

July 2, 2013

TO: All Interested Bidders

SUBJECT: Invitation for Bids #13-1195CD Manatee County Historic Courthouse 2nd Floor Remodel and Outside Air Project

ADDENDUM #5

Bidders are hereby notified that this Addendum shall be acknowledged on page <u>00300-1</u> of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgment of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. With the changes and additions being issued in this Addendum #5, the following date and time has been scheduled for all interested Bidders and their Subcontractors to be escorted to the construction site by County staff for the examination of site conditions:

Tuesday, July 9, 2013 at <u>9:00 AM</u>

Manatee County Historic Courthouse 1115 Manatee Avenue West Bradenton, FL 34205 Contact: Angela Honts (941) 748-4501 ext 5844

<u>Note:</u> All interested bidders shall meet the Project Manager on the west side of the Courthouse to be escorted into the building as a group.

2. **CHANGE** Article A.06, Deadline for Clarification, on page 00010-2 of the bid documents to read as follows:

<u>July 16, 2013 at 3:00 PM</u> shall be the deadline to submit all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bids to the Manatee County Purchasing Division.

This deadline has been established to maintain fair treatment for all potential Bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this Work may achieve.

Financial Management Department –Purchasing Division 1112 Manatee Avenue West, Suite 803, Bradenton, F1, 34205 PHONF: 941,749,3014 * FAX: 941,749,3034 www.mymanatee.org

- 3. **DELETE** Article C.14.e, Property Insurance, on page 00030-6 of the bid documents.
- 4. **CLARIFICATION** of Work Hours listed in Article 1.8.B on page 4 of Section 011000 of the Contract Documents and Contractor responsibility for overtime hours of County staff listed in Article 4.2.1 on page 00700-8 of the Bid Documents:

The standard work hours for all unoccupied portions of this project shall be 7am to 11pm Monday thru Friday (no Holidays or Weekends). The standard work hours for occupied portions of this project (i.e First floor ceiling tile) shall be 5pm to 11pm Monday thru Friday (No Holidays or Weekends). All requested work outside of the standard project hours above require a 72 hour advance written request and approval by the Project Manager. The Contractor shall be responsible for a \$75 per hour charge back for all work performed outside of the standard hours for this project.

- 5. **DELETE** all of Section 012000 Payment Procedures Revision 4 that were issued with Addendum #2, and **INSERT** the Section 012000 Payment Procedures Revision 6,(pages 1 thru 12) that are attached to this Addendum #5.
- 6. DELETE Article 1.8.A on page 7 of Section 014000 of the Contract Documents.
- 7. DELETE Section 017900 of the Contract Documents in its entirety.
- 8. **CHANGE** Article 3.1.C on page 3 of Section 024119 of the Contract Documents to read as follows:
 - C. Survey Existing Conditions And Correlate With Requirements Indicated To Determine Extent Of Selective Demolition Required. Refer to the Jerry N. Zoller, AIA, PA Architect/Planner drawings and S1–3.1 along with the ZNS Engineering Structural Report Section 020000 of the Specifications.
- 9. **CHANGE** Article 3.06.D on page 5 of Section 054000 of the Contract Documents to read as follows:

D. Squareness - Prefabricated panels shall not be more than 1/8 of an inch out of square within the length of that panel.

- 10. **DELETE** all of Section 062023 Interior Architectural Woodwork that are in the Contract Documents, and **INSERT** the Section 062023 Interior Architectural Woodwork Revision 5, (pages 1 thru 8) that are attached to this Addendum #5.
- 11. DELETE Article 2.6 on page 4 of Section 077200 of the Contract Documents.
- 12. **DELETE** all of Section 087100 Door Hardware that are in the Contract Documents, and **INSERT** the Section 087100 Door Hardware Revision 4 pages 1 thru 14 that are attached to this Addendum #5.
- 13. **DELETE** all of Section 096500 Resilient Floor Tile that are in the Contract Documents, and **INSERT** the Section 096500 Resilient Floor Tile Revision 4, (pages 1 thru 4) that are attached to this Addendum #5.
- 14. **DELETE** all of Section 096800 Carpeting that are in the Contract Documents, and **INSERT** the Section 096800 Carpeting Revision 5, (pages 1 thru 4) that are attached to this Addendum #5.
- 15. **DELETE** all of Section 102113 Toilet Compartments that are in the Contract Documents, and **INSERT** the Section 102113 Toilet Compartments Revision 4 pages 1 thru 4 that are attached to this Addendum #5.

16. ADD the following to the top of page 1 of Section 220553 of the Contract Documents:

SECTION 220553- Identification for Plumbing Piping and Equipment

- 17. DELETE Article 1.5.D on page 3 of Section 230100 of the Contract Documents.
- 18. **DELETE** all of Section 260519 Low-Voltage Electrical Power Conductors and Cables that are in the Contract Documents, and **INSERT** the Section 260519 Low-Voltage Electrical Power Conductors and Cables Revision 3 (pages 1 thru 12) that are attached to this Addendum #5.
- 19. DELETE Article 2.8 on page 9 of Section 283111 of the Contract Documents.
- 20. **DELETE** Plan Sheet Numbers T1, A0, A1-3.3, A1-4.1, A1-4.2, A1-4.4, A1-8.1, A3-9.2, S1-3.1, S2-9.2, M2-4.0, M2-4.1, E1-1.1, E1-3.1, E1-3.2 of the Plan Set and **INSERT** the revised Plan Sheet Numbers T1, A0, A1-3.3, A1-4.1, A1-4.2, A1-4.4, A1-8.1, A3-9.2, S1-3.1, S2-9.2, M2-4.0, M2-4.1, E1-1.1, E1-3.1, E1-3.2 of the Plan Set that are attached to this Addendum #5.
- 21. ADD Plan Sheet Number A1-8.2 that is attached to this Addendum #5 to the Plan Set.

22. CHANGE the Due Date and Time to Tuesday, July 30, 2013 at 3:00 PM.

The following questions have been presented by potential bidders:

<u>QUESTION #1:</u> During the pre-bid meeting it was discussed that the existing court room pews which are stacked/stored in various areas, are to be moved into the "Historic Courtroom" for storage. This is not indicated on the documents. Please confirm this is to be included in the bid. In addition: a. Is the intent to butt the pews to each other or stack atop each other? b. Is the existing space structurally sufficient to support the load of all the pews?

<u>RESPONSE #1:</u> Yes, as stated in Addendum #2, the Contractor is to move the pews into the Historic Courtroom after the installation of the fire sprinkler system has passed inspection. Pews may be stacked as long as Contractor protects finished surfaces. Yes, the existing space is structurally sufficient to support the load of the pews.

<u>QUESTION #2:</u> During the Pre-Bid Meeting, bidders were directed to include all permitting cost in our bids. The City Building Department indicates the only pending permit cost required is \$100.00 for an Addenda that was submitted and the building permit fees have already paid. Please confirm there aren't any additional permit costs.

<u>RESPONSE #2:</u> There will be no outstanding permit fees; however the Contractor will be required to maintain the Master Commercial Permit that is in place.

<u>QUESTION #3:</u> During the subcontractor walkthrough it was observed that portions of the existing 3rd Floor concrete slab/structure has some type of stucco or cementitious membrane applied to certain areas. Was this a finish only or did it provide any portion of a fire rated assembly? a. There are no notes to repair or remove the plaster. Without direction the plaster will be left in its existing condition; b. If it is to be repaired, please provide scope and, if required the appropriate UL approved details to address the material.

RESPONSE #3: Contractor shall remove all loose material. No repair is required.

IFB #13-1195CD Addendum #5 Page 4 <u>QUESTION #4:</u> Will any elevator be available to receive certain construction materials? If so, can we utilize off hours delivery to minimize disruption to staff?

<u>RESPONSE #4:</u> Elevators will not be made available to Contractors. Contractors shall refer to the staging plan issued with Addendum #2 for all staging activities.

<u>QUESTION #5:</u> Reference paragraph 4.2.1 – The ceiling on the first floor is to be replaced on off hours. Should the Contractor include overtime costs for the EOR or County personnel associated with this scope of work?

RESPONSE #5: See item #2 above of this Addendum #5.

QUESTION #6: Are there requirements for testing? Who provides the testing?

RESPONSE #6: Refer to the Specification Section 014000, Quality Requirements, Articles 1.6 and 1.7.

<u>QUESTION #7:</u> Reference paragraph 9.1 – the Contractor is to warranty all work for 3 years. What warranty is remaining on the roof? Should the contractor pay for the manufacturer to reinspect and reinstate the original warranty?

RESPONSE #7: The roof was installed in 2012 and has a 20 year warranty therefore the remaining warranty is 19 years. Yes, the Contractor will be responsible for maintaining the integrity of the existing warranty.

<u>QUESTION #8:</u> Is the existing roof under warranty? If so what company/subcontractor holds the warranty?

RESPONSE #8: Yes. Peach State Roofing was the contractor and Fibertite is the warranty holder.

<u>QUESTION #9:</u> There are several drawings/details noted/referenced on the D. H. Gracey details for the roofing systems that are not on the drawings. Please provide the details required for this project.

RESPONSE #9: See Revised Drawing Sheet A-0 that is attached to this Addendum #5.

<u>QUESTION #10:</u> There is a discrepancy in the material for the glass system at the West Stair – the Door and Frame Schedule indicates aluminum and the Window Schedule indicates hollow metal for the window/frame. Is the intent to have an aluminum door in a hollow metal frame? This is normally not a compatible system.

<u>RESPONSE #10</u>: Sheet A1-4.2 should be a HM in lieu of ASF. The door should be a full lite SCW door per door elevation "4" (see revised Sheet A1-4.2 attached to this Addendum #5).

<u>QUESTION #11:</u> There are no specifications for glass and glazing other than notes on the drawings. Are specific specifications required?

RESPONSE #11: No, See A1-4.2 Glazing Notes with Door Schedule.

<u>QUESTION #12:</u> Many areas in the northern section of the building appear to have plaster on masonry. Will any of the exterior walls require furring/false walls to accommodate new wall outlets? If so please provide detail(s) and limits for each detail.

RESPONSE #12: Yes. See revised Sheet A1-8.1 attached to this Addendum #5 for details.

<u>QUESTION #13:</u> The exterior walls have areas that are furred with stucco. Please confirm that all existing wood furring and stucco finish needs to be removed to allow for new furred walls for systems rough-in requirements.

RESPONSE #13: The existing finishes do not need to be removed unless loose.

<u>QUESTION #14:</u> Regarding the 3rd floor area (portion of the Historic Courtroom) - the Mechanical, Plumbing, Electrical and Fire Sprinkler drawings do not note this area for demolition work. Please confirm that information indicated in 3/D1-3.2 is what is required for demolition in this area. In addition, are exit lights required for this space-post demolition.

<u>RESPONSE #14:</u> Yes, the notes on sheet D1-3.2 are correct. The intent is a clean shell space with sprinklers per FP1-4. Provide an exit light on the north side of the salvaged door and one salvaged light fixture on a life safety circuit.

<u>QUESTION #15:</u> Current Vendors serving the facility: a. Is Commercial Fire and Communications, Inc. (CFC) is the current fire alarm vendor; b. Is Qualified Building Solutions (QBS) is the current security vendor; c. Is there a current vendor for low voltage/ structured cabling systems?

RESPONSE #15: a. No, the vendor is Integrated Fire Systems; b. Yes; c. No.

<u>QUESTION #16:</u> Lightning protection is not noted in the bid documents. Is lightning protection required? There is a fully functional lightning protection system with warranty installed in 2011.

<u>RESPONSE #16:</u> Yes lighting protection is required. Tie in the outside air return unit to the existing system which is currently warranted by Windemuller Technical Services, Inc.

<u>QUESTION #17:</u> To utilize trash chutes windows will need to be removed. Please provide mounting/anchoring details for re-installation of existing windows.

<u>RESPONSE #17:</u> Specific details not available. All windows were installed per the NOA - 091210.05 and shall be reinstalled per NOA - 091210.05. Any damaged Fast Flash coating shall be restored as required and Contractor is responsible for maintaining existing warranty or supplying a new one.

<u>QUESTION #18:</u> Numerous existing interior window sill substrates have substantial deterioration. Please provide details to repair deteriorated substrates.

RESPONSE #18: Reform deteriorated sills with concrete to accept existing marble sills.

<u>QUESTION #19:</u> The drawings note to install Owner provided window sills. It does not appear all of the sills are on site. Are other sills stored elsewhere?

<u>RESPONSE #19:</u> All sills are stored in the Historic Courtroom and marked by window number per D1-3.1.

<u>QUESTION #20:</u> Are there specific requirements for security / dust control at the West stairway?

<u>RESPONSE #20</u>: There are no specific security requirements for the west stairwell. Dust control is the responsibility of the Contractor.

<u>QUESTION #21:</u> The existing 2nd Floor substrate/existing topping: a. Many areas are very rough b. Some sound as though the existing topping is loose/delaminated c. We suggest an Owner mandated allowance be dictated to all bidders for inclusion to address possible remedial work at floor substrates.

<u>RESPONSE #21:</u> No allowance will be dictated to bidders. Floor repair, if required shall be included under the existing Bid item for structural repairs.

<u>QUESTION #22:</u> Referencing Future Mechanical Room 202, the walls noted for demolition (at proposed duct and pipe chase) appear to be load bearing due to the existing chase being an elevator shaft. Are these walls acceptable to remove as indicated? a. If not details to support the underside of the existing to remain 2nd Floor and 3rd Floor structures will be required?

RESPONSE #22: Yes, walls are to be removed and are non-load bearing.

<u>QUESTION #23:</u> New door openings are to be cut into and installed at the existing South wall of the Historic Courtroom. The wall appears to be red clay brick structure. Please provide structural details for installation of new door openings.

<u>RESPONSE #23:</u> Enlarge opening for specified doors, provide lintel, patch finishes to match adjacent. Provide shoring as necessary.

<u>QUESTION #24:</u> Please provide specifications for the concrete poles on which the camera are mounted in the North end of the exterior of the building. The drawings indicate 15' concrete but no shape/size/color/etc.

<u>RESPONSE #24:</u> The poles and cameras have been removed from the project; see revised sheets A1-3.2, E1-3.1 and E1-3.2 that are attached to this Addendum #5.

<u>QUESTION #25:</u> There is a discrepancy between the "A" and "E" sheets with regard to the conduit size from the poles – noted in item above. Please provide required size.

RESPONSE #25: See response to question #24 above.

<u>QUESTION #26:</u> The underside of the 3rd Floor structure has many holes in the red clay tile/block from old/abandoned hangers. Some holes are small in diameter – size of fasteners/all-thread – however, some are several inches in diameter. Do these holes need to be repaired? There is no way to quantify the scope and an allowance should be mandated by the Owner to be carried by all bidders.

RESPONSE #26: No repair is required, unless material is loose – remove any loose material where found. Any structural repairs to the floor are to be paid under the Bid item for structural repairs.

<u>QUESTION #27:</u> The existing elevator shaft and stairwell walls are indicated to be rated. These walls are scheduled as existing to remain. Are the walls properly rated as existing?

RESPONSE #27: Yes.

<u>QUESTION #28:</u> Partition types "D" & "E" are partial height walls and in some cases terminate without end support. Should these walls have steel tube supports at the ends that terminate in an open area? If so, provide details for support and required locations.

RESPONSE #28: See revised A1-8.1 with steel angle support detail that is attached to this Addendum #5.

<u>QUESTION #29:</u> Sheet D1-3.0 – note 13 is indicated in the middle of the two existing restrooms. Are we to anticipate that the perimeter walls of the restrooms are potentially load bearing?

RESPONSE #29: Perimeter walls of the restroom are non-load bearing.

QUESTION #30: Please provide the required profiles for the Chair Rail, Molding, etc.

<u>RESPONSE #30:</u> Details will not be provided. Contractor to match existing chair rail and molding located on the 3rd floor of the Historic Courthouse.

<u>QUESTION #31:</u> In the elevations of the walls incorporating chair rail/wood molding there is no designation of the material below the chair rail/outside the molding. Is this painted gypsum board as is noted inside the wood molding?

RESPONSE #31: Yes.

<u>QUESTION #32:</u> Specification 062023 indicates the running trim is to be Oak. Plans call for material to be painted. Due to the heavy grain oak is not normally painted. Is this the intent?

RESPONSE #32: See revised Specification Section 06 2023 that is attached to this Addendum #5 – Provide painted poplar in lieu of stained oak.

<u>QUESTION #33:</u> On the plans and throughout the casework details there is a note to "Provide 3 inch grommets as required by the Owner. The quantity is indeterminate. Please provide the total number of 3 inch grommets required for the project.

RESPONSE #33: One per workstation or chair shown on A1-5.1 thru A1-5.6.

<u>QUESTION #34:</u> 3/D1-3.2 notes "existing metal railings shall remain" but the railing is a single horizontal tube railing and doesn't appear to meet OSHA standards for fall hazards. There is also a portion of the railing missing. Should this railing be modified? If so, please provide information.

<u>RESPONSE #34:</u> Railing shall remain "as is" and install a temporary OSHA compliant fall protection guard that will remain in place at project completion.

<u>QUESTION #35:</u> Sheet A1-4.1. a. The "Room Finish Schedule" notes First Floor. Should this state Second Floor? b. "Finish Schedule Notes", Note 1, please clarify where this note applies.

<u>RESPONSE #35</u>: a. Yes; b. See Revised Sheet A1-4.1 attached to this Addendum #5- Note 1 of FINISH SCHEDULE NOTES has been omitted on Sheet A1-4.1.

QUESTION #36: Sheet A1-4.6; a. Please clarify if door lite kits are wood or hollow metal.

RESPONSE #36: Hollow Metal.

QUESTION #37: Sheet A3-9.2; a. Please clarify the intent of the ceiling work on the 1st floor i. Are all ceilings shown on the RCP to be replaced as noted on the "T" sheet? 1. If so what type of ceiling is required? a. A majority of the RCP is drawn as "AC1" but not designated as such. The few notes that are shown indicate "AC" with a height but are not listed throughout the area drawn b. There is a note in a stairway, located on the east side AC2 7'-3"; is this accurate? indicates а new at building that of the ii. Toilet Rooms have a "DW" note depicting ceiling elevations. Do the Toilet Rooms receive new hard gypsum ceilings? b. On the west side of the building a note states "proposed window soffits". Are we to provide new gypsum soffits at all exterior windows, only at the window with the note, or at the two windows with the dashed box?

RESPONSE #37: i. No, see revised Sheet A3-9.2 that is attached is to this Addendum #4; **a**. Match existing height; **b**. Note has been removed from revised Sheet A3-9.2 that is attached to this Addendum #5; **ii.** Note removed from A3-9.2. **b**. Provide gypsum soffits at all exterior windows in areas of work as indicated on A3-9.2.

<u>QUESTION #38:</u> In several instances the structural drawings refer to mechanical drawings by Forney Engineering. Should this be ATP Engineering, or are we to refer to other drawings for additional information? If so, please provide the required drawings.

RESPONSE #38: ATP is the Engineer of record. Refer to ATP wherever Forney is mentioned.

QUESTION #39: On sheet S2-4.4 there is a reference to detail A/9.1. Should this be A/S2-9.2?

RESPONSE #39: The Detail Tag should read E/S2-9.2.

<u>QUESTION #40:</u> Sheet M1-3.1 General Note #25, P1-3.0 General Note #18, and other areas in the documents, indicate a 1 year warranty, Division 1 of the specifications indicates 3 year warranty. Which is correct?

RESPONSE #40: The Contractor shall provide a minimum three year warranty on all work provided.

<u>QUESTION #41:</u> Detail7/M1-7.1 notes a condensate drain detail but the drawings do not reflect any condensate drain system piping or drain point locations for AHU's and FCU's. Please clarify.

RESPONSE #41: Sheet M1-3.1 and M2-4.4 show locations.

<u>QUESTION #42:</u> Will duct passing thru finished spaces without acoustical ceilings (stairways) receive any type of finishes?

<u>RESPONSE #42:</u> The stairways on M2-4.0 and M2-4.1 were reused as chases in the previous project. (No longer stairways.)

<u>QUESTION #43:</u> Sheets MD2-4.5, M2-4.0 and M2-4.1 – There are numerous air handler units (AHU's) and fan coil units (FCU's) shown in the Basement and 1st Floor areas that are not "Grayscale" (as would indicate that they are existing to remain) but are drawn bold as if they are new. However, the units are not listed on any equipment schedule and appear to be the same on both the demolition and new work sheets. Are these units new or existing? If new provide all required specifications/data/electrical circuits/controls/etc.

RESPONSE #43: All units are existing.

IFB #13-1195CD Addendum #5 Page 9 <u>QUESTION #44:</u> Please provide structural details for installation and anchoring of the AHU concrete equipment/housekeeping pads.

RESPONSE #44: Provide anchorage per AHU manufacturers' instruction or in lieu of no instruction install 3/8" concrete expansion anchors at each mount.

<u>QUESTION #45:</u> The Finish Schedule notes VCT in the Mechanical Rooms but not on the concrete equipment pads. Do these pads receive paint to seal the concrete prior to installation of AHU's?

RESPONSE #45: No, provide the concrete pads without paint or sealer.

<u>QUESTION #46:</u> With access to all Mechanical Rooms via elevator, are the units sectional for access thru the building and future maintenance/replacement?

RESPONSE #46: Yes

<u>QUESTION #47:</u> Sheet M2-4.0 – Demolition Note 1 indicates a new window being installed at the exterior south wall but the architectural drawings do not note a window in this location. Please confirm if a window is to be provided at this location. If so: a. Does this particular opening require modifications to accept a window, b. Provide specifications for the window.

RESPONSE #47: The window opening is on the South elevation and presently has a louver in the opening which is to be removed and the replacement window installed which is stored in the Historic Courtroom. See details on sheet A1-8.2, that is attached to this Addendum #, for installation details.

<u>QUESTION #48:</u> Please provide detail for the fire dampers serving duct that passes thru concrete floors.

RESPONSE #48: Vertical static fire dampers are to be either Greenheck FD series, with a 20-24 inch sleeve, or Ruskin IBD2 series with a 20-24 inch sleeve. Verify floor thickness in the field. The manufacturer of both dampers provides details to meet the UL listing of the dampers on concrete floors and chases. Access doors are provided with the dampers. Spare links are specified in the specifications. All floor to floor and shaft floor-to-floor penetrations are rated at 1 ½ hour minimum.

<u>QUESTION #49:</u> The East stair on sheet M2-4.1 indicates new vertical duct in the stairwell (more especially at the stair landing areas). This sheet notes a new "soffit" at the duct the M sheets violate any life safety egress requirements? The soffit is not noted on the Architectural sheets. Provide detail for requirements

RESPONSE #49: The stairwell found is currently being used as a mechanical chase.

<u>QUESTION #50:</u> Sheet MD2-4.5 – indicates numerous exterior wall grills being abandoned due to new design. What happens with the abandoned exterior wall grills? Are they being removed in their entirety and masonry patched, or being capped to prevent outside air from entering the building, etc.? Please provide details for the abandoned grills.

RESPONSE #50: All exterior abandoned grills shown on MD2-4.5 have been infilled or removed under previous work by others. There are two (2) 2x2 grills shown on revised M2-4.0 attached to this Addendum #4 (one adjacent to west side 1st floor entrance and same location at east side 1st floor entrance, at colonnade floor level.) No detail will be provided. Infill face brick using Manatee County stocked brick (stored in penthouse) over infill masonry (General Contractor provided) backup wall. At interior finished surfaces, match adjacent finish and paint.

<u>QUESTION #51:</u> Sheet M2-4.4 – notes an exhaust fan within 25'-0" of the outside air intake unit. Is this within the minimum distance an exhaust fan or sewer vent stack can be to the proposed outside air intake unit?

RESPONSE #51: Yes, the placement meets the Florida Mechanical Code.

<u>QUESTION #52:</u> Does the outside air unit require a condensate drain system? If so, is the condensate to be routed to nearest roof drain?

RESPONSE #52: Sheet M2-4.4 indicates the condensate size and location.

<u>QUESTION #53:</u> SheetP1-3.1 – Drawings indicate new floor drains in Toilet Rooms. Are these floors to be sloped to drain? If so, are drains to be recessed in existing slab? (This could cause significant structural concerns.) Or should floors be raised in Toilet rooms? If so provide details for same.

RESPONSE #53: Provide floor drain per plans. Do not raise floors. Do not recess floor drains. Do not slope floors.

<u>QUESTION #54:</u> Sheet E1-3.1 – Room –"IT Staff Apps-264", please clarify if the noted receptacles and low voltage outlets are floor or ceiling mounted?

RESPONSE #54: Please refer to the legend sheet. The legend shall indicate the floor/ceiling mounting.

<u>QUESTION #55:</u> Sheet E3-3.0 – The drawings note new card readers for existing door and door frames (mainly located in the basement) but these openings are not prepped for card readers and electric strikes. Should these openings be replaced in their entirety or field modified to accommodate new hardware requirements? Please note some of these doors are stairway doors that are probably grouted.

RESPONSE #55: Field modified.

<u>QUESTION #56:</u> The drawings note new card readers for existing elevators. Are the elevators capable of integration with card readers/controls? a. Is the elevator scope of work to be by Owner or should the bidders include in their scope of work? i. If bidders are to include in the scope of work, please provide elevator company contact information

<u>RESPONSE #56:</u> Yes, elevators are capable of integration with card readers/controls. Elevator work to be owner provided.

QUESTION #57: Please provide details for new/enlarged/abandoned openings in exterior walls at new louvers, etc.

RESPONSE #57: See sheet A1-8.2 issued with this Addendum #5.

QUESTION #58: Please provide detail G/S2-9.2 as noted in Structural Evaluation Item "1" on sheet S1-3.1

RESPONSE #58: See revised Sheet S2-9.2 issued with this Addendum #5.

IFB #13-1195CD Addendum #5 Page 11 <u>QUESTION #59:</u> Sheet A1-3.3 – indicates VCT-3 in several rooms – it does appear to have the symbol for VCT-2. Are the areas indicating VCT-3 to be VCT-2? If not provide specifications for VCT-3.

<u>RESPONSE #59:</u> See revised Sheets A1-3.3, A1-4.1 and revised specification section 096500 attached to this Addendum #5.

<u>QUESTION #60:</u> Note VCT-2 "Gold Cortina Stone" is a discontinued product. VCT-1 "Corn Silk" is a discontinued color. These are not standard products, please specify alternate materials to replace them.

RESPONSE #60: See answer to above question #59.

QUESTION #61: Will the IT room require Static Dissipative tile?

RESPONSE #61: No, standard VCT; see revised sheet A1-3.3 attached to this Addendum #5.

<u>QUESTION #62:</u> Specification section 00700: a. 4.2.1 indicates the Contractor is responsible for additional overtime charges from the County staff required to be on site due to "after-hours" work. In the pre-bid informational meeting this item was discussed as a County provided cost. Is the Contractor responsible for this cost? If so, what are the rates and required information? b. 4.3 – indicates the Contractor is responsible for temporary power. Are the existing panels in the facility not available for temporary power needs for the construction site?

<u>RESPONSE #62:</u> a. See item #2 of this Addendum #5. b. Contractor will be allowed to use existing power from within the facility.

<u>QUESTION #63:</u> Specification Section 087100. a. Hardware Set # 5 - Doesn't note card access system but the "Door and Frame Schedule" on Sheet A1-4.2 does. Please confirm if it will require card access. b. Hardware Set # 8 - Notes card access system but the "Door and Frame Schedule" on Sheet A1-4.2 doesn't. Please confirm if card access will be utilized. c. Hardware Sets # 6, 11, 15 and 19 - These sets are noted but aren't identified on the "Door and Frame Schedule" on Sheet A1-4.2. Please confirm if these sets will be utilized.

RESPONSE #63: See revised Sheet A1-4.2 and Revised Specification Section 087100 issued with this Addendum #5. **a.** Yes, card swipe is required. **b.** No, card swipe not required on this door. **c.** See revised Sheet A1-4.2 and Specification Section 087100 issued with this Addendum #5.

<u>QUESTION #64:</u> Specification Section 233113, Item 3.6 "Cleaning New Systems" a. This section notes cleaning all new duct but there are locations where new duct connects to existing duct systems and equipment. Is the existing duct required to be cleaned as well? If so, please provide limits of scope for duct cleaning.

RESPONSE #64: No existing ductwork is to be cleaned. These areas were recently renovated.

<u>QUESTION #65:</u> Specification Section 233116, Item 3.3 "Filed Quality Control" a. This section notes to perform duct leakage testing for Non Metal Ducts Systems but Specification Section 233113 "Metal Ducts" doesn't appear to require duct leakage testing. Please confirm if all duct systems are to have duct leakage testing performed or just Non Metal Duct systems.

RESPONSE #65: Provide maximum allowable leakage tests in all duct work in accordance with ASHRAE 2005 Fundamental handbook Chapter 35, class 3 for round ducts, class 12 for rectangular ducts in pressures less than or equal to +/- 2" static pressure. Provide 7 days notice to the Owner and Architect for attendance at the test.

<u>QUESTION #66:</u> Specification Section- 260533 a. Please confirm MC cable is not allowed. It wasn't specified in this section b. Please confirm the smallest electrical raceway size allowed is $\frac{3}{4}$ ". Sheet E1-3.1, General Notes indicate $\frac{1}{2}$ " raceways for HVAC control systems c. Item 3.2, E) notes "no more than three 90-degree bends in any conduit run except for communications conduits". NEC allows for 360 degrees of bends. Please clarify.

RESPONSE #66: a. MC Cable is not allowed; however it is acceptable for whips to lights and small runs up to 5 ft. **b.** You are comparing "power" electrical systems to HVAC controls. Electrical systems may require more wires to be pulled in the conduit. There are typically less wires and smaller wires pulled for the HVAC controls than "power" electrical systems. Both items shall meet NFPA 70 NEC. **c.** The specifications are correct as written.

<u>QUESTION #67:</u> Specification Section- 262210, Item 3.4) C) a. Refers to infrared-scanning at certain intervals after completion of the work. Is this particular specification required for this project? If so, please confirm if this applies only to equipment installed within this scope of work or what, if any, existing equipment is to be included in the testing.

<u>RESPONSE #67:</u> The infrared scanning is only applied to the equipment that will be installed. This is to check for systematic hot spots and resolve possible problems that may arise.

<u>QUESTION #68:</u> Specification Section 262416, Item 3.5 C a. Refers to measure load balancing and make circuit changes. Typically, this is done during design phase of a project but if circuit changes were required this could impact previously installed raceways and identification of circuits and devices throughout the building. Is load balancing a requirement of this project?

<u>RESPONSE #68:</u> Load balancing and phase rotation reports on each panel are a requirement of this project.

QUESTION #69: Corner Guards – What is the height?

<u>RESPONSE #69:</u> Corner Guards shall be standard 8'-0" sections, beginning at the top of base. Provide shop drawing of proposed corner guard and standard colors for architects review and approval.

<u>QUESTION #70:</u> Fire Extinguishers and Cabinets – They don't seem to be shown on Life Safety or Floor Plans however there is a Specification. Are they needed on this project?

RESPONSE #70: Provide Ten (10) Semi-recessed to be field located by Architect and Fire Marshall – also provide Six (6) fire extinguishers on wall/hook mount for Mechanical and Custodial rooms. Provide 16 fire extinguishers per specification.

<u>QUESTION #71:</u> Toilet Compartments – Item K on the Accessory Schedule on A1-4.4 – Refers to Finish Schedule on A1-4.1. There are 4 Plastic Laminate Codes. Which laminates are being used for the Toilet Compartments?

<u>RESPONSE #71:</u> Provide Bobrick Solid Phenolic Duraline Series model 1182 in standard color "Black" in lieu of Classic series. See revised Sheet A1-4.1 issued with this Addendum #5.

IFB #13-1195CD Addendum #5 Page 13 <u>QUESTION #72:</u> Drawing A1-8.1, partition B states 5/8" drywall on each side and shows two layers on one side. Please confirm that it is 2 on one side and 1 on the other.

RESPONSE #72: See revised drawing sheet A1-8.1 with corrected detail notes 2, issued with this Addendum #5.

<u>QUESTION #73:</u> Drawing A3-9.2 refers to detail 2 on drawing A8.1 for window soffit details; however detail 2 provides details of a new wall. Note #3 on drawing T-1 also refers to new gypsum board headers "where required". a. Please quantify. b. If there is soffit work to be done then considering drywall mudding, sanding & painting can those areas be left open?

<u>RESPONSE #73:</u> See revised Sheet A3-9.2 issued with this Addendum #5; detail 2 should refer to detail 12 on sheet A1-8.1. **a**. See plans for quantity. **b**. Yes, as required, review coordination requirements.

<u>QUESTION #74:</u> A few areas of the 1st floor ceiling were recently replaced. Should they be excluded from this bid?

RESPONSE #74: Yes, see revised Sheet A3-9.2 issued with this Addendum #5.

<u>QUESTION #75:</u> Drawing S1-3.1 shear crack Mark 2 refers to a bearing crack. a. We couldn't find it. Please provide more information. b. The note refers to an "optional repair". Whose option?

<u>RESPONSE #75:</u> Sheet S1-3.1 Mark 2 refers to a bearing crack that was field observed by Structural Engineer (See figures 5 and 6 of Specifications Section 020000). Repair is not optional, Contractor to perform the repair per Specification Section 020000 and revised Sheet S1-3.1 that is attached to this Addendum #5.

QUESTION #76: Please provide the scope of work required for any elevator work.

RESPONSE #76: See response to Question #56.

<u>QUESTION #77:</u> The negative pressure systems that are currently there, will they remain in place during our demolition? Are they owned by Manatee County?

<u>RESPONSE #77:</u> The County owned negative pressure systems currently in place will be removed prior to Contractor activity.

<u>QUESTION #78:</u> Some rooms currently have plaster on the walls with holes all through it, such as in the southeast area where the future rooms 225 – 232 will be built; will the plaster be required to be removed?

RESPONSE #78: Existing finishes do not need to be removed unless they are loose.

<u>QUESTION #79:</u> Will the existing benches/furniture that is onsite be removed prior to commencement of demo or will demo contractor need to dispose of them?

RESPONSE #79: The Contractor is required to install and verify operational condition of sprinkler heads in historic courtroom #201 prior to moving the Pews into the courtroom. All other remaining furniture and casework shall be removed and disposed of by the Contractor.

<u>QUESTION #80:</u> Bid Form Item #1 Mobilization - Is this for general conditions? Otherwise clarify what all should be included in this number?

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<u>RESPONSE</u> #80: Please see Item #5 of this Addendum #5 for a revised measurement and payment for Mobilization.

QUESTION #81: Bid Form - What item # do the stair railings and the casework go under?

<u>RESPONSE #81:</u> See revised specification 012000 Payment Procedures issued with this Addendum #5 and Revised Bid Form issued with Addendum #2.

<u>QUESTION #82:</u> Cabinets - White melamine for cabinets and shelves; can it be standard 5/8" thickness?

RESPONSE #82: Yes.

<u>QUESTION #83:</u> Cabinets - Specification 062023, page 5, 2.6, C2- can clear finish maple plywood be used for the drawer sides and back in lieu of solid hardwood lumber?

RESPONSE #83: Yes.

QUESTION #84: Cabinets - Are the drawer boxes dovetailed?

RESPONSE #84: Yes.

<u>QUESTION #85:</u> Cabinets - Specification 062023, page 5, 2.6, F; are dust panels over compartments and drawers required for this project?

RESPONSE #85: Yes.

QUESTION #86: Door schedule - #257, 258, 259 are noted as "Omitted". Is this correct?

RESPONSE #86: No, see revised sheet A1-4.2 issued with this Addendum #5.

<u>QUESTION #87:</u> Door schedule - #261 is listed as a storefront door and storefront frame. However the Window Schedule lists the frame as hollow metal (type H and J). Clarify.

RESPONSE #87: See revised Sheet A1-4.2 issued with this Addendum #4 should be a HM in lieu of ASF. The door should be a full lite SCW door per door elevation "4".

<u>QUESTION #88:</u> Floor repairs or leveling may be required, but the condition of the floors will not be known until demolition is complete. Should this be an owner allowance?

RESPONSE #88: No allowance, see response to question #26 above.

<u>QUESTION #89:</u> Flooring - AI-3.3 has rooms with VCT-3 flooring detailed. The Finishes Legend only lists VCT-I & 2.

RESPONSE #89: See revised Sheets A1-3.3, A1-4.1, and revised specification Section 096500 issued with this Addendum #5.

<u>QUESTION #90:</u> Elevator use - Clarify under what conditions and hours the elevators can be used for equipment or personnel loading.

RESPONSE #90: See response to Question #4.

QUESTION #91: 102630 Vinyl Corner Guards - What is the height?

<u>RESPONSE #91:</u> Corner Guards shall be standard 8'-0" sections, beginning at the top of base. Provide shop drawing of proposed corner guard and standard colors for architects review and approval.

<u>QUESTION #92:</u> Stairs 203, 215, 270 - Floor and wall finishes only at the 2nd floor level? If so, where is the cut off?

RESPONSE #92: Stairs 203 and 215 are to remain "existing to remain as is". Stair 270 is detailed on sheets A1-4.8 and A1-4.9. The finish schedule on A1-4.1 is corrected to match (see revised Sheet A1-4.1 attached to this Addendum #5).

<u>QUESTION #93:</u> 1st floor work - Who will be responsible for moving, handling or relocating of furniture, fixtures or equipment, as well as personal effects, out of the work areas?

RESPONSE #93: The Contractor shall provide labor for moving, handling or relocating of furniture and fixtures. County personnel shall remove equipment and personal effects. Contractor shall provide a schedule to coordinate work areas in occupied spaces of the 1st floor. Schedule shall be reviewed and approved by County and Clerk Staff with a minimum of 2 weeks notice. Contractor is responsible for protecting existing furniture and cleanup prior to opening the next business day.

<u>QUESTION #94:</u> Window Sills - Have these been fit for each window, or will cutting or trimming be required?

RESPONSE #94: Cutting and Trimming shall be required.

<u>QUESTION #95:</u> Wood chair rail and inset moldings - Need size type of wood (for paint grade) profile information.

RESPONSE #95: Moldings shall match existing conditions on the 3rd floor, see revised Sheet A1-4.1 for molding profiles.

<u>QUESTION #96:</u> 2, 3, 4/A4.9 - New chair rail and moldings are shown on the 1st floor level. Assume the new moldings only occur at the 2nd floor level?

RESPONSE #96: Chair rail and moldings shown on the 1st floor level are existing. Yes, proposed moldings are on 2nd floor only. See revised Sheet A1-4.1 for molding profiles.

<u>QUESTION #97:</u> 1st floor work A/9.2 - At one of the windows there is a note "proposed soffit details". Will window head soffits on the 1st floor apply to this phase of the project?

RESPONSE #97: See revised sheet A3-9.2 issued with this Addendum #5; Detail 2 should refer to detail 12 on sheet A1-8.1; the detail applies to both 1st and 2nd floor work.

<u>QUESTION #98:</u> Electrical - Interior side of exterior perimeter walls; electrical work will require cutting of the furred walls, as well as cutting into the walls where the plaster is direct attached to the structure wall. Confirm this is acceptable.

RESPONSE #98: Cutting into the exterior walls is not acceptable.

<u>QUESTION #99:</u> Electrical- Page El-6.1; note to replace tap box, conduit, conductors, replace if necessary. What to replace, all items or just tap box? If conductors are to be replaced need to know feed location.

IFB #13-1195CD Addendum #5 Page 16 <u>**RESPONSE #99:**</u> Delete note on Electrical page E1-6.1 to replace tap box, conduit, conductors, replace as necessary. Panel and tap box to remain as is.

<u>QUESTION #100:</u> Electrical - Existing conduit runs located on the ceiling of the 2nd floor (these serve the floor above); many are not to code. If priced to remove, replace and bring up to code, our proposal will be higher than a subcontractor who does not. How should electrician handle this?

<u>RESPONSE #100:</u> Items that are indicated on the plans shall be replaced. Existing conditions had met the code requirements of that time period of when they were installed.

QUESTION #101: Electrical - Will all low voltage systems be in full conduit systems?

RESPONSE #101: Low voltage systems should be in conduit as per the plans.

<u>QUESTION #102:</u> Electrical - Conduit runs to Server Room (on 2nd floor) from the basement; none shown for phone/CATV.

RESPONSE #102: All phone and data systems will be run in conduit per the plans.

<u>QUESTION #103:</u> Specification 221316 calls for no-hub cast iron DWV piping. However, there are some existing DWV lines run down from the 3rd floor that are PVC. Can this material be substituted?

<u>RESPONSE #103</u>: PVC pipe is approved. Provide and install PVC Plastic DWV Pipe: ASTM D 2665, Schedule 40, plain ends, glued, Rated at 10 feet head and tested. All fire penetrations fire sealed. Provide test reports of all piping to the Architect. All hangars shall be in accordance with the specifications.

<u>QUESTION #104:</u> Security System- Confirm that equipment and wiring is responsibility of Owner's vendor.

RESPONSE #104: The Contractor is responsible for conduit and string only.

<u>QUESTION #105:</u> Replacement of louver at penthouse - Painting may have to be touched up. Confirm extent of painting required (just at repaired area or entire wall surface?).

RESPONSE #105: Touch up painting on the interior only.

<u>QUESTION #106:</u> Specification 00150 Local Preference - Confirm if Local Preference will be used to "score" bidders, or as the basis of selecting the low bidder other than in a case of tie bids.

<u>RESPONSE #106</u>: If two or more bids received are equal with respect to price, the bid from the local vendor will be accepted provided local bidder is deemed responsive and responsible.

<u>QUESTION #107:</u> Specification 00300 Trench Safety Act - Will this form be required for the project?

RESPONSE #107: No.

<u>QUESTION #108:</u> Specification 00700, 4.3 & 015000 re: contractor costs - Since we are performing work inside the facility, which is already metered, will the county pay for water and electric used for construction? If so, what about for the required job trailer?

<u>RESPONSE #108:</u> Contractor shall use existing power and water from within the facility. The historic courtroom may be used in lieu of job trailer.

<u>QUESTION #109:</u> Noise - Certain construction operations such as the demolition phase and anchoring metal stud partition runners to the floors & ceilings may create noise for the occupants on the 1st and 3rd floors. Advise what specific construction activities will be allowed during normal weekday, daytime hours.

<u>RESPONSE #109:</u> Contractor shall refer to Section 011000- Summary, Article 1.8.d for construction activities pertaining to noise. The Contractor is responsible for exercising professional judgment and coordinating with Owner.

<u>QUESTION #110:</u> Is the Owner going to have a consultant on the project conducting inspections or collecting air samples?

<u>RESPONSE #110:</u> Owner will provide onsite representation to observe abatement; however the inspections and testing shall be the responsibility of the Contractor.

QUESTION #111: Are we going to abate the black mastic with no floor tile?

RESPONSE #111: All asbestos found is to be abated.

<u>QUESTION #112:</u> Can we use the elevator to load up our equipment, and to bag out ACM? Addendum #2 describes the chute but the ACM bags may not be able to go into a chute.

RESPONSE #112: Elevator use is not permitted. Contractors shall refer to the staging plan issued with Addendum #2 for all staging activities. The successful Contractor shall provide a health and safety plan for review and approval by Owner prior to the start of any construction activity.

END OF ADDENDUM #5

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until **Tuesday, July 30, 2013 at 3:00 PM.**

Sincerely,

Melissa M. Wendel, CPPO Purchasing Official

SECTION 012000 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
- 1.2 SUMMARY
 - A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
 - B. Related Sections include the following:
 - 1. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 1 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.
 - 3. Refer to County Purchasing requirements for additional directives and clarification.
- 1.3 DEFINITIONS
 - A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 1.4 SCHEDULE OF VALUES
 - A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - 2. Submit the Schedule of Values to Engineer and Project Manager at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
 - B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.

- b. Name of Engineer.
- c. Engineer's project number.
- d. Contractor's name and address.
- e. Date of submittal.
- 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value
 - h. Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
- 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
- 4. Round amounts to nearest whole dollar, total shall equal the Contract Sum.
- 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
- 6. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing if required.
- 7. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
- 9. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 10. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. Transmittal: Submit 3 signed and notarized original copies of each Application for Payment to Engineer and Project Manager by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- E. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Delays: Submit each Application for Payment with Contractor's waiver of mechanic's lien for construction period covered by the application.
 - a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 - 5. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- F. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of Values.
 - 3. Contractor's Construction Schedule (preliminary if not final).
 - 4. Products list.
 - 5. Schedule of unit prices.
 - 6. Submittals Schedule (preliminary if not final).
 - 7. List of Contractor's staff assignments.
 - 8. List of Contractor's principal consultants.
 - 9. Copies of building permits.
 - 10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 11. Initial progress report.

- 12. Report of preconstruction conference.
- 13. Certificates of insurance and insurance policies.
- 14. Performance and payment bonds.
- 15. Data needed to acquire Owner's insurance.
- G. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- H. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 6. AIA Document G707, "Consent of Surety to Final Payment."
 - 7. Evidence that claims have been settled.
 - 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
- I. Separate Pricing and Lump Sum Payments Separate pricing and lump sum payments shall follow the following payment schedule below and meet the required specifications, meet the requirements of the Engineer's plans, and must be accepted by the Owner's Representative and the Engineer.
- J. SCOPE:
 - 1. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the constructions.

Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

- K. GENERAL
 - 1. All contract lump sum prices included in the Bid Form section will be full compensation for all labor, equipment, and incidental to construct the 2nd Floor Remodel and Outside Air Project of the Manatee County Historic Courthouse as specified in the Contract Documents under this contract.
- L. WORK OUTSIDE AUTHORIZED LIMITS
 - 1. No payment will be made for work constructed outside the authorized limits of work.
- M. LUMP SUM PAYMENT
 - 1. Where payment for items are shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items.
 - 2. Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a break-down of the lump sum totals.
 - 3. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed, completed, and accepted by the Engineer. Such work includes but is not limited to the furnishing of all necessary labor, materials, equipment, transportation, clean up, restoration of disturbed areas, all other appurtenances to complete the construction and installation of the work as shown on the drawings, as described in the specifications, and as directed by the Engineer. Measurement and Payment for Lump Sum bid items will be based on a percentage of completion, as approved by the Owner and recommended by the Engineer, on a monthly basis for the Lump Sum bid items listed on the Bid Form of the Contract Documents. Partial payments will be based on the breakdown of the Bid Item in accordance with the Schedule of Values submitted by the Contractor and approved by the Engineer. Payment shall also include full compensation for project photographs, as-built record drawings, project signs, rubbish and spoil removal, repair, replacement or relocation of all signs, walls, and any and all other items required to complete the project in accordance with Contract Documents.
 - 4. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the Owner until as-built (record) drawings have been submitted and approved by the Engineer.
 - a. Shop Drawings, Working Drawings.
 - b. Cleanup and miscellaneous work.
 - c. Testing and placing system in operation.
 - d. Any material and equipment required to be installed and utilized for the tests.

- e. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
- f. Maintaining the existing quality of service during construction.
- g. Appurtenant work as required for a complete and operable system.
- h. As-built Record Drawings.
- N. BID ITEMS
 - 1. Mobilization Provide mobilization for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the project requirements. See the plans for an exact scope of work. Include in this Bid Item Temporary Facilities & Safety Controls.

Measurement and payment for this Bid Item shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required insurance for the project and the Contractor's mobilization and demobilization costs as shown in the Bid Form. Mobilization includes, but it not limited to: preparation and movement of personnel, equipment, supplies and incidentals such as safety and sanitary supplies/ facilities

Payment for mobilization shall not exceed 10 percent (10%) of the total Contract cost unless the Contractor can prove to the County that his actual mobilization cost exceeds 10 percent (10%). Provide breakdown of all mobilization costs with request for payment.

Partial payments for this Bid Item will be made in accordance with the following schedule:

| Percent of Original Contract Amount: | Percent Allowable Payment of Mobiliztion/Demobilization Bid Item Price: |
|---|--|
| 5 | 25 |
| 10 | 35 |
| 25 | 45 |
| 50 | 50 |
| 75 | 75 |
| 100 | 100 |

- Structural Repairs Provide for all Structural Repairs for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Structural Repairs shall be inspected and accepted by the Engineer and City of Bradenton.
- 3. Asbestos Abatement Perform Asbestos Abatement for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as

required to meet the Florida Building Code and the City of Bradenton requirements. See the "*Limited NESHAP Asbestos Renovation Survey*" prepared by PSI dated May 8, 2012 and "*Pre-Renovation Asbestos Inspection Report for Second Floor Flooring and Walls*" prepared by EEG Environmental Services, LLC, dated April 7, 2011, for an exact scope of work

- 4. Selective Demo Perform Demolition for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work.
- 5. Concrete Provide and install all Concrete for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Concrete work shall be inspected and accepted by the Architect and the City of Bradenton.
- 6. Framing & Gypsum Board Provide and install all Framing & Gypsum Board for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Framing & Gypsum Board shall be inspected and accepted by the Architect and the City of Bradenton.
- 7. Doors and Door Frames Provide and install all Doors and Door Frames for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Doors and Door Frames shall be inspected and accepted by the Architect and the City of Bradenton.
- 8. Door Hardware Provide and install all Door Hardware for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Door Hardware shall be inspected and accepted by the Architect.
- 9. Roofing Tie In / Repair / Walkway Pads Provide and install all Roofing Tie In / Repair for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Roofing Tie In / Repair / Walkway Pads shall be inspected and accepted by the Architect and the City of Bradenton.
- 10. Acoustic Ceilings and Grid Provide and install all Acoustic Lay-In Ceiling and Ceiling Grid for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Ceiling Grid and Lay-In Ceiling shall be inspected and accepted by the Architect and the City of Bradenton.

- 11. Flooring (Ceramic Tile, VCT, Carpet) Provide and install all Flooring for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Flooring shall be inspected and accepted by the Architect.
- 12. Casework Provide and install all Casework for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Casework shall be inspected and accepted by the Architect.
- 13. Painting Provide and install all Painting for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Painting shall be inspected and accepted by the Architect.
- 14. Signage Provide and install all Signage for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Signage shall be inspected and accepted by the Architect and the City of Bradenton.
- 15. Bathroom partitions and Accessories Provide and install all Bathroom partitions and Accessories for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Bathroom partitions and Accessories shall be inspected and accepted by the Architect.
- 16. Miscellaneous items Provide and install stair railings and chair rail moldings. (LIST ALL ITEMS AND UNIT COSTS included under this category) for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Miscellaneous items shall be inspected and accepted by the Architect and where applicable by the City of Bradenton.
- 17. Fire Protection Systems Provide and install all fire protection systems for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and all local codes. See the fire protection plans and specifications for an exact scope of work. Demolition and replacement of items may be required. Install the systems as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed fire protection systems shall be inspected and accepted by the Engineer and the City of Bradenton.

- HVAC Demos Perform Demolition for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work.
- 19. HVAC Systems and Components Provide and install all mechanical systems for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and all local code requirements. Before final payment is completed the Manatee County Project Manager, the Engineer and the City of Bradenton Inspector shall inspect and accept the HVAC systems.
- 20. HVAC Controls Provide and install all temperature controls for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and all local codes. Before final payment is completed the Manatee County Project Manager, the Engineer and the City of Bradenton Inspector shall inspect and accept the HVAC systems.
- 21. IT Room DX System Provide a price for the provision of an HVAC unit for cooling the computer room 217, and the complete installation of the provided unit. See the mechanical plans and specifications for the DX air handler for a specific scope. Provide and install all items required for the installation of the DX air handler unit for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and all local code requirements. Install the systems and check the HVAC air balance of the building after the construction of the building is completed. Before final payment is completed the Manatee County Project Manager, the Engineer and the City of Bradenton Inspector shall inspect and accept the HVAC systems.
- 22. HVAC Test and Balance Perform HVAC Test and Balance for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the HVAC Test and Balance Report shall be provided by the General Contractor and inspected and accepted by the Engineer of Record.
- 23. Plumbing Provide and install all Plumbing for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Plumbing shall be inspected and accepted by the Engineer and the City of Bradenton.
- 24. Plumbing Fixtures Provide and install all Plumbing Fixtures for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Plumbing Fixtures shall be inspected and accepted by the Architect and the City of Bradenton.

- 25. Electrical Switchgear, panels, circuit breakers, transformer(s) Provide and install all Electrical Work for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Build-ing Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Electrical Work shall be inspected and accepted by the Engineer and the City of Bradenton.
- 26. Lighting– Provide and install all Lighting for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and the City of Bradenton requirements. See the plans for an exact scope of work. Before final payment is completed the Lighting shall be inspected and accepted by the Engineer and the City of Bradenton.
- 27. Wiring and Electrical Conduit Provide and install all conduits and wiring required for the Fire Protection, Life Safety, Security, Data and electrical connections per the National Electrical Code (NEC) and all local codes. See the mechanical, electrical, security and fire protection plans and specifications for the exact scope of work. Before final payment is completed all conduit shall be inspected and accepted by the Engineer and the City of Bradenton.
- 28. Electrical Systems and Components Provide and install all electrical items: conduits, wiring, and all items required to make a complete functioning electrical system for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as to meet the requirements of the National Electrical Code (NEC) and all of the local codes. See the electrical design plans and specifications for an exact scope of work. Excludes items for Electrical Switchgear #25, Lighting #26, Wiring and Electrical Conduits # 27, Security Systems #29, and Fire Alarm Systems #30. Before final payment is completed electrical systems shall be inspected and accepted by the Engineer and the City of Bradenton.
- 29. Security Systems Provide and install all security system items of the Project at the Manatee County Historic Courthouse and tie into the existing building security as required. See the contact documents for the exact scope of work. The Wiring and Electrical Conduit for security systems is a separate bid item (bid item # 27) and is not part of the allowance. Before final payment is completed security systems shall be inspected and accepted by the Engineer and the City of Bradenton.

General Contractor shall use an allowance of \$ 50,000.00 to contract with the Manatee County Security Continuing Services Contractor listed below.

Qualified Systems Contracting, Inc.6996 Anderson RoadTampa, FL 33634LarryOffice: 813-885-3705BrandFax: 866-306-1799Cell:

Larry Phillips Branch Manager Cell: 813-523-8685

30. Fire Alarm Systems - Provide and install all fire alarm systems for the 2nd Floor Remodel and Outside Air Project at the Manatee County Historic Courthouse as required to meet the Florida Building Code and all local codes. The Wiring and Conduit installation are in another bid item (bid item # 27). See the contract documents for the exact scope of work. Limited demolition shall be required. Provide and install new systems and connect to the existing building system. Before final payment is completed fire alarm systems shall be inspected and accepted by the Engineer and the City of Bradenton.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012000

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SECTION 062023 - INTERIOR ARCHITECTURAL WOODWORK

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 the following:
 - 1. Interior standing and running trim.
 - 2. Plastic-laminate cabinets.
 - 3. Plastic-laminate countertops.
 - 4. Solid-surfacing-material deal plates.

1.3 DEFINITIONS

A. Interior architectural woodwork includes wood furring, blocking, shims, and hanging strips for installing woodwork items unless concealed within other construction before woodwork installation.

1.4 SUBMITTALS

- A. Product Data: For high-pressure decorative laminate adhesive for bonding plastic laminate solidsurfacing material cabinet hardware and accessories.
- B. Provide samples for verification of all finish materials prior to ordering materials or beginning fabrication.
- C. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
 - 1. Show details full size.
 - 2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
 - 3. Show locations and sizes of cutouts and holes for items installed in architectural woodwork.

1.5 WARRANTY

- A. Provide a three (3) year warranty on all casework and installation
- 1.6 QUALITY ASSURANCE

- A. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" for grades of interior architectural woodwork indicated for construction, finishes, installation, and other requirements.
- B. Cabinet makers and installer to have a minimum of three (3) years of experience.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver woodwork until painting and similar operations that could damage woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.9 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

PART 2 - PRODUCTS

2.1 CASEWORK PRODUCTS

- A. Laminates
 - 1. Exposed face laminates
 - a. Nevamar Laminate is standard for the tops and cabinet sides, doors and drawer fronts.
 - b. All colors and grains to match (both interior and exterior).
 - c. If a countertop calls for a 90 degree, 45 degree the comers and match grain.
 - 2. Interiors to be vt cabinet liner for all interiors with doors and drawers.
 - 3. Adhesive to be Wilsonart 951 glue.
- B. Cabinet Construction
 - 1. Sides and frames to be 3/4" white birch plywood.
 - 2. Backs to be 1/2" white birch plywood.

- 3. Doors to be MDF and laminated 6 sides (no pvc edges)
- 4. Shelving to be 3/4" birch plywood and laminated 6 sides.
- 5. Countertops to be built with a top layer of MDF and a base layer of 3/4" birch plywood. The bottoms of each top are to be solid and laminated. All exposed edged to be laminated.

C. HARDWARE

- 1. Screws to be zinc plated square head screws.
- 2. Handles to be 4" wire pull brush nickel.
- 3. Drawer slides to be Blum Metabox full extension drawer slides with Metabox file systems.
- 4. Hinges to be Salice soft close hinges, 110 degree, unless otherwise called for.
- 5. Hanging rail systems to be Metabox steel rails rail support brackets and covers.
- 6. Shelf pins to be 114 nickel.
- 7. Support brackets to be Fastcap speed brace 21 x 28.
- 8. Grommets to be 3" wherever applicable.

2.2 MATERIALS

- A. General: Provide materials that comply with requirements of AWI's quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.
- B. Wood Species and Cut for Painted Finish: Popular, plain sawn or sliced.
- C. Wood Products: Comply with the following:
 - 1. Particleboard: ANSI A208.1, Grade M-2.
 - 2. Softwood Plywood: DOC PS 1.
- D. Solid-Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. E. I. du Pont de Nemours and Company.
 - 2. Type: Standard type, unless Special Purpose type is indicated.
 - 3. Colors and Patterns: Match Architect's samples.

2.3 MISCELLANEOUS HARDWARE AND ACCESSORIES

- A. Grommets for Cable Passage through Countertops: 3-inch OD, black, molded-plastic grommets and matching plastic caps with slot for wire passage.
 - 1. Product: Subject to compliance with requirements, provide "OG series" by Doug Mockett & Company, Inc.
- B. Paper Slots: 17 inches long by 1-3/4 inches wide by 1 inch deep; brown, molded-plastic, paper-slot liner with 1/4-inch lip.

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- 1. Product: Subject to compliance with requirements, provide "Model CP-2" by Doug Mockett & Company, Inc.
- C. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in BHMA A156.9.

2.4 MISCELLANEOUS MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.
- C. Adhesive for Bonding Plastic Laminate: Un-pigmented contact cement.
 - 1. Adhesive for Bonding Edges: Hot-melt adhesive or adhesive specified above for faces.

2.5 FABRICATION, GENERAL

- A. Interior Woodwork Grade: Unless otherwise indicated, provide Premium-grade interior woodwork complying with referenced quality standard.
- B. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.
- C. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.
- D. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:
 - 1. Corners of Cabinets and Edges of Solid-Wood (Lumber) Members 3/4 Inch Thick or Less: 1/16 inch.
 - 2. Edges of Rails and Similar Members More Than 3/4 Inch Thick: 1/8 inch.
 - 3. Corners of Cabinets and Edges of Solid-Wood (Lumber) Members and Rails: 1/16 inch.
- E. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
 - 1. Notify Architect seven days in advance of the dates and times woodwork fabrication will be complete.
 - 2. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on Shop Drawings before disassembling for shipment.

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- F. Shop-cut openings to maximum extent possible to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
 - 1. Seal edges of openings in countertops with a coat of varnish.

2.6 INTERIOR STANDING AND RUNNING TRIM FOR PAINTED FINISH

- A. Wood Species and Cut: Popular, plain sawn.
- B. For trim items wider than available lumber, use veneered construction. Do not glue for width.
- C. For rails wider or thicker than available lumber, use veneered construction. Do not glue for width or thickness.
- D. Backout or groove backs of flat trim members and kerf backs of other wide, flat members, except for members with ends exposed in finished work.
- E. Assemble casings in plant except where limitations of access to place of installation require field assembly.
- F. Assemble moldings in plant to maximum extent possible. Miter corners in plant and prepare for field assembly with bolted fittings designed to pull connections together.
- 2.7 PLASTIC-LAMINATE CABINETS
 - A. AWI Type of Cabinet Construction: Flush overlay.
 - B. Laminate Cladding for Exposed Surfaces: High-pressure decorative laminate complying with the following requirements:
 - 1. Horizontal Surfaces Other Than Tops: Grade HGS.
 - 2. Vertical Surfaces: Grade HGS.
 - 3. Edges: Grade HGS.
 - C. Materials for Semi-exposed Surfaces:
 - 1. Surfaces Other Than Drawer Bodies: High-pressure decorative laminate, Grade VGS.
 - a. PVC edges NOT ALLOWED.
 - b. For semi-exposed backs of panels with exposed plastic-laminate surfaces, provide surface of high-pressure decorative laminate, Grade VGS.
 - 2. Drawer Sides and Backs: Solid-hardwood lumber.
 - 3. Drawer Bottoms: Hardwood plywood.
 - D. Concealed Backs of Panels with Exposed Plastic Laminate Surfaces: High-pressure decorative laminate, Grade BKL.

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- E. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
 - 1. Match Architect's sample.
- F. Provide dust panels of 1/4-inch plywood or tempered hardboard above compartments and drawers, unless located directly under tops.
- 2.8 PLASTIC-LAMINATE COUNTERTOPS
 - A. High-Pressure Decorative Laminate Grade: HGS.
 - B. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
 - 1. Match Architect's sample.
 - C. Grain Direction: Parallel to cabinet fronts.
 - D. Edge Treatment: Same as laminate cladding on horizontal surfaces.
 - E. Core Material: See above.
 - F. Core Material at Sinks: See above.
 - G. Backer Sheet: Provide plastic-laminate backer sheet, Grade BKL, on underside of countertop substrate.
 - H. Paper Backing: Provide paper backing on underside of countertop substrate.

2.9 SOLID-SURFACING-MATERIAL COUNTERTOPS

- A. Solid-Surfacing-Material Thickness: 1/2 inch.
- B. Colors, Patterns, and Finishes: Provide materials and products that result in colors of solid-surfacing material complying with the following requirements:
 - 1. As selected by Architect from manufacturer's full range.
- C. Fabricate tops in one piece, unless otherwise indicated. Comply with solid-surfacing-material manufacturer's written recommendations for adhesives, sealers, fabrication, and finishing.
 - 1. Fabricate tops with shop-applied edges of materials and configuration indicated.
 - 2. Fabricate tops with shop-applied backsplashes.
- D. Install integral sink bowls in countertops in shop.
- E. Drill holes in countertops for plumbing fittings and soap dispensers in shop.

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PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition woodwork to average prevailing humidity conditions in installation areas.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

3.2 INSTALLATION

- A. Grade: Install woodwork to comply with requirements for the same grade specified in Part 2 for fabrication of type of woodwork involved.
- B. Assemble woodwork and complete fabrication at Project site to comply with requirements for fabrication in Part 2, to extent that it was not completed in the shop.
- C. Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8 inch in 96 inches.
- D. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- E. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails or finishing screws for exposed fastening, countersunk and filled flush with woodwork and matching final finish if transparent finish is indicated.
- F. Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to greatest extent possible. Do not use pieces less than 96 inches long, except where shorter single-length pieces are necessary. Scarf running joints and stagger in adjacent and related members.
 - 1. Fill gaps, if any, between top of base and wall with plastic wood filler, sand smooth, and finish same as wood base if finished.
 - 2. Install wall railings on indicated metal brackets securely fastened to wall framing.
 - 3. Install standing and running trim with no more variation from a straight line than 1/8 inch in 96 inches.
- G. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
 - 1. Install cabinets with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.
 - 2. Fasten wall cabinets through back, near top and bottom, at ends and not more than 16 inches o.c. with No. 10 wafer-head screws sized for 1-inch penetration into wood framing, blocking, or hanging strips.

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- H. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
 - 1. Align adjacent solid-surfacing-material countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
 - 2. Install countertops with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.
 - 3. Secure backsplashes to tops with concealed metal brackets at 16 inches o.c..
 - 4. Calk space between backsplash and wall with sealant specified in Division 7 Section "Joint Sealants."

3.3 ADJUSTING AND CLEANING

- A. Adjusting
 - 1. Replace finish carpentry that is damaged or does not comply with requirements. Finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery, doors and drawers for uniform appearance.
 - 2. If caulking is applicable, use color match caulking.
- B. Cleaning
 - 1. Clean finish carpentry on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas
 - 2. All cabinets to be vacuumed and polished with Pledge at the end of each install.
- C. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- D. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 062023

SECTION 087100 - DOOR HARDWARE

PART I - GENERAL

1.1 WORK INCLUDED

A. The work in this section shall include furnishing of all items of finish hardware as hereinafter specified or obviously necessary to complete the building, except those items that are specifically excluded from this section of the specification.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Hollow Metal Doors and Frames
- B. Aluminum Doors and Frames
- C. Wood Doors

1.3 DESCRIPTION OF WORK

- A. Furnish labor and material to complete hardware work indicated, as specified herein, or as may be required by actual conditions at building.
- B. Include all necessary screws, bolts, expansion shields, other devices, if necessary, as required for proper hardware application. The hardware supplier shall assume all responsibility for correct quantities.
- C. Hardware shall meet the requirements of Federal, State and Local codes having jurisdiction over this project, notwithstanding any real or apparent conflict therewith in these specifications.
- D. Fire-rated openings:
 - Provide hardware for fire-rated openings in compliance with A.I.A. (NBFU) Pamphlet No. 80, NFPA Standards NO. 101, UBC 702 (1997) and UL10C. This requirement takes precedence over other requirements for such hardware. Provide only hardware that has been tested and listed by UL for the types and sizes of doors required, and complies with the requirements of the door and door frame labels.
 - 2. Panic exit devices are required on fire-rated doors, provide supplementary marking on door UL label indicating Fire Door to be equipped with fire exit hardware and provide UL label on exit device indicating "Fire Exit Hardware".
- F. Fasteners:
 - 1. Hardware as furnished shall conform to published templates generally prepared for machine screw installation.
 - 2. Furnish each item complete with all screws required for installation. Typically, all exposed screws installation.
 - 3. Insofar as practical, furnished concealed type fasteners for hardware units that have exposed screws shall be furnished with Phillips flat head screws, finished to match adjacent hardware.
 - 4. Door closers and exit devices to be installed with closed head through bolts (sex bolts).

1.4 QUALITY ASSURANCE

- A. The supplier to be a directly franchised distributor of the products to be furnished and have in their employ an AHC (Architectural Hardware Consultant). This person is to be available for consultation to the architect, owner and the general contractor at reasonable times during the course of work.
- B. The finish hardware supplier shall prepare and submit to the architect six (6) copies of a complete schedule identifying each door and each set number, following the numbering system and not creating any separate system himself. He shall submit the schedule for review, make corrections as directed and resubmit the corrected schedule for final approval. Approval of schedule will not relieve Contractor of the responsibility for furnishing all necessary hardware, including the responsibility for furnishing correct quantities.
- C. No manufacturing orders shall be placed until detailed schedule has been submitted to the architect and written approval received.
- D. After hardware schedule has been approved, furnish templates required by manufacturing contractors for making proper provisions in their work for accurate fitting, finishing hardware setting. Furnish templates in ample time to facilitate progress of work.
- E. Hardware supplier shall have an office and warehouse facilities to accommodate the materials used on this project. The supplier must be an authorized distributor of the products specified.
- F. The hardware manufactures are to supply both a pre-installation class as well as a post-installation walk-thru. This is to insure proper installation and provide for any adjustments or replacements of hardware as required.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Wrap, protect finishing hardware items for shipment. Deliver to manufacturing contractors hardware items required by them for their application; deliver balance of hardware to job; store in designated location. Each item shall be clearly marked with its intended location.

1.6 WARRANTY

- A. The material furnished shall be warranted for one year after installation or longer as the individual manufacturer's warranty permits.
- B. Overhead door closers shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a period of ten (10) years commencing on the Date of Final Completion and Acceptance, and in the event of failure, the manufacture is to promptly repair or replace the defective with no additional cost to the Owner.

2.1 ACCEPTABLE MANUFACTURERS

- A. To the greatest extent possible, obtain each kind of hardware from only one manufacturer.
- B. All numbers and symbols used herein have been taken from the current catalogues of the following manufacturers.

| PROI | DUCT | ACCEPTABLE MANUFACTURER | ACCEPTABLE SUBSTITUTE |
|------|--|----------------------------|--------------------------|
| 1) | Hinges | lves | Hager, Stanley , Bommer |
| 2) | Locks & Latches | Best Access | None (Owners standard) |
| 3) | Cylinders, Keys, Keying | Best Access | None (Owners standard) |
| 4) | Exit Devices | Von Duprin | None (Owners standard) |
| 5) | Door Closers | LCN | None (Owners standard) |
| 6) | OH Stops/Holders | Glynn Johnson | Rixson |
| 7) | Magnetic Hold Opens | LCN | Dor-O-Matic |
| 8) | Wall Stops / Floor / Stops / Flushbolts | lves | Rockwood, G J |
| 9) | Kick Plates | lves | Quality, Rockwood |
| 10) | Threshold/Weather-strip | National Guard | Pemko, Zero |
| 11) | Silencers | lves | Rockwood, GJ |
| 12) | Key Cabinet | Lund | Key Control |
| | | | |

- C. If material manufactured by other than that specified or listed herewith as an equal, is to be bid upon, permission must be requested from the architect seven (7) days prior to bidding. If substitution is allowed, it will be so noted by addendum.
- 2.2 FINISH OF HARDWARE:
 - A. Exterior Hinges to be Oil Rubbed Bronze (613), Interior Hinges to be Oil Rubbed Bronze (643). Door Closers to be Bronze (690). Locks to be Oil Rubbed Bronze (613), Exit Devices to be Oil Rubbed Bronze (313), Overhead Holders to be Oil Rubbed Bronze (613), Flat Goods to be Oil Rubbed Bronze (613), and the Thresholds to be Duranotic Bronze Aluminum.
- 2.3 HINGES AND PIVOTS:
 - A. Exterior butts shall be Stainless Steel. Butts on all out swinging doors shall be furnished with non-removable pins (NRP).
 - B. Interior butts shall be as listed.
 - C. Doors 5' or less in height shall have two (2) butts. Furnish one (1) additional butt for each 2'6" in height or fraction thereof. Dutch door shall have two (2) butts per leaf.

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- 2.04 KEYING:
 - A. All locks and cylinders shall be 7 pin, patented interchangeable CORMAX core cylinders.
 - B. Provide green brass construction cores. Construction keys and extractor keys are to be turned over to the owner at the end of project
 - C. Hardware supplier to provide temporary cylinders or cores during the construction phase. The contractor is to change out the temporary cylinders for the permanent cylinders. The contractor shall provide the following:
 - 1. 2 Change keys
 - 2. 6 Master keys per set
 - 3. 9 Construction keys
 - 4. 2 Extractor leys
 - D. Contact Kurt Mahoney @ Discount Lock and Key for keying information per county instructions.
- 2.5 LOCKSETS:
 - A. Locksets shall be Heavy Duty Cylindrical type, unless specified otherwise, in "9K" series with interchangeable CORMAX core 7 pin 15D trim as manufactured by Best Access Systems. Cores will be included in lock price and purchased by hardware supplier.
 - 1. Acceptable substitutions: None (Owners standard)
- 2.6 EXIT DEVICES:
 - A. All devices shall be Von Duprin 98 Series in types and functions specified. All devices must be listed under "Panic Hardware" in accident equipment list of Underwriters Laboratories. All labeled doors with "Fire Exit Hardware" must have labels attached and be in strict accordance with Underwriters Laboratories.
 - B. All exit devices shall be tested to ANSI/BHMA A156.3 test requirements by a BHMA certified testing laboratory. A written certification showing successful completion of a minimum of 1,000,000 cycles must be provided.
 - C. All surface strikes shall be roller type and come complete with a plate underneath to prevent movement. And shall be provided with a dead-latching feature to prevent latch bolt tampering.
 - 1. Acceptable substitutions: None (Owners standard)

2.7 DOOR CLOSERS:

A. All closers shall be LCN 4000 series having non-ferrous covers, forged steel arms separate valves for adjusting backcheck, closing and latching cycles and adjustable spring to provide up to 50% increase in spring power. Closers shall be furnished with parallel arm mounted on all doors opening into corridors or other public spaces and shall be mounted to permit 180 degrees door swing

wherever wall conditions permit. Furnish with non-hold open arms unless otherwise indicated.

- B. Door closer cylinders shall be of high strength cast iron construction to provide low wear operating capabilities of internal parts throughout the life of the installation. All door closers shall be tested to ANSI/BHMA A156.4 test requirements by a BHMA certified testing laboratory. A written certification showing successful completion of a minimum of 10,000,000 cycles must be provided.
- C. Door closers shall utilize temperature stable fluid capable of withstanding temperature ranges of 120 degrees Fahrenheit to -30 degrees Fahrenheit, without requiring seasonal adjustment of closer speed to properly close the door. Closers for fire-rated doors shall be provided with temperature stabilizing fluid that complies with the standards UBC 7-2 (1997) and UL 10C.
- D. Door closers shall incorporate tamper resistant non-critical screw valves of V-slot design to reduce possible clogging from particles within the closer. Closers shall have separate and independent screw valve adjustments for latch speed, general speed, and hydraulic backcheck. Backcheck shall be properly located so as to effectively slow the swing of the door at a minimum of 10 degrees in advance of the dead stop location to protect the door frame and hardware from damage. Pressure relief valves (PRV) are not acceptable.
 - 1. Acceptable substitutions: None (Owners standard)
- 2.8 TRIM AND PLATES:
 - A. Kick plates, mop plates, and armor plates, shall be .050 gauge with 630 finish. Kick plates to be 10" high, mop plates to be 4" high. All plates shall be two (2) inches less full width of door.
 - B. Push plates, pull plates, door pulls, and miscellaneous door trim shall be shown in the hardware schedule.
- 2.9 DOOR STOPS:
 - A. Doorstops shall be furnished for all doors to prevent damage to doors or hardware from striking adjacent walls or fixtures. Wall bumpers equal to IVES 407 Series are preferred, but where not practical furnish floor stops equal to IVES 436 or 438 series. Where conditions prohibit the use of either wall or floor type stops, furnish surface mounted overhead stops equal to Glynn Johnson, 450 Series.
- 2.10 THRESHOLDS AND WEATHERSTRIP:
 - A. Thresholds and weather-strip shall be as listed in the hardware schedule.
- 2.11 DOOR SILENCERS:
 - A. Furnish rubber door silencers equal to IVES 20for all new interior hollow metal frames, (2) per pair and (3) per single door frame.

PART III - EXECUTION

3.1 INSTALLATION:

- A. All hardware shall be applied and installed in accordance with the Finish Hardware schedule. Care shall be exercised not to mar or damage adjacent work.
- B. Contractor to provide a secure lock-up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items that are not immediately replaceable, so that the completion of the work will not be delayed by hardware losses both before and after installation.
- C. No hardware is to be installed until the hardware manufactures have provided a pre-installation class. To insure proper installation of the specified products a post-installation inspection is to be conducted.

3.2 ADJUSTING AND CLEANING:

- A. Contractor shall adjust all hardware in strict compliance with manufacturer's instructions. Prior to turning project to owner, contractor shall clean and make any final adjustments to the finish hardware.
- 3.3 PROTECTION:
 - A. Contractor shall protect the hardware, as it is stored on construction site in a covered and dry place.
 - B. Contractor shall protect exposed hardware installed on doors during the construction phase.
- 3.4 KEY CABINET:
 - A. Set up and index one (1) Key Cabinet that allows room for expansion for 150% of the number of keys for the project.

3.5 HARDWARE SCHEDULE:

- A. The following schedule is furnished for whatever assistance it may afford the contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware group, provide door or item with hardware same as required for similar purposes. Quantities listed are for each pair of doors or for each single door.
- B. This hardware schedule was prepared by.

IR – Security Technology 3451 Technological Ave, Suite 7 Orlando FL 32817 Ph: 407-571-2000 Fax 407-571-2006

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Hardware Group No. 01

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|---------------------|----------------------------------|--------|-----|
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | FIRE EXIT HARDWARE | 98L-F 996L | 313 | VON |
| 1 | ΕA | RIM CYLINDER | 1E72 | 613 | BES |
| 1 | ΕA | CORE ONLY | 1C7-1 | 613 | BES |
| 1 | ΕA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | ΕA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | ΕA | BALANCE | FURNISHED UNDER SECTION 08 40 00 | | B/O |
| | | WIDE STILE ALUMINUM | I STOREFRONT DOOR REQUIRED | | |

Hardware Group No. 02

Provide each PR door(s) with the following:

| Quantity | y | Description | Model Number | Finish | Mfr |
|----------|-----|--|----------------------|--------|-----|
| 5 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | ELECTRIC HINGE | 3CB1 4.5 X 4.5 TW4 | 643 | IVE |
| 1 | EA | FIRE EXIT HARDWARE | 9847EO-F-LBR | 313 | VON |
| 1 | EA | FIRE EXIT HARDWARE | 9847L-F-LBR E996L | 313 | VON |
| 1 | EA | RIM CYLINDER | 1E72 | 613 | BES |
| 1 | EA | CORE ONLY | 1C7-1 | 613 | BES |
| 2 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 2 | EA | KICK PLATE | 8400 10" X 1" LDW | 613 | IVE |
| 2 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | | WIRING DIAGRAM | BY HARDWARE SUPPLIER | | B/O |
| 1 | | CARD READER | BY SECURITY SUPPLIER | | B/O |
| | | CARD READER TO RELEASE ELECTRIC TRIM CONCEALED VERTICAL ROD EXIT DEVICES - LESS BOTTOM ROD | | | |

Hardware Group No. 03

Provide each PR door(s) with the following:

| Quantity | | Description | Model Number | Finish | Mfr |
|----------|-----|------------------------|----------------|--------|-----|
| 6 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | SET | CONST LATCHING BOLT | FB51P | 613 | IVE |
| 1 | EA | STOREROOM LOCK | 93K7D15D | 613 | BES |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 2 | EA | DOOR BOTTOM | 321AA | DUR | ZER |

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Hardware Group No. 04

Provide each SGL door(s) with the following:

| Quantit | .y | Description | Model Number | Finish | Mfr |
|---------|-----|------------------------|----------------------|--------|-----|
| 3 | EA | HINGE | 3CB1HW 4.5 X 4.5 | 643 | IVE |
| 1 | EA | FIRE EXIT HARDWARE | 98L-F 996L | 313 | VON |
| 1 | EA | RIM CYLINDER | 1E72 | 613 | BES |
| 1 | EA | CORE ONLY | 1C7-1 | 613 | BES |
| 1 | EA | ELECTRIC STRIKE | 6300 | 613 | VON |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | EA | MAGNETIC HOLD- OPEN | SEM 1960 | 690 | LCN |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | | WIRING DIAGRAM | BY HARDWARE SUPPLIER | | B/O |
| 1 | | CARD READER | BY SECURITY SUPPLIER | | B/O |
| | | CARD READER TO REL | EASE ELECTRIC STRIKE | | |

Hardware Group No. 05

Provide each SGL door(s) with the following:

| Quantity | у | Description | Model Number | Finish | Mfr |
|----------|-----|---|--------------------------------------|--------|-----|
| 3 | EA | HINGE | 3CB1HW 4.5 X 4.5 | 643 | IVE |
| 1 | EA | FIRE EXIT HARDWARE | CX98EO-F | 313 | VON |
| 1 | EA | MORTISE CYLINDER | 1E72 | 613 | BES |
| 1 | EA | CORE ONLY | 1C7-1 | 613 | BES |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | EA | MAGNETIC HOLD- OPEN | SEM 1960 | 690 | LCN |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | EA | POWER SUPPLY | PS914 | GRY | VON |
| | | MAGNETIC HOLDERS T DELAYED EGRESS ON | O RELEASE ON FIRE ALARM PUSH SIDE | | |

CYLINDER IN PANIC TO TURN ON/OFF DELAYED EGRESS

Hardware Group No. 06

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|-----|--------------------|----------------------|--------|-----|
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | FIRE EXIT HARDWARE | 98L-F 996L | 313 | VON |
| 1 | EA | RIM CYLINDER | 1E72 | 613 | BES |
| 1 | EA | CORE ONLY | 1C7-1 | 613 | BES |
| 1 | EA | ELECTRIC STRIKE | 6300 | 613 | VON |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | | WIRING DIAGRAM | BY HARDWARE SUPPLIER | | B/O |
| 1 | | CARD READER | BY SECURITY SUPPLIER | | B/O |
| | | CARD READER TO REL | EASE ELECTRIC STRIKE | | |

Hardware Group No. 07

Provide each SGL door(s) with the following:

| Quantit | y | Description | Model Number | Finish | Mfr |
|---------|-----|-------------------|-----------------------|--------|-----|
| 3 | ΕA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | STOREROOM LOCK | 93K7D15D | 613 | BES |
| 1 | EA | ELECTRIC STRIKE | 6211 FSE 24VAC | 613 | VON |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | | WIRING DIAGRAM | BY HARDWARE SUPPLIER | | B/O |
| 1 | | CARD READER | BY SECURITY SUPPLIER | | B/O |
| | | CARD READER TO RE | LEASE ELECTRIC STRIKE | | |

Hardware Group No. 08

Provide each SGL door(s) with the following:

| Quantit | y | Description | Model Number | Finish | Mfr |
|---------|-----|--------------------|----------------------|--------|-----|
| 3 | EA | HINGE | 3CB1HW 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | STOREROOM LOCK | 93K7D15D | 613 | BES |
| 1 | EA | ELECTRIC STRIKE | 6211 FSE 24VAC | 613 | VON |
| 1 | ΕA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | ΕA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | SET | SEALS | 188S | BLK | ZER |
| 1 | | WIRING DIAGRAM | BY HARDWARE SUPPLIER | | B/O |
| 1 | | CARD READER | BY SECURITY SUPPLIER | | B/O |
| | | CARD READER TO REL | EASE ELECTRIC STRIKE | | |

Hardware Group No. 09

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|----------------|-------------------|--------|-----|
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | CLASSROOM LOCK | 93K7R15D | 613 | BES |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | EA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 10

Provide each SGL door(s) with the following:

| Quan | tity | Description | Model Number | Finish | Mfr |
|------|------|----------------|-------------------|--------|-----|
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | STOREROOM LOCK | 93K7D15D | 613 | BES |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | EA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 11

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|----------------|-------------------|--------|-----|
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | ENTRANCE LOCK | 93K7AB15D | 613 | BES |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | ΕA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | ΕA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 12

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|----------------|-------------------|--------|-----|
| 3 | ΕA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | PRIVACY SET | 93K0L15D | 613 | BES |
| 1 | ΕA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | ΕA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | ΕA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | EA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 13

Provide each SGL door(s) with the following:

| | | · · · | • | | |
|--------|----|----------------|-------------------|--------|-------|
| Quanti | ty | Description | Model Number | Finish | n Mfr |
| 3 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | PASSAGE SET | 93K0N15D | 613 | BES |
| 1 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | EA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | EA | SILENCER | SR64 | GRY | IVE |
| | | | | | |

Hardware Group No. 14

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|----------------|-------------------|--------|-----|
| 3 | ΕA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | ΕA | PUSH PLATE | 8200 8" X 16" | 613 | IVE |
| 1 | ΕA | PULL PLATE | 8303-0 4" X 16" | 613 | IVE |
| 1 | ΕA | SURFACE CLOSER | 4041 | 690 | LCN |
| 1 | ΕA | KICK PLATE | 8400 10" X 2" LDW | 613 | IVE |
| 1 | ΕA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | ΕA | SILENCER | SR64 | GRY | IVE |

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Hardware Group No. 15

Provide each PR door(s) with the following:

| Quantit | y | Description | Model Number | Finish | n Mfr |
|---------|----|---------------|----------------|--------|-------|
| 6 | EA | HINGE | 3PB1 4.5 X 4.5 | 643 | IVE |
| 2 | EA | ROLLER LATCH | 358 | 613 | IVE |
| 2 | ΕA | PASSAGE | 93K02DT150 | 613 | BES |
| 1 | EA | OVERHEAD STOP | 450S | 613 | GLY |
| 2 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 2 | ΕA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 16

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|---------------|----------------|--------|-----|
| 3 | ΕA | HINGE | 3PB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | ENTRANCE LOCK | 93K7AB15D | 613 | BES |
| 1 | ΕA | OVERHEAD STOP | 450S | 613 | GLY |
| 3 | ΕA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 17

Provide each SGL door(s) with the following:

| Quantit | у | Description | Model Number | Finish | Mfr |
|---------|----|---------------|----------------|--------|-----|
| 3 | EA | HINGE | 3PB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | ENTRANCE LOCK | 93K7AB15D | 613 | BES |
| 1 | ΕA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | ΕA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 18

Provide each SGL door(s) with the following:

| Quantity | Description | Model Number | Finish | Mfr |
|----------|-------------|-----------------------------|--------|-----|
| 1 | | EXISTING HARDWARE TO REMAIN | | B/O |

Hardware Group No. 19

Provide each SGL door(s) with the following:

| Quantit | ty | Description | Model Number | Finish | Mfr |
|---------|----|-------------|----------------|--------|-----|
| 3 | EA | HINGE | 3PB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | PASSAGE | 93K0N15D | 613 | BES |
| 1 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 3 | EA | SILENCER | SR64 | GRY | IVE |

Hardware Group No. 20

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Provide each PR door(s) with the following:

| Quantity | / | Description | Model Number | Finish | Mfr |
|----------|-----|--------------------|-------------------|--------|-----|
| 6 | EA | HINGE | 3CB1 4.5 X 4.5 | 643 | IVE |
| 1 | EA | FIRE EXIT HARDWARE | 9847EO-F-LBR | 313 | VON |
| 1 | EA | FIRE EXIT HARDWARE | 9847L-F-LBR 996L | 313 | VON |
| 1 | EA | RIM CYLINDER | 1E72 | 613 | BES |
| 1 | EA | CORE ONLY | 1C7-1 | 613 | BES |
| 2 | EA | SURFACE CLOSER | 4041 | 690 | LCN |
| 2 | EA | KICK PLATE | 8400 10" X 1" LDW | 613 | IVE |
| 2 | EA | WALL STOP | WS407CCV | 613 | IVE |
| 1 | SET | SEALS | 188S | BLK | ZER |

End of Section 087100

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Page Inserted By Jerry N Zoller, AIA, PA

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SECTION 096500 - RESILIENT FLOOR TILE

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 the following:1. Vinyl composition tile (VCT).
- 1.3 SUBMITTALS
 - A. Product Data: For each type of product indicated.
- 1.4 QUALITY ASSURANCE
 - A. Fire-Test-Response Characteristics: Provide products identical to those tested for fireexposure behavior per test method indicated by a testing and inspecting agency acceptable to authorities having jurisdiction.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store tiles on flat surfaces.
- PART 2 PRODUCTS
- 2.1 COLORS AND PATTERNS
 - A. Colors and Patterns: As specified on the drawings and as selected by Architect & Manatee County.
- 2.2 VINYL COMPOSITION TILE
 - A. Vinyl Composition Tile (VCT): ASTM F 1066.
 - B. Class: 2 (through-pattern tile).
 - C. Wearing Surface: Smoothed
 - D. Thickness: 0.125 inch.
 - E. Size: 12 by 12 inches.
 - F. Fire-Test-Response Characteristics:

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic cement based formulation provided or approved by resilient product manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
- C. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edges of tiles, and in maximum available lengths to minimize running joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of resilient products.
- B. Concrete Substrates: Prepare according to ASTM F 710.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
 - 3. Moisture Testing:
 - a. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
 - b. Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
- C. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
- D. Access Flooring Panels: Remove protective film of oil or other coating using method recommended by access flooring manufacturer.

- E. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- F. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
 - 1. Do not install resilient products until they are same temperature as space where they are to be installed.
- G. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 TILE INSTALLATION

- A. Lay out tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
 - 1. Lay tiles square with room axis.
- B. Match tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.
 - 1. Lay tiles with grain running in one direction.
- C. Scribe, cut, and fit tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, edgings, door frames, thresholds, and nosings.
- D. Extend tiles into toe spaces, door reveals, closets, and similar openings.
- E. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent, non-staining marking device.
- F. Install tiles on covers for telephone and electrical ducts and similar items in finished floor areas. Maintain overall continuity of color and pattern with pieces of tile installed on covers. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.
- G. Adhere tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after completing resilient product installation:
 - 1. Remove adhesive and other blemishes from exposed surfaces.
 - 2. Sweep and vacuum surfaces thoroughly.
 - 3. Damp-mop surfaces to remove marks and soil.
 - a. Do not wash surfaces until after time period recommended by manufacturer.

- B. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 - 1. Apply protective floor polish to horizontal surfaces that are free from soil, visible adhesive and surface blemishes if recommended in writing by manufacturer.
 - a. Use commercially available product acceptable to manufacturer.
 - b. Coordinate selection of floor polish with Owner's maintenance service.
 - 2. Cover products installed on horizontal surfaces with undyed, untreated building paper until Substantial Completion.
 - 3. Do not move heavy and sharp objects directly over surfaces. Place hardboard or plywood panels over flooring and under objects while they are being moved. Slide or roll objects over panels without moving panels.

END OF SECTION 096500

SECTION 096800 - CARPETING

- PART 1 GENERAL
- 1.1 RELATED DOCUMENTS
 - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
 - A. This Section includes the following:1. Carpet Tiles.
- 1.3 SUBMITTALS
 - A. Product Data: For the following, including installation recommendations for each type of substrate:
 - 1. Carpet: For each type indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance.
 - B. Maintenance Data: For carpet to include in maintenance manuals. Include the following:
 - 1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
 - 2. Precautions for cleaning materials and methods that could be detrimental to carpet.
 - C. Warranties: Special warranties specified in this Section.
- 1.4 QUALITY ASSURANCE
 - A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Comply with CRI 104, Section 5, "Storage and Handling."
- 1.6 PROJECT CONDITIONS
 - A. Comply with CRI 104, Section 7.2, "Site Conditions; Temperature and Humidity" and Section 7.12, "Ventilation."

- B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- C. Do not install carpet over concrete slabs until slabs have cured, are sufficiently dry to bond with adhesive, and have pH range recommended by carpet manufacturer.
- D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet before installing these items.

1.7 WARRANTY

- A. Special Warranty for Carpet: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet installation that fails in materials or workmanship within specified warranty period.
 - 1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.
 - 2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, excess static discharge, and delamination.
 - 3. Warranty Period: 10 years from date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Carpet Tile: Full boxes equal to 5 percent of amount installed.

PART 2 - PRODUCTS

2.1 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cementbased formulation provided or recommended by carpet manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, non-staining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and is recommended or provided by carpet manufacturer.
 - 1. VOC Limits: Provide adhesives with VOC content not more than 50g/L when calculated according to 40 CFR 59, Subpart D (EPA method 24).
- C. Seam Adhesive: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
- D. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

2.2 CARPET

A. As specified on the drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Examine carpet for type, color, pattern, and potential defects.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
 - 1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet manufacturer.
 - 2. Subfloor finishes comply with requirements specified in Division 03 Section "Cast-in-Place Concrete" for slabs receiving carpet.
 - 3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Comply with CRI 104, Section 7.3, "Site Conditions; Floor Preparation," and with carpet manufacturer's written installation instructions for preparing substrates.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider, and protrusions more than 1/32 inch, unless more stringent requirements are required by manufacturer's written instructions.
- C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet manufacturer.
- D. Broom and vacuum clean substrates to be covered immediately before installing carpet.
- 3.3 INSTALLATION

- A. Comply with CRI 104 and carpet manufacturer's written installation instructions for the following:
 - 1. Direct-Glue-Down Installation: Comply with CRI 104, Section 9, "Direct Glue-Down Installation."
- B. Comply with carpet manufacturer's written recommendations and Shop Drawings for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
- C. Do not bridge building expansion joints with carpet.
- D. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
- E. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, non-staining marking device.
- G. Install pattern parallel to walls and borders to comply with CRI 104, Section 15, "Patterned Carpet Installations" and with carpet manufacturer's written recommendations.
- 3.4 CLEANING AND PROTECTING
 - A. Perform the following operations immediately after installing carpet:
 - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
 - 2. Remove yarns that protrude from carpet surface.
 - 3. Vacuum carpet using commercial machine with face-beater element.
 - B. Protect installed carpet to comply with CRI 104, Section 16, "Protection of Indoor Installations."
 - C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer and carpet adhesive manufacturer.

END OF SECTION 096800

SECTION 102113 - TOILET COMPARTMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Solid Phenolic Substrate: (Bobrick DuraLineSeries[®])
 1. Toilet Partitions:
 - a. Configuration: Floor-Anchored, Overhead-Braced.

1.2 RELATED REQUIREMENTS

- A. Section 055000 Metal Fabrications, coordination with overhead supports; steel beams above finished ceiling to secure ceiling hung and floor-to-ceiling stiles.
- B. Section 061000 Rough Carpentry, coordination with blocking in walls to secure panels, wall posts and stiles.
- C. Section 095000 Ceilings, coordination with layout and installation.
- D. Section 092000 Plaster and Gypsum Board, coordination with blocking.
- E. Section 093000 Tiling, coordination with layout and installation.
- F. Section 102800 Washroom Accessories, for accessories.
- G. Section 102814 Baby Changing Stations, for baby changing stations.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's data sheets for each product specified.
- B. Shop Drawings: Submit manufacturer's shop drawings for each product specified, including the following:
 - 1. Plans, elevations, details of construction and attachment to adjacent construction.
 - 2. Show anchorage locations and accessory items.
 - 3. Verify dimensions with field measurements prior to final production of toilet compartments.
- C. USA Certificate of Origin: Manufacturer must supply with first submittal, an example of their Certificate of Origin declaring toilet compartments are wholly manufactured and assembled specifically in the United States, including city and state locations. A notarized Certificate of Origin must be provided with closeout documents.

1.4 QUALITY ASSURANCE

- A. Manufacturer: Provide products manufactured by a company with a minimum of 10 years successful experience manufacturing similar products.
- B. Single Source Requirements: To the greatest extent possible provide products from a single manufacturer.
- C. Accessibility Requirements: Comply with requirements applicable in the jurisdiction of the project, including but not limited to ADA and ICC/ANSI A117.1 requirements as applicable.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations. Protect from damage.

1.6 WARRANTY

A. Manufacturer's Warranty (ClassicSeries): Manufacturer's standard 1 year warranty for materials and workmanship.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design Products: Based on the quality and performance requirements of the project, specifications are based solely on the products of Bobrick Washroom Equipment, Inc.. www.bobrick.com. Location of manufacturing shall be the United States.
- B. Substitutions: The Architect will consider products of comparable manufacturers as a substitution, pending the contractor's submission of adequate documentation of the substitution in accordance with procedures in Division 1 of the Project Manual. Documentation shall include a list of five similar projects of equivalent size where products have been installed for a minimum of two years, and manufacturer's certification that products are fabricated in the United States.

2.2 SOLID PHENOLIC SUBSTRATE (DuraLineSeries)

- A. Solid Phenolic Partitions: Bobrick DuraLineSeries.
 - 1. Color: As selected by Architect from manufacturer's full range.
- B. Toilet Partitions:
 - 1. Configuration: Floor-anchored, overhead-braced partitions; extruded anodized aluminum with satin finish headrails, 0.045 inch (1.14 mm) thick with anti-grip profile.
 - a. Basis-of-Design: Bobrick 1182 DuraLineSeries Toilet Partitions.
 - 1) Hardware: Stainless steel hardware Partitions.
 - 2) Reinforcement: None.

PART 3 EXECUTION

3.1 PREPARATION

- A. Prepare substrates including but not limited to blocking and supports in walls and ceilings at points of attachment using methods recommended by the manufacturer for achieving the best result for the substrates under the project conditions.
 - 1. Inspect areas scheduled to receive compartments for correct dimensions, plumbness of walls, and soundness of surfaces that would affect installation of mounting brackets.
 - 2. Verify spacing of plumbing fixtures to assure compatibility with installation of compartments.
- B. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
- C. Do not proceed with installation until substrates have been properly prepared with blocking and supports in walls and ceilings at points of attachment and deviations from manufacturer's

SECTION 102113 – Revision #4 TOILET COMPARTMENTS Section Page 2 of 4 recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.

3.2 INSTALLATION

- A. Install products in strict compliance with manufacturer's written instructions and recommendations, including the following:
 - 1. Verify blocking and supports in walls and ceilings has been installed properly at points of attachment.
 - 2. Verify location does not interfere with door swings or use of fixtures.
 - 3. Use fasteners and anchors suitable for substrate and project conditions
 - 4. Install units rigid, straight, plumb, and level.
 - 5. Conceal evidence of drilling, cutting, and fitting to room finish.
 - 6. Test for proper operation.

3.3 ADJUSTING, CLEANING AND PROTECTION

- A. Adjust hardware for proper operation after installation. Set hinge cam on in-swinging doors to hold doors open when unlatched. Set hinge cam on out-swinging doors to hold unlatched doors in closed position.
- B. Touch-up, repair or replace damaged products.
- C. Clean exposed surfaces of compartments, hardware, and fittings.

END OF SECTION 102113

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SECTION 102113 – Revision #4 TOILET COMPARTMENTS Section Page 4 of 4 SECTION 260519 – LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Communications cables and wires.
 - 3. Connectors, splices, and terminations rated 600 V and less.
 - 4. Sleeves and sleeve seals for cables.

1.3 DEFINITIONS

- A. EPDM: Ethylene-propylene-diene terpolymer rubber.
- B. NBR: Acrylonitrile-butadiene rubber.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For testing agency.
- C. Field quality-control test reports.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.
 - 1. Testing Agency's Field Supervisor: Person currently certified by the InterNational Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.

- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NFPA 70.
- 1.6 COORDINATION
 - A. Set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS

- 2.1 CONDUCTORS AND CABLES
 - A. Copper Conductors: Comply with NEMA WC 70.
 - B. Conductor Insulation: Comply with NEMA WC 70 for Types THW, THHN-THWN, and XHHW.
 - C. Multiconductor Cable: Comply with NEMA WC 70 with ground wire.
- 2.2 CONNECTORS AND SPLICES
 - A. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.
- 2.3 SLEEVES FOR CABLES
 - A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
 - B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.
 - C. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138inch thickness as indicated and of length to suit application.
 - D. Coordinate sleeve selection and application with selection and application of firestopping.

2.4 SLEEVE SEALS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and cable.
 - 1. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
 - 2. Pressure Plates: Stainless steel. Include two for each sealing element.
 - 3. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

- 3.1 CONDUCTOR MATERIAL APPLICATIONS
 - A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
 - B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- 3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS
 - A. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.
 - B. Feeders in Cable Tray: Type THHN-THWN, single conductors in raceway.
 - C. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.
 - D. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway.
 - E. Branch Circuits in Cable Tray: Type THHN-THWN, single conductors in raceway.
 - F. Class 1 Control Circuits: Type THHN-THWN, in raceway.
 - G. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
- E. Support cables according to Division 26 Standards.
- F. Identify and color-code conductors and cables according to Division 26 Standards.

3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
- B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
 - 1. Use oxide inhibitor in each splice and tap conductor for aluminum conductors.
- C. Wiring at Outlets: Install conductor at each outlet, with at least 12 inches of slack.

3.5 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Coordinate sleeve selection and application with selection and application of firestopping.
- B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- D. Rectangular Sleeve Minimum Metal Thickness:
 - 1. For sleeve rectangle perimeter less than 50 inches and no side greater than 16 inches, thickness shall be 0.052 inch.
 - 2. For sleeve rectangle perimeter equal to, or greater than, 50 inches and 1 or more sides equal to, or greater than, 16 inches, thickness shall be 0.138 inch.
- E. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

- F. Cut sleeves to length for mounting flush with both wall surfaces.
- G. Extend sleeves installed in floors 2 inches above finished floor level.
- H. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and cable unless sleeve seal is to be installed.
- I. Seal space outside of sleeves with grout for penetrations of concrete and masonry and with approved joint compound for gypsum board assemblies.
- J. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and cable, using joint sealant appropriate for size, depth, and location of joint according to architectural requirements.
- K. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at cable penetrations. Install sleeves and seal with firestop materials.
- L. Roof-Penetration Sleeves: Seal penetration of individual cables with flexible boot-type flashing units applied in coordination with roofing work.
- M. Aboveground Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Size sleeves to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- N. Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch annular clear space between cable and sleeve for installing mechanical sleeve seals.

3.6 SLEEVE-SEAL INSTALLATION

- A. Install to seal underground exterior-wall penetrations.
- B. Use type and number of sealing elements recommended by manufacturer for cable material and size. Position cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.7 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly.

3.8 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections and prepare test reports.

- B. Perform tests and inspections and prepare test reports.
- C. Tests and Inspections:
 - 1. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors, and conductors feeding the following critical equipment and services for compliance with requirements.
 - 2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - 3. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each splice in cables and conductors No. 3 AWG and larger. Remove box and equipment covers so splices are accessible to portable scanner.
 - a. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each splice 11 months after date of Substantial Completion.
 - b. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
 - c. Record of Infrared Scanning: Prepare a certified report that identifies splices checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.
- D. Test Reports: Prepare a written report to record the following:
 - 1. Test procedures used.
 - 2. Test results that comply with requirements.
 - 3. Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
- E. Remove and replace malfunctioning units and retest as specified above.

3.9 FIELD QUALITY CONTROL

A. This specification is intended to describe the requirements to furnish, engineer and install voice, data and fiber optic cables, and any associated hardware for the cabling requirements of the remodeling project of the second floor of the Manatee County Historic Court House (HCH). It is not the intent of this specification to list all the necessary parts required for the installation. It is the vendor's responsibility to provide a list of all parts required to complete the installation. The bidder is responsible for furnishing and installing all necessary incidental installation materials.

3.10 SCOPE OF WORK TO BE PERFORMED

A. Install, terminate and test (3) category 6 rated cables for data and voice applications (universal) at any outlet location so designated on the drawing for such stated purposes throughout the second floor of the facility. In addition, place (1) category 6 cables for any additional data requirement devices, such as wireless access points (AP) or camera's as so SECTION 260519

designated on the drawings. Provide all materials needed to terminate from work area outlet to telecommunications room using TIA-568-C.2 standard. Terminate to telecommunications room and label according to MCG IT Department specifications. Install, terminate and test fiber optic and copper backbone cabling from the HCH MTR (Main Telecommunication Room) to the HCH new second floor TR that is being built as part of the remodel. Bidder is to provide and install (1) 19" x 77" open aluminum equipment rack with horizontal wire management, vertical wire management and necessary ladder racking to wall. Bidder is required to submit brief statement of work to verify understanding of project requirements, summary materials list including manufacturer cut sheets for major components and proposed work schedule with anticipated project duration.

3.11 UNIVERSAL CATEGORY 6 CABLE

- A. Telephone/Voice (Universal) cable pulls shall not exceed 90 meters from the telecomm /data closet to jack. It shall be the responsibility of Vendor to notify the MCG Communications Department in advance if, in their opinion, this limit will be exceeded, prior to installation.
- B. All universal and wireless AP cable installations shall be installed with blue category 6 CMR rated four (4) pair cable and terminate at the station end on 8-position RJ type category 6 jacks. Labeling will be compliant with TIA-606-B labeling specifications and MCG Communications Department labeling materials and scheme.
- C. Universal jacks shall be colored to match 4-position faceplate chosen and colored to match installed electrical faceplate. Blank filler inserts shall be installed when extra ports are not used. Wireless AP locations will require surface or back box in designated ceiling locations. Labeling will be compliant with TIA-606-B labeling specifications.
- D. In the telecommunications room, all universal, AP, camera or BAC data device wire shall terminate on category 6 patch panels of sufficient port count to support the installed cables plus twenty five (25) percent growth. Labeling shall be compliant with TIA-606-B labeling specifications and MCG IT Department labeling materials and scheme.
- E. Bidder to provide (100) category 6, 8-position, RJ45-RJ45 patch cords @ 3 foot, (100) category 6, 8-position, RJ45-RJ45 patch cords @ 5 foot and (200) category 6, 8-position, RJ45-RJ45 station patch cords @ 10 foot. All patch cords should be (yellow) in color.
- F. Arrange and mount equipment and materials in a manner acceptable to MCG IT Department. (floor plan will be provided)
- G. Penetrations through floor and fire-rated walls shall utilize conduit sleeves and shall be firestopped after installation and testing, utilizing a firestopping assembly approved for that application.
- H. Install all wiring from station location to the designated telecommunications room (TR), unless otherwise noted.
- I. Installation shall conform to the following basic guidelines:

- 1. Use of approved wire, cable, and wiring devices.
- 2. Cable shall be installed in accordance with manufacturer's recommendations and best industry practices.
- 3. The cable's minimum bend radius and maximum pulling tension shall not be exceeded. Pulling tension on 4-pair UTP cables shall not exceed 25-lbf.
- 4. Cables shall not be attached to ceiling grid or lighting fixture wires. Where support for horizontal cable is required, Vendor shall install appropriate carriers to support the cabling.
- 5. If a J-hook or trapeze system is used to support cable bundles, all horizontal cables shall be supported at a maximum of 48 to 60 inch intervals. At no point shall cable(s) rest on acoustic ceiling grids or panels.
- 6. Horizontal distribution cables shall be grouped neatly and care should be taken to insure that bundling material does not cause deformation of the bottom cables within the bundle and degrade cable performance.
- 7. Install cables in one continuous piece. Splices shall not be allowed under any circumstances.
- 8. Allow for recommended cable service loops of (5) five feet at station location and (10) ten feet at closet / patch panel location.
- 9. Cables shall be dressed and terminated in accordance with the recommendations made in the TIA-568-C.2 standard, manufacturer's recommendations and best industry practices.
- 10. Pair untwist at the termination shall not exceed manufacturer's recommendations.
- 11. Cables shall be neatly bundled and dressed to their respective panels or blocks. Each panel or block shall be fed by an individual bundle separated and dressed back to the point of cable entrance into the rack or frame.
- 12. The cable jacket shall be maintained as close as possible to the termination point.

3.12 INDOOR VOICE CABLE

A. Install (1) 200 pair, inside rated, category 3 backbone cable for interconnection from the customer provided PBX to category 5e voice patch panel ports to be installed in data rack. Wire panels with 2-pairs per port in a USOC wiring configuration (see schematic). Install panels in required rack in HCH MTR

3.13 PRE-INSTALLATION INSPECTIONS

A. Visually inspect all cables, cable reels and shipping cartons to detect possible cable damage incurred during shipping and transport. Visibly damaged goods are to be returned to the supplier and replaced at no additional cost to MCG. If post-manufacture performance data has been supplied by the manufacturer of cables or connecting hardware, copies of such data shall be kept for inclusion in the documentation and made available to MCG upon request.

3.14 TESTING AND CERTIFICATION (CATEGORY 6)

A. REQUIREMENTS

1. Vendor shall provide sufficient skilled labor to complete testing within the agreed upon test period. Vendor shall be responsible for supplying all of the required test equipment used to

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B. TESTING OBSERVATION

1. The MCG IT Department reserves the right to be present during any or all testing. All cabling not tested strictly in accordance with these procedures shall be retested at no additional cost to MCG. A total of 100 percent of the installed cable shall be tested. All tests shall pass acceptance criteria defined below. Test equipment shall be fully charged prior to each day's testing or a fresh set of batteries shall be brought to the job site.

C. STANDARDS COMPLIANCE

- 1. All testing shall be performed in conformance with current TIA-568-C.2 category 6 requirements. All tests shall be performed using a cable tester with current applicable firmware or software updates. Vendor shall configure the tester to include at minimum the profile as follows:
 - a. Attenuation
 - b. Near End Cross Talk (NEXT)
 - c. Power Sum Near End Cross Talk (PSNEXT)
 - d. Return Loss
 - e. Equal Level Far End Cross Talk (ELFEXT)
 - f. Length (in feet)
 - g. Propagation delay
 - h. Delay skew
 - i. Ambient Noise and Resistance.

D. DOCUMENTATION

- 1. Test results shall be provided in hardcopy report format (Adobe PDF) using the cable tester's software and electronic format on CD, compact flash or USB memory cards. Handwritten test reports or editable formats such as Excel spreadsheets or CSV files are not acceptable.
- 2. Test reports shall include the following information for each cabling element tested:
 - a. Tester manufacture, model, serial number, software version and date of last factory calibration.
 - b. Circuit ID number and project/job name.
 - c. Auto-test specification used
 - d. Date and time of test.
 - e. Wiremap results that indicate the cabling has no shorts, opens, miswires, split, reversed or crossed pairs, and end-to-end connectivity is achieved.
 - f. Attenuation, Near End Cross Talk (NEXT), Power Sum Near End Cross Talk (PSNEXT), Return Loss, Equal Level Far End Cross Talk (ELFEXT) and Power Sum Equal Level Far End Cross Talk (PSELFEXT) data that indicate the worst case result, the frequency at which it occurs, the limit at that point and the margin. Information shall be provided for all pairs or pair combinations and in both directions.
 - g. Length (in feet), propagation delay and delay skew relative to the applicable limit.
 - h. Any individual test that fails the relevant performance specification shall be marked as a FAIL and action taken to correct the problem.
 - i. Overall pass/fail indication.
- 3. Test reports shall be submitted within five (5) business days of completion of testing.

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E. ACCEPTANCE

- 1. Once all work has been completed, test documentation has been submitted, and MCG is satisfied that all work is in accordance with contract documents, MCG shall notify Vendor in writing of formal acceptance of the system.
 - a. Designer/consultants and MCG may agree to allow certain cabling runs to exceed standardized performance criteria (e.g. length). In this event, such runs shall be explicitly identified and excluded from requirements to pass standardized tests.
 - b. Acceptance shall be subject to completion of all work, successful post installation testing, yielding 100 percent PASS rating, and receipt of full documentation as described above.

F. WARRANTY

1. Vendor must install universal cable system components with a manufacturer backed product defect and performance assurance warranty. Proof of warranty must be submitted in the form of site specific manufacturer documentation and certificate. A minimum of three years product and installation warranty shall be provided.

G. OUTSIDE PLANT

- 1. OPTICAL FIBER-Data Backbone
 - a. (One) 12 strand, indoor CMR rated, single mode optical fiber cable (SMF) and (one) 12 strand 50um, indoor CMR rated, multi mode fiber optic cable (MMF) between the main building (MTR) and the second floor telecommunications room (TR). Terminate both SMF and MMF in LIU using LC connectors. Contractor may use field terminated or factory terminated pigtail splice connectors. Fiber shall be installed in riser rated 11/4" innerduct from origination point to termination point.
 - b. Pull cable in existing conduit runs.
 - c. Fiber optic cable to be terminated with LC type connectors
 - HCH MTR existing CommScope fiber termination shelf shall be used. Provide
 (2) 12 port LC panel insert.
 - 2) HCH second floor TR, provide (1) fiber termination shelf (rack mounted). Provide (2) 12 port LC panel inserts.
 - d. Indoor /outdoor, non-metallic, CMR, tight buffered
 - 1) SM Fiber Type: 8.3/125um core/cladding
 - 2) MM Fiber Type: 50/125um core/cladding

H. VOICE BACKBONE CABLE

- 1. One 200 pair, 24awg, category 3, CMR rated, twisted pair copper cable between the HCH (MTR) and the HCH second floor (TR). The copper cable will be terminated at each end on 66 type punch down blocks. Pull cable in existing conduit runs.
- 2. Twisted Pair Cable Termination
 - a. (8) ea 66 type punch down block
 - b. 200 Pair 24 AWG, CMR rated cable
- 3. The bidder shall provide a full warranty for all labor, materials and workmanship provided on the OSP portion of this bid for One (1) full year from date of County acceptance.
- 4. All materials to provide a complete installation as per manufacturers suggested installation requirements must be included. This would include but is not limited to: coupling panels, couplers, cable clamp, buffer tubing, sealant and blocking kits.

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I. OSP INSTALLATION

- 1. All cable length must be verified with a field survey by the bidder.
- 2. The installed cables will be properly fire-stopped within all buildings.
- 3. Cables and terminals will be grounded and bonded as required.
- 4. All cables conduits entering the buildings must be plugged/sealed with water stop filler.
- 5. All cables and terminations must be labeled in accordance with TIA-606-B, Administration Standard for Commercial Telecommunications Infrastructure.

J. GROUNDING

- 1. TIA-607-B: Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications
- 2. NEC Article 800: 800.33, the metallic sheath of telephone cable and primary protectors must be grounded as close as practicable to the point of entrance of the phone cable to the building or structure.



K. OSP CABLE TESTING (copper & fiber optic)

- 1. The installed and terminated copper backbone and fiber optic cables should be 100% fault free once all tests are completed. All work is to be performed to local code, standard outside cable plant installation practices and BICSI Telecommunications Distribution Manual.
- 2. Copper cables shall be tested from termination to termination for continuity, shorts and grounds. Documentation shall be provided with date of test and technician signature.
- 3. All fibers shall be certified tested from termination to termination and documentation provided to the Telecommunications division of the Information Services Department for Manatee County at the time of installation completion. Test results must be equipment generated results either in hard or soft copy. No handwritten or user prepared data will be accepted. Link loss at 1310nm and 1550nm wavelengths must be documented for each fiber. The fiber cable's manufacturer performance specifications must be included with the test results.
- 4. Incidental Materials

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Manatee County Historical Courthouse 2nd Floor Remodel and Outside Air Project

a. All incidental installation materials and equipment necessary to complete the relocation/installation as specified in this bid, i.e. screws, tie wraps, anchors, any type of equipment, tools, fire-stop material etc., shall be furnished by the bidder. The bidder is responsible for all test equipment and any special machinery that may be required to meet the requirements of this specification.

END OF SECTION 260519 Revision 3 2013.6.25