

BIDDING REQUIREMENTS
ADDENDUM NO. 2

APRIL 25th, 2019

FRANKLIN COUNTY, MISSOURI
PURCHASING DEPARTMENT
400 EAST LOCUST
UNION, MISSOURI 63084

FGM ARCHITECTS INC.
10 SOUTH BROADWAY, SUITE 1150
ST. LOUIS, MISSOURI 63102

TO: PROSPECTIVE BIDDERS

SUBJECT: FRANKLIN COUNTY PUBLIC SAFETY FACILITY
FGM Project No.: 18-2562.01

This addendum forms a part of the Bidding and Contract Documents and modifies the original bidding documents dated March 29th, 2019. Acknowledge receipt of this addendum in space provided on Bid Form. Failure to do so may subject bidders to disqualification.

“DEADLINE TO SUBMIT RESPONSE” SHALL BE REVISED TO MAY 9, 2019 @ 2:00 PM.

CLARIFICATION – Ceiling type “EX” – Is applicable to the extents shown within the Renovation of Areas, “A”, “B”, or “C” and graphically is shown on the documents with a 50% Grey hatch. – See RCP Legend for specifics on expectation for ceiling.

CLARIFICATION – Wherever new Detention areas are referenced in the project; scope extents shall match I-3 use group shown on the Code Compliance Plans.

SPECIFICATIONS

1. SECTION 01-77-00 – ELECTRIC CLOSEOUT DOCUMENT MANAGEMENT – SEE ATTACHED PAGES
2. SECTION 06-41-16 – PLASTIC LAMINATE FACED ARCHITECTURAL CABINETS
 - a. Paragraph 2.1, A, 7 ADD – “Kewaunee”
3. SECTION 07-14-13 – BELOW GRADE WATERPROOFING SYSTEM – SEE ATTACHED PAGES.
4. SECTION 07-95-00 – EXPANSION CONTROL
 - a. Paragraph 2.3, E, REVISE – WALL TO WALL
 1. Basis of Design Product: MM Systems – Series ESS Color Joint Silicone System
 - a. Nominal joint width: 2in.
 - b. Movement Capability: 50 percent
 - c. Type of Movement: Thermal and Seismic
 - d. Seal Material: Manufacturer’s Standard
 - i. Color: As Selected by Architect from Manufacturer’s full range.
5. SECTION 08-71-00 FINISH HARDWARE – SEE ATTACHED PAGES FOR HARDWARE GROUPS AND SCHEDULES.

6. SECTION 08-80-00 - GLAZING
 - a. Paragraph 3.9,A: REVISED – “Glass Type GL-E: 1” Low-e coated fully tempered insulated window units.
 - b. Paragraph 3.9,C: ADD
 1. Glass Type GL-L: 1” Low-e coated fully laminated insulating glass units
 1. Basis of Design Product: 1” PPG Solarban 60 (2) or Solarbronze.
 2. Overall Unit Thickness: 1 inch.
 3. Minimum Thickness of Each Glass Lite: 6 mm.
 4. Outdoor Lite: Fully laminated glass.
 5. Tint Color: Bronze.
 6. Interspace Content: 90% Argon, 10% Air
 7. Indoor Lite: Fully tempered glass.
 8. Low-e coating: Solarban 60 Solar Control (Sputter) Low E coating on second surface.
 9. Visible Light Transmittance: 42%.
 10. Winter Nighttime U-Factor: 0.24 maximum.
 11. Summer Daytime U-Factor: 0.22 maximum.
 12. Solar Heat Gain Coefficient: 0.27 maximum.
 13. Safety glazing required.
 - c. Paragraph 3.9,D: ADD
 - D. Glass Type GL-X: See Section 08 43 33.13 Aluminum Windows (ICC-500 Compliant)
7. SECTION 09-84-33 – SOUND ABSORBING WALL UNITS
 - a. Paragraph 2.2, A: REVISED – to read “Acoustic Wall Panel – (SEE DRAWINGS -AWP-6)”
 - b. Paragraph 2.2, A.1, c: OMIT
 - c. Paragraph 2.2, A.1, I: REVISED – to read “Mounting: Z-Clips with tamper resistant fasteners in OUTDOOR REC. ROOMS, mount bottom of panel 12’-0”.
 - d. Paragraph 2.2, B: REVISED – to read “Acoustic Wall Panel – (SEE DRAWINGS – AWP-1 to AWP-5)”
 - e. Paragraph 2.2, B,a: REVISED – “Core Thickness: See Drawings; NRC 0.80”
 - f. Paragraph 2.2, B,b: REVISED – “See Drawings”
8. SECTION 10-28-00 TOILET, BATH AND LAUNDRY ACCESSORIES
 - a. Paragraph: 2.2, C: REVISED – to read “Towel (folded) Dispenser – (TBA-1H)”
 - b. Paragraph: 2.2, H: OMIT – Liquid-Soap Dispenser (TBA-6)
 - c. Paragraph: 2.2, I: ADD – Shower Rod and Curtain – (TBA-12)
 - i. Basis of design Bobrick Shower Curtain Rod with Concealed Mounting – (B-207 x 36)
 - ii. Basis of design Bobrick Shower Curtain and Hook (204-1) & (204-2)
9. SECTION 11-52-13 – PROJECTION SCREENS
 - a. Paragraph 2.2: REVISE – to read “MANUAL PROJECTION SCREEN”
10. SECTION 12-35-53.13 – LABORATORY COUNTERTOPS AND ACCESSORIES
 - a. Paragraph 2.3, A.1,d: ADD – “Kewaunee”
11. SECTION 12-49-40 – ROLLER SHADES
 - a. Paragraph 2.2,A.1: REVISE – to Read... “in Rooms; B144, B146, B147, B148, B149, D102, D113, D114, D115, D116”
12. SECTION 21 05 11 – Clean Agent Fire Extinguishing System
 - a. New specification includes updated sequence of operation, updated notification appliance types, and clean agent discharge density.
13. SECTION 23 09 65 – BACnet Direct Digital Temperature Control System

- a. Paragraph 2.1,A,9: ADD – “Trane” to list of approved temperature control manufacturers.

14. SECTION 26 09 71 – Fire Alarm Systems – Addressable

- a. Paragraph 2.1,E: ADD – “EST” to list of equivalent manufacturers.

DRAWINGS VOL. 1 OF 2

1. SHEET G1.0.3 CODE COMPLIANCE PLAN
 - A. ADD – Dayroom walls shall be built/listed as smoke partitions. See attached sheet G1.0.3 for typical locations.
2. SHEET ES2 – EROSION & SEDIMENT CONTROL PLAN PHASE II:
 - A. ADD - Rip-rap pad at Flared End #8 to match the pad shown on the Grading Plan.
 - C1 – Demolition Plan:
 - A. ADD - Camera and pole removal southeast of existing communication tower.
3. SHEET C2.1 – SITE PLAN:
 - A. REVISE - Site Legend Item “C” has been revised to be Lighted Pipe Bollard. (Ref. MEP Plans)
 - B. ADD - Item “H”, Pipe Bollard (See Detail, Sheet D1)
4. SHEET C3 – GRADING PLAN:
 - A. ADD - A rip-rap specification and detail for the ditch along shooting range reference new Rip-Rap Liner Detail, Sheet D3.
 - B. ADD - Rip-Rap at Flared End #8.
5. SHEET C4 – UTILITY PLAN:
 - A. ADD - 8 inch M.J. Plug to Water Main Detail “D” callout.
6. SHEET C5 – PHASE 1 FENCING PLAN:
 - A. ADD - New Man Gate at corner of Temporary Fenced Area #2.
7. SHEET C7 – STORM SEWER LINE #1:
 - A. REMOVED - Future parking lot linework in future jail expansion.
8. SHEET C9 – STORM SEWER LINE #4 & #5:
 - A. REMOVED - Future parking lot linework in future jail expansion.
9. SHEET D2 – DETAIL SHEET:
 - A. ADD - Phasing notes and 8 inch M.J. plug to Water Main Detail “D”.
10. SHEET D3 – DETAIL SHEET:
 - A. ADD - Rip-Rap Liner Detail.
 - B. REMOVED - Grated Trench Inlet Detail. Trench Drain shall be per specification on Grading Plan on south side of existing jail building.
11. SHEET RW-1 – RETAINING WALL PLAN:
 - A. REVISE - Concrete swale detail sheet reference to D3.
12. SHEET AD1.0.1 DEMOLITION PLAN – AREA “A”
 - A. ADD – See Sheet AD1.0.1 for additional demolition extents.
13. SHEET AD1.0.2 DEMOLITION PLAN – AREA “B”
 - B. ADD – See Sheet AD1.0.2 for additional demolition extents.
14. SHEET AD1.0.3 DEMOLITION PLAN – AREA “C”
 - C. ADD – See Sheet AD1.0.3 for additional demolition extents.
15. SHEET A1.1.3 FIRST FLOOR NOTATION PLAN – AREA ‘C’ & MEZZANINE AREA ‘A’

- A. REVISE – See attached sheet A1.1.3 for additional wall framing extents – P41
16. SHEET A1.1.20 – SHEET A1.1.25 EQUIPMENT PLANS
 - A. REVISE – See revised “SPECIALTY EQUIPMENT LEGEND” applicable to all sheets.
 17. SHEET A1.1.26 – SHEET A1.1.26 KITCHEN/LAUNDRY EQUIPMENT PLAN
 - B. REVISE – See sheet A1.1.26/K19 for more details on Laundry and Dishwashing scope.
 18. SHEET A1.2.4 ROOF DETAILS
 - A. ADD – See sheet A1.2.4/E5, E9, E13 for added treated wood blocking as required for vertical termination/anchoring of cover board and roofing membrane.
 - B. REVISE – See sheet A1.2.4/N13 for revised Gutter Detail.
 19. SHEET A2.2.0 PARTITION TYPES
 - A. REVISE – See sheet A2.2.0/P73 for revised air gap thickness.
 20. SHEET A2.2.4 WALL TYPES
 - A. REVISE – See sheet A2.2.4/W4, W5, W6 for revised wall type descriptions.
 21. SHEET A2.3.1 WINDOW AND STOREFRONT ELEVATIONS
 - B. REVISE – See sheet A2.2.4 for new notes on SF-1 and SF-7 window notes. See Specifications for each applicable type.
 22. SHEET A3.3.1 WALL SECTIONS
 - A. REVISE – See attached sheet A3.3.1/A13 & M for revised details.
 23. SHEET A3.3.3 WALL SECTIONS
 - B. REVISE – See attached sheet A3.3.3/J13, N17 for revised details.
 - C. ADD – See sheet A3.3.3/N1, N9, N13 for added treated wood blocking as required for vertical termination/anchoring of cover board and roofing membrane.
 24. SHEET A4.1.0 LARGE SCALE PLANS
 - A. ADD – See attached sheet A4.1.0/E21, J21, N21 for revised details.
 25. SHEET A5.1.0. ENLARGED PLANS AND INTERIOR ELEVATIONS
 - D. REVISE – See attached sheet A5.1.0/C5, E13 for revised details.
 26. SHEET A5.1.1 ENLARGED PLANS AND INTERIOR ELEVATIONS
 - E. REVISE – See attached sheet A5.1.1/A12, A4 for revised details.
 - F. REVISE – See attached sheet A5.1.1 for revised Toilet & Bath Accessory Schedule
 27. SHEET A5.1.2 ENLARGED PLANS AND INTERIOR ELEVATIONS
 - G. REVISE – See attached sheet A5.1.2/A1, A17, M14 for revised details.
 28. SHEET A5.1.3 ENLARGED PLANS AND INTERIOR ELEVATIONS
 - H. REVISE – See attached sheet A5.1.3/A9, D9, D13, G11, G13, O8 for revised details.
 29. SHEET A6.1.0 OVERALL FIRST FLOOR REFLECTED CEILING PLAN
 - A. REVISE – See sheet A6.1.0, for revised extents of ceiling type “EX”.
 30. SHEET A6.1.1 FIRST FLOOR REFLECTED CEILING PLAN – AREA ‘A’
 - A. REVISE – See sheet A6.1.1, for revised extents of ceiling type “EX”.
 - B. ADD – See Sheet A6.1.1, Additional Projector Screen VDB-3 (120x48) and Projector ceiling mount in EOC A102.
 31. SHEET A6.1.2 FIRST FLOOR REFLECTED CEILING PLAN – AREA ‘B’
 - A. REVISE – See sheet A6.1.2, for revised extents of ceiling type “EX”.
 - B. REVISE – Sheet A6.1.2 /Keynote C1 shall read: “Existing canopy structure and deck to be painted. GC to prep existing steel for new finishes as required.”.

- 32. SHEET A6.1.3 FIRST FLOOR REFLECTED CEILING PLAN – AREA ‘C’
 - C. REVISE – See sheet A6.1.0, for revised extents of ceiling type “EX”.
 - D. ADD - Additional Projector Screen VDB-3 (120x48) and Projector ceiling mount in TRAINING C112.
- 33. SHEET A8.1.1 – A8.1.6 FIRST FLOOR FINISH PLANS
 - A. ADD – Existing loading dock South of Delivery B197 shall be painted to encapsulate existing Lead paint. Color to match existing.
 - B. REVISE – See Sheet A8.1.1 Thru A8.1.6 for revised finish floor legend.
- 34. SHEET A8.3.0 ROOM FINISH SCHEDULE
 - A. REVISE – See Sheet A8.3.0 for Revised Finish schedule.
- 35. SHEET A8.3.1 ROOM FINISH LEGEND
 - A. REVISE – See Sheet A8.3.1 for Revised Finish legend.
- 36. SHEET A8.5.1 INTERIOR SIGNAGE
 - A. REVISE – See Sheet A8.5.1 for Revised signage types.
- 37. SHEET A8.5.2 INTERIOR SIGNAGE PLAN – AREA ‘A’
 - E. REVISE – See sheet A8.5.2 for revised extents of Signage Types.
- 38. SHEET A8.5.3 INTERIOR SIGNAGE PLAN – AREA ‘B’
 - A. REVISE – See sheet A8.5.3 for revised extents of Signage Types.
- 39. SHEET A8.5.3 INTERIOR SIGNAGE PLAN – AREA ‘C’
 - A. REVISE – See sheet A8.5.4 for revised extents of Signage Types.

DRAWINGS VOL. 2 OF 2

- 40. SHEET S1.1.4 TYPICAL DETAILS
 - B. REVISE – Details 1 and 2.
- 41. SHEET S1.1.5 TYPICAL DETAILS
 - D. REVISE – Detail 11.
 - E. ADD – Details 12 and 13.
- 42. SHEET S2.1.1 FOUNDATION PLAN – AREA ‘A’
 - A. ADD – Plan note 6.
 - B. ADD – Load bearing CMU control joint locations.
 - C. REVISE – Typical notes for Load Bearing CMU Wall Schedule.
 - D. REVISE – Detail 3.
- 43. SHEET S2.1.2 FOUNDATION PLAN – AREA ‘B’
 - A. ADD – Plan notes 13, 14, and 15.
 - B. REVISE – Plan note 7.
 - C. ADD – Load bearing CMU control joint locations.
 - D. ADD – New SOG and thickened SOG for laundry washer/extractors.
 - E. REMOVE – New SOG extents note.
- 44. SHEET S2.1.3 FOUNDATION PLAN – AREA ‘C’
 - A. ADD – Plan note 9.
 - B. REVISE – Plan note 6.
 - C. ADD – Load bearing CMU control joint locations.
- 45. SHEET S2.1.4 FOUNDATION PLAN – AREA ‘D’
 - A. ADD – Plan note 13.
 - B. REVISE – Plan note 7.
 - C. ADD – Load bearing CMU control joint locations.

- D. ADD – Grease interceptor note on plan.
 - E. ADD – Top of footing elevations at Sally Port.
 - F. ADD & REVISE – Footing elevation and footing steps to accommodate plumbing.
46. SHEET S2.1.5 FOUNDATION PLAN – AREA ‘E’
- A. ADD – Plan notes 14, 15, 16, 17.
 - B. REVISE – Plan notes 7 and 10.
 - C. ADD – Load bearing CMU control joint locations.
 - D. ADD – Top of footing elevations at Sally Port.
 - E. ADD & REVISE – Footing elevations, footing thickness, and footing steps to accommodate plumbing.
47. SHEET S2.2.1 MEZZANINE FRAMING PLAN – AREA ‘E’
- A. REVISE – Section 11/S4.3 to TYPICAL at this level.
 - B. ADD & REVISE – Framing to support non-load bearing CMU wall above composite slab.
48. SHEET S2.3.1 ROOF FRAMING PLAN – AREA ‘A’
- A. ADD – Plan note 11 and corresponding identification on plan.
49. SHEET S2.3.4 ROOF FRAMING PLAN – AREA ‘D’
- A. REVISE – Extent and framing for RTU #3.
50. SHEET S2.3.5 ROOF FRAMING PLAN – AREA ‘E’
- A. REVISE – Extent and framing for RTU #2 and #6.
 - B. REVISE – Extent and framing for ERV #1 and #2.
51. SHEET S3.1 FOUNDATION SECTIONS
- A. REVISE – Detail 8.
52. SHEET S3.3 FOUNDATION SECTIONS
- A. ADD – Detail 7.
53. SHEET S4.3 FRAMING SECTIONS & DETAILS
- C. REVISE – Details 11 and 12.
 - D. ADD – Detail 17.
54. SHEET M0.0.1
- C. CLARIFY – Notes about ACM work not be anticipated.
55. SHEET M0.0.2
- F. REVISE – Remarks on the Cabinet Unit Heater and Louvre Schedules.
 - G. REVSE – Remarks on Air Device Schedule.
56. SHEET M0.0.3
- A. ADD – Detail for AHU.
57. SHEET MD1.1.1
- A. CLARIFY – Existing diffusers and thermostats shown for quantity.
 - B. CLARIFY – Existing to remain supply taps and dampers shown for quantity.
58. SHEET MD1.1.2
- A. CLARIFY – Existing diffusers and thermostats shown for quantity.
 - B. CLARIFY – Existing to remain supply taps and dampers shown for quantity.
59. SHEET MD1.1.3
- A. CLARIFY – Existing diffusers and thermostats shown for quantity.
 - B. CLARIFY – Existing to remain supply taps and dampers shown for quantity.
60. SHEET M1.1.1

- B. ADD – Emergency bypass duct between AHU-1 and 2.
 - C. ADD – Generator tank fill and vent piping.
 - D. REVISE – Re-routed Denlar hood vent up to mezzanine level.
 - E. REVISE – Thermostat locations in renovation space for re-location purposes.
 - F. REVISE – Keyed notes for clarification.
61. SHEET M1.1.2
- A. ADD – Thermostat locations in renovation space for re-location purposes.
62. SHEET M1.1.3
- A. ADD – Two (2) missing R1 grilles.
 - B. REVISE – Denlar hood duct to correct elevation.
 - C. ADD – Thermostat locations in renovation space for re-location purposes.
63. SHEET M1.1.4
- A. ADD – Elbows to return connections on RTUs.
64. SHEET M1.1.5
- A. REVISE – CFM on video room diffusers.
65. SHEET M1.1.6
- A. ADD – Section to show ductwork in service corridor space.
66. SHEET M1.2.0
- A. – Tags on RTU-1 and 2 to show proper locations.
67. SHEET E0.0.1
- A. REVISE – Seismic Restraints Table for 911/EMA building General Note 7 listing the conduit sizes which are exempt from seismic restraints.
 - B. ADD – General Note to provide commissioning of lighting controls per IECC requirements. Include functional testing of occupancy sensors, dimmers, switches and time switch. At least 10% of each unique combination of sensor type and space geometry occupancy sensors shall be tested to verify proper location and aiming, correct auto-on operation and HVAC operation does not cause a false on. Verify time switch is programmed with accurate schedule, accurate time and date, battery is installed and energized, override is less than 2 hours, and switch provide proper on/off operation of lighting. Dimmers and switches shall be tested to verify proper operation. Submit final report to owner with O&M Manuals.
68. SHEET E0.0.2
- A. REVISE – Plan and keyed notes 10, 11 and 15 to indicate MSB will be Owner Furnished Contractor Installed.
 - B. ADD - Sequence of Operations for service relocation notes.
 - C. ADD - Keyed note 16 indicating pathways and conductors to be provided for connection of new genset at a later construction phase in accordance with the Sequence of Operations.
69. SHEET E0.0.3
- A. ADD – keyed note 26 and conduit for future use.
 - B. ADD - keyed note 27 for conduits and installation of OFCI mobile temporary genset.
 - C. ADD - keyed note 28 and located in-grade pull boxes for Charter and AT&T new underground services.
70. SHEET E0.0.4
- D. REVISE – Lighting Fixture Schedule to add types W and V3 and revise types V1 and V2.
71. SHEET E0.0.6
- A. ADD – Detail 19 for clarifications on floor boxes.
 - B. REVISE - detail 9 indicating the electrical contractor shall provide cabling for access control, detention doors, intercom, cameras and detention CPUs per SEC sheets.

- 72. SHEET E0.0.7
 - A. REVISE – Clarify AIC Ratings of panels to correspond with values on One-Line diagram.
 - B. REVISE – Branch circuits in panel HJ for shooting range lighting and CUH-5.
- 73. SHEET E0.0.8
 - A. REVISE – Panel schedules LI, LC and LJ to include TEF-1, TEF-4, Body Scanner, Chemical Feed System, Cell Control Console and OHD branch circuits
- 74. SHEET E0.1.0
 - A. ADD – Keyed note 55 for EF-7.
 - B. ADD – Keyed note 56 for 911/EMA emergency HVAC shutdown.
- 75. SHEET E0.1.2
 - A. ADD – Keyed notes for clarification of service requirements, control connection between ATS and genset and isolated ground bus.
- 76. SHEET ED1.1.1
 - A. REVISE – Keyed note 1 at Outdoor Rec area lighting.
- 77. SHEET ED2.1.2
 - A. ADD – Keyed note 10 and locate Ameren meet to be removed to allow for installation of OFCI MSB.
 - B. ADD – Disconnect existing Water Heater and make safe, ready for demolition.
- 78. SHEET ED2.1.3
 - A. ADD – Keyed note 2 to clarify overhead door operators to remain.
- 79. SHEET ED3.1.1
 - A. ADD – Demolished smoke detectors and speakers in detention areas.
- 80. SHEET ED3.1.2
 - A. ADD – Demolished smoke detectors and speakers in detention areas.
- 81. SHEET ED3.1.3
 - A. ADD – Demolished smoke detectors and speakers in detention area.
- 82. SHEET ED4.1.1
 - A. ADD – Tagged equipment for clarification.
- 83. SHEET E1.1.1
 - A. REVISE – Locations of type A fixtures in Evidence Packaging and Tech Office.
- 84. SHEET E1.1.2
 - A. REVISE – Keyed notes at type R fixtures at dock area.
- 85. SHEET E1.1.3
 - A. REMOVE – Extraneous keyed note 4 on Mezzanine Plan.
 - B. REVISE – Keyed note 4 at wall mounted exterior fixtures near dock area.
 - C. REVISE – Hatch and branch circuits for emergency fixtures at detention mezzanine.
- 86. SHEET E1.1.4
 - A. REVISE – Circuit and fixtures at public entrance.
 - B. CLARIFY – Circuits at D117 and D142.
- 87. SHEET E1.1.5
 - A. REVISE – Types and locations of shooting range lighting.
 - B. ADD – Keyed note 3 at exterior type R fixtures.

- C. CLARIFY – Cell lighting switching includes two separate switchlegs. One for ambient light and one for the nightlight. Only one switchleg is shown, but two are required to be controlled by Central Control.
88. SHEET E1.1.6
- A. ADD – Keyed note 5 for control of TEF-1 with occupancy sensor.
 - B. REVISE – Fixtures with hatch for emergency lighting.
89. SHEET E2.1.1
- A. ADD – Keyed notes 9 and 12 to 911/Dispatch area.
 - B. ADD – Keyed note 13 for light fixture cord reel in Evidence Garage A128.
 - C. ADD – Receptacles for refrigerators and freezers in Storage A138 and A141.
90. SHEET E2.1.2
- A. REVISE – Keyed notes 2 and 6.
 - B. ADD – Keyed note 2 at OFCI MSB.
 - C. ADD – Keyed note 5 to wall box at B110 and B118.
 - D. ADD – Keyed note 6 to floor box at B110.
91. SHEET E2.1.3
- A. REVISE – layout of transformer, genset and bollards to match civil and architectural.
92. SHEET E2.1.4
- A. ADD – Keyed note 9 and receptacle for Chemical Feed System at Inmate Property D129.
 - B. ADD – Receptacle and data for Body Scanner D140.
 - C. ADD – Exterior receptacle near Generator.
 - D. ADD – Receptacle at St Scrtty D117.
 - E. ADD – Power connection at Dental D154.
93. SHEET E2.1.5
- A. REVISE – Delete extra TV boxes in Dayrooms.
94. SHEET E2.1.6
- A. ADD – branch circuits for Central Control consoles in E202.
95. SHEET E3.1.1
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD - Keyed note 22 for clean agent system requirements at Server A104.
 - C. REVISE - Number of tamper and flow switches to coordinate with fire protection.
 - D. REVISE - Number and location of smoke detectors, notification appliances and duct detectors. Evidence Storage A132 detectors are existing to remain.
 - E. REVISE - Keyed note 21.
 - F. ADD - Keyed notes 18 and 19 to Corridor BC100.
96. SHEET E3.1.2
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD – camera at main entry.
 - C. REVISE – fire alarm notification appliances in Waiting B142 and Corridor B143.
 - D. ADD - keyed notes 12 and 19 in Waiting B142 and Corridor BC103.
 - E. ADD – Keyed note 22 and motion detectors above detention ceiling access panels.
 - F. ADD – Keyed note 23 and duct smoke detectors at fire smoke dampers.
 - G. ADD – Keyed note 24 and tamper and flow switches at new fire protection riser serving the Jail Addition.
97. SHEET E3.1.3
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD – Door hardware junction box at Armory C108.
 - C. ADD – Detectors in detention area are existing to remain.

98. SHEET E3.1.4
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD –Keyed note 19 for detention CPUs at Intake Desk, LT D114, Karen D113, St Sgt D115, Capt D116 and St Scrt D117.
 - C. REVISE – Keyed note on plan at expansion joint.
 - D. REVISE – Delete fire alarm notification appliance at Corridor BC103.
99. SHEET E3.1.5
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD – Junction box with keyed note 10 at detention door to Chase E130.
- 100.SHEET E3.1.6
- A. ADD – General Note 9 for detention cabling information.
 - B. ADD –Keyed note 17 and intercom at Landing EC201.
 - C. ADD – Keyed note 18 and CPU connections at Control E202.
 - D. ADD – Duct smoke detectors at ERU-1, ERU-2, RTU-5, RTU-6 and RTU-7.
 - E. ADD – Cellular antenna in Control E202.
- 101.SHEET E4.1.1
- A. ADD – Keyed note 5 for range hood connection at Break A113.
 - B. ADD – Keyed note 6 to clarify intent of switch at Evidence Garage A123.
- 102.SHEET E4.1.2
- A. ADD – Keyed note 5 and ductless splits DS-4 and DS-5 in Dishwash B1622.
 - B. ADD – Keyed note 4 to clarify reconnecting RP-3 and RP-4.
- 103.SHEET E4.1.3
- A. ADD – Keyed note to VAV boxes, TRH, UH, CUH and EH to clarify they are existing to remain.
- 104.SHEET E4.1.4
- A. ADD – Keyed note 4 with junction box to Vehicular Sallyport D118 for CO/NOX sensor and EF control.
 - B. ADD – Branch circuit for TEF-4 in Toilet D102.
- 105.SHEET E4.1.5
- A. ADD – Branch circuit for CUH-5 in Vestibule E125.
- 106.SHEET E4.1.6
- B. ADD – Keyed note 3 at TEF-1 in Toilet E204.
- 107.SHEET E4.2.0
- A. ADD – Keyed note 7 and locate at EF-1 and EF-6 above Evidence Garage and Vehicular Sallyport.
 - B. ADD – Keyed note 8 and locate at RTU-5 and RTU-6.
 - C. ADD – Keyed note 9 and locate at EF-EX5, EF-EX9, EF-EX16 and EF-EX19.
 - D. ADD – Keyed note 1 to ERU-1 and ERU-2.
 - E. REVISE – Labeling of RTU-1, RTU-2, ERU-1 and ERU-2 to coordinate with mechanical.
- 108.SHEET FP0.0.1
- A. REVISE –Anchorage & Sway Bracing Schedule to separate New Emergency Response Center from New Jail Facility.
 - B. REVISE - backflow preventer on section detail to include tamper switches on the fire protection backflow preventer.
 - C. ADD - Clean Agent System Design Criteria to clarify discharge characteristics and providers of initiation, releasing, and notification for clean agent systems.
- 109.SHEET FP1.1.1
- A. REVISE –Update keyed note numbering.

- 110.SHEET FP1.1.2
- A. REVISE –Two (2) standard sprinklers to institutional-type.
 - B. ADD – Two (2) sprinklers in Laundry to account for wall location changes.
- 111.SHEET FP1.1.4
- A. REVISE –Nine (9) standard sprinklers to institutional-type.
 - B. ADD – One sprinkler.
- 112.SHEET FP1.1.6
- A. REVISE –Plan keyed note locations for better clarity in four-man cells. No change in design intent.
- 113.SHEET P0.0.1
- A. REVISE – Schedules.
 - B. ADD – Seismic Schedule for Jail building.
- 114.SHEET P0.0.3
- A. REVISE – Sections.
- 115.SHEET PD1.0.2
- A. REVISE – Match line sheet reference.
- 116.SHEET PD1.0.3
- B. REMOVE – Acid neutralization tank and related pipe.
- 117.SHEET PD1.1.1
- A. REMOVE – Plumbing fixtures in remodeled space.
- 118.SHEET PD1.1.3
- A. REMOVE – Acid neutralization tank and related pipe.
- 119.SHEET P1.0.1
- A. ADD – Floor drain and related pipe.
- 120.SHEET P1.0.2
- A. ADD –Pipe sizes.
- 121.SHEET P1.0.3
- B. REVISE –Waste pipe for removal of Acid neutralization tank and related pipe.
- 122.SHEET P1.0.4
- A. ADD – Pipe sizes.
 - B. ADD – Pipe elevations.
- 123.SHEET P1.0.5
- A. ADD – Pipe sizes.
 - B. ADD – Pipe elevations.
 - C. REVISE – Pipe route to avoid footings.
- 124.SHEET P1.1.1
- A. ADD –Pipe labels.
- 125.SHEET P1.1.2
- A. ADD – Kitchen and Laundry equipment layout.
 - B. REVISE – fixture call outs.
 - C. REVISE – S-6 in Evidence Layout

- 126.SHEET P1.1.3
A. ADD – Hot water return pipe.
- 127.SHEET P1.1.4
A. REVISE – Pipe route.
B. REVISE – Fixture tags.
- 128.SHEET P1.1.5
A. ADD – Pipe sizes.
- 129.SHEET P1.1.6
A. REVISE – Pipe route.
- 130.SHEET P1.2.1
A. ADD – Vent through roof.
- 131.SHEET P1.2.3
B. ADD – Vent pipe caps.
- 132.SHEET P1.2.4
A. ADD – Vent through roof locations.
B. RELOCATE – Vent through roof to miss mechanical equipment.
- 133.SHEET P1.2.5
A. RELOCATE – Vent through roof to miss mechanical equipment.

RESPONSES TO REQUESTS FOR INFORMATION

1. Will the Structural Steel specification requiring AISC Certified Fabricators & Erectors be waived for experience? Region Welding has been providing structural steel for commercial projects for 18+ years and we use Union Erectors”

RESPONSE: The AISC Certification requirement will not be waived for this project.

2. Section 10 14 16 – Plaques – COULD YOU LET ME KNOW WHERE TO FIND THE DIMENSIONS OF THE CAST ALUMINUM PLAQUE? DRAWING?”

RESPONSE: The dimensions shall be 24” High by 18” Wide.

3. We will be bidding the 10 22 13 Wire Partition for this project (attached). I am having trouble locating it in the plans. Can you help guide me to which drawing it is in so I can get the dimensions for quoting?”

RESPONSE: See Detail K19/A1.1.26.

4. Will EST Fire alarm be listed as an approved type due to the fact the existing building is currently EST system?

RESPONSE: EST will be considered an equivalent manufacturer for the Fire Alarm System provided it meets the specified requirements.

5. How many exterior directional signs are needed? Page A0.01 has arrows pointing to 2 symbols, but there are 4 of those symbols on the plan. Should our pricing include a quantity of 2 or 4?

RESPONSE: Refer to sheet C2 and D1 for Balance of exterior Signage and quantities. Wayfinding sign TYPE 12 shall include a quantity of (1) – Location TBD.

6. Do you have an updated sign schedule that we should be referencing for pricing?
The plans on A8.5.2 – A8.5.5 have sign types shown on the plans, however I do not see a Type 1 on the drawing to identify what should be priced.

RESPONSE: Signage TYPE 1 on plans is referenced as TYPE 1 VIAH28 on sheet A8.5.1

7. There is currently a Sealed Concrete Ashford form floor type shown on the finish floor legend, but not shown on the plans anywhere. Is this applicable?

RESPONSE: Sealed Concrete -Ashford form is applicable for all exposed Detention Floor areas unless noted otherwise. See specification 03-35-00 for more information.

8. Specifications states "All storefront entrances, curtain wall and pre-glazed windows on one set of shop drawings, prepared by the manufacturer single sources NO EXCEPTIONS", but there are three different manufacturers designed around. They also state to obtain all storefront, curtain wall, and entrance accessories from a single manufacturer, but this is not possible. Please provide clarification.

RESPONSE: Requirement will be omitted from project.

9. The specifications call for all glazing to be "flush glazing", but the drawings are not depicted in this condition. Please provide clarification.

RESPONSE: The glazing shall be "flush glazed" per the specifications.

10. There are multiple clarifications needed on the Glazing types and glazing schedule for GL-B, GL-T and GL-E. Please provide clarification.

RESPONSE: See attached revised specification pages and schedule. All glass thickness references on drawings shall be omitted. Refer to specifications.

11. Specification 11-52-13 calls for Electrically operated projection screen Noted VDB-3. The drawings show no screens tagged VDB-3, however there is one room C112 with details ref. J5/A6.5.0 that show a "manual" screen. Please Verify

RESPONSE: There are two revised locations for VDB-3 Manual projection screen and projector mount, Training Room C112 and EOC A102.

12. Could not locate any VDB-2 Tack boards on Drawings. Please provide locations, sizes, and quantities required.

RESPONSE: Any references to VDB-2 shall be listed as A.W.P. See Visual Display Schedule on A1.1.20.

13. A5.3.0 shows the intake room as 4" slab resting on insulation. S2.1.1 shows this room as an 18" solid concrete slab. Please indicate what the construction of this floor is.

RESPONSE: Please refer to the structural detail on S2.1.1 for the correct construction detail.

14. The Geotechnical report makes reference to deep foundations for the jail addition. There is nothing in the plans or specification indicating that deep foundations are to be included in the bid. Please advise.

RESPONSE: See Addendum 1 to the Geotechnical Report

15. We are to provide a unit price for underpinning \$/lf according to detail 15/S1.1.3. It is unknown how deep the underpinning will have to be constructed. Please assign a depth of underpinning so that the unit price can be better defined.

RESPONSE: The intent of the underpinning is to establish a base unit price in the event existing footings are undermined due to the remediation of the existing un-controlled existing fills and other materials deemed unsatisfactory at the new building. Underpinning may not be required if the existing foundations are not undermined. For a base line assume a 4'-0" depth below existing footings.

16. Section A17/A3.4.0 shows below grade waterproofing. Please provide a spec section for this project.

RESPONSE: See attached specification section.

17. Please indicate the extents of Access flooring on the project.

RESPONSE: Access Flooring extents is limited to Dispatch A101 and EOC A102.

18. Please verify that Owner will furnish and pay all costs for building permit, fire permit, and health department permit. There is conflicting information in bid documents. Refer to Pre-Bid Agenda item #25, General Works Scope of Work item #8, Fire Protection Scope of Work item #22, Plumbing Scope of Work item #20, HVAC Scope of Work item #20, Electrical and Lower Voltage Scope of Work item #22.

RESPONSE: See updated Scope of Work issued in Addendum No. 2.

19. Please verify that Owner will furnish and pay for builder's risk insurance and Contractor will not be required to carry builders risk insurance. AIA A101 §8.5.2.e indicates Contractor will be required to carry builders risk insurance if required by the Owner.

RESPONSE: Builder's Risk will be provided by the Owner.

20. Drawing C5 calls for 10' tall temporary fencing. Site Logistics Guidelines item #8 calls for 8' tall temporary fencing. Please clarify which is correct. a. Are there are special requirements or phasing required when installing the temporary security fencing such as maintaining a secure perimeter at all times?

RESPONSE: Contractor shall provide new fence to match existing or can re-use the existing fence that is shown to be demolished at the Contractor's preference.

21. General Works Scope of Work item #90 issued with addendum 1 clarified that the Evidence Conex will not be emptied prior to moving. What is inside the Conex and is the load secured? The Conex will be tilted when loading onto flatbed.

RESPONSE: There is evidence in the conex container, and the Owner is responsible to secure it prior to relocation. Coordination with Owner required prior to move.

22. Will Navigate develop and maintain the Contractor's Construction Schedule (Reference Spec 01 32 00) with input provided from each Prime Contractor?

RESPONSE: Navigate has developed an overall project construction and phasing schedule that is sufficient to complete the project. It is expected that Prime Contractors bidding the project, agree that this overall project construction schedule is sufficient to complete the project in the time allocated.

Upon award to Prime Contractors, Navigate will obtain input from such Prime Contractors in order to coordinate and sequence the work within the substantial completion dates identified in the Prime Contractors contract and in accordance with the overall project construction schedule.

Navigate will coordinate with Prime Contractors weekly/bi-weekly as needed to update the sequence and detail of the overall project construction schedule as needed to maintain

progress onsite in accordance with the overall project construction schedule. Navigate will maintain and issue the schedule regularly.

23. Please verify that General Works Scope of Work item #5 "Perform all unloading, loading, distribution, and hoisting of materials" applies only to work performed under Bid Package 2019-A6. The other bid packages have a similar, but less stringent, scope item included.

RESPONSE: See updated Scope of Work issued in Addendum No. 2. Each Prime Contractor is responsible for their own unloading, loading, distribution, and hoisting.

24. General Works Scope of Work item #9 and Electrical Scope of Work #30 appear to be redundant. Please verify that EC will pay connection charges.

RESPONSE: See updated Scope of Work issued in Addendum No. 2.

25. General Works Scope of Work item #54 states "This Contractor is responsible for all meter costs as part of the project." Can this be made the responsibility of the applicable MEP Prime Contractors? I am interpreting "meter costs" to be charges from utilities other than consumption charges.

RESPONSE: See updated Scope of Work issued in Addendum No. 2.

26. General Works Scope of Work item #92. We suggest that removal and hoisting of the generator be completed by the Electrical Prime Contractor.

RESPONSE: See updated Scope of Work issued in Addendum No. 2.

27. Drawing C1: There is a note in the center of the page that reads "Existing Unknown Underground Utility (To Be Verified and Relocated as Needed)." Which bid package is responsible for this item? Can this be excluded from the bid and handled T&M as it is impossible to provide an accurate proposal for the work?

RESPONSE: Existing Unknown Underground utility to be removed. It is anticipated through discussion with Owner that this an empty or unused utility for previously removed services/structures. General Works contractor shall include costs for one mobilization of hydro-excavation of this line prior to removal to confirm location/service/use.

28. Who is responsible for specification 01 56 00 Temporary Protection? All bid package scopes contain a line similar to General Works Scope of Work item #25. Is someone responsible for floor protection for the entire surface in dayrooms and all other exposed concrete floor locations or is each contractor to provide what they need to complete their work?

RESPONSE: General Works Contractor to be responsible for entirety of Spec Section 01 56 00 to provide and maintain temporary protection as indicated in the specification. All remaining prime contractors are responsible for providing lifts/equipment needed for their scope that have white tires, equipment "diapers" etc., See Spec Section 01 56 00 Part 3.1.B.

29. Please clarify scope for MEPFP demolition. Will MEPFP Prime Contractors make safe, disconnect, cut, cap, drop, and haul out to their owner dumpsters?

RESPONSE: Regarding demolition of existing services, fixtures, and equipment, MEPFP Prime contractors are to make safe, disconnect, cut, cap, and drop. General Works contractor is to pick up and haul waste to dumpsters provided by the General Works contractor.

30. Will any temporary partitions be required to be provided by the General Works Contractor? If so, please provide type and locations.

RESPONSE: General Works contractor responsible for providing and removing temporary

partitions. This is only expected to be needed for dust control during phased renovations between occupied areas and renovation areas. For example, temp partition or zipper wall will be needed in the hallway of Area 4 during demo of opening between Areas 4 and 5.

31. General Works Scope of Work item #15. What is intent for locating private utilities? We can only locate what we are made aware of. Can this be handled as an allowance similar to scope of work item #80?

RESPONSE: The expectation is that prior to excavation by any prime contractor, that an effort has been made by that contractor/subcontractor to locate any private utilities, the same as what is required in public ROW by Missouri One Call.

32. Phase II Renovation includes Areas 3, 5, 6, 7, 8, and 9 per AIA A101 summary. Is there is sub-phasing plan available for Phase II or is the contractor going to get access to all areas at the same time?

RESPONSE: During Phase II of the project, Contractors will have access to Areas 3, 5, 6, 7, 8, 9, and 10a.

33. What type of system is the existing roof assembly and who is the manufacturer?

RESPONSE: Existing Roof was installed by Lorenz Roofing. Contact is Tom Anderson. Contact information is 314-423-3338 and 314-574-0246. – MANUFACTURER = Jon Manville - 60 MI EPDM

34. Is the General Works Contractor or Plumbing Contractor responsible for layout, saw cutting, breaking and removal of concrete slab for under slab plumbing within renovation spaces? Is General Works Contractor or Plumbing Contractor responsible for vapor barrier, granular fill, dowels, and concrete for plumbing trench patching?

RESPONSE: See AD drawing series for floor/slab demolition and patching. Demo and replacement for slab for MEPFP services is to be by General Works Contractor. Coordinate exact layout with MEPFP contractors prior to saw-cutting, MEPFP contractors to layout demo of slab areas for the General Works contractor. Detail for the replacement of the slab is shown on the structural drawings. Patching of vapor barrier required as needed to maintain continuity.

35. Is it the intention to provide 6" vinyl letters spelling out the room name and number of every single room in the Detention Area B, D, & E or only the cells?

RESPONSE: SEE ADD01 for changes to the signage specifications. Contractor to provide a total of (4) total painted characters applicable to GENERAL NOTE "3" on INTERIOR SIGNAGE PLANS.

Respectfully,



Joshua N. Mandell, AIA, NCARB, LEED® AP BD+C

This addendum consists of 252 pages

Attachments: 2019-A6 General Works ADD2, 2019-A7 Fire Protection ADD2, 2019-A8 Plumbing ADD2, 2019-A9 HVAC ADD2, 2019-A10 Electrical and Low Voltage ADD2, General Works Bid Form ADD 2, Non-General Works Bid Form ADD 2, Second Tour Sign-in Sheet, Supplemental Bid info ADD 2, RFP Schedule Section ADD 2, 01-77-00 Electronic Closeout Document Management, 07-14-13 Fluid Applied Waterproofing, 08-71-00 Finish Hardware

Drawings: See List above

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The Construction Manager (CM) referred to below is Navigate Building Solutions, LLC. The Owner referred to below is Franklin County. The Contractor referred to below is the General Works Contractor. The Other Prime Contractors referred to below are the MEP/FP and DEC Contractors engaged by Owner to perform those bid Package scopes of work. This bid package includes, but is not limited to, the following:

All work outlined by the project documents (plans and specifications) issued by FGM Architects dated March 29, 2019 and specifications: Division 00 all Sections; Division 01 all Sections; Divisions 02 through 10 all sections, including 078413 for this scope of work, Section 115213, Balance of Division 11 as called out in Alternates, Divisions 12 and 13 all sections, Divisions 31 through 33 all Sections. Divisions 21 – 28 and Detention and Security Package, BP-2019-A3 are included for reference and coordination with the work with Bid Package 2019-A6 General Works.

1. Contractor is aware of the potential for Liquidated Damages. Contractor shall be responsible to maintain scheduled items for the Contractor's work as included in the project master schedule below. Contractor shall reference AIA 101 and AIA 201 contract drafts provided in the bid documents. Contractor agrees to pay the Owner, or to deduct from the Contract Sum, not as a penalty, but as liquidated damages, the amounts listed in the contract drafts provided.
2. The draft AIA 101 and AIA 201 have been modified from their original versions. Contractor shall read and agree to these documents as part of the bid process.
3. Contractor is required to provide detailed work schedule (short term schedule) on a weekly basis. Contractor's detailed work schedule shall adhere to the master project schedule. Contractor shall meet the requirements of the master project schedule. Should the Contractor fall behind the master project schedule by more than 5 work days due to the fault of this Contractor, the Contractor shall provide a recovery schedule to the Construction Manager within 5 days of request by the Construction Manager.
4. Provide all supervision, labor, tools, equipment and materials to complete the work.
5. Perform all unloading, loading, distribution and hoisting of materials **for this scope of work.**
6. Furnish, install, maintain and remove temporary on-site trailers and storage containers as required to perform the work. This Contractor shall provide a separate office trailer equal to a Wilscott M03610, printer (Brother model - MFC-J5330DW), desk, chair and WIFI for the CM to use during construction. This Contractor shall also provide in the CM's jobsite trailer a conference table and eight chairs for contractor weekly meetings, bi-weekly Owner meetings, and other meetings as needed.
7. Perform all work in accordance with OSHA standards and any Additional Project Safety Requirements issued in the specifications (including OSHA 10-hour requirement). This Contractor is responsible for OSHA required safety railings (installation, maintenance and removal) including appropriate OSHA approved system for roof edge protection for all trades.
8. **The Owner will provide the MO DNR Land Disturbance permit, City of Union Building permit, Union Fire Protection Fire permit, and Franklin County Health Department permit. This Contractor (or its subcontractors) is responsible for all other trade permits, if required, tap/connection fees required by utility companies, state, county, local, regional, and federal authorities and agencies associated with**

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this scope of work. This Contractor is required to comply with all permit requirements and inspection requirements associated with such permits. This Contractor is also required to obtain a Business License from the City of Union.

- ~~9. This Contractor is responsible for electric utility connection charges for temporary power.~~
10. Coordinate all work with the Construction Manager's representative and other Prime Contractors.
11. This Contractor shall provide all surveying and layout required to complete the work included in this Contractor's scope of work.
12. This Contractor shall provide benchmarks and control lines for use by all Contractors.
13. Review all drawings and specifications and accept responsibility for requirements, general notes, notes, specifications, and details as they relate to this scope of work.
14. This Contractor will install, maintain, and remove all SWPPP scope of work. Contractor will provide all SWPPP reports per MDNR standards.
15. This Contractor is responsible for locating all public and private utilities.
16. Provide street cleaning to remove dirt, mud, and debris generated by the project site as needed to maintain a clean surface at existing drives, parking lots and public roads.
17. Provide adequate dust control during construction work, including misting during demo and earthwork operations.
18. Provide barricades, signage, flagging and flagman for traffic control and public safety during the execution of the work.
19. Protect adjacent properties and utilities as required during the execution of this work. Provide shoring or underpinning as required for safe excavations to meet OSHA requirements and to protect adjacent streets, sidewalks, utilities and existing structure(s). If this requires engineered shoring systems, this Contractor will provide as needed for this scope of work.
20. This Contractor shall furnish all dumpsters for the entire project and shall include cost to haul offsite and legally dispose of all construction rubbish and debris. Cleanup all rubbish and debris from site and building daily.
21. Onsite meetings will be held with the Construction Manager, Detention Equipment Contractor, General Works Contractor, Fire Protection Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor to coordinate installation of all systems in the building. The work of this Contractor must be performed in accordance with the decisions and schedules formulated at these meetings so as not to delay the work of the other Contractors.
22. This Contractor shall provide a heavy construction cleaning prior to punch list creation so all surfaces can be observed by the design team. Provide final cleaning of all buildings and site prior to occupancy.

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23. This Contractor will be responsible to review all specifications and drawings including Architectural, Civil, Mechanical, Plumbing, Electrical, Fire Protection, Low Voltage, Structural, Detention and Security, etc.
24. Contractor will provide ice, cups and distribute drinking water as needed for this scope of work.
25. The Owner, Architect, and CM will be very stringent on the quality of exposed concrete floors during punch list. It is ultimately in this Contractor's scope of work to protect all finish products through education, signage, and temporary protection. Proper concrete protection from staining must be observed and will be enforced. Steel must not be placed on slab to avoid staining. Diaper hydraulic powered equipment to avoid oil and gasoline staining. Pipe cutting machines shall not be used on the concrete slabs where the clear sealers are scheduled. Any rubber-tired traffic shall be kept at a minimum and shall be protected with drop cloths.
26. No lignite to be allowed in any interior flatwork concrete.
27. Contractor to furnish first aid and safety supplies as needed for this scope of work.
28. Contractor is solely responsible for site/project safety for this scope of work.
29. Contractor to maintain Site Specific Safety Plan which shall be completed and kept in their job trailer at all times.
30. Contractor to grout fill frames per architectural details and notes.
31. Provide code compliant seismic support and bracing as required for installation of acoustical ceiling systems per contract documents.
32. Provide Fire-Stop Systems as required for the installation of this scope of work. Fire-Stop Systems for floor and wall penetrations of all Detention Contractor, Mechanical, Plumbing, Electric and Fire Protection Systems to be by those Contractors.
33. Provide stenciling of rated walls per contract documents.
34. Include cost to furnish and install toilet accessories as indicated.
35. Include wall blocking as needed for ALL toilet accessories, TV's, etc. regardless of OFCI, OFOI, or CFCI status.
36. Contractor will provide temporary construction toilets for the project for all Contractors, visitors, etc.
37. Contractor to provide and maintain weather protection for material and work as required by the project schedule. Contractor to also provide any cold or hot weather measures for weather sensitive materials like concrete, masonry, roofing materials, air/vapor barrier, etc.
38. This Contractor is responsible for securing the building once it is reasonably possible to do with temporary or permanent measures at the close of every day. Any temporary openings in existing walls are to be secured at the end of the work day.

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39. This Contractor to supply and install temporary site fence/gates at the entrance to the site. Temporary rock parking is required for visitors to the site, temporary construction parking, staging, and laydown areas. Coordination of all staging/trailer placement/access to be coordinated and approved by the Construction Manager. See site logistics plan in bid documents. Existing fencing and razor wire along with additional fencing and razor wire, if necessary, to be installed per documents, see civil and site logistics plan for general locations.
40. Contractor will be required to install and maintain a construction entrance and road(s).
41. Contractor is responsible for any coordination of staging or relocation for materials for this scope of work after initial unloading.
42. Contractor to coordinate all deliveries of materials with Construction Manager's personnel.
43. This Contractor to cleanup all rubbish and debris from site and building on a daily basis. This includes off-site disposal of all rubbish and debris along with excess spoils, unsuitable materials, excess materials such as concrete, sand and masonry materials. Trucks or dumpsters to haul off material by this Contractor.
44. As-built Surveys will be required by this Contractor at the Completion of the Project, including for Site Utilities, rain gardens, detention basins, etc. to submit to Utility company or City/County for final approval.
45. Materials testing shall be performed by Owner's consultant and paid for by Owner. Contractor will assist and coordinate/schedule with the agency to perform onsite testing work as needed/required by the documents. If the agency must re-test or re-inspect for failed tests/inspections or if the Contractor fails to notify the testing agency of a cancelled test/inspection, this Contractor shall compensate the Owner for such tests.
46. Include ALL caulking and sealants for all systems and materials furnished and installed by all Contractors including detention sealants. This includes but not limited to caulking of security glazing at borrow lights and doors and at bottom of each cell module and the module floor.
47. Pre-engineered steel detention modules will require specified floor coating within the cells on slab on grade
48. Include installation and grouting of hollow metal door and window frames furnished by DEC bid package.
49. Doors to steel cell modules will require painting inside and outside of cells by this Contractor.
50. Plywood on walls at new server rooms by this Contractor. Also, leveling RTU curbs is responsibility of this Contractor.
51. No tobacco use is allowed on the project.
52. Contractor must not burn in the concrete at the carpet tile, vinyl, or other resilient flooring locations. Contractor to ensure floors are kept dry and clean so that the concrete can dry in order to accept adhesive for flooring products. Include moisture mitigation as required by the specifications.

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53. This Contractor to supply and install all site storm piping and downspout connections. Contractor to coordinate site, plumbing, and architectural drawings.
54. This Contractor to supply and install all site utilities indicated as new on the project documents. This Contractor is responsible for all meter costs for new utilities as a part of the project.
55. Full-time onsite superintendent is required when any of this Contractor's labor or this Contractor's subcontractor's labor is onsite.
56. Provide a mockup per documents of the building envelope materials and construction techniques. The mockup should reflect the project document details and be installed exactly as indicated on the drawings. The purpose of the mockup is to not only review and achieve an approval of the materials, but also to ensure the transition of the materials results in a good water tight condition. Contractor to follow the mockup guidelines outlined in the project documents. If the Contractor questions a detail provided, it should be submitted as an RFI and discussed with the project team prior to the construction of the mockup.
57. This Contractor shall produce a submittal log at the beginning of the project that is populated with all of the required submittals for this scope of work and assign due dates for submission to the Architect and due dates for return from the Architect. This log must be submitted to the CM and Architect for review on a weekly basis.
58. This Contractor shall maintain an RFI log for this scope of work. This log must be submitted to the CM and Architect for review on a weekly basis. Log to include:
 - a. Contractor RFI number
 - b. Topic of RFI
 - c. Date submitted
 - d. Date requested response by
 - e. Date returned
 - f. Status- Open or Closed
59. Immediately upon award, this Contractor shall submit any proposed revisions to site logistics plan for review. The Owner, CM, Contractor, and Architect will meet to review and discuss site logistics and finalize an agreed upon plan of action for construction parking, office/storage containers, temporary toilets, temporary site fence, etc.
60. This Contractor must prepare and make available upon request, a procurement log for this scope of work for all long lead materials and equipment. Procurement log must include date of order, date of confirmation of order, expected delivery date, actual delivery date, and comments noting any changes to dates and reasons for change.
61. This Contractor shall organize and arrange for pre-installation meetings for this scope of work for all major scopes of work with the subcontractors and manufacturers prior to commencement of those activities and invite the Owner, Architect, and CM to all pre-installation meetings. This contractor shall keep minutes of those meetings and forward to the CM and Architect for review.
62. This Contractor will be responsible for submitting daily logs containing the number of workers, equipment, work accomplished, daily weather, deliveries, visitors to the site, any inspections passed

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or failed, problems encountered, and other relevant data as may be required for this scope of work. These reports must be submitted to the CM daily.

63. CM must be contacted prior to cover-up of all rough-in so that photographs can be taken for Owner's record, if desired.
64. This Contractor shall arrange, schedule, organize and video tape as it pertains to this scope of work all equipment start-ups and Owner Training sessions per contract documents.
65. This Contractor must populate a closeout log and submit to the CM and Architect for review to verify that all required items have been populated. Once approved, this log will be used to track required closeout items prior to final payment. This contractor is highly encouraged to submit O&M requirements as soon as possible in advance of final acceptance to help eliminate delay in payment.
66. If this contractor chooses to backfill foundation walls prior to that time which is approved/allowed by the structural engineer, this Contractor is responsible for designing, installing, rental (and eventual removal) of all temporary shoring of foundation walls prior to backfill.
67. This Contractor is responsible for any temporary heating/cooling, humidifying/dehumidifying as needed to maintain the project schedule and as needed prior to starting the permanent HVAC equipment. Use of the new HVAC system will not be allowed during construction.
68. This Contractor shall be responsible for the cost of temporary ~~utilities electric usage~~ during the course of construction. ~~including but not limited to: gas, electric, sewer, water.~~ If there is only single phase electric available from the local electric utility for temporary electric, any other needs will require the use of a temporary generator at the Contractor's cost. **Water should be available from the existing building, but in the event that source is not sufficient, Contractor is responsible for any backflow costs/water usage costs for hydrant use.**
69. This Contractor will compile for the Owner a 'record set' of all documents and drawings, as it pertains to this scope of work, for the project at substantial completion. This shall be 'red-lined' copies of all project changes throughout the course of the project to identify all systems as they were actually installed on the project for the Owner's records. These must be electronically recorded and submitted to the Owner in pdf format on a 'thumb drive'.
70. Contractor is required to hold their alternate pricing that was included in the bid form for 3 months after the bid date. Contractor will notify Owner Representative when decisions need to be made regarding the acceptance of bid alternates in order to maintain deliveries, installation, and the master project schedule.
71. Construction work shall only be allowed during the following hours: 7AM – 4PM (Monday through Friday). Any time outside these hours needs to be pre-approved by the CM/Owner.
72. Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
73. During the warranty period of the project, this Contractor shall document, maintain and update a Warranty Log of all warranty items, weekly, to be shared with the Client and CM.

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Bid Package 2019-A6 General Works
UPDATED FOR ADDENDUM NO. 2

74. Builder's Risk to be carried by the Owner.
75. Contractor is required to maintain access to the work as needed to maintain schedule. Schedule delays will not be accepted for wet/poor site conditions after weather events.
76. This contractor shall include in the base bid price a coordination allowance of \$200,000. Allowance shall include all overhead, profit, and fees. Any savings to this allowance shall also include the associated overhead, profit, and fees. This allowance may only be used at the sole discretion of the CM. Allowance amount to be entered on Bid Form.
77. This Contractor to install non-security ceiling access panels provided by other Contractors.
78. Include housekeeping pads.
79. During demolition, remove items shown to be demolished that are universal waste (including closers shown to be removed) and deliver to a spot in the existing building designated by CM. See Phase II Environmental Site Assessment Report.
80. Include one mobilization for hydro-excavation/locates of existing domestic and fire lines.
81. Owner access to building on northeast corner of site to be maintained via temporary rocked road or permanent asphalt road at contractor's discretion. Access to overhead doors on south side of building will not be able to be maintained during retaining wall/water line and asphalt replacement. The duration of this disruption to be minimized.
82. Background checks for workers including office staff that visit site regularly will be required. Vendor delivery drivers will not be required to have background checks. List of employees who have passed the background check for prime Contractors and their subcontractors to be provided to CM before starting work. Background checks to consist of Name Search available from Missouri State Highway Patrol. Search can be requested and paid for by using following website: www.machs.mo.gov. Results provided to CM of background checks will only consist of a list of workers that passed. Workers with felony convictions for violent crimes or who are on the sex offender list will be deemed to have not passed the background check and are not allowed on the construction site.
83. This Contractor shall provide sufficient access for DEC to be able to transport the Steel Cell modules to their final locations. This shall include leaving out masonry on south elevation of approximately 20' to allow cells to enter building. Also, the day room walls shall be left out sufficiently to allow cells to be moved into their final locations. Masonry at slab shall be bridged via sufficient method to allow cells to pass over masonry at finish floor level. Rebar for this masonry to be drilled and epoxied in place per details at area left out down to slab. This Contractor is NOT responsible for a mud slab at exterior of building for DEC to join cells together.

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Bid Package 2019-A6 General Works
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84. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
85. This Contractor to be responsible for encapsulating the lead paint at the existing loading dock LBP on Lift Platform and frame per the Phase II Environmental Site Assessment issued by Sitex Environmental, Inc. dated February 19, 2019.
86. Contractor shall plan for minimum three (3) asphalt mobilizations.
87. Contractor to coordinate with Electrical Contractor for temporary electric to construction trailers.
88. This Contractor to provide, install and eventual disposal, plywood or acceptable substitute on exterior of building at detention windows inside construction area on both levels.
89. This Contractor shall provide an opportunity for a ground-breaking ceremony. Included in this scope of work is to provide a twelve-inch high mound of loose dirt, three feet wide and twenty feet long to be removed after ceremony.
90. Civil drawings show this Contractor to relocate one evidence shed and one shed that holds targets. Targets will be removed from shed and replaced in shed by Owner after moving shed to a different location at firing range. Evidence Conex will not be emptied and is to be placed inside the "Elliot" Building, located on the northeast corner of site.
91. The Owner has procured and purchased the MSB identified on the one-line diagram. This item is being assigned to the Electrical Contractor for receiving, unloading, and installation. This is an Owner Furnished Contractor Installed item. The equipment is set to arrive onsite by June 10, 2019.
92. This Contractor shall be aware that the existing generator, buried fuel tank, electrical transformer, and electric meter are all located within the footprint of the new Jail addition. These items must be coordinated with mass excavation scope of work. Owner has coordinated with Ameren and a generator rental company for procurement of a new transformer and generator; however, final coordination of this effort is to be completed with this Contractor and other prime contractors immediately after award and prior to mass excavation. General Works contractor is responsible for decommission and removal of existing generator and fuel tank system. General Works Contractor shall hoist generator onto a trailer provided by the Owner. Electrical contractor is responsible for disconnection of existing feed to generator.
93. This Contractor responsible for protecting existing wall and graphics as stated on Sheet AD1.0.3.
94. General Works contractor must provide costs for Bid Alternates 1, 2, 3, and 4. This Contractor shall NOT include the cost of these alternates in their Base Bid.

Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A7 Fire Protection
UPDATED FOR ADDENDUM NO. 2

The Construction Manager referred to below is Navigate Building Solutions. The Owner referred to below is Franklin County. The Contractor referred to below is the Fire Protection Contractor. The Other Prime Contractors referred to below are the General Works, MEP and DEC Contractors engaged by Owner to perform those bid Package scopes of work. It is required that this Contractor coordinate closely with the other Prime Contractors to maintain schedule. This bid package includes, but is not limited to, the following:

All work outlined by the project documents (plans and specifications) issued by FGM Architects dated March 29, 2019 and specifications: Division 0 all Sections; Division 1 all Sections; Division 33 as they apply to the Fire Protection Work; Division 21 all Sections and Section 078413 as it applies to the Fire Protection Work.

1. Contractor is aware of the potential for Liquidated Damages. Contractor shall be responsible to maintain scheduled items for the Contractor's work as included in the project master schedule below. Contractor shall reference AIA 101 and AIA 201 contract drafts provided in the bid documents. Contractor agrees to pay the Owner, or to deduct from the Contract Sum, not as a penalty, but as liquidated damages, the amounts listed in the contract drafts provided.
2. The draft AIA 101 and AIA 201 have been modified from their original versions. Contractor shall read and agree to these documents as part of the bid process.
3. Contractor will provide ice, cups and distribute drinking water as needed for this scope.
4. Contractor to coordinate all deliveries of materials with Construction Manager's personnel.
5. No tobacco use is allowed on the project.
6. This Contractor shall arrange, schedule, organize and video tape as it pertains to this scope of work all equipment start-ups and Owner Training sessions per contract documents.
7. This contractor shall include in the base bid price a coordination allowance of \$20,000. Allowance shall include all overhead, profit, and fees. Any savings to this allowance shall also include the associated overhead, profit, and fees. This allowance may only be used at the sole discretion of the CM. Allowance amount to be entered on Bid Form.
8. Construction work shall only be allowed during the following hours: 7AM – 4PM (Monday through Friday) Any time outside these hours needs to be pre-approved by the CM/Owner.
9. This Contractor will compile for the Owner a 'record set' of all documents and drawings, as it pertains to this scope of work, for the project at substantial completion. This shall be 'red-lined' copies of all project changes throughout the course of the project to identify all systems as they were actually installed on the project for the Owner's records. These must be electronically recorded and submitted to the Owner in pdf format on a 'thumb drive'.
10. Contractor is required to hold their alternate pricing that was included in the bid form for 3 months after the bid date. Contractor will notify Owner Representative when decisions need to be made regarding the acceptance of bid alternates in order to maintain deliveries, installation, and the master project schedule.

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Bid Package 2019-A7 Fire Protection
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11. Fire Protection work shall start within 15 days of Notice to proceed but not later than required to coordinate with or allow the progress of the Construction Manager or other Contractors.
12. This Contractor shall be responsible to locate all existing utilities including calling Missouri Once Call prior to any excavations.
13. The work of this contractor begins and ends five feet (5'-0) beyond the building foundation.
14. This Contractor is responsible for sealing all penetrations through walls, ceilings and floors made during the installation of his own work including Fire Stopping / Smoke Sealing assemblies including labeling of assembly per contract documents.
15. Include cleanup of all rubbish and debris on a daily basis to an area (central pile) designated by Construction Manager.
16. All labor, tools, equipment, materials and supervision to complete the work.
17. Unloading, loading, hoisting and lifts necessary to complete **this scope of work**.
18. Perform all work in accordance with OSHA safety standards and any job specific safety standards required in contract documents including OSHA 10-hour requirement.
19. Coordinate all work with the Construction Manager's representative and other Prime Contractors. Coordinate with Detention package concerning sprinkler heads at steel cell modules.
20. Materials testing shall be performed by Owner's consultant and paid for by the Owner. This Contractor shall provide all miscellaneous labor required to assist the testing agency. Charges for re-testing failed testing by this Contractor.
21. General Works Contractor to provide benchmarks and building corners, this Contractor shall provide all other layout required to perform his own work.
22. **The Owner will provide the MO DNR Land Disturbance permit, City of Union Building permit, Union Fire Protection Fire permit, and Franklin County Health Department permit. This Contractor (or its subcontractors) is responsible for all other trade permits, if required, tap/connection fees required by utility companies, state, county, local, regional, and federal authorities and agencies associated with this scope of work. This Contractor is required to comply with all permit requirements and inspection requirements associated with such permits. This Contractor is also required to obtain a Business License from the City of Union.**
23. Include cold and hot weather protection as required to maintain the project schedule.
24. Onsite meetings will be held with the Construction Manager, Detention Equipment Contractor, General Works Contractor, Fire Protection Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor to coordinate installation of all systems in the building. The work of this Contractor must be performed in accordance with the decisions and schedules formulated at these meetings so as not to delay the work of the other Contractors.

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25. This Contractor is responsible for sealing all penetrations through walls, ceilings and floors made during the installation of his own work including Fire Stopping / Smoke Sealing assemblies with labeling of assembly per contract documents.
26. Install and remove temporary protection for sprinkler heads.
27. Provide head adjustments after ceiling grid installed for both elevation and location within tile. Include coordination with other trades to install sprinkler heads within ceiling grid.
28. This contractor must include Professional Liability and errors and omissions insurance for the Design Build Sprinkler System. Drawings and calculations shall be signed and sealed by a Professional Engineer registered in the State of Missouri.
29. This contractor will furnish all access panels required for this scope of work.
30. Provide all necessary supports, hangers, brackets etc. for seismic bracing of the sprinkler system.
31. This Contractor to provide water tight seals for this Contractor's penetrations through foundation wall.
32. All backfill below building slabs and paving shall be minus material compacted by this contractor.
33. This contractor shall be responsible to locate all existing utilities including calling Missouri One Call prior to any excavations.
34. Furnish and install all necessary supports, hangers and brackets required to meet seismic requirements.
35. All spoils from underground trenches will be removed from site by this contractor.
36. Contractor is required to provide detailed work schedule (short term schedule) on a weekly basis. Contractor's detailed work schedule shall adhere to the master project schedule. Contractor shall meet the requirements of the master project schedule. Should the Contractor fall behind the master project schedule by more than 5 work days due to the fault of this Contractor, the Contractor shall provide a recovery schedule to the Construction Manager within 5 days of request by the Construction Manager.
37. This Contractor must prepare and make available upon request, a procurement log for this scope of work for all long lead materials and equipment. Procurement log must include date of order, date of confirmation of order, expected delivery date, actual delivery date, and comments noting any changes to dates and reasons for change.
38. Background checks for workers including office staff that visit site regularly will be required. Vendor delivery drivers will not be required to have background checks. List of employees who have passed background check for prime Contractors and their subcontractors to be provided before starting work. Background checks to consist of Name Search provided by

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Missouri State Highway Patrol. Search can be requested and paid for by using following website: www.machs.mo.gov. Results of background checks will only consist of a list of workers that passed. Workers with felony convictions for violent crimes or who are on the sex offender list will be deemed to have not passed the background check and are not allowed on the construction site.

39. This Contractor shall produce a submittal log at the beginning of the project that is populated with all of the required submittals for this scope of work and assign due dates for submission to the Architect and due dates for return from the Architect. This log must be submitted to the CM and Architect for review on a weekly basis.
40. This Contractor shall maintain an RFI log for this scope of work. This log must be submitted to the CM and Architect for review on a weekly basis. Log to include:
 - a. Contractor RFI number
 - b. Topic of RFI
 - c. Date submitted
 - d. Date requested response by
 - e. Date returned
 - f. Status- Open or Closed
41. This Contractor will be responsible for submitting daily logs containing the number of workers, equipment, work accomplished, daily weather, deliveries, visitors to the site, any inspections passed or failed, problems encountered, and other relevant data as may be required for this scope of work. Daily logs are required to have a minimum of 6 pictures attached each day. These reports must be emailed to the CM daily.
42. CM must be contacted prior to cover-up of all rough-in so that photographs can be taken for Owner's record if desired.
43. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
44. This Contractor will be responsible to review all specifications and drawings including Architectural, Civil, Mechanical, Plumbing, Electrical, Fire Protection, Low Voltage, and Structural, etc.
45. Proper concrete protection from staining must be observed and will be enforced. Steel must not be placed on slab to avoid staining. Diaper hydraulic powered equipment to avoid oil and gasoline staining. Pipe cutting machines shall not be used on the concrete slabs where the clear sealers are scheduled. Any rubber-tired traffic shall be kept at a minimum and shall be protected with drop cloths.
46. Sprinkler heads in all cells are furnished and installed by this Contractor.
47. Any tie-ins to existing system or modifications to layout in remodel areas are to be accomplished by this Contractor. The existing system will need to be taken out of service daily, drained and re-energized at the end of each day. Note that Area 8 will receive new ceiling tiles and this Contractor shall anticipate removing, salvaging, and re-installing escutcheons as needed for that area.

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Bid Package 2019-A8 Plumbing
UPDATED FOR ADDENDUM NO. 2

The Construction Manager referred to below is Navigate Building Solutions. The Owner referred to below is Franklin County. The Contractor referred to below is the Plumbing Contractor. The Other Prime Contractors referred to below are the General Works, ME/FP and DEC Contractors engaged by Owner to perform those bid Package scopes of work. It is required that this Contractor coordinate closely with the other Prime Contractors to maintain schedule. This bid packages includes, but is not limited to, the following:

All work outlined by the project documents (plans and specifications) issued by FGM Architects dated March 31, 2019 and specifications: Division 0 all Sections; Division 1 all Sections; Division 33, as they apply to the Plumbing work; Division 22 all Sections, section 078413 as it applies to the Plumbing Work.

1. Contractor is aware of the potential for Liquidated Damages. Contractor shall be responsible to maintain scheduled items for the Contractor's work as included in the project master schedule below. Contractor shall reference AIA 101 and AIA 201 contract drafts provided in the bid documents. Contractor agrees to pay the Owner, or to deduct from the Contract Sum, not as a penalty, but as liquidated damages, the amounts listed in the contract drafts provided.
2. The draft AIA 101 and AIA 201 have been modified from their original versions. Contractor shall read and agree to these documents as part of the bid process.
3. Contractor will provide ice, cups and distribute drinking water as needed for this scope of work.
4. Contractor to coordinate all deliveries of materials with Construction Manager's personnel.
5. No tobacco use is allowed on the project.
6. This Contractor shall arrange, schedule, organize and video tape as it pertains to this scope of work all equipment start-ups and Owner Training sessions per contract documents.
7. This Contractor shall include in the base bid price a coordination allowance of \$30,000. Allowance shall include all overhead, profit, and fees. Any savings to this allowance shall also include the associated overhead, profit, and fees. This allowance may only be used at the sole discretion of the CM. Allowance amount to be entered on Bid Form.
8. Construction work shall only be allowed during the following hours: 7AM – 4PM (Monday through Friday) Any time outside these hours needs to be pre-approved by the CM/Owner.
9. This Contractor will compile for the Owner a 'record set' of all documents and drawings, as it pertains to this scope of work, for the project at substantial completion. This shall be 'red-lined' copies of all project changes throughout the course of the project to identify all systems as they were actually installed on the project for the Owner's records. These must be electronically recorded and submitted to the Owner in pdf format on a 'thumb drive'.
10. Contractor is required to hold their alternate pricing that was included in the bid form for 3 months after the bid date. Contractor will notify Owner Representative when decisions need

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to be made regarding the acceptance of bid alternates in order to maintain deliveries, installation, and the master project schedule.

11. Builder's Risk to be carried by the Owner.
12. Plumbing work shall begin within 15 days of Notice to proceed but not later than required to coordinate with or allow the progress of the other Contractors.
13. The work of this Contractor begins and ends five feet (5'-0) beyond the building foundation and includes the final connection to site piping.
14. Includes cleanup of all rubbish and debris on a daily basis to an area (central pile) designated by Construction Manager.
15. All labor, tools, equipment, materials and supervision to complete the work.
16. Unloading, loading, hoisting and lifts necessary to complete **this scope of work**.
17. Perform all work in accordance with OSHA safety standards and any job specific safety standards required in contract documents (including OSHA 10 hour requirement).
18. Coordinate all work with the Construction Manager's representative and other Prime Contractors. Coordinate with Detention package concerning responsibilities to procure and install plumbing devices that will be paid for by Detention contractor along with what fixtures will be furnished and arrive pre-set by Detention Contractor.
19. Materials testing shall be performed by Owner's consultant and paid for by the Owner. This Contractor shall provide all miscellaneous labor required to assist the testing agency. Pipe testing of this work for compliance with specifications and local codes is by this Contractor.
20. General Works Contractor shall provide benchmarks and building corners, this Contractor shall provide all other layout required to perform his own work.
21. **The Owner will provide the MO DNR Land Disturbance permit, City of Union Building permit, Union Fire Protection Fire permit, and Franklin County Health Department permit. This Contractor (or its subcontractors) is responsible for all other trade permits, if required, tap/connection fees required by utility companies, state, county, local, regional, and federal authorities and agencies associated with this scope of work. This Contractor is required to comply with all permit requirements and inspection requirements associated with such permits. This Contractor is also required to obtain a Business License from the City of Union.**
22. Include cold and hot weather protection as required to maintain the project schedule.
23. Onsite meetings will be held with the Construction Manager, Detention Equipment Contractor, General Works Contractor, Fire Protection Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor to coordinate installation of all systems in the building. The work of this Contractor must be performed in accordance with the decisions and schedules formulated at these meetings so as not to delay the work of the other Contractors.

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24. This Contractor is responsible for sealing all penetrations through walls, ceilings and floors made during the installation of his own work including Fire Stopping / Smoke Sealing assemblies including labeling of assembly per contract documents.
25. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
26. Furnish and install footing drain including gravel backfill and filter fabric and tie in/final connection to storm piping per contract documents
27. This Contractor to provide water tight seals for this Contractor's penetrations through foundation wall.
28. All backfill below building slabs and paving shall be minus material compacted by this Contractor.
29. This Contractor shall be responsible to locate all existing utilities including calling Missouri One Call prior to any excavations.
30. Furnish and install all necessary supports, hangers and brackets required to meet seismic requirements.
31. This Contractor will furnish all access panels required for this work.
32. All spoils from underground trenches will be removed from site by this Contractor.
33. The building pad and all utility trenches will be graded leveled and compacted to ~.10' after completion of utility work. The building pad will be re-graded and repaired until acceptable by the Jobsite Superintendent and the Concrete Contractor.
34. Contractor is required to provide detailed work schedule (short term schedule) on a weekly basis. Contractor's detailed work schedule shall adhere to the master project schedule. Contractor shall meet the requirements of the master project schedule. Should the Contractor fall behind the master project schedule by more than 5 work days due to the fault of this Contractor, the Contractor shall provide a recovery schedule to the Construction Manager within 5 days of request by the Construction Manager.
35. This Contractor must prepare and make available upon request, a procurement log for this scope of work for all long lead materials and equipment. Procurement log must include date of order, date of confirmation of order, expected delivery date, actual delivery date, and comments noting any changes to dates and reasons for change.
36. Background checks for workers including office staff that visit site regularly will be required. Vendor delivery drivers will not be required to have background checks. List of employees who have passed background check for prime Contractors and their subcontractors to be provided before starting work. Background checks to consist of Name Search provided by Missouri State Highway Patrol. Search can be requested and paid for by using following

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website: www.machs.mo.gov. Results of background checks will only consist of a list of workers that passed. Workers with felony convictions for violent crimes or who are on the sex offender list will be deemed to have not passed the background check and are not allowed on the construction site.

37. This Contractor shall produce a submittal log at the beginning of the project that is populated with all of the required submittals for this scope of work and assign due dates for submission to the Architect and due dates for return from the Architect. This log must be submitted to the CM and Architect for review on a weekly basis.
38. This Contractor shall maintain an RFI log for this scope of work. This log must be submitted to the CM and Architect for review on a weekly basis. Log to include:
 - a. Contractor RFI number
 - b. Topic of RFI
 - c. Date submitted
 - d. Date requested response by
 - e. Date returned
 - f. Status- Open or Closed
39. This Contractor will be responsible for submitting daily logs containing the number of workers, equipment, work accomplished, daily weather, deliveries, visitors to the site, any inspections passed or failed, problems encountered, and other relevant data as may be required for this scope of work. These reports must be submitted to the CM daily.
40. CM must be contacted prior to cover-up of all rough-in so that photographs can be taken for Owner's record if desired.
41. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
42. This Contractor will be responsible to review all specifications and drawings including Architectural, Civil, Mechanical, Plumbing, Electrical, Fire Protection, Low Voltage, and Structural, etc.
43. Proper concrete protection from staining must be observed and will be enforced. Steel must not be placed on slab to avoid staining. Diaper hydraulic powered equipment to avoid oil and gasoline staining. Pipe cutting machines shall not be used on the concrete slabs where the clear sealers are scheduled. Any rubber-tired traffic shall be kept at a minimum and shall be protected with drop cloths.
44. Water should be available from the existing building, but in the event that source is not sufficient, Contractor is responsible for any backflow costs/water usage costs for hydrant use for this scope of work.

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Bid Package 2019-A9 HVAC
UPDATED FOR ADDENDUM NO. 2

The Construction Manager referred to below is Navigate Building Solutions. The Owner referred to below is Franklin County. The Contractor referred to below is the HVAC Contractor. The Other Prime Contractors referred to below are the General Works, EP/FP and DEC Contractors engaged by Owner to perform those bid Package scopes of work. It is required that this Contractor coordinate closely with the other Prime Contractors to maintain schedule. This bid package includes, but is not limited to, the following:

All work outlined by the project documents (plans and specifications) issued by FGM Architects dated March 29, 2019 and specifications: Division 0 all Sections; Division 1 all Sections; Division 33, as it relates to the HVAC Work; Division 23 all sections; section 078413 as it relates to HVAC work, and Division 26 as it relates to the HVAC work.

1. Contractor is aware of the potential for Liquidated Damages. Contractor shall be responsible to maintain scheduled items for the Contractor's work as included in the project master schedule below. Contractor shall reference AIA 101 and AIA 201 contract drafts provided in the bid documents. Contractor agrees to pay the Owner, or to deduct from the Contract Sum, not as a penalty, but as liquidated damages, the amounts listed in the contract drafts provided.
2. The draft AIA 101 and AIA 201 have been modified from their original versions. Contractor shall read and agree to these documents as part of the bid process.
3. Contractor will provide ice, cups and distribute drinking water as needed for this scope of work.
4. Contractor to coordinate all deliveries of materials with Construction Manager's personnel.
5. No tobacco use is allowed on the project.
6. This Contractor shall arrange, schedule, organize and video tape as it pertains to this scope of work all equipment start-ups and Owner Training sessions per contract documents.
7. An allowance of \$30,000 is to be included in Contract costs. This allowance may only be used at the sole discretion of the CM. Allowance to be entered on Bid Form.
8. Construction work shall only be allowed during the following hours: 7AM – 4PM (Monday through Friday) Any time outside these hours needs to be pre-approved by the CM/Owner.
9. This Contractor will compile for the Owner a 'record set' of all documents and drawings, as it pertains to this scope of work, for the project at substantial completion. This shall be 'red-lined' copies of all project changes throughout the course of the project to identify all systems as they were actually installed on the project for the Owner's records. These must be electronically recorded and submitted to the Owner in pdf format on a 'thumb drive'.
10. Contractor is required to hold their alternate pricing that was included in the bid form for 3 months after the bid date. Contractor will notify Owner Representative when decisions need to be made regarding the acceptance of bid alternates in order to maintain deliveries, installation, and the master project schedule.

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11. Builder's Risk to be carried by the Owner
12. HVAC work shall begin within 15 days of Notice to proceed but not later than required to coordinate with or allow the progress of the Construction Manager or other Contractors.
13. Include cleanup of all rubbish and debris on a daily basis to an area (central pile) designated by Construction Manager.
14. All labor, tools, equipment, materials and supervision to complete the work.
15. Unloading, loading, hoisting and lifts necessary to complete **this scope of work**.
16. Install all work in accordance with OSHA safety standards and any job specific safety standards required in contract documents (including OSHA 10-hour requirement).
17. Coordinate all work with the Construction Manager's representative and other Prime Contractors.
18. Materials testing shall be performed by Owner's consultant and paid for by the Owner. This Contractor shall provide all miscellaneous labor required to assist the testing agency. Pipe and duct testing of this work for compliance with specifications and local codes is by this Contractor.
19. General Works Contractor shall provide benchmarks and building corners, this Contractor shall provide all other layout required to perform his own work.
20. **The Owner will provide the MO DNR Land Disturbance permit, City of Union Building permit, Union Fire Protection Fire permit, and Franklin County Health Department permit. This Contractor (or its subcontractors) is responsible for all other trade permits, if required, tap/connection fees required by utility companies, state, county, local, regional, and federal authorities and agencies associated with this scope of work. This Contractor is required to comply with all permit requirements and inspection requirements associated with such permits. This Contractor is also required to obtain a Business License from the City of Union.**
21. Include cold and hot weather protection as required to maintain the project schedule.
22. Onsite meetings will be held with the Construction Manager, Detention Equipment Contractor, General Works Contractor, Fire Protection Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor to coordinate installation of all systems in the building. The work of this Contractor must be performed in accordance with the decisions and schedules formulated at these meetings so as not to delay the work of the other Contractors.
23. This Contractor is responsible for sealing all penetrations through walls, ceilings and floors made during the installation of his own work including Fire Stopping / Smoke Sealing assemblies including labeling of assembly per contract documents.
24. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.

Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A9 HVAC
UPDATED FOR ADDENDUM NO. 2

25. This Contractor shall furnish and install all curbs for roof top equipment including cutting metal deck as necessary for duct and piping penetrations.
26. This Contractor will furnish and install condensate piping to drain locations.
27. This Contractor shall include costs for all testing and balancing per contract documents.
28. In renovation phases, provide temporary filters on return duct including the replacement of temporary filters during construction as needed.
29. Includes all control wiring.
30. Includes complete functioning temperature control system.
31. This Contractor will locate and cut in all return air openings in partitions.
32. Furnish all disconnects for all equipment as required by code and the Project Documents and Schedules. Disconnects will be wired by the Electrical Contractor.
33. Provide and install all necessary supports, hangers, brackets, etc. for seismic bracing.
34. This contractor shall furnish all access panels as required for this scope of work.
35. All ductwork ends to be sealed before arriving at site and seals at end of runs to be maintained.
36. Contractor is required to provide detailed work schedule (short term schedule) on a weekly basis. Contractor's detailed work schedule shall adhere to the master project schedule. Contractor shall meet the requirements of the master project schedule. Should the Contractor fall behind the master project schedule by more than 5 work days due to the fault of this Contractor, the Contractor shall provide a recovery schedule to the Construction Manager within 5 days of request by the Construction Manager.
37. This Contractor must prepare and make available upon request, a procurement log for this scope of work for all long lead materials and equipment. Procurement log must include date of order, date of confirmation of order, expected delivery date, actual delivery date, and comments noting any changes to dates and reasons for change.
38. Background checks for workers including office staff that visit site regularly will be required. Vendor delivery drivers will not be required to have background checks. List of employees who have passed background check for prime Contractors and their subcontractors to be provided before starting work. Background checks to consist of Name Search provided by Missouri State Highway Patrol. Search can be requested and paid for by using following website: www.machs.mo.gov. Results of background checks will only consist of a list of workers that passed. Workers with felony convictions for violent crimes or who are on the sex offender list will be deemed to have not passed the background check and are not allowed on the construction site.

Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A9 HVAC
UPDATED FOR ADDENDUM NO. 2

39. This Contractor shall produce a submittal log at the beginning of the project that is populated with all of the required submittals for this scope of work and assign due dates for submission to the Architect and due dates for return from the Architect. This log must be submitted to the CM and Architect for review on a weekly basis.
40. This Contractor shall maintain an RFI log for this scope of work. This log must be submitted to the CM and Architect for review on a weekly basis. Log to include:
 - a. Contractor RFI number
 - b. Topic of RFI
 - c. Date submitted
 - d. Date requested response by
 - e. Date returned
 - f. Status- Open or Closed
41. This Contractor will be responsible for submitting daily logs containing the number of workers, equipment, work accomplished, daily weather, deliveries, visitors to the site, any inspections passed or failed, problems encountered, and other relevant data as may be required for this scope of work. Daily logs are required to have a minimum of 6 pictures attached each day. These reports must be emailed to the CM daily.
42. CM must be contacted prior to cover-up of all rough-in so that photographs can be taken for Owner's record if desired.
43. This Contractor will be responsible to review all specifications and drawings including Architectural, Civil, Mechanical, Plumbing, Electrical, Fire Protection, Low Voltage, Detention and Security, and Structural, etc.
44. Proper concrete protection from staining must be observed and will be enforced. Steel must not be placed on slab to avoid staining. Diaper hydraulic powered equipment to avoid oil and gasoline staining. Pipe cutting machines shall not be used on the concrete slabs where the clear sealers are scheduled. Any rubber-tired traffic shall be kept at a minimum and shall be protected with drop cloths.

Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A10 Electrical and Low Voltage
UPDATED FOR ADDENDUM NO. 2

The Construction Manager referred to below is Navigate Building Solutions. The Owner referred to below is Franklin County. The Contractor referred to below is the Electrical and Low Voltage Contractor. The Other Prime Contractors referred to below are the General Works, MP/FP and DEC Contractors engaged by Owner to perform those bid Package scopes of work. It is required that this Contractor coordinate closely with the other Prime Contractors to maintain schedule. This bid package includes, but is not limited to, the following:

All work outlined by the project documents (plans and specifications) issued by FGM Architects dated March 29, 2019 and specifications: Division 0 all Sections; Division 1 all Sections; Division 33 as it relates to the Electrical Work; Divisions 21, 22, 23 as they relate to the Electrical work; Divisions 26 - 28 all Sections, section 078413 for this scope of work .

1. Contractor is aware of the potential for Liquidated Damages. Contractor shall be responsible to maintain scheduled items for the Contractor's work as included in the project master schedule below. Contractor shall reference AIA 101 and AIA 201 contract drafts provided in the bid documents. Contractor agrees to pay the Owner, or to deduct from the Contract Sum, not as a penalty, but as liquidated damages, the amounts listed in the contract drafts provided.
2. The draft AIA 101 and AIA 201 have been modified from their original versions. Contractor shall read and agree to these documents as part of the bid process.
3. Contractor will provide ice, cups and distribute drinking water as needed for this scope of work.
4. Contractor to coordinate all deliveries of materials with Construction Manager's personnel.
5. No tobacco use is allowed on the project.
6. This Contractor shall arrange, schedule, organize and video tape as it pertains to this scope of work all equipment start-ups and Owner Training sessions per contract documents.
7. An allowance of \$60,000 is to be included in Contract costs. This allowance may only be used at the sole discretion of the CM. Allowance to be entered on Bid Form.
8. Construction work shall only be allowed during the following hours: 7AM – 4PM (Monday through Friday) Any time outside these hours needs to be pre-approved by the CM/Owner.
9. This Contractor will compile for the Owner a 'record set' of all documents and drawings, as it pertains to this scope of work, for the project at substantial completion. This shall be 'red-lined' copies of all project changes throughout the course of the project to identify all systems as they were actually installed on the project for the Owner's records. These must be electronically recorded and submitted to the Owner in pdf format on a 'thumb drive'.
10. Contractor is required to hold their alternate pricing that was included in the bid form for 3 months after the bid date. Contractor will notify Owner Representative when decisions need to be made regarding the acceptance of bid alternates in order to maintain deliveries, installation, and the master project schedule.

**Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A10 Electrical and Low Voltage
UPDATED FOR ADDENDUM NO. 2**

11. Builder's Risk to be carried by the Owner.
12. Electrical work shall begin within 15 days of Notice to proceed but not later than required to coordinate with or allow the progress of the Construction Manager or other Contractors.
13. This Contractor shall be responsible to locate all existing utilities including calling Missouri Once Call prior to any excavations.
14. Includes cleanup of all rubbish and debris on a daily basis to an area (central pile) designated by Construction Manager.
15. All labor, tools, equipment, materials and supervision to complete the work.
16. Unloading, loading, hoisting and lifts necessary to complete **this scope of work**.
17. Install all work in accordance with OSHA safety standards and any job specific safety standards required in contract documents (including OSHA 10 hour requirement).
18. Coordinate all work with the Construction Manager's representative and other Prime Contractors. Coordinate with Detention package concerning low voltage and power wiring extent of scope.
19. Materials testing shall be performed by Owner's consultant and paid for by the Owner. This Contractor shall provide all miscellaneous labor required to assist the testing agency.
20. General Works Contractor shall provide benchmarks and building corners, this Contractor shall provide all other layout required to perform his own work.
21. Include cold and hot weather protection as required to maintain the project schedule
22. **The Owner will provide the MO DNR Land Disturbance permit, City of Union Building permit, Union Fire Protection Fire permit, and Franklin County Health Department permit. This Contractor (or its subcontractors) is responsible for all other trade permits, if required, tap/connection fees required by utility companies, state, county, local, regional, and federal authorities and agencies associated with this scope of work. This Contractor is required to comply with all permit requirements and inspection requirements associated with such permits. This Contractor is also required to obtain a Business License from the City of Union.**
23. Onsite meetings will be held with the Construction Manager, Detention Equipment Contractor, General Works Contractor, Fire Protection Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor to coordinate installation of all systems in the building. The work of this Contractor must be performed in accordance with the decisions and schedules formulated at these meetings so as not to delay the work of the other Contractors.
24. This Contractor is responsible for sealing all penetrations through walls, ceilings and floors made during the installation of his own work including Fire Stopping / Smoke Sealing assemblies including labeling of assembly per contract documents.

Franklin County Public Safety Facility
Additions and Renovations to Franklin County Sheriff's Office and Jail
Bid Package 2019-A10 Electrical and Low Voltage
UPDATED FOR ADDENDUM NO. 2

25. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
26. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
27. This Contractor will provide all conduit and junction boxes for HVAC Control Wiring
28. This Contractor will include concrete bases for all site lighting.
29. Include all work necessary for a complete fire alarm system.
30. Provide temporary power and lighting per OSHA requirements for building construction including providing "turtles" enabling the use of extension cords no longer than 75'0" in any area of each building. Provide meter for temporary service within 75' cable run to pole mounted transformer per site logistics plan. From there, provide feed and connect to CM trailer and General Works trailer per site logistics plan and also provide temporary power for main construction site. Include Ameren charge for 200 amp single phase feed of \$450. Include Ameren costs for any charges in excess of this due to cable length run over 75' by Ameren or increased service size. Temporary electric usage not by this Contractor. This contractor will be responsible for removal of all temporary power and lighting.
31. Furnish and install conduit with pull strings for phone/data lines to HVAC equipment and Fire Alarm panel.
32. This Contractor to supply locations and sleeves for service entrance include water tight seal at all penetrations including fiber, telephone, communication, etc. per contract documents.
33. The Mechanical Contractor will provide disconnects for all equipment as required by code and the contract documents and schedules. Disconnects will be wired by the Electrical Contractor.
34. All backfill for this scope of work below building slabs and paving shall be minus material furnished, installed and compacted by this Contractor.
35. All spoils from this Contractor's underground trenches will be removed from site by this Contractor.
36. The building pad and all utility trenches will be regraded, leveled and compacted to .10' after completion of utility work until acceptable by the General Works Contractor.
37. This Contractor shall be responsible to locate all existing utilities including calling Missouri Once Call prior to any excavations.
38. Furnish and install concrete transformer pad per Ameren UE Specifications.
39. This Contractor will be responsible to review all drawings including Architectural, Civil, Mechanical, Plumbing etc, and include any work shown that will be claimed by this Contractor.
40. Provide and install all necessary supports, hangers, brackets etc. for seismic bracing.

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Additions and Renovations to Franklin County Sheriff's Office and Jail
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41. This Contractor to furnish and install hanger wires on light fixtures to meet seismic bracing requirements.
42. This Contractor will furnish all access panels required for this work.
43. This Contractor to provide water tight seals for this Contractor's penetrations through foundation.
44. Contractor is required to provide detailed work schedule (short term schedule) on a weekly basis. Contractor's detailed work schedule shall adhere to the master project schedule. Contractor shall meet the requirements of the master project schedule. Should the Contractor fall behind the master project schedule by more than 5 work days due to the fault of this Contractor, the Contractor shall provide a recovery schedule to the Construction Manager within 5 days of request by the Construction Manager.
45. This Contractor to include raceways per Contract Documents for use by Detention Equipment Contractor.
46. Fuel for generator testing is by this Contractor. At turnover of emergency generators, this Contractor is to completely fill generator fuel tanks.
47. During demolition, remove universal waste (fluorescent lamps and ballasts) and deliver to a spot in the existing building designated by CM.
48. This Contractor must prepare and make available upon request, a procurement log for this scope of work for all long lead materials and equipment. Procurement log must include date of order, date of confirmation of order, expected delivery date, actual delivery date, and comments noting any changes to dates and reasons for change.
49. Background checks for workers including office staff that visit site regularly will be required. Vendor delivery drivers will not be required to have background checks. List of employees who have passed background check for prime Contractors and their subcontractors to be provided before starting work. Background checks to consist of Name Search provided by Missouri State Highway Patrol. Search can be requested and paid for by using following website: www.machs.mo.gov. Results of background checks will only consist of a list of workers that passed. Workers with felony convictions for violent crimes or who are on the sex offender list will be deemed to have not passed the background check and are not allowed on the construction site.
50. This Contractor shall produce a submittal log at the beginning of the project that is populated with all of the required submittals for this scope of work and assign due dates for submission to the Architect and due dates for return from the Architect. This log must be submitted to the CM and Architect for review on a weekly basis.
51. This Contractor shall maintain an RFI log for this scope of work. This log must be submitted to the CM and Architect for review on a weekly basis. Log to include:
 - a. Contractor RFI number

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- b. Topic of RFI
 - c. Date submitted
 - d. Date requested response by
 - e. Date returned
 - f. Status- Open or Closed
52. This Contractor will be responsible for submitting daily logs containing the number of workers, equipment, work accomplished, daily weather, deliveries, visitors to the site, any inspections passed or failed, problems encountered, and other relevant data as may be required for this scope of work. Daily logs are required to have a minimum of 6 pictures attached each day. These reports must be emailed to the CM daily.
53. CM must be contacted prior to cover-up of all rough-in so that photographs can be taken for Owner's record if desired.
54. This Contractor is responsible to hire roofing contractor that can maintain warranty of existing roof for any new roof penetrations needed to perform this scope of work at existing roof.
55. This Contractor will be responsible to review all specifications and drawings including Architectural, Civil, Mechanical, Plumbing, Electrical, Fire Protection, Low Voltage, Detention and Security, and Structural, etc.
56. Supply and install a complete raceway system to connect modular control cabinets located in rear chase to head end equipment rack in associated equipment room. Install equipment racks and cabinets with connections to raceway system
57. Include all branch circuits including conduit, wiring and connections from power distribution panels through UPS systems, terminal strips and/or receptacles in electronic control panels and/or electronic system devices.
58. Proper concrete protection from staining must be observed and will be enforced. Steel must not be placed on slab to avoid staining. Diaper hydraulic powered equipment to avoid oil and gasoline staining. Pipe cutting machines shall not be used on the concrete slabs where the clear sealers are scheduled. Any rubber-tired traffic shall be kept at a minimum and shall be protected with drop cloths.
59. The Owner has procured and purchased the MSB identified on the one-line diagram. This item is being assigned to this Contractor for receiving, unloading, and installation. This is an Owner Furnished Contractor Installed item. The equipment is set to arrive onsite by June 14, 2019.
60. This Contractor shall be aware that the existing generator, buried fuel tank, electrical transformer, and electric meter are all located within the footprint of the new Jail addition. These items must be coordinated with mass excavation scope of work. Owner has coordinated with Ameren and a generator rental company for procurement of a new transformer and generator; however, final coordination of this effort is to be completed with this Contractor and other prime contractors immediately after award and prior to mass

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excavation. Disconnection of the existing generator and XFMR to be by the Electrical Contractor. Removal of the Generator to be by the General Works Contractor and hoisted onto a trailer provided by the Owner. Removal of the buried fuel tank to be by the General Works Contractor.

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

Below is a contact for the BIDDER submitting this bid, who will be responsible for any questions that may arise during bid review and who may also be contacted to discuss the acceptance or rejection of this bid:

BIDDER Company Name	
BIDDER Contact Person Name	
Address	
City/State/Zip	
Phone Number	
Email Address	
Fax Number	

BIDDER accepts all of the terms and conditions of the “Notice to Bidders” and the “Instructions to Bidders”, including without limitation those dealing with the disposition of Bid security.

Bidding and Contract Requirements

STIPULATED SUM BID FORM

Name of Project: **Additions and Renovations to the existing Franklin County Sheriff Station, Jail, and Communication Center**

Bid Package: _____

Date: _____

Proposal from: _____

(Hereinafter called Bidder), a corporation organized and existing under the laws of the state of _____, a partnership, or an individual doing business as _____ (cross out inapplicable).

TO: ATTN: Purchasing Department
Franklin County, Missouri
400 East Locust Street, Room 004
Union, MO 63084

The Bidder, in compliance with the Invitation for Bid for the project, and having carefully examined the Bidding Documents as set forth in the Project Manual, which documents are made a part hereof, as well as the site and all conditions surrounding and affecting the work, agrees to furnish all labor, materials, and supplies necessary to perform all the work in accordance with said documents and within the time and at the prices stated below.

BASE BID

Franklin County Jail Addition, Renovation, and 911 Addition					
ITEM NO.	ITEM DESCRIPTION	UNIT	PRICE PER UNIT	QUANTITY	SUB-TOTAL
1	Soils Allowance - Undocumented Fill removal and re-compaction in lifts per the Cochran Engineering Geotechnical Report dated June 2018 and Geotechnical Addendum dated September 2018.*	Cubic Yard		7,200	
2	Soils Allowance - Undocumented Fill removal and replacement with imported 1" compacted granular per the Cochran Engineering Geotechnical Report dated June 2018 and Geotechnical Addendum dated September 2018.*	Cubic Yard		1,000	
3	2019-A6 General Works	Lump Sum		1	

Furnish all labor, tools, equipment, and material required to perform all work indicated above for this bid package, as defined in the Bid Documents (including costs for Payment and Performance Bonds) for the **TOTAL LUMP SUM AMOUNT of (as the total of Items 1 through 3 in above table):**

\$ _____ **BASE BID**

ALTERNATES - To be submitted at the time of bid. Bids will not be accepted if these alternates are not provided at the time of bid. Refer to section 012300 for full description of **ALTERNATES.** Where bidder finds the alternate to be not applicable to their bid package, bidder shall indicate "N/A" on that alternate line item.

ADD ALTERNATE #1: FURNISH & INSTALLATION OF 12 GA PLANK SECURITY CEILINGS

\$ _____

ADD ALTERNATE #2: FURNISH ONLY MEZZANINE WALKWAY, MEZZANINE HANDRAILS, MEZZANINE STAIRS, & STAIR HANDRAILS AT MEZZANINE MODULES

\$ _____

ADD ALTERNATE #3: INSTALLATION ONLY OF MEZZANINE WALKWAY, MEZZANINE HANDRAILS, MEZZANINE STAIRS, & STAIR HANDRAILS AT MEZZANINE MODULES

\$ _____

ADD ALTERNATE #4: FURNISH AND INSTALL SECURITY WOVEN ROD BARRIER/SCREEN AT MEZZANINE

\$ _____

ADD ALTERNATE #5: CLOSEOUT SOFTWARE AND PROCESS

\$ _____

ADD ALTERNATE #6: WASH EXISTING EXTERIOR MASONRY WALLS

\$ _____

ADD ALTERNATE #7: REPLACE THE BALANCE OF ANY EXISTING VOICE/DATA WIRING SHOWN TO REMAIN IN PLACE

\$ _____

ADD ALTERNATE #8: FULL MOISTURE MITIGATION OF NEW AND/OR EXISTING SLABS

\$ _____

UNIT PRICES - To be submitted to Owner 24 Hours after Bid Date/Time.

Unit Prices shall for scope adjustments after award shall be provided for the items listed in section 012200 – UNIT PRICES. Bidder shall use the Supplemental Bid Information form provided and submit within 24 hours of the Bid date and time.

LIST OF PROPOSED SUBCONTRACTORS – To be submitted to Owner 24 Hours after Bid Date/Time.

See form provided in Specification labeled as “Supplemental Bid Information” to submit to Owner 24 hours after bid date/time. List all potential M/W/DBE contract amounts as well for proposed subcontractors.

REFERENCES – To be submitted at the time of bid.

Bids will not be accepted if references are not provided at the time of bid. Bidder shall provide at least three references of similar projects.

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

TIME

Owner approval and issuance of conditional Notice to Proceed is anticipated to be on May 21, 2019. BIDDER hereby states that the time required to perform all work indicated in the BID DOCUMENTS (and any accepted alternates) and work necessary to complete the project per the project milestone schedule listed in the scope of work is acceptable. Liquidated Damages shall be assessed for delays to Substantial Completion and are further described in the bidding and contract requirements.

BID DOCUMENTS

A. Bidder acknowledges receipt of the following Appendixes & Addenda:

- 1. Drawings and Specifications
- 2. Addenda
 - a. Addenda No. _____ Dated _____
 - b. Addenda No. _____ Dated _____
 - c. Addenda No. _____ Dated _____
 - d. Addenda No. _____ Dated _____
 - e. Addenda No. _____ Dated _____

MISCELLANEOUS BID REQUIREMENTS

- A. The undersigned understands that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time and date for receiving bids.
- B. The undersigned understands that the Owner reserves the right to reject any or all bids or subcontractors.
- C. The undersigned further agrees to indemnify and save the Owner from and against all losses, judgments of every nature and description made, brought, or recovered against the Owner by reason of any act or omission of the undersigned, his agents, subcontractors, or employees in the execution of the work or in guarding the same.
- D. The undersigned hereby declares that this Stipulated Sum Bid is based solely upon the materials and equipment described in the bidding documents (including Addenda), and that no substitutions are contemplated.
- E. The Bidder declares that he/she has had an opportunity to examine the site of the work and he/she has examined the bidding Documents therefore, and that he/she has carefully prepared his Bid upon the basis thereof and that he/she has carefully examined and checked this Bid and the materials, equipment and labor required thereunder, the cost thereof, and his figures therefor, and hereby states that the amount or amounts set forth in this Bid is, or are, correct and that no mistake or error has occurred in this bid.
- F. See next page for signatures.

IF A CORPORATION

Name of Corporation

Signature of Officer

Name and Title of Officer

Incorporated under the laws of the State of _____ (Print)

Licensed to do business in Missouri? (Check one) Yes No

Address for Communications _____

(Seal if bid is by a corporation.)

IF A PARTNERSHIP State name and address of all partners:

Name of Partnership

Signature of Authorized Partner

IF INDIVIDUAL

Name of Firm (if any)

Address for Communications

Signature of Individual

Name of Individual (Print)

IF BIDDING AS A JOINT VENTURE *(List all parties.)*

BID FORM

Due May 9, 2019 at 2:00pm

For Bid Packages A7-2019 Fire Protection, A8-2019 Plumbing, A9-2019 HVAC, and A10-2019 Electrical

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

Below is a contact for the BIDDER submitting this bid, who will be responsible for any questions that may arise during bid review and who may also be contacted to discuss the acceptance or rejection of this bid:

BIDDER Company Name	
BIDDER Contact Person Name	
Address	
City/State/Zip	
Phone Number	
Email Address	
Fax Number	

BIDDER accepts all of the terms and conditions of the "Notice to Bidders" and the "Instructions to Bidders", including without limitation those dealing with the disposition of Bid security.

Bidding and Contract Requirements

STIPULATED SUM BID FORM

Name of Project: **Additions and Renovations to the existing Franklin County Sheriff Station, Jail, and Communication Center**

Bid Package: _____

Date: _____

Proposal from: _____

(Hereinafter called Bidder), a corporation organized and existing under the laws of the state of _____, a partnership, or an individual doing business as _____ (cross out inapplicable).

TO: ATTN: Purchasing Department
Franklin County, Missouri
400 East Locust Street, Room 004
Union, MO 63084

The Bidder, in compliance with the Invitation for Bid for the project, and having carefully examined the Bidding Documents as set forth in the Project Manual, which documents are made a part hereof, as well as the site and all conditions surrounding and affecting the work, agrees to furnish all labor, materials, and supplies necessary to perform all the work in accordance with said documents and within the time and at the prices stated below.

BASE BID

Bidder to complete all lines on the bid form. If the Bidder is not bidding one of the Bid Packages, Bidder shall write "NO BID" in the line for that scope of work.

Bid Package A7 - Fire Protection

Furnish all labor, tools, equipment, and material required to perform all work for this bid package, as defined in the Bid Documents (including costs for Payment and Performance Bonds) for the **TOTAL LUMP SUM AMOUNT of:**

\$ _____

Bid Package A8 - Plumbing

Furnish all labor, tools, equipment, and material required to perform all work for this bid package, as defined in the Bid Documents (including costs for Payment and Performance Bonds) for the **TOTAL LUMP SUM AMOUNT of:**

\$ _____

Bid Package A9 - HVAC

Furnish all labor, tools, equipment, and material required to perform all work for this bid package, as defined in the Bid Documents (including costs for Payment and Performance Bonds) for the **TOTAL LUMP SUM AMOUNT of:**

\$ _____

Bid Package A10 - Electrical

Furnish all labor, tools, equipment, and material required to perform all work for this bid package, as defined in the Bid Documents (including costs for Payment and Performance Bonds) for the **TOTAL LUMP SUM AMOUNT of:**

\$ _____

If this Bidder chooses to submit a combined bid for two or more bid packages and the combined total is less than the sum of the two separate bids listed above, please provide a combined bid below. The combined bid below includes the following Bid Packages

_____ in the amount of

\$ _____ **COMBINED BID**

ALTERNATES - To be submitted at the time of bid. Bids will not be accepted if these alternates are not provided at the time of bid. Refer to section 012300 for full description of **ALTERNATES.** Where bidder finds the alternate to be not applicable to their bid package, bidder shall indicate "N/A" on that alternate line item.

ADD ALTERNATE #1: FURNISH & INSTALLATION OF 12 GA PLANK SECURITY CEILINGS

\$ _____

ADD ALTERNATE #2: FURNISH ONLY MEZZANINE WALKWAY, MEZZANINE HANDRAILS, MEZZANINE STAIRS, & STAIR HANDRAILS AT MEZZANINE MODULES

\$ _____

ADD ALTERNATE #3: INSTALLATION ONLY OF MEZZANINE WALKWAY, MEZZANINE HANDRAILS, MEZZANINE STAIRS, & STAIR HANDRAILS AT MEZZANINE MODULES

\$ _____

ADD ALTERNATE #4: FURNISH AND INSTALL SECURITY WOVEN ROD BARRIER/SCREEN AT MEZZANINE

\$ _____

ADD ALTERNATE #5: CLOSEOUT SOFTWARE AND PROCESS

\$ _____

ADD ALTERNATE #6: WASH EXISTING EXTERIOR MASONRY WALLS

\$ _____

ADD ALTERNATE #7: REPLACE THE BALANCE OF ANY EXISTING VOICE/DATA WIRING SHOWN TO REMAIN IN PLACE

\$ _____

ADD ALTERNATE #8: FULL MOISTURE MITIGATION OF NEW AND/OR EXISTING SLABS

\$ _____

UNIT PRICES - To be submitted to Owner 24 Hours after Bid Date/Time.

Unit Prices shall for scope adjustments after award shall be provided for the items listed in section 012200 – UNIT PRICES. Bidder shall use the Supplemental Bid Information form provided and submit within 24 hours of the Bid date and time.

LIST OF PROPOSED SUBCONTRACTORS – To be submitted to Owner 24 Hours after Bid Date/Time.

See form provided in Specification labeled as “Supplemental Bid Information” to submit to Owner 24 hours after bid date/time. List all potential M/W/DBE contract amounts as well for proposed subcontractors.

REFERENCES – To be submitted at the time of bid.

Bids will not be accepted if references are not provided at the time of bid. Bidder shall provide at least three references of similar projects.

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

Company: _____
Address: _____
Contact Person: _____
Telephone: _____
Email: _____
Type of service provided: _____
Dates/year(s) service was provided: _____

TIME

Owner approval and issuance of conditional Notice to Proceed is anticipated to be on May 21, 2019. BIDDER hereby states that the time required to perform all work indicated in the BID DOCUMENTS (and any accepted alternates) and work necessary to complete the project per the project milestone schedule listed in the scope of work is acceptable. Liquidated Damages shall be assessed for delays to Substantial Completion and are further described in the bidding and contract requirements.

BID DOCUMENTS

A. Bidder acknowledges receipt of the following Appendixes & Addenda:

- 1. Drawings and Specifications
- 2. Addenda
 - a. Addenda No. _____ Dated _____
 - b. Addenda No. _____ Dated _____
 - c. Addenda No. _____ Dated _____
 - d. Addenda No. _____ Dated _____
 - e. Addenda No. _____ Dated _____

MISCELLANEOUS BID REQUIREMENTS

- A. The undersigned understands that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time and date for receiving bids.
- B. The undersigned understands that the Owner reserves the right to reject any or all bids or subcontractors.
- C. The undersigned further agrees to indemnify and save the Owner from and against all losses, judgments of every nature and description made, brought, or recovered against the Owner by reason of any act or omission of the undersigned, his agents, subcontractors, or employees in the execution of the work or in guarding the same.
- D. The undersigned hereby declares that this Stipulated Sum Bid is based solely upon the materials and equipment described in the bidding documents (including Addenda), and that no substitutions are contemplated.
- E. The Bidder declares that he/she has had an opportunity to examine the site of the work and he/she has examined the bidding Documents therefore, and that he/she has carefully prepared his Bid upon the basis thereof and that he/she has carefully examined and checked this Bid and the materials, equipment and labor required thereunder, the cost thereof, and his figures therefor, and hereby states that the amount or amounts set forth in this Bid is, or are, correct and that no mistake or error has occurred in this bid.
- F. See next page for signatures.

IF A CORPORATION

Name of Corporation

Signature of Officer

Name and Title of Officer

Incorporated under the laws of the State of _____ (Print)

Licensed to do business in Missouri? (Check one) Yes No

Address for Communications _____

(Seal if bid is by a corporation.)

IF A PARTNERSHIP State name and address of all partners:

Name of Partnership

Signature of Authorized Partner

IF INDIVIDUAL

Name of Firm (if any)

Address for Communications

Signature of Individual

Name of Individual (Print)

IF BIDDING AS A JOINT VENTURE *(List all parties.)*

Issuance of following Bid Packages:	April 1, 2019
2019-A6 General Works	
2019-A7 Fire Protection	
2019-A8 Plumbing	
2019-A9 HVAC	
2019-A10 Electrical and Low Voltage	
Receipt of Bids	May 9, 2019
Anticipated Commission Award (NTP) of Bid Packages	May 21, 2019
Submittal Process Complete	August 30, 2019
Detention Steel Cell Delivery	November 1, 2019
Substantial Completion of Phase I(a) – Area 1 and 2 Detention Facility and Site	September 1, 2020
Substantial Completion of Phase I(b) – Area 4 911 Addition And necessary site work for occupancy	January 30, 2020
Substantial Completion Phase I(c) – Area 10a Road Patrol	May 22, 2020
Substantial Completion Phase II – Areas 3, 5, 6, 7, 8, 9	February 11, 2021
Substantial Completion Phase III – Area 10 b	May 4, 2021
Final Completion	June 4, 2021

The project is expected to be completed in three phases:

- Phase I:
 - I(a) New Detention Addition and Site
 - I(b) New 911 Dispatch Addition and related site work for occupancy
 - I(c) Area 10a Renovation of Road Patrol Area
- Phase II: Renovation of Existing Sheriff’s Department and Jail for Area 3 (Kitchen, Laundry, Dishwashing, Trustee Housing, Weekender Housing, and Women’s Housing), Area 5 (EMA), Area 6 (Evidence), Area 7 (Narcotics), Area 8 (Administration and Lobby), Area 9 (Detectives)
- Phase III: Renovation of Existing Sheriff’s Department for Area 10b (Breakroom and Training)

Name	Company	Phone #
Roy Hardester Stacy Lampe	Castle Cont Castle 314-952-8254	314-575-6095 Roy.Hardester@digcastle.com stacy.lampe@digcastle.com
Bill VONDERA CHRIS SCHULZ	PLATTIN CREEK EXCAVATING HUFFMAN ROOFING 573-756-5000	636-287-1848 billvondera@plattincreekexcavating.com cschulz.hrsa@yahoo.com 314-393-5071
JEFF KNOLL	WEITKAMP MASONRY JKNOLL@WEITKAMPMASONRY.COM	636-230-5973 x15
Alex Rosas	show me Industrial Services showmeindustrial@sbcglobal.net	314-890-8030
CHRISTINE LIPS	BYRNE & JONES CONSTRUCTION CLIPS@BYRNEANDJONES.COM	314-313-5721
Dennis Dyes	K&S Associates estimating@ksgcstl.com	314-647-3535
JASON ZIPPEN	BOMMARITO CONSTRUCTION ZIPPEN@BOMMARITOCONSTRUCTION.COM	314-353-0104

**ATTN: Purchasing Department
Franklin County, Missouri
400 East Locust Street, Room 004
Union, MO 63084**

**Proposal for:
Additions and Renovations to the existing Franklin County Sheriff Station, Jail, and
Communication Center
1 Bruns Lane
Union, MO 63084**

This form shall be completed and submitted in its entirety **no later than 24 hours following the receipt of the bids** to the Owner. Bidder must submit supplemental bid information via email as follows:

Re: Supplemental Bid Information for Franklin County, Missouri
Attn: Ann Struttman, Purchasing Director astruttman@franklinmo.net
CC: Jen Kissinger, Navigate Building Solutions, LLC. jen@navigatebuildingsolutions.com

Name of Project: **Additions and Renovations to the existing Franklin County Sheriff Station, Jail, and Communication Center**

Bid Package: _____

Date: _____

Proposal from: _____

UNIT PRICES for all Bid Packages: The unit rates below are to include all general conditions, overhead, and profit. Rates are to be applied either as add or deduct rates; the same rate will apply for either condition. There will be only one rate allowed per unit price regardless of when in the construction process the rate is being applied or what trade is performing it.

Unit Price Description	Unit	\$/Unit
Unit Price No. 1: Excavation and haul-off of unsuitable soils and import & compaction of suitable soils.	Per CY	
Unit Price No. 2: Lime treatment of on-site unsatisfactory soils with Code-L material tilled in to a depth and percentage as directed by Civil Engineer.	Per CY	
Unit Price No. 3: Removal and haul-off of rippable rock.	Per CY	
Unit Price No. 4: Removal and haul-off of non-rippable rock.	Per CY	

Additions and Renovations to the existing Franklin County Sheriff Station, Jail, and Communication Center – SUPPLEMENTAL BID INFORMATION

Unit Price No. 5: Removal and haul-off of trench rock.	Per CY	
Unit Price No. 6: Removal and disposal of existing buried concrete man-made structures.	Per CY	
Unit Price No. 7: Removal, haul-off, and disposal of unsuitable soils and placement of lean concrete for soil remediation.	Per CY	
Unit Price No. 8: Load and haul-off of surplus soils.	Per CY	
Unit Price No. 9: Soil import, placement and compaction.	Per CY	
Unit Price No. 10: 1" clean rock placement and compaction	Per CY	
Unit Price No. 11: 1" minus rock placement and compaction	Per CY	
Unit Price No. 12: 2" clean rock placement and compaction	Per CY	
Unit Price No. 13: 2" minus rock placement and compaction	Per CY	
Unit Price No. 14: Topsoil place and final grade	Per CY	
Unit Price No. 15: Removal & haul-off of unsuitable soils and import & compaction of 1" granular material per Geotechnical Engineer recommendations	Per CY	
Unit Price No. 16: Sawcut, remove, patch concrete slabs/trenches.	Per SF	
Unit Price No. 17: Underpinning of the existing foundations as a result of over-excavation of the unsatisfactory soils	Per LF	
Unit Price No. 18: Furnish and installation of Sod	Per SY	
Unit Price No. 19: Furnish and install full bead blast floor mitigation and epoxy-type coating (compatible with flooring products/adhesives) on new or existing concrete slabs.	Per SF	
Unit Price No. 20: Furnish and install enhanced flooring adhesive capable of withstanding up to 99% Relative Humidity of slabs (compatible with flooring products) on new or existing concrete slabs.	Per SF	

**Additions and Renovations to the existing Franklin County Sheriff Station,
Jail, and Communication Center – SUPPLEMENTAL BID INFORMATION**

LIST OF PROPOSED SUBCONTRACTORS for all Bid Packages

*Where not applicable for this bid package, please indicate "N/A"

A list of the two apparent subcontractors in each division that are being considered for award to perform work on the jobsite including their union affiliation and their M/WBE status and amount.

If you do not plan to use subcontractors, indicate below and return this form with your bid.

Please list the two subcontractors in each category that the above referenced Bidder intends to negotiate subcontracts for materials, services, supplies, specialty contractors, etc. as follows:

Scope of Work	Proposed Subcontractors	Union/ Non-Union	Potential M/W/DBE Contract Amount
Site Demo/ Earthwork	1. 2.		
Site Utilities	1. 2.		
Asphalt	1. 2.		
Landscaping/ Irrigation	1. 2.		
Site Concrete	1. 2.		
Footings & Foundations	1. 2.		
Concrete Flatwork	1. 2.		
Masonry	1. 2.		

Steel Fabricator	1. 2.		
Steel Erector	1. 2.		
Rough Carpentry	1. 2.		
Finish Carpentry	1. 2.		
Millwork/Casework	1. 2.		
Air Barrier	1. 2.		
Roofing	1. 2.		
Sheet Metal	1. 2.		
Doors, Frames, Hardware	1. 2.		
Glazing	1. 2.		
Framing	1. 2.		
Drywall	1. 2.		

**Additions and Renovations to the existing Franklin County Sheriff Station,
Jail, and Communication Center – SUPPLEMENTAL BID INFORMATION**

Ceilings	1. 2.		
Flooring	1. 2.		
Painting	1. 2.		
The following sections are for the MEPFP bid packages to identify the potential subcontractors and their scopes of work.			
Bid Package	Proposed Subcontractor	Scope	Union/Non-Union
Plumbing Subs	1. 2. 3. 4.		
Fire Protection	1. 2. 3. 4.		
Mechanical	1. 2. 3. 4.		
Electrical/Low Voltage	1. 2. 3. 4.		
Audio/Visual	1. 2. 3. 4.		

**Additions and Renovations to the existing Franklin County Sheriff Station,
Jail, and Communication Center – SUPPLEMENTAL BID INFORMATION**

Submitted By:

Bidder: _____

Address: _____

Business Telephone: _____ Fax Number: _____

Typed/Printed Name: _____

Authorized Signature: _____

Title: _____

(Seal - if bid by a corporation)

Date: _____

END: SUPPLEMENTAL BID INFORMATION

SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
 - 1. Swinging doors.
 - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
 - 1. Mechanical door hardware.
 - 2. Electromechanical door hardware.
 - 3. Cylinders specified for doors in other sections.
- C. Related Sections:
 - 1. Division 06 Section “Rough Carpentry”.
 - 2. Division 06 Section “Finish Carpentry”.
 - 3. Division 08 Section “Hollow Metal Doors and Frames”.
 - 4. Division 08 Section “Flush Wood Doors”.
 - 5. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
 - 6. Division 28 Section “Access Control Hardware”.
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC 500-2014, ICC/NSSA Standard for the Design and Construction of Storm Shelters.
 - 3. ICC/IBC - International Building Code.
 - 4. NFPA 70 - National Electrical Code.
 - 5. NFPA 80 - Fire Doors and Windows.
 - 6. NFPA 101 - Life Safety Code.
 - 7. NFPA 105 - Installation of Smoke Door Assemblies.
 - 8. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards:

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

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
 1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

- a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
 - 2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
 - D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
 - E. Informational Submittals:
 - 1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
 - F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.
- 1.4 QUALITY ASSURANCE
- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
 - B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 - C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
 - D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- E. Severe Storm Shelter Openings: Provide complete door systems for hurricane or tornado resistant storm shelters and other areas of refuge complying and tested according to FEMA P-361 (2015), Design and Construction Guidance for Community Safe Rooms; and ICC 500 (2014), ICC/NSSA Standard for the Design and Construction of Storm Shelters.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
1. Function of building, purpose of each area and degree of security required.
 2. Plans for existing and future key system expansion.
 3. Requirements for key control storage and software.
 4. Installation of permanent keys, cylinder cores and software.
 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

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

1.6 COORDINATION

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

1.7 WARRANTY

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

4. Five years for motorized electric latch retraction exit devices.
5. Two years for electromechanical door hardware.

1.8 MAINTENANCE SERVICE

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

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
 1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

- a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 - 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 - 4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
 - 5. Manufacturers:
 - a. Hager Companies (HA).
 - b. Ives (IV).
 - c. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).
- B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.
- 1. Manufacturers:
 - a. Hager Companies (HA).
 - b. Ives (IV).
 - c. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).

2.3 POWER TRANSFER DEVICES

- A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
 - 1. Manufacturers:
 - a. Hager Companies (HA) - ETW-QC (# wires) Option.
 - b. Ives (IV)
 - c. McKinney Products (MK) - QC (# wires) Option.

- B. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

- a. Securitron (SU) - EL-CEPT Series.
- b. Von Duprin (VD) - EPT-10 Series.

- C. Tornado Resistance Compliance: Power transfer devices to be U.L. listed for windstorm components where applicable.

2.4 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified.

1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Surface bolts to be minimum 8” in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.

5. Manufacturers:

- a. Door Controls International (DC).
- b. Ives (IV).
- c. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

- B. Coordinators: ANSI/BHMA A156.3 certified door coordinators consisting of active-leaf, hold-open lever and inactive-leaf release trigger. Model as indicated in hardware sets.

1. Manufacturers:

- a. Door Controls International (DC).
- b. Ives (IV).
- c. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

- C. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

2. Manufacturers:

- a. Ives (IV).
- b. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
- c. Trimco (TC).

2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
 - 1. Manufacturers:
 - a. Schlage (SC).
 - b. No Substitution.
- C. Cylinders: Original manufacturer cylinders complying with the following:
 - 1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
 - 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 - 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
 - 4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 - 5. Keyway: Match Facility Restricted Keyway.
- D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
 - 1. Removable Cores: Core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware. Provide removable core (small or large format) as specified in Hardware Sets.
- E. Keying System: Each type of lock and cylinders to be factory keyed.
 - 1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
 - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 - 3. Existing System: Key locks to Owner's existing system.
- F. Key Quantity: Provide the following minimum number of keys:
 - 1. Change Keys per Cylinder: Three (3).
 - 2. Master Keys (per Master Key Level/Group): Five (5).
 - 3. Construction Keys (where required): Ten (10).
 - 4. Construction Control Keys (where required): Two (2).
 - 5. Permanent Control Keys (where required): Two (2).

G. Construction Keying: Provide temporary keyed construction cores.

H. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 MECHANICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Grade 1 certified.

1. Furnish with solid cast levers, standard 2 3/4" backset, and 1/2" (3/4" at rated paired openings) throw brass or stainless steel latchbolt.
2. Locks are to be non-handed and fully field reversible.
3. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.2 requirements to 2 million cycles.
4. Manufacturers:
 - a. Schlage (SC) – ND Series.
 - b. No Substitution.

2.7 LOCK AND LATCH STRIKES

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

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.8 ELECTROMAGNETIC LOCKING DEVICES

- A. Surface Electromagnetic Locks (Heavy Duty): Electromagnetic locks to be surface mounted type conforming to ANSI A156.23, Grade 1 with minimum holding force strength of 1,200 pounds. Locks to be capable of either 12 or 24 voltage and be UL listed for use on fire rated door assemblies. Electronics are to be fully sealed against tampering and allow exterior weatherproof applications. As indicated in Hardware Sets, provide specified mounting brackets and housings. Power supply to be by the same manufacturer as the lock with combined products having a lifetime replacement warranty.

1. Manufacturers:

- a. Schlage (SC) – M450 Series.
- b. Securitron (SU) – M62 Series.

2.9 ELECTRIC STRIKES

- A. Standard Electric Strikes: Heavy duty, cylindrical and mortise lock electric strikes conforming to ANSI/BHMA A156.31, Grade 1, UL listed for both Burglary Resistance and for use on fire rated door assemblies. Stainless steel construction with dual interlocking plunger design tested to exceed 3000 lbs. of static strength and 350 ft-lbs. of dynamic strength. Strikes tested for a minimum 1 million operating cycles. Provide strikes with 12 or 24 VDC capability and supplied standard as fail-secure unless otherwise specified. Provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike where specified.

1. Manufacturers:

- a. Folger Adam EDC (FO).
- b. HES (HS).
- c. Von Duprin (VD).

- B. Surface Mounted Rim Electric Strikes: Surface mounted rim exit device electric strikes conforming to ANSI/BHMA A156.31, Grade 1, and UL Listed for both Burglary Resistance and for use on fire rated door assemblies. Construction includes internally mounted solenoid with two heavy-duty, stainless steel locking mechanisms operating independently to provide tamper resistance. Strikes tested for a minimum of 500,000 operating cycles. Provide strikes with 12 or 24 VDC capability supplied standard as fail-secure unless otherwise specified. Option available for latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike. Strike requires no cutting to the jamb prior to installation.

1. Manufacturers:

- a. HES (HS) - 9500/9600 Series.
- b. Von Duprin (VD).

- C. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.10 CONVENTIONAL EXIT DEVICES

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

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
5. Electromechanical Options: Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified in hardware sets. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.
6. Motorized Electric Latch Retraction: Devices with an electric latch retraction feature must use motors which have a maximum current draw of 600mA. Solenoid driven latch retraction is not acceptable.
7. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
8. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
9. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
10. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
11. Rail Sizing: Provide exit device rails factory sized for proper door width application.

12. Through Bolt Installation: For exit devices and trim as required.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Manufacturers:

- a. Sargent Manufacturing (SA) - 80 Series.
- b. Von Duprin (VD) - 35A/98 XP Series.

2.11 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.
4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.
5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.

1. Manufacturers:

- a. LCN Closers (LC) - 4040XP Series.
- b. Sargent Manufacturing (SA) - 281 Series.

2.12 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, .050-inch thick.
5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:
 - a. Hager Companies (HA).
 - b. Ives (IV).
 - c. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

2.13 DOOR STOPS AND HOLDERS

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

- b. Ives (IV).
 - c. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
- C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.
 - 1. Manufacturers:
 - a. Glynn Johnson (GJ).
 - b. Rixson Door Controls (RF).
 - c. Sargent Manufacturing (SA).

2.14 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. National Guard Products (NG).
 - 2. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).
 - 3. Zero (ZE).

2.15 FABRICATION

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

2.16 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

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

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

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

3.4 FIELD QUALITY CONTROL

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

3.5 ADJUSTING

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

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

- B. Clean adjacent surfaces soiled by door hardware installation.

- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

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

3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. The supplier is responsible for handing and sizing all products and providing the correct option for the appropriate door type and material where more than one is presented in the hardware sets. Quantities listed are for each pair of doors, or for each single door.
- C. Manufacturer's Abbreviations:

- 1. IV - Ives
- 2. SC - Schlage
- 3. SU - Securitron
- 4. VD - Von Duprin
- 5. HS - HES
- 6. FO - Folger Adam
- 7. GJ - Glynn-Johnson
- 8. LC - LCN Closers
- 9. NG - National Guard
- 10. ZE - Zero International Inc

Hardware Sets

Set: 1.0

Doors: SF-D101A

1 Continuous Hinge	112HD	628	IV
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1 Rim Exit Device	99NL-OP 110MD-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 Door Pull	8190HD-0	630	IV
1 Door Closer	4040XP SCUSH	AL	LC
1 Shoe	4040XP-30	AL	LC
1 Spacer	4040XP-61	AL	LC
1 Threshold	425		NG

Notes: DPS by others. Sweeps and seals to be manufacturers standard to match framing supplied and installed by Aluminum door supplier.

Set: 2.0

Doors: SF-D101B

1 Continuous Hinge	112HD	628	IV
1 Push Bar & Pull	9190HD-??-0	630	IV
1 Door Closer	4040XP SCUSH	AL	LC
1 Shoe	4040XP-30	AL	LC
1 Spacer	4040XP-61	AL	LC

Notes: Sweeps and seals to be manufacturers standard to match framing supplied and installed by Aluminum door supplier.

Set: 3.0

Doors: A100

1 Continuous Hinge	224HD EPT	628	IV
1 Surface Vert Rod Exit	QEL WS 9927NL-OP 110MD-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 Door Pull	8190HD-0	630	IV
1 Door Closer	4040XP SCUSH TBSRT	AL	LC
1 Threshold	656A		ZE
1 Drip Strip	16A		NG
1 Gasketing	188S-verify color		ZE
1 Sweep	39A		ZE
1 Electric Power Transfer	EPT10	SP28	VD
1 Power Supply	PS902 900-2RS		VD

Notes: Furnished hardware to meet ICC-500. Card reader, DPS and REX by others. Operation: A valid

card presentation on pull side retracts latch bolt for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 4.0

Doors: [A121A](#), [AC-101A](#), [C110A](#)

1 Continuous Hinge	224HD	628	IV
1 Rim Exit Device	99NL-OP 110MD-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 Electric Strike	9600	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Door Pull	8190HD-0	630	IV
1 Door Closer	4040XP SCUSH	AL	LC
1 Threshold	425		NG
1 Gasketing	700NA		NG
1 Drip Strip	16A		NG
1 Sweep	202NA		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 5.0

Doors: [A110](#)

2 Continuous Hinge	224HD	628	IV
1 Surface Vert Rod Exit	WS 9927EO	US26D	VD
1 Surface Vert Rod Exit	WS 9927L-NL 17 996L-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
2 Door Closer	4040XP SCUSH TBSRT	AL	LC
1 Threshold	656A		ZE
1 Drip Strip	16A		NG
1 Gasketing	188S-verify color		ZE
2 Sweep	39A		ZE

Notes: DPS by others. Furnished hardware to meet ICC-500.

Set: 6.0

Doors: [A102](#)

1 Continuous Hinge	224HD	628	IV
1 Surface Vert Rod Exit	WS 9927EO	US26D	VD
1 Door Closer	4040XP SCUSH TBSRT	AL	LC
1 Threshold	656A		ZE
1 Drip Strip	16A		NG
1 Gasketing	188S-verify color		ZE
1 Sweep	39A		ZE

Notes: DPS by others. Furnished hardware meet ICC-500.

Set: 7.0

Doors: [AC103B](#)

1 Continuous Hinge	224HD	628	IV
1 Rim Exit Device	99EO	US26D	VD
1 Door Closer	4040XP SCUSH	AL	LC
1 Threshold	425		NG
1 Gasketing	700NA		NG
1 Drip Strip	16A		NG
1 Sweep	202NA		NG

Notes: DPS by others.

Set: 8.0

Doors: [A152](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	630	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP SCUSH	AL	LC
1 Threshold	425		NG
1 Gasketing	700NA		NG
1 Sweep	202NA		NG
1 Lock Guard	LG10	630	IV

Notes: DPS by others.

Set: 9.0

Doors: [A128A](#), [A129B](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Fire Rated Rim Exit	99L-NL-F 17 996L-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Electric Strike	9500	630	HS
1 Door Closer	4040XP EDA	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 10.0

Doors: [A121B](#), [AC102A](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Rim Exit Device	99NL-OP 110MD-NL	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 Electric Strike	9600	630	HS
1 Electric Strike Faceplate	J	630	HS
1 Door Pull	8190HD-0	630	IV
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 11.0

Doors: [C112B](#), [SF-C112](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
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1 Rim Exit Device	99L 996L(Std)	US26D	VD
1 Cylinder	as required LFIC	626	SC
1 Door Closer	4040XP EDA	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 12.0

Doors: [A200B](#), [AC103A](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Rim Exit Device	99EO	US26D	VD
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 13.0

Doors: [AC100](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Rim Exit Device	99L-BE 996L-BE	US26D	VD
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 14.0

Doors: [B123](#), [B124](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Institution Lock	ND82 R D SPA	626	SC
1 Electric Strike Faceplate	J	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Electric Strike	1006-F	630	HS
1 Door Closer	4040XP REG	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader on both sides, DPS and power supply by others. Operation: A valid card presentation on either side releases electric strike for authorized entry and exit. Door position switch monitors door open/closed status to the access control system. Fail safe. Interface power supply with fire alarm panel to

release electric strike in an emergency.

Set: 15.0

Doors: [A101A](#), [A101B](#), [A104](#), [A109](#), [A117A](#), [A155](#), [B126A](#), [BC103](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Electric Strike	1006	630	HS
1 Electric Strike Faceplate	J	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Door Closer	4040XP REG	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 16.0

Doors: [A149](#), [BC106](#), [BC107A](#), [D102](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Electric Strike	1006	630	HS
1 Electric Strike Faceplate	J	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 17.0

Doors: [AC102B](#), [B101](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Electric Strike	1006	630	HS
1 Electric Strike Faceplate	J	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Door Closer	4040XP SCUSH	AL	LC
1 Gasketing	5050 verify color		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 18.0

Doors: [A129A](#)

5 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Electric Hinge	5BB1 4-1/2" x 4-1/2" TW8	652	IV
1 Self Latching Top Bolt	FB51T/FB61T	630	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Electric Strike	310-2-24D	630	FO
1 Overhead Stop	90S series	US32D	GJ
1 Overhead Holder/Stop	450S series	US32D	GJ
1 Door Closer	4040XP REG	AL	LC
1 Threshold	425		NG
1 Gasketing	106NA		NG
2 Sweep	202NA		NG

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 19.0

Doors: [A132](#)

5 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Electric Hinge	5BB1 4-1/2" x 4-1/2" TW8	652	IV
1 Self Latching Top Bolt	FB51T/FB61T	630	IV

1 Storeroom Lock	ND80 R D SPA	626	SC
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Electric Strike	310-2-24D	630	FO
1 Overhead Stop	90S series	US32D	GJ
1 Overhead Holder/Stop	450S series	US32D	GJ
1 Door Closer	4040XP REG	AL	LC

Notes: Card reader, DPS, REX and power supply by others. Operation: A valid card presentation releases electric strike for authorized entry. Free egress at all times. Door position switch monitors door open/closed status to the access control system. Request-to-exit motion sensor allows for authorized (non-alarm) egress. Fail secure.

Set: 20.0

Doors: [B183A](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Passage Latch	ND10S SPA	626	SC
1 Magnetic Lock	M62BD		SU
1 Door Closer	4040XP SCUSH	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Gasketing	5050 verify color		NG

Notes: Card reader on both sides, DPS and power supply by others. Operation: Door B183A is interlocked with door B183B. Card reader on either side releases magnetic lock if door B183B is closed. Door position switch monitors door open/closed status to the access control system. Fail secure by battery backup.

Set: 21.0

Doors: [B183B](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Passage Latch	ND10S SPA	626	SC
1 Magnetic Lock	M62BD		SU
1 Door Closer	4040XP REG	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Floor Stop	FS410	626	IV
1 Gasketing	5050 verify color		NG
1 Bracket	ZA-32/62SS		SU

Notes: Card reader on both sides, DPS and power supply by others. Operation: Door B183B is

interlocked with door B183A. Card reader on either side releases magnetic lock if door B183A is closed. Door position switch monitors door open/closed status to the access control system. Fail secure by battery backup.

Set: 22.0

Doors: [E105](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP REG	AL	LC
1 Floor Stop	FS410	626	IV
1 Gasketing	5050 verify color		NG

Set: 23.0

Doors: [D160](#), [E102](#), [E103B](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP SCUSH	AL	LC
1 Gasketing	5050 verify color		NG

Set: 24.0

Doors: [A200](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV

Set: 25.0

Doors: [A103](#), [D129](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP EDA	AL	LC
1 Wall Stop	WS407CCV	630	IV

Set: 26.0

Doors: [A200A](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Door Closer	4040XP REG	AL	LC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 27.0

Doors: [A201](#), [A218](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ
1 Door Closer	4040XP REG	AL	LC
1 Gasketing	5050 verify color		NG

Set: 28.0

Doors: [A116A](#), [A131](#), [A148](#), [B100](#), [B109](#), [B111](#), [B115](#), [B119](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV

Set: 29.0

Doors: [B160](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 30.0

Doors: [E203](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV

Set: 31.0

Doors: [D117B](#), [D157](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Storeroom Lock	ND80 R D SPA	606	SC
1 Overhead Stop	90S series	US32D	GJ

Set: 32.0

Doors: [A118.1](#), [A118.2](#)

1 Storeroom Lock	ND80 R D SPA	626	SC
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Notes: Balance of hardware is existing and to be re-used. Field verify existing door & frame for new hardware.

Set: 33.0

Doors: [A219A](#), [A219B](#), [A221A](#), [A221B](#), [B103](#), [B104](#), [B134](#), [B135](#), [B136](#), [B153](#), [B154](#), [B185](#), [B191](#), [B192](#), [B193](#), [B196](#), [B200](#), [B200A](#), [B201](#), [B202A](#), [B202B](#), [C108](#), [C109](#), [C113](#)

1 Storeroom Lock	ND80 R D SPA	606	SC
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Notes: Balance of hardware is existing and to be re-used. Field verify existing door and frame for new hardware.

Set: 34.0

Doors: [B143](#), [B197](#), [CC102](#), [CC103](#), [CC106](#)

1 Storeroom Lock	ND80 R D SPA	606	SC
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Notes: Field verify if new lock or exit device is required and function. Balance of hardware is existing and to be re-used. Field verify existing door and frame for new hardware.

Set: 35.0

Doors: [D119](#), [E124](#)

6 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Self Latching Top Bolt	FB51T/FB61T	630	IV
1 Storeroom Lock	ND80 R D SPA	626	SC
1 Coordinator	COR series x FL20	628	IV
2 Mounting Bracket	MB1/MB2	689	IV

2 Door Closer	4040XP SCUSH	AL	LC
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Set: 36.0

Doors: C118

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Entrance Lock	ND53 R D SPA	626	SC
1 Door Closer	4040XP REG	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV

Set: 37.0

Doors: A122A, A123, A124, A126, A150, A151, B105, B106, B107, B112, B118, B120, B127, B138, B155, B156, B170, C121, D113, D114, D115, D116, D117A

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Entrance Lock	ND53 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV

Set: 38.0

Doors: D159

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Entrance Lock	ND53 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 39.0

Doors: D121

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Entrance Lock	ND53 R D SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ
1 Gasketing	5050 verify color		NG

Set: 40.0

Doors: C103

3 Hinge	5BB1 4-1/2" x 4-1/2"	606	IV
1 Entrance Lock	ND53 R D SPA	606	SC

1 Wall Stop	WS407CCV	606	IV
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Set: 41.0

Doors: B110, B144, B146, B147, B148A, B148B, B149, B151A, B151B, C100, C101, C102

1 Entrance Lock	ND53 R D SPA	606	SC
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Notes: Balance of hardware is existing and to be re-used. Field verify existing door and frame for new hardware.

Set: 42.0

Doors: A111A, C120, C125

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Door Closer	4040XP REG	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV

Set: 43.0

Doors: A112A, A112B, A113A, A153, CC104, CC105, D112A

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Door Closer	4040XP EDA	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV

Set: 44.0

Doors: C112A

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Door Closer	4040XP H	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 45.0

Doors: [B179](#), [E101](#)

3 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Door Closer	4040XP SCUSH	AL	LC
1 Gasketing	5050 verify color		NG

Set: 46.0

Doors: [C123](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Door Closer	4040XP SHCUSH	AL	LC

Set: 47.0

Doors: [B181](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ
1 Door Closer	4040XP REG	AL	LC
1 Gasketing	5050 verify color		NG

Set: 48.0

Doors: [A108](#), [A154](#), [B125A](#), [B128](#), [B129](#), [B139](#), [BC109](#), [C119](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Wall Stop	WS407CCV	630	IV

Set: 49.0

Doors: [D105](#), [D106](#), [D107](#), [D108](#), [D109](#), [D110](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Wall Stop	WS407CCV	606	IV
1 Gasketing	5050 verify color		NG

Set: 50.0

Doors: [C115](#), [D158](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ

Set: 51.0

Doors: [B125B](#), [B141](#), [B142A](#), [B142B](#), [B152](#), [B187](#), [B189A](#), [B189B](#), [B194](#), [B198](#), [B199](#), [C105](#)

1 Classroom Lock	ND70 R D SPA	606	SC
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Notes: Balance of hardware is existing and to be re-used. Field verify existing door and frame for new hardware.

Set: 52.0

Doors: [C114](#)

6 Hinge	5BB1 4-1/2" x 4-1/2" NRP	652	IV
1 Self Latching Top Bolt	FB51T/FB61T	630	IV
1 Classroom Lock	ND70 R D SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ

Set: 53.0

Doors: [A105](#), [A106](#), [B116](#), [B117](#), [B158](#), [B159](#), [D103](#), [D145](#), [E204](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Privacy Lock	ND40S SPA	626	SC
1 Wall Stop	WS407CCV	630	IV

Set: 54.0

Doors: [A114A](#), [A119A](#), [A120A](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Privacy Lock	ND40S SPA	626	SC
1 Wall Stop	WS407CCV	630	IV
1 Gasketing	5050 verify color		NG

Set: 55.0

Doors: [D123.1](#), [D125](#), [D126](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Privacy Lock	ND40S SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ
1 Gasketing	5050 verify color		NG

Set: 56.0

Doors: [B137](#), [B150](#), [B184](#), [B186](#)

1 Privacy Lock	ND40S SPA	606	SC
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Notes: Balance of hardware is existing and to be re-used. Field verify existing door and frame for new hardware.

Set: 57.0

Doors: [D154](#), [D155](#), [D156](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	652	IV
1 Passage Latch	ND10S SPA	626	SC
1 Overhead Stop	90S series	US32D	GJ
1 Gasketing	5050 verify color		NG

Set: 58.0

Doors: [B132](#), [B133](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	630	IV
1 Push Plate	8200-4x16	630	IV
1 Door Pull	8103HD-0	630	IV
1 Door Closer	4040XP REG	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Wall Stop	WS407CCV	630	IV

Set: 59.0

Doors: [C110B](#)

3 Hinge	5BB1 4-1/2" x 4-1/2"	630	IV
1 Push Bar & Pull	9190HD-??-0	630	IV
1 Door Closer	4040XP SCUSH	AL	LC
1 Kick Plate	8400 10" x 2" LDW B-CS	US32D	IV
1 Gasketing	5050 verify color		NG

Set: 60.0

Doors: B131A, B131B

1 Cylinder as required LFIC 626 SC

Notes: Balance of hardware is existing and to be re-used.

Set: 61.0

Doors: C106, C107

Notes: Existing door, frame and hardware to be re-used. No new work.

Set: 62.0

Doors: A128B, D118A, D118B, E112C, E116C

Notes: Hardware complete by door supplier.

END OF SECTION 087100

SECTION 071413 - FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Installation of waterproofing membrane on surfaces indicated on drawings, consisting of preparation of existing and repaired concrete surfaces, sealing of cracks and joints, and application Reinforced Liquid-Applied Waterproofing Membrane.

1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-In-Place Concrete.
- B. Section 07 13 26 – Blindsight Waterproofing System

1.3 REFERENCES

- A. ASTM C 836 100% Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for use with Separate Wearing Course.

1.4 SYSTEM DESCRIPTION

- A. Product provided by this Section is a coal-tar and solvent-free, single component, elastomeric liquid designed to create a seamless reinforced waterproofing membrane at 120 mil thickness. Vertical application at basement walls.

1.5 SUBMITTALS

- A. General: Submit in accordance with Section 013000.
- B. Product Data: Submit manufacturer's product literature and installation instructions.
- C. Subcontractor's approval by Manufacturer: Submit document stating manufacturer's acceptance of subcontractor as an Approved Applicator for the specified materials.
- D. Warranty: Submit a sample warranty identifying the terms and conditions stated in Section 1.7.

1.6 QUALITY ASSURANCE

- A. Applicator Qualifications: Applicator shall be experienced in applying the same or similar materials and shall be specifically approved in writing by the membrane system manufacturer.
- B. Pre-Application Conference: Prior to beginning work, convene a conference to review conditions, installation procedures, schedules and coordination with other work.
- C. Product manufacture shall be the same manufacture for section 07 13 26.

1.7 WARRANTY

- A. Upon completion and acceptance of the work required by this section, the manufacturer will issue a warranty agreeing to promptly replace defective materials.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.
 - 1. Name of material.
 - 2. Manufacturer's stock number and date of manufacture.
 - 3. Material safety data sheet.
- B. Recommended storage and application temperature is 75 degrees F. Store materials in protected and well ventilated area.

1.9 PROJECT CONDITIONS

- A. Do not apply membrane if temperature is less than 40 degrees F., if precipitation is imminent or the surface is wet or has frost. Substrate may be saturated surface dry.
- B. Coordinate waterproofing work with other trades to ensure adequate illumination, ventilation, and dust-free environment during application and curing of membrane. The applicator shall have sole right of access to the specified areas for the time needed to complete the application and allow the membrane to cure adequately.
- C. Protect adjoining surfaces not to be coated against damage or soiling. Protect plants, vegetation and animals which might be affected by waterproofing operations.
- D. Warn personnel against breathing of vapors and contact of material with skin or eyes. Wear applicable protective clothing and respiratory protection gear.
- E. Maintain work area in a neat and orderly condition, removing empty containers, rags, and rubbish daily from the site.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain waterproofing materials sheet flashings, protection course, molded-sheet drainage panels from single source from single manufacturer. Basis of Design: CCW-MIRASEAL Reinforced Liquid Applied Waterproofing Membrane at 120 mil thickness as supplied by Carlisle Coatings and Waterproofing Incorporated, 900 Hensley Lane, Wylie, Texas 78098, Phone: (800) 527-7092 Fax: (972) 442-0076.

2.2 PRODUCTS

- A. Waterproofing membrane shall be CCW-MIRASEAL for horizontal surfaces applied at 60 mils for each coat, reinforced by DCH Fabric between coats and CCW- MIRASEAL for vertical surfaces applied at 60 mils for each coat, reinforced by DCH fabric between coats and shall meet or exceed the requirements of ASTM C 836.

2.3 ACCESSORY PRODUCTS

- A. Surface Primer: is not required for concrete or wood all other surfaces as recommended by manufacturer for each surface encountered.
- B. Sealants: Shall be CCW-201 two-component Polyurethane Sealant.
- C. Backing Rod: Shall be closed-cell polyethylene foam rod.
- D. Flexible Flashing: Shall be as recommended and supplied by coating manufacturer.
- E. Protection Course: Shall be CCW Protection Board-H/HS for horizontal surfaces or CCW Protection Board-V for vertical surfaces.
- F. Drainage Composite: Shall be CCW MiraDrain 6200 as recommended by the manufacturer for each condition.
- G. Perimeter Drainage System: Where required shall be CCW HC - DRAIN.
- H. Reinforcing: Shall be CCW DCH Fabric.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Before any waterproofing work is started the waterproofing applicator shall thoroughly examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner, or general contractor shall be notified in writing and corrections made.
- B. Condition of Concrete Surfaces:
 - 1. The concrete surfaces shall be of sound structural grade, minimum of 2500 PSI compressive strength, and shall have a wood float or fine broom finish, free of fins, ridges, voids or entrained air holes.
 - 2. Concrete shall be cured by water curing method. Curing compounds must be of the pure sodium silicate type and be approved by the Carlisle representative.
 - 3. Concrete shall be cured at least three (3) days and shall be sloped for proper drainage.
 - 4. Control joints and/or expansion joints shall have been properly installed at strategic points throughout the field of the deck to control cracking caused by deflection and shrinkage.
 - 5. Any required crickets or drains should be installed at the time the main deck is poured. Deck should be monolithic.
 - 6. Voids, rock pockets and excessively rough surfaces shall be repaired with approved non-shrink grout or ground to match the unrepaired areas.
 - 7. Two-stage drains shall have a minimum 3" flange and be installed with the flange flush and level with the concrete surface.
 - 8. Surfaces at cold joints shall be on the same plane.

3.2 SURFACE PREPARATION

- A. The concrete surface must be thoroughly clean, dry and free from any surface contaminates or cleaning residue that may harmfully affect the adhesion of the membrane.

- B. Install a 1" face, 45 degree cant of CCW-201 polyurethane sealant at all angle changes and inside corners including projections through the deck, walls, curbs, bumpers, etc.
- C. All cracks over 1/16" in width and all moving cracks under 1/16" in width shall be saw cut to 1/4" minimum in width and depth. Saw cut a 1/4" by 1/4" kerf around drain flanges. Clean, prime and fill saw cuts flush with CCW-201 polyurethane sealant.
- D. All moving cracks over 1/16" wide and all expansion joints less than 1" wide shall be cleaned, primed, fitted with a backing rod and caulked with CCW-201 polyurethane sealant. For larger joints, contact Carlisle representative.
- E. Allow all sealant to cure thoroughly.
- F. Apply a 6" wide, 45 mils thick stripe-coat of CCW-MIRASEAL centered over all sealed cracks, hairline cracks, joints, and outside corners.
- G. Apply a 45 mil thick stripe-coat of CCW-MIRASEAL over sealant cants and extending 4" onto the horizontal deck and up the vertical wall to the height called out on the drawings (minimum 8" recommended).
- H. Allow all detail work to cure overnight.
- I. All required metal shall be installed at this time. Apply a stripe coat of CCW-MIRASEAL, 45 mils thick, 6" wide, centered over all transitions from concrete to metal flashings and reinforce with CCW DCH Fabric. Allow the stripe coat to cure a minimum of three (3) hours to a firm consistency.

3.3 APPLICATION

- A. Priming: Primer is not required for adhesion to dry surfaces, non-porous concrete or wood. Consult CCW for other substrates.
- B. Apply the CCW-MIRASEAL in one uniform coat at the rate of one gallon minimum per 25 square feet or as needed in order to obtain a minimum thickness of 60 wet mils, including coverage of detail work. Use a 1/2-inch notch squeegee to achieve a uniform thickness, then back roll to smooth coating.
- C. Immediately install Carlisle's DCH fabric working the fabric into the wet CCW-MIRASEAL until fabric is saturated, avoiding trapped air, wrinkles and fishmouths. Cut and lay flat wrinkles and fishmouths.
- D. In the event the entire surface is not completed in one day and becomes contaminated, prior to beginning application clean an area 6" wide along the edge of the previously applied membrane with a cloth wet with xylene solvent. New work shall overlap the existing work by 6".
- E. Allow the first coat of CCW-MIRASEAL to cure three (3) hours minimum to a firm consistency.
- F. Apply the second coat of CCW-MIRASEAL at 25 sf/gallon in a uniform consistency of 60 mils over the first coat of CCW-MIRASEAL. Cover the DCH fabric for complete encapsulation.

3.4 FLOOD TEST

- A. Allow CCW-MIRASEAL Membrane to cure for at least 24 hours. Plug drains and provide barriers necessary to contain flood water.
- B. Flood surface with 1" head of water for 24 hours. Inspect for leaks and repair membrane if leaks are found. Retest after making repairs.

3.5 PROTECTION COURSE

- A. Install MiraDrain 6200 Drainage Composite and CCW Protection Board-H/HS Protection Course immediately after flood testing on horizontal surfaces. If flood testing is delayed, install a temporary covering to protect the CCW-MIRASEAL membrane from damage by other trades.

END OF SECTION 071413

SECTION 01 77 00 – ELECTRONIC CLOSEOUT DOCUMENT MANAGEMENT (2019-FC)

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes the administrative and procedural requirements for the project record document management services consultant, including the following duties and responsibilities:
 - 1. Provide services as required as the designated Digital Record Management Consultant (DRMC).
 - 2. Receive all project record documents and ensure compatible format(s) for electronic access for Owner at end of project construction as specified in this Section.

1.2 QUALITY ASSURANCE

- A. Digital Record Management Consultant Qualifications:
 - 1 Experience: Minimum 5 years providing project record document services.
 - 2 Training: Trained in process of collection, organization, validation, and delivery of project record document services.
- B. DRMC Capabilities and Duties:
 - 1 Capable of scanning large and small format documents, in color and black and white.
 - 2 Capable of accepting and downloading from FTP site or manufacturers' websites or file sharing sites; and accepting other forms of digital documentation.
 - 3 Deliverables to Owner are to allow single document or range of documents to be printed in large or small formats.
 - 4 Deliverables to Owner are to be viewable on multiple computers without additional licensing fees.
 - 5 DRMC is to maintain backup copy of deliverables available only to Owner or DRMC.

PART 2 – PRODUCT

2.1 Acceptable DRMC is:

- A. BuildingWorks Inc. 314-647-2812.
- B. Accepted Substitution.

2.2 Documents

- A. Documentation to be electronically stored includes, but is not necessarily limited to:
 - 1. Contract Documents: Complete Set of Drawings and Project Specification Manual in PDF format.
 - 2. Approved Submittals: Product Data, Shop Drawings and Submittal Logs, as required. Submittals as needed for equipment and materials from all Project Manual Divisions.

Submittals from the mechanical, electrical, plumbing, life safety (fire and alarm system) conveyance, roof system and others as requested by Owner are to include manufacturer, model number and mark from the Drawings.

3. Equipment Manuals: Installation, Operation, Maintenance, Parts Lists, Manufacturer Warranties, and/or a Consolidated Manual. Include Serial number and asset number with the location of the piece of equipment, if required by this specification.
4. Reports – Commissioning, Test and Balance, Geotechnical, Concrete Testing, Air Quality, regular meeting reports, etc.
5. Correspondence essential to quality of construction – Emails, faxes, mail, etc.
6. Contractor and Sub-Contractor Warranty Letters.
7. Pictures and Videos may include still photos or videos of start up procedures (See consultant for format of video files).
8. Contact list of people, businesses, manufactures and suppliers.
9. Complete Set of As-Built Red Line Drawings with each sheet identified as “As-Built/Record Documents”.
10. Complete Set of As-Built Record Drawings (PDF format or paper) with each sheet identified as “Record Documents” from the design professional, if required by this specification.
11. Additional documents as may be required by the Contract Documents include, but not necessarily limited to:
 - a. LEED Documentation,
 - b. Contract Modification Documents – Addenda, Change Orders, RFI’s and ASI’s, Field Orders, and similar,
 - c. Engineering calculations,
 - d. Inspection Certifications,
 - e. Certificate of Occupancy,
 - f. CAD and/or 3-D model files.
 - g. Administrative documents

2.3 CLOSEOUT SUBMITTALS MANAGEMENT

A. DRMC is to supply the following Project Document services:

1. Expanded Services:
 - a. Receive and facilitate required and approved close out/as-built documents to deliver a computer-based file of electronic closeout submittals.
 - b. Provide collection assistance of closeout submittal documents, organization and categorization of data, validation and audit to Owner’s designated recipient.
 - c. Expanded Services creates detail pages for Mechanical, Electrical, Plumbing, Life Safety, Roofing, Conveyance, Capital Equipment, Finishes, with the addition of Doors, and Hardware to room or area.

B. Original production, content, and coordination of closeout submittals remains the responsibility of design professionals, general contractor, sub-contractors, suppliers, and others as required by Agreement.

2.4 DELIVERY AND TRAINING

- A. Delivery
 - 1. Deliverable Products: DRMC to deliver to Owner, [through general contractor, etc.,) as DRMC deems acceptable for amount or type of data stored, and as acceptable to Owner.
 - 2. Delivery may be in person or electronically as deemed acceptable by DRMC and Owner, with review by General Contractor.

- B. Training
 - 1. Provide training to Owner's designated personnel including, but not necessarily limited to, functions and operations of electronic closeout submittal system.
 - 2. Owner demonstrates the ability to navigate electronic closeout submittal system at end of training.
 - 3. DRMC is available to provide added fee services for additional training and ongoing support.
 - 4. Provide DRMC training in person or electronically as acceptable to DRMC and Owner, with review by General Contractor.

PART 3 – EXECUTION

3.1 IMPLEMENTATION PROCEDURE:

- A. Expanded Services Procedure:
 - 1. DRMC prepares project plan and forwards to Contractor and Owner for approval. Obtain approvals before proceeding.
 - 2. Approved submittals are forwarded to DRMC during construction.
 - 3. DRMC reports to Contractor as to receipt of, and compliance with, the approved project plan, the approved submittals and other documents as outlined in the project plan.
 - 4. DRMC provides digital, electronic files of closeout submittal documents.
 - 5. Delivery and Training to be provided as described above.

END OF SECTION 01 77 00