

January 18, 2024

ADDENDUM NUMBER FOUR (4)

Project: MTK – Camp Kamassa  
Kitchen/Cafeteria and Infirmary Building  
4002 Sumrall Road  
Crystal Springs, MS  
PN: 19104

FROM: Dean Architecture, P.A.  
661 Sunnybrook Road, Suite 140  
Ridgeland, MS 39157  
(601) 939-7717

The following additions, changes, clarifications and/or substitutions to the Project Drawings and Project Manual as indicated, are hereby made a part of the Contract Documents. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal Form where indicated.

Architectural Specifications:

**Item #1:** Section 004100 – Bid Form, as follows:

Remove existing Bid Form and replace with the attached revised Bid Form. (Added Unit Prices for additional site work.)

**Item #2:** Section 074110 – Metal Roof Panels, remove paragraph 2.01,A and 2.02,A and replace with the following:

2.01 MANUFACTURERS

A. Same as metal roof specified in Section 133419 Metal Building Systems.

2.02 MANUFACTURED METAL PANELS

A. Standing Seamed Metal Roof System: MBCI - BattenLok® HS

1. Basis of Design: same manufacturer and panel specified in metal building Section 133419.
2. Panel Width: 16"
3. 24 Gage steel.
4. Concealed Anchor Clips.
5. Mechanically field-seamed, factory-applied sealant same length as panels.
6. Kynar Color: As selected from manufacturer's standard colors.

**Item #3:** Section 133419 – Metal Building Systems, remove paragraph 2.04 and replace with the following:

2.04 MATERIALS - ROOF

A. Standing Seam Metal Roof Panel – Equal to MBCI – BattenLok® HS 16" wide – Kynar color as selected from manufacturer standard color selection.

1. Standing Seam Metal Roof Panels: formed with raised trapezoidal ribs at panel edges and intermediate stiffening ribs symmetrically spaced between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panel and engaging opposite edge of panels.

2. Gauge: 24
3. Clips: Manufacturer's standard, floating type to accommodate thermal movement: fabricated from aluminum-zinc alloy-coated steel sheet.
4. Joint Type: Mechanically seamed, double folded.
5. Panel coverage; 16 inches
6. Wind uplift: UL 90
7. Factory applied sealant at each standing seam joint.
8. Cleats: Manufacturer's standard, mechanically seamed cleats formed from steel sheet.
9. Metal Liner Panel – color as selected – at exterior soffit areas and breezeway area.

Refer to Drawings:

**Item #1:** Sheet A101, Floor Plan, as follows:

- Change metal studs on full height walls separating Dining 106 and Kitchen 117, Kitchen Storage 115, Dishwashing 107 to be a 6" metal stud in lieu of 3 5/8" metal studs shown. The wall suspended above the serving line opening shall be 6" metal studs.
- Change metal studs on full height walls separating Dining 106 and Foyer 101 from Women's 104, Family 102, and Men's 103 to be a 6" metal stud in lieu of 3 5/8" shown.

**Item #2:** Sheet A101, Floor Plan, Note #3 and Addendum #2, refer to drawings Item #1, remove both of these notes and replace with the following:

3. Stainless steel trim at kitchen equipment cabinets and dishwashing pass-thru to be provided and installed by Owner in conjunction with kitchen equipment vendor. General Contractor to coordinate rough opening size and locations.

**Item #3:** Sheet A103, Reflected Ceiling Plan, as follows:

Ceiling type Legend and Finish Schedule - remove reference to ceramic faced ceiling tiles from legend. All 2x2 LAT ceiling tiles shall be per Section 095100, Type 1, Armstrong 2988.

**Item #4:** Sheet A601, Door Schedule & Details

Door Types A, B and E are shown to be solid core wood doors clad with metal in a raised cross buck panel bottom and a 9-panel divided lite top. G.C option to provide a similar insulated hollow metal door with metal trim applied moldings at the bottom with a 9 lite divided glass insert in the top.

Mechanical, Plumbing and Fire Protection

SEE ATTACHED ITEMS PROVIDED BY DEWBERRY ENGINEERS, INC.

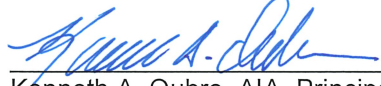
MTK – Camp Kamassa  
Kitchen/Cafeteria and Infirmary Building  
Crystal Springs, MS  
Addendum #4  
January 18, 2023

Civil

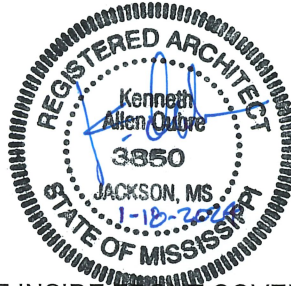
SEE ATTACHED CIVIL ITEMS PROVIDED BY WGK, INC.

END OF ADDENDUM NUMBER FOUR (4)

**Dean Architecture, P.A.**



Kenneth A. Oubre, AIA, Principal



PLEASE ATTACH THIS ADDENDUM TO THE INSIDE FRONT COVER OF EACH SET OF SPECIFICATIONS.



SECTION 004100

BID FORM

THE PROJECT AND THE PARTIES

1.01 TO:

- A. Owner  
1. Mississippi Toughest Kids  
123 E. Georgetown Street  
Crystal Springs, MS 39059

1.02 FOR:

- A. Camp Kamassa - Kitchen / Cafeteria Building and Infirmary Building

1.03 DATE: \_\_\_\_\_ (BIDDER TO ENTER DATE)

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

- A. Bidder's Full Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_

1.05 OFFER

- A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Dean Architecture, P.A. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

- B. **Kitchen / Cafeteria Building - Bid Price No. 1**

\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- C. **Infirmary Building - Bid Price No. 2**

\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- D. **Total Bid Price ( Kitchen / Cafeteria and Infirmary Buildings combined) ( Total of Bid Price 1 and 2 from above)**

\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- E. **Deductive Alternate No. 1 - Remove Clerestory building element from Kitchen / Cafeteria Building**

Deduct \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- F. **Deductive Alternate No. 2- Remove Ground Faced Block Wainscot from Kitchen / Cafeteria Building**

Deduct \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- G. **Deductive Alternate No. 3 - Remove Ground Faced Block Wainscot from Infirmary Building**

Deduct \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- H. All applicable federal taxes are included and State of Mississippi taxes are included in the Bid Sum.

- I. All Cash Allowances described in Section 012100 are included in the Bid Sum.



### 1.06 ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for Sixty days from the bid closing date.
- B. If this bid is accepted by Owner within the time period stated above, we will:
  - 1. Execute the Agreement within seven days of receipt of Notice of Award.
  - 2. Commence work within seven days after written Notice to Proceed of this bid.

### 1.07 CONTRACT TIME

- A. Complete the Work in \_\_\_\_\_ calendar days from Notice to Proceed.  
(Bidder to enter number of calendar days.) Total of all Work days for both buildings.

### 1.08 UNIT PRICES

- A. The following Unit Prices will apply to authorized items added to the Work. These unit prices shall remain fixed throughout the length of the contract from the date of the signatures of the contract between the Owner and the Contractor. During this period, the Owner shall have the option to execute change orders to the Contract for Construction for any or all of the items listed below in the quantities selected and at the unit prices so stated.
- B. **Excavation and back fill** of unstable soil material in building pad area. GC shall provide all equipment and labor to excavate unstable material from building site and place spoil material at a location on-site just adjacent to the construction site and infill with suitable material acquired from the Owners borrow pit located just Northeast of the building site.  
Cost per yard to haul out and back in \$ \_\_\_\_\_ Per Square Yard.
- C. **Lime Treatment of building pad.** GC shall provide all material and labor to lime treat soils in building pad area per recommendation of 4-6% hydrated lime by dry weight of soil. Lime treatment should extend 12 to 18 inches below the surface exposed per BCD's Geotech REport No. 180185.
  - 1. Cost per Ton of Lime material delivered to site \$ \_\_\_\_\_ per ton.
  - 2. Cost per Square Yard of Soil Mixing of lime into soil \$ \_\_\_\_\_ Per SY

### 2.01 ADDENDA

- A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
  - 1. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
  - 2. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
  - 3. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
  - 4. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.

### 2.02 BID FORM SIGNATURE(S)

- A. The Corporate Seal of

\_\_\_\_\_  
(Bidder - print the full name of your firm)  
was hereunto affixed in the presence of:

\_\_\_\_\_  
(Authorized signing officer, Title)

- B. If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

**2.04 RESIDENT BIDDER ( CHECK APPROPRIATE LINE )**

**THE BIDDER IS A RESIDENT** \_\_\_\_\_

**THE BIDDER IS A NON-RESIDENT** \_\_\_\_\_

**OF THE STATE OF MISSISSIPPI.**

**TELEPHONE NUMBER :** \_\_\_\_\_

**EMAIL :** \_\_\_\_\_

**END OF BID FORM**

January 18, 2024

**ADDENDUM NO. 4**

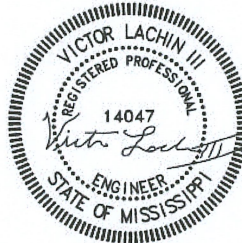
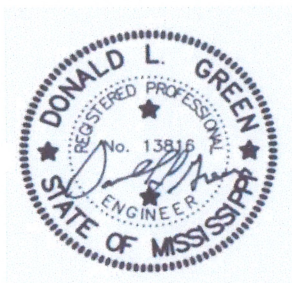
PROJECT: Camp Kamassa  
Kitchen/Infirmary

FROM: Dewberry Engineers, Inc.  
1900 Lakeland Drive  
Jackson, MS 39216

The following additions, changes, clarifications and/or substitutions to the Project Drawings/Specifications as indicated are hereby made a part of the Contract Documents. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal Form where indicated.

- Item No. 1: Specifications; Add the attached Section 211313 Wet-Pipe Sprinkler Systems
- Item No. 2: Specifications, Section 211316, Part 2 – Products, 2.2 Steel Pipe and Fittings, replace all references to “galvanized” with “black”.
- Item No. 3: Specifications, Section 211316, Part 3 – Execution, 3.3 Piping Installation, remove C.. (There is no seismic-restraint required.)

**END OF ADDENDUM NO. 4**





SECTION 21 13 13  
WET-PIPE SPRINKLER SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
  - 1. Pipes, fittings, and specialties.
  - 2. Specialty valves.
  - 3. Sprinklers.
  - 4. Alarm devices.
  - 5. Pressure gages.

1.3 DEFINITIONS

- A. Standard-Pressure Sprinkler Piping: Wet-pipe sprinkler system piping designed to operate at working pressure of 175-psig maximum.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Shop Drawings: For wet-pipe sprinkler systems.
  - 1. Include plans, elevations, sections, and attachment details.
  - 2. Include diagrams for power, signal, and control wiring.
- C. Delegated-Design Submittal: For wet-pipe sprinkler systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Sprinkler systems, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
  - 1. Domestic water piping.
  - 2. Items penetrating finished ceiling include the following:
    - a. Lighting fixtures.
    - b. Air outlets and inlets.
- B. Approved Sprinkler Piping Drawings: Working plans, prepared according to NFPA 13, that have been approved by authorities having jurisdiction, including hydraulic calculations if applicable.
- C. Welding certificates.
- D. Fire-hydrant flow test report.
- E. Field Test Reports and Certificates: Indicate and interpret test results for compliance with performance requirements and as described in NFPA 13. Include "Contractor's Material and Test Certificate for Aboveground Piping."
- F. Field quality-control reports.

## 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For wet-pipe sprinkler systems and specialties to include in emergency, operation, and maintenance manuals.

## 1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Sprinkler Cabinets: Finished, wall-mounted, steel cabinet with hinged cover, and with space for minimum of six spare sprinklers plus sprinkler wrench. Include number of sprinklers required by NFPA 13 and sprinkler wrench. Include separate cabinet with sprinklers and wrench for each type of sprinkler used on Project.

## 1.8 QUALITY ASSURANCE

- A. Installer Qualifications:
  - 1. Installer's responsibilities include designing, fabricating, and installing sprinkler systems and providing professional engineering services needed to assume engineering responsibility. Base calculations on results of fire-hydrant flow test.

- a. Engineering Responsibility: Preparation of working plans, calculations, and field test reports by a qualified professional engineer.
- B. Welding Qualifications: Qualify procedures and operators according to 2010 ASME Boiler and Pressure Vessel Code.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Sprinkler system equipment, specialties, accessories, installation, and testing shall comply with the following:
  - 1. NFPA 13.
- B. Standard-Pressure Piping System Component: Listed for 175-psig minimum working pressure.
- C. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design wet-pipe sprinkler systems.
  - 1. Sprinkler system design shall be approved by authorities having jurisdiction.
    - a. Margin of Safety for Available Water Flow and Pressure: 10 percent, including losses through water-service piping, valves, and backflow preventers.
    - b. Sprinkler Occupancy Hazard Classifications:
      - 1) Electrical Equipment Rooms: Ordinary Hazard, Group 1.
      - 2) General Storage Areas: Ordinary Hazard, Group 1.
      - 3) Mechanical Equipment Rooms: Ordinary Hazard, Group 1.
      - 4) Office and Public Areas: Light Hazard.
      - 5) Kitchen Service Areas: Ordinary Hazard, Group 1.
  - 2. Minimum Density for Automatic-Sprinkler Piping Design:
    - a. Light-Hazard Occupancy: 0.10 gpm over 1500-sq. ft. area.
    - b. Ordinary-Hazard, Group 1 Occupancy: [0.15 gpm over 1500-sq. ft. area.
  - 3. Maximum Protection Area per Sprinkler: According to UL listing.
  - 4. Maximum Protection Area per Sprinkler:
    - a. Office Spaces: 120 sq. ft.
    - b. Storage Areas: 130 sq. ft.
    - c. Mechanical Equipment Rooms: 130 sq. ft.
    - d. Electrical Equipment Rooms: 130 sq. ft.
    - e. Other Areas: According to NFPA 13 recommendations unless otherwise indicated.



## 2.2 STEEL PIPE AND FITTINGS

- A. Standard-Weight, Black Steel Pipe: ASTM A 53/A 53M. Pipe ends may be factory or field formed to match joining method.
- B. Schedule 10, Black-Steel Pipe: ASTM A 135/A 135M or ASTM A 795/A 795M, Schedule 10 in NPS 5 and smaller; and NFPA 13-specified wall thickness in NPS 6 to NPS 10, plain end.
- C. Black Steel Pipe Nipples: ASTM A 733, made of ASTM A 53/A 53M, standard-weight, seamless steel pipe with threaded ends.
- D. Uncoated Steel Couplings: ASTM A 865/A 865M, threaded.
- E. Uncoated Gray-Iron Threaded Fittings: ASME B16.4, Class 125, standard pattern.
- F. Malleable- or Ductile-Iron Unions: UL 860.
- G. Cast-Iron Flanges: ASME 16.1, Class 125.
- H. Steel Flanges and Flanged Fittings: ASME B16.5, Class 150.
  - 1. Pipe-Flange Gasket Materials: EPDM rubber gasket.
    - a. Class 125 and Class 250, Cast-Iron, Flat-Face Flanges: Full-face gaskets.
    - b. Class 150 and Class 300, Ductile-Iron or -Steel, Raised-Face Flanges: Ring-type gaskets.
  - 2. Metal, Pipe-Flange Bolts and Nuts: Carbon steel unless otherwise indicated.
- I. Steel Welding Fittings: ASTM A 234/A 234M and ASME B16.9.
  - 1. Welding Filler Metals: Comply with AWS D10.12M/D10.12 for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.
- J. Grooved-Joint, Steel-Pipe Appurtenances:
  - 1. Pressure Rating: 175-psig minimum.
  - 2. Painted Grooved-End Fittings for Steel Piping: ASTM A 47/A 47M, malleable-iron casting or ASTM A 536, ductile-iron casting, with dimensions matching steel pipe.
  - 3. Grooved-End-Pipe Couplings for Steel Piping: AWWA C606 and UL 213 rigid pattern, unless otherwise indicated, for steel-pipe dimensions. Include ferrous housing sections, EPDM-rubber gasket, and bolts and nuts.

## 2.3 SPECIALTY VALVES

- A. Listed in UL's "Fire Protection Equipment Directory" or FM Global's "Approval Guide."
- B. Pressure Rating:
  - 1. Standard-Pressure Piping Specialty Valves: 175-psig minimum.

- C. Body Material: Cast or ductile iron.
- D. Size: Same as connected piping.
- E. End Connections: Flanged or grooved.
- F. Alarm Valves:
  - 1. Standard: UL 193.
  - 2. Design: For horizontal or vertical installation.
  - 3. Include trim sets for bypass, drain, electrical sprinkler alarm switch, pressure gages, and fill-line attachment with strainer.
  - 4. Drip Cup Assembly: Pipe drain without valves and separate from main drain piping.
  - 5. Drip Cup Assembly: Pipe drain with check valve to main drain piping.
  - 6. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- G. Deluge Valves:
  - 1. Standard: UL 260.
  - 2. Design: Hydraulically operated, differential-pressure type.
  - 3. Include trim sets for alarm-test bypass, drain, electrical water-flow alarm switch, pressure gages, drip cup assembly piped without valves and separate from main drain line, and fill-line attachment with strainer.
  - 4. Wet, Pilot-Line Trim Set: Include gage to read diaphragm-chamber pressure and manual control station for manual operation of deluge valve, and connection for actuation device.
- H. Automatic (Ball Drip) Drain Valves:
  - 1. Standard: UL 1726.
  - 2. Pressure Rating: 175-psig minimum.
  - 3. Type: Automatic draining, ball check.
  - 4. Size: NPS 3/4.
  - 5. End Connections: Threaded.

## 2.4 SPRINKLER PIPING SPECIALTIES

- A. Branch Outlet Fittings:
  - 1. Standard: UL 213.
  - 2. Pressure Rating: 175-psig minimum.
  - 3. Body Material: Ductile-iron housing with EPDM seals and bolts and nuts.
  - 4. Type: Mechanical-tee and -cross fittings.
  - 5. Configurations: Snap-on and strapless, ductile-iron housing with branch outlets.
  - 6. Size: Of dimension to fit onto sprinkler main and with outlet connections as required to match connected branch piping.
  - 7. Branch Outlets: Grooved, plain-end pipe, or threaded.
- B. Flow Detection and Test Assemblies:

1. Standard: UL's "Fire Protection Equipment Directory" or FM Global's "Approval Guide."
  2. Pressure Rating: 175-psig minimum.
  3. Body Material: Cast- or ductile-iron housing with orifice, sight glass, and integral test valve.
  4. Size: Same as connected piping.
  5. Inlet and Outlet: Threaded or grooved.
- C. Branch Line Testers:
1. Standard: UL 199.
  2. Pressure Rating: 175 psig.
  3. Body Material: Brass.
  4. Size: Same as connected piping.
  5. Inlet: Threaded.
  6. Drain Outlet: Threaded and capped.
  7. Branch Outlet: Threaded, for sprinkler.
- D. Sprinkler Inspector's Test Fittings:
1. Standard: UL's "Fire Protection Equipment Directory" or FM Global's "Approval Guide."
  2. Pressure Rating: 175-psig minimum.
  3. Body Material: Cast- or ductile-iron housing with sight glass.
  4. Size: Same as connected piping.
  5. Inlet and Outlet: Threaded.
- E. Adjustable Drop Nipples:
1. Standard: UL 1474.
  2. Pressure Rating: 250-psig minimum.
  3. Body Material: Steel pipe with EPDM-rubber O-ring seals.
  4. Size: Same as connected piping.
  5. Length: Adjustable.
  6. Inlet and Outlet: Threaded.
- F. Flexible Sprinkler Hose Fittings:
1. Standard: UL 1474.
  2. Type: Flexible hose for connection to sprinkler, and with bracket for connection to ceiling grid.
  3. Pressure Rating: 175-psig minimum.
  4. Size: Same as connected piping, for sprinkler.

## 2.5 SPRINKLERS

- A. Listed in UL's "Fire Protection Equipment Directory" or FM Global's "Approval Guide."
- B. Pressure Rating for Automatic Sprinklers: 175-psig minimum.
- C. Sprinkler Finishes: Painted.



- D. Sprinkler Escutcheons: Materials, types, and finishes for the following sprinkler mounting applications. Escutcheons for concealed, flush, and recessed-type sprinklers are specified with sprinklers.
  - 1. Ceiling Mounting: Flush mounted pop-off cover.
  - 2. Sidewall Mounting: Chrome-plated steel one piece, flat.
- E. Sprinkler Guards:
  - 1. Standard: UL 199.
  - 2. Type: Wire cage with fastening device for attaching to sprinkler.

## 2.6 ALARM DEVICES

- A. Alarm-device types shall match piping and equipment connections.
- B. Water-Motor-Operated Alarm:
  - 1. Standard: UL 753.
  - 2. Type: Mechanically operated, with Pelton wheel.
  - 3. Alarm Gong: Cast aluminum with red-enamel factory finish.
  - 4. Size: 8-1/2-inches diameter.
  - 5. Components: Shaft length, bearings, and sleeve to suit wall construction.
  - 6. Inlet: NPS 3/4.
  - 7. Outlet: NPS 1 drain connection.
- C. Electrically Operated Alarm Bell:
  - 1. Standard: UL 464.
  - 2. Type: Vibrating, metal alarm bell.
  - 3. Size: 10-inch diameter.
  - 4. Finish: Red-enamel factory finish, suitable for outdoor use.
  - 5. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Water-Flow Indicators:
  - 1. Standard: UL 346.
  - 2. Water-Flow Detector: Electrically supervised.
  - 3. Components: Two single-pole, double-throw circuit switches for isolated alarm and auxiliary contacts, 7 A, 125-V ac and 0.25 A, 24-V dc; complete with factory-set, field-adjustable retard element to prevent false signals and tamperproof cover that sends signal if removed.
  - 4. Type: Paddle operated.
  - 5. Pressure Rating: 250 psig.
  - 6. Design Installation: Horizontal or vertical.
- E. Pressure Switches:
  - 1. Standard: UL 346.
  - 2. Type: Electrically supervised water-flow switch with retard feature.
  - 3. Components: Single-pole, double-throw switch with normally closed contacts.
  - 4. Design Operation: Rising pressure signals water flow.

- F. Valve Supervisory Switches:
  - 1. Standard: UL 346.
  - 2. Type: Electrically supervised.
  - 3. Components: Single-pole, double-throw switch with normally closed contacts.
  - 4. Design: Signals that controlled valve is in other than fully open position.
  - 5. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## 2.7 PRESSURE GAGES

- A. Standard: UL 393.
- B. Dial Size: 3-1/2- to 4-1/2-inch diameter.
- C. Pressure Gage Range: 0- to 250-psig minimum.
- D. Label: Include "WATER" label on dial face.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Perform fire-hydrant flow test according to NFPA 13 and NFPA 291. Use results for system design calculations required in "Quality Assurance" Article.
- B. Report test results promptly and in writing.

### 3.2 SERVICE-ENTRANCE PIPING

- A. Connect sprinkler piping to water-service piping for service entrance to building.
- B. Install shutoff valve, backflow preventer, pressure gage, drain, and other accessories indicated at connection to water-service piping.
- C. Install shutoff valve, check valve, pressure gage, and drain at connection to water service.

### 3.3 PIPING INSTALLATION

- A. Locations and Arrangements: Drawing plans, schematics, and diagrams indicate general location and arrangement of piping. Install piping as indicated on approved working plans.
  - 1. Deviations from approved working plans for piping require written approval from authorities having jurisdiction. File written approval with Architect before deviating from approved working plans.

2. Coordinate layout and installation of sprinklers with other construction that penetrates ceilings, including light fixtures, HVAC equipment, and partition assemblies.
- B. Piping Standard: Comply with NFPA 13 requirements for installation of sprinkler piping.
  - C. Use listed fittings to make changes in direction, branch takeoffs from mains, and reductions in pipe sizes.
  - D. Install unions adjacent to each valve in pipes NPS 2 and smaller.
  - E. Install flanges, flange adapters, or couplings for grooved-end piping on valves, apparatus, and equipment having NPS 2-1/2 and larger end connections.
  - F. Install "Inspector's Test Connections" in sprinkler system piping, complete with shutoff valve, and sized and located according to NFPA 13.
  - G. Install sprinkler piping with drains for complete system drainage.
  - H. Install sprinkler control valves, test assemblies, and drain risers adjacent to standpipes when sprinkler piping is connected to standpipes.
  - I. Install automatic (ball drip) drain valve at each check valve for fire-department connection, to drain piping between fire-department connection and check valve. Install drain piping to and spill over floor drain or to outside building.
  - J. Install alarm devices in piping systems.
  - K. Install pressure gages on riser or feed main, at each sprinkler test connection, and at top of each standpipe. Include pressure gages with connection not less than NPS 1/4 and with soft-metal seated globe valve, arranged for draining pipe between gage and valve. Install gages to permit removal and install where they are not subject to freezing.
  - L. Fill sprinkler system piping with water.
  - M. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 210517 "Sleeves and Sleeve Seals for Fire-Suppression Piping."
  - N. Install sleeve seals for piping penetrations of concrete walls and slabs. Comply with requirements for sleeve seals specified in Section 210517 "Sleeves and Sleeve Seals for Fire-Suppression Piping."
  - O. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 210518 "Escutcheons for Fire-Suppression Piping."



### 3.4 JOINT CONSTRUCTION

- A. Install couplings, flanges, flanged fittings, unions, nipples, and transition and special fittings that have finish and pressure ratings same as or higher than system's pressure rating for aboveground applications unless otherwise indicated.
- B. Install unions adjacent to each valve in pipes NPS 2 and smaller.
- C. Install flanges, flange adapters, or couplings for grooved-end piping on valves, apparatus, and equipment having NPS 2-1/2 and larger end connections.
- D. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- E. Remove scale, slag, dirt, and debris from inside and outside of pipes, tubes, and fittings before assembly.
- F. Flanged Joints: Select appropriate gasket material in size, type, and thickness suitable for water service. Join flanges with gasket and bolts according to ASME B31.9.
- G. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
  - 1. Apply appropriate tape or thread compound to external pipe threads.
  - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged.
- H. Welded Joints: Construct joints according to AWS D10.12M/D10.12, using qualified processes and welding operators according to "Quality Assurance" Article.
  - 1. Shop weld pipe joints where welded piping is indicated. Do not use welded joints for galvanized-steel pipe.
- I. Steel-Piping, Cut-Grooved Joints: Cut square-edge groove in end of pipe according to AWWA C606. Assemble coupling with housing, gasket, lubricant, and bolts. Join steel pipe and grooved-end fittings according to AWWA C606 for steel-pipe joints.
- J. Steel-Piping, Roll-Grooved Joints: Roll rounded-edge groove in end of pipe according to AWWA C606. Assemble coupling with housing, gasket, lubricant, and bolts. Join steel pipe and grooved-end fittings according to AWWA C606 for steel-pipe grooved joints.

### 3.5 VALVE AND SPECIALTIES INSTALLATION

- A. Install listed fire-protection valves, trim and drain valves, specialty valves and trim, controls, and specialties according to NFPA 13 and authorities having jurisdiction.
- B. Install listed fire-protection shutoff valves supervised open, located to control sources of water supply except from fire-department connections. Install permanent identification signs indicating portion of system controlled by each valve.

- C. Install check valve in each water-supply connection. Install backflow preventers instead of check valves in potable-water-supply sources.
- D. Specialty Valves:
  - 1. Install valves in vertical position for proper direction of flow, in main supply to system.
  - 2. Install alarm valves with bypass check valve and retarding chamber drain-line connection.
  - 3. Install deluge valves in vertical position, in proper direction of flow, and in main supply to deluge system. Install trim sets for drain, priming level, alarm connections, ball drip valves, pressure gages, priming chamber attachment, and fill-line attachment.

### 3.6 SPRINKLER INSTALLATION

- A. Install sprinklers in suspended ceilings in center of acoustical ceiling panels.
- B. Install dry-type sprinklers with water supply from heated space. Do not install pendent or sidewall, wet-type sprinklers in areas subject to freezing.
- C. Install sprinklers into flexible, sprinkler hose fittings, and install hose into bracket on ceiling grid.

### 3.7 IDENTIFICATION

- A. Install labeling and pipe markers on equipment and piping according to requirements in NFPA 13.
- B. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

### 3.8 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
  - 1. Leak Test: After installation, charge systems and test for leaks. Repair leaks and retest until no leaks exist.
  - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
  - 3. Flush, test, and inspect sprinkler systems according to NFPA 13, "Systems Acceptance" Chapter.
  - 4. Energize circuits to electrical equipment and devices.
  - 5. Coordinate with fire-alarm tests. Operate as required.
  - 6. Verify that equipment hose threads are same as local fire department equipment.
- B. Sprinkler piping system will be considered defective if it does not pass tests and inspections.

- C. Prepare test and inspection reports.

### 3.9 CLEANING

- A. Clean dirt and debris from sprinklers.
- B. Only sprinklers with their original factory finish are acceptable. Remove and replace any sprinklers that are painted or have any other finish than their original factory finish.

### 3.10 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain specialty valves and pressure-maintenance pumps.

### 3.11 PIPING SCHEDULE

- A. Piping between Fire Department Connections and Check Valves: Galvanized, standard-weight steel pipe with grooved ends, grooved-end fittings, grooved-end-pipe couplings, and grooved joints.
- B. Sprinkler specialty fittings may be used, downstream of control valves, instead of specified fittings.
- C. Standard-pressure, wet-pipe sprinkler system, NPS 2 and smaller shall be the following:
  - 1. Standard-weight, black-steel pipe with threaded ends; uncoated, gray-iron threaded fittings; and threaded joints.
- D. Standard-pressure, wet-pipe sprinkler system, NPS 2-1/2 to NPS 4 shall be the following:
  - 1. Standard-weight, black-steel pipe with threaded ends; uncoated, gray-iron threaded fittings; and threaded joints.
  - 2. Schedule 10 black-steel pipe with roll-grooved ends; uncoated, grooved-end fittings for steel piping; grooved-end-pipe couplings for steel piping; and grooved joints.
- E. Standard-pressure, wet-pipe sprinkler system, NPS 5 and larger shall be the following:
  - 1. Standard-weight, black-steel pipe with threaded ends; uncoated, gray-iron threaded fittings; and threaded joints.
  - 2. Schedule 10 black-steel pipe with roll-grooved ends; uncoated, grooved-end fittings for steel piping; grooved-end-pipe couplings for steel piping; and grooved joints.

### 3.12 SPRINKLER SCHEDULE

- A. Use sprinkler types in subparagraphs below for the following applications:
  - 1. Rooms without Ceilings: Upright sprinklers.
  - 2. Rooms with Suspended Ceilings: Concealed sprinklers.
  - 3. Wall Mounting: Sidewall sprinklers.
- B. Provide sprinkler types in subparagraphs below with finishes indicated.
  - 1. Concealed Sprinklers: Rough brass, with factory-painted white cover plate.
  - 2. Recessed Sprinklers: White recessed with pop-off cover.
  - 3. Upright, Pendent and Sidewall Sprinklers: Chrome plated in finished spaces exposed to view; rough bronze in unfinished spaces not exposed to view.

END OF SECTION





ENGINEERS & SURVEYORS

January 18, 2024

ADDENDUM NUMBER FOUR (4)

Project: MTK – Camp Kamassa  
Kitchen/Cafeteria and Infirmary Building  
4002 Sumrall Road  
Crystal Springs, MS  
PN: 19104

From: WGK, Inc.  
204 W. Leake Street  
Clinton, MS 39056  
601-925-4444

The following additions, changes, clarifications and/or substitutions to the Project Drawings and Project Manual as indicated, are hereby made a part of the Contract Documents. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal Form where indicated.

Clarifications:

**Building Pad Scope of Work:**

Contractor should follow the recommendations within the BCD Geotechnical Report No. 180185 as follows:

1. Scarify exposed soils to a minimum depth of 6 in. and compact to not less than 95 percent standard Proctor maximum dry density with stability present.
2. CONTRACTOR should then perform proof roll with a third party testing company on site to determine stability.
3. If stability is not evident, contractor should plan on drying soils by processing.
4. If timing/expediency becomes an issue to the OWNER, Contractor will be directed to achieve stability through treatment of in situ soils with admixtures or additional over-excavation and replacement of soils from onsite borrow area as per the unit costs provided on the bid form as part of this addendum.
5. Once stability is achieved, CONTRACTOR to bring pad to subgrade elevation by using recently cleared hill adjacent to site for onsite borrow material as discussed at pre-bid meeting and will be required to meet compaction requirements per Geotech report as determined by density testing.
6. CONTRACTOR to provide unit costs for lime material, mixing of lime into in situ soils, excess excavation to be wasted on site, and borrow excavation to be brought from on site.

WGK, Inc.

Brandon McKay, P.E.  
Principal