Addendum
No. FIVE Date: 7.8.2020

Project:

New Educational Facility for the
West Morgan High School for the
Morgan County Board of Education
Decatur, Alabama

MCKEE PROJECT NO. 2020.123
ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO. 2020086

The following changes and/or substitutions to the plans and specifications are hereby made a part of
same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on his Proposal Form.

A5.1 GENERAL MODIFICATIONS:

A. Refer to the attached Unit Price Item Legend Sheet [Revised 7.8.20], herein.

NOTE: This sheet must be included with the Proposal Form in the contractor’s sealed envelope.

A5.2 SPECIFICATION MODIFICATIONS:

A. Refer to Section 01000, Alternates [Revised 7.8.20], herein.
B. Refer to Section 01010, Scope of Work; Page 1 [Revised 7.8.20], herein.
C. Refer to Section 01011, Contingency Allowance [Revised 7.8.20], herein.
D. Refer to Section 07600, Flashing and Sheetmetal [Revised 7.8.20], herein.
E. Refer to Section 13120, Pre-Engineered Metal Building [Revised 7.8.20], herein.
F. The following manufactures are hereby approved subject to the plans and specifications:

1. Section 09843, Sound Absorbing Wall Panels–
   a. Acousticore | Cartersville GA | 770.429.9880.
   b. Ekko Eraser | Tampa FL | 904.710.8351

2. Section 08100, Steel Doors & Frames– Mesker | Indianapolis IN | 855.365.2407

A5.3 DRAWING MODIFICATIONS:

A. Refer to attached drawings as follows:

   1. Sheet C200 dated 7.7.20, herein.
   4. Sheet E3.3 dated 6.30.20, herein.

A5.4 CLARIFICATIONS

A. The football field shown on Site Plans are for illustrated purposes only. No equipment is to be
   furnished or installed. Refer to site plan for site preparation, earthwork and finish grades.
B. All Sound Rated Wood Doors to have STC rating of minimum 46. Refer to Door Schedule for locations.

C. Contractor shall provide all e-builder licenses as required by specification Section 01315 ‘Project Management Communications’.

END OF ADDENDUM
UNIT PRICE ITEM LEGEND

a

New Educational Facility
for the
West Morgan High School
for the
Morgan County Board of Education
Decatur, Alabama

MCKEE PROJECT NO. 2020.123

Legal Name of Bidder ________________________________________________________________
Mailing Address ______________________________________________________________________

The General Contractor shall include the Unit Prices below in their Base Bid Proposal. The quantities assigned below are above and beyond the amounts required to complete the work required by the bid documents. This Unit Price Item Legend shall be submitted with the sealed Proposal.

SCHEDULE OF UNIT PRICES:

UNIT PRICES: The Unit Prices below establishes Unit Prices so that the Owner can delete/add quantities from the Contract(s) required.

UNIT PRICE #1: The Contractor shall include in his Base Bid proposal the cost for furnishing and installing, as directed, an Additional 500 Cubic Yards Measured In Place (CYMIP) of approved off-site topsoil in addition to the re-use of on-site topsoil required by the contract documents.

500 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid

UNIT PRICE #2: The Contractor shall include in his Base Bid proposal the cost for furnishing and installing, as directed, 1,000 Square Yards of Bermuda Sod required by the contract documents.

1000 SY @ ______/SY = $________________________ Included in Base Bid

UNIT PRICE #3: The Contractor shall include in his Base Bid proposal the cost for 1,000 Cubic Yards Measured In Place (CYMIP) of Excavation and On-site disposal of unsuitable soil and replacement and compacting of approved On-site material, all as directed.

1000 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid

UNIT PRICE #4: The Contractor shall include in his Base Bid proposal the cost for 1000 Cubic Yards Measured In Place (CYMIP) of Excavation and Off-site disposal of unsuitable soil and furnishing, placing and compacting of approved Off-site material, all as directed.

1000 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid
UNIT PRICE #5: The Contractor shall include in his Base Bid proposal the cost for 100 Cubic Yards Measured In Place (CYMIP) of Excavation and On-site disposal of unsuitable soil and furnishing and installing Lean Concrete in accordance with specifications, all as directed.

$ \text{100 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$

UNIT PRICE #6: The Contractor shall include in his Base Bid proposal the cost for furnishing and installation, as directed, 1,000 Square Yards of BX1200 Geogrid fabric or Approved Equal.

$ \text{1000 SY @ ______/SY = $________________________ Included in Base Bid}$

UNIT PRICE #7: The Contractor shall include in his Base Bid proposal the cost for furnishing and installing, as directed, 100 Cubic Yards Measured In Place (CYMIP) of ALDOT #57 Stone.

$ \text{100 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$

UNIT PRICE #8: The Contractor shall include in his Base Bid proposal the cost for furnishing and installing, as directed, 100 Cubic Yards Measured In Place (CYMIP) of ALDOT #2 Stone.

$ \text{100 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$

UNIT PRICE #9: The Contractor shall include in his Base Bid proposal the cost for removal and off-site disposal of Mass Rock, as directed, and per Section 02200, Earth Moving and Geotechnical Report.

$ \text{20 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$

UNIT PRICE #10: The Contractor shall include in his Base Bid proposal the cost for removal and off-site disposal of Trench Rock, as directed, and per Section 02200, Earth Moving and Geotechnical Report.

$ \text{20 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$

UNIT PRICE #11: The Contractor shall include in his Base Bid proposal the cost for 10,000 Cubic Yards Measured In Place (CYMIP) of furnishing, placing and compacting of imported Off-site Structural fill material as directed, in order to achieve the depicted subgrades on the grading plan. This allowance will only be utilized in the event that sufficient quantities of said material are not located on the Owner’s project site.

$ \text{10,000 CYMIP @ ______/CYMIP = $________________________ Included in Base Bid}$
SECTION 01000 - ALTERNATES [Revised 7.8.20]

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

DESCRIPTION OF REQUIREMENTS

Definition: An Alternate is an amount proposed by bidders and stated on the Proposal Form that will be added to or deducted from Base Bid amount if the Owner decides to accept a corresponding change in either scope of work or in products, materials, equipment, systems or installation methods described in Contract Documents.

Coordination: Coordinate related work and modify or adjust adjacent work as required to ensure that work affected by each accepted Alternate is complete and fully integrated into the project.

Notification: Immediately following award of Contract, prepare and distribute to each party involved notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates, if any.

Schedule: A “Schedule of Alternates” is included at the end of this section. Specification section referenced in the Schedule contain requirements for materials and methods necessary to achieve the work described under each Alternate.

Include as part of each Alternate, miscellaneous devices, appurtenances and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

SCHEDULE OF ALTERNATES

ADDITIVE Bid Alternate #1 Cost for Phasing the Project as Follows:

Phase 1: All work, with the exception of the Auxiliary Gym, to have a Construction Duration of 360 Calendar Days from the Notice to Proceed.

Phase 2: Work for Auxiliary Gym to have a Construction Duration of 420 Calendar Days from the Notice to Proceed.

END OF SECTION
PART 1 – GENERAL

RELATED DOCUMENTS AND GENERAL INFORMATION:

Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 specification sections apply to the work of this section.

SUMMARY:

This Section includes the following:

1. Type of the Contract.
2. Completion Times.
4. Project Work Identification.
5. Owner-furnished products.
7. Contractor Use of premises.
8. Work Under Other Contracts.
13. Protection of Work in Place.
15. Owner’s occupancy requirements.

Related Sections include the following:

1. Division 1 Section 01500 “Temporary Facilities and Controls” for limitations and procedures governing temporary use of Owner’s facilities.

TYPE OF CONTRACT:

1. Construction Contract (ABC Form C-5, August 2001).

COMPLETION TIMES

All work shall be completed no later than July 15, 2021.

All Base Bid Construction work shall be completed in 420 480 450 Calendar Days.

Refer to Section 01000, Alternates, for Alternate completion times.

DIVISION OF CONSTRUCTION MANAGEMENT USER FEES:


1. The Contractor shall include in his Base Bid Proposal all “Basic Permit Fee”.

2. Do not include the “Plan Review Fee” or the “Contract Administration Fee” in your Proposal.

3. The Contractor shall be responsible for all “Re-Inspection Fees” per 355-16-1-.03 “Fees Required”, (5) “Additional Fees”, (b).
SECTION 01011 – CONTINGENCY ALLOWANCE [Revised 7.8.20]

The General Contractor shall include in his bid proposal the following sums:

1. **Two Hundred Fifty Thousand Dollars ($250,000.00)** as a contingency to cover unforeseen conditions or minor changes that are necessary to correct or supplement the work as detailed in the Contract Documents.

2. **Six Hundred Dollars ($600.00)** as a contingency to cover cost for 1 e-Builder license (for 1 year) for use by Morgan County Schools.

3. **Fifty Thousand Dollars ($50,000.00)** as a contingency to cover cost for Electrical Aid to Construction to JWEMC.

4. **Thirty Thousand Dollars ($30,000.00)** as a contingency to cover cost for Natural Gas Aid to Construction to Wheeler Basin.

5. **Thirty-Five Thousand Dollars ($35,000.00)** as a contingency to cover cost for Domestic Water Service Aid to Construction to Town of Trinity Utility/Water Department.

6. **Fifteen Thousand Five Hundred Dollars ($15,500.00)** as a contingency to cover cost for the Owner’s hardware cores that implement Morgan County Schools’ patented keyway system. The contractor will issue a purchase order to the Owner’s preferred hardware vendor for all cores that are required by the hardware schedule. Hardware cores will be transmitted directly to the Owner and installed by the Owner’s personnel. Volkert will coordinate/conduct a Keying Meeting between the Owner and their hardware vendor.

The Contractor shall include in his bid proposal all costs of office, job supervision, overhead, profit, and bond on this Contingency Allowance, because no such costs will be paid to Contractor for work performed under this Contingency Allowance. Only the direct costs of performing work under this provision shall be paid under and charged against the Contingency Allowance; such cost includes costs of materials and delivery, installation labor, payroll taxes and insurance, equipment expense, and the cost of subcontracted work (subcontractor’s cost may include a maximum of 15% mark-up for overhead and profit).

After unknown conditions are identified and examined and the scope of work and method of repair determined, or request for a proposal to cover additional work has been issued by the Owner, the Contractor shall submit a proposal for such work to the Architect for the Owner’s approval. If the Owner approves such proposal, he will issue written authorization to the Contractor to perform the work and charge the related costs to the Contingency Allowance. At the Owner’s option, work performed under this provision may be ordered done on a time and material basis, in which case, the Contractor shall keep accurate records of all time and materials used and submit such records to the Architect for his approval at the end of each day’s work.

An accounting of the costs charged against this Contingency Allowance shall be mutually maintained by the Contractor, Architect, and Owner throughout the course of the project. Any of this Contingency Allowance not spent shall be credited to the Owner by Change Order at close out of the project, refer to Contingency Allowance Form attached to this Section.

Provide for payment.

The Contractor shall include a line item in the Schedule of Values entitled “Contingency Allowance”. The estimated value of work completed pursuant to fully executed Contingency Allowance Authorizations may be included in the Contractor’s monthly Applications for Payment. Payments under this Contingency Allowance shall not exceed the net, total of fully executed Contingency Allowance Authorizations.
In accordance with Specification Section 01011 – CONTINGENCY ALLOWANCE, the Contractor _______ is hereby authorized to proceed with the changes in Work as are described below and is to be paid for the performance of these changes as provided in Specification Section 01011. This Authorization shall become effective when it is signed by the Contractor and the Owner’s representative and it is understood and agreed that the amount(s) stipulated below constitute full compensation for these changes in Work.

TOTAL AMOUNT OF THIS AUTHORIZATION $  

ORIGINAL AMOUNT OF THE CONTINGENCY ALLOWANCE $  

NET TOTAL OF PREVIOUS AUTHORIZATIONS $  

PREVIOUS REMAINING CONTINGENCY ALLOWANCE $  

TOTAL AMOUNT OF THIS AUTHORIZATION $  

CONTINGENCY ALLOWANCE REMAINING AFTER THIS CONTINGENCY $  

Recommended By:  

Authorized By:  

Accepted By:  

Architect  

Owner  

Contractor  

END OF SECTION
SECTION 07600 - FLASHING AND SHEET METAL [Revised 7.8.20]

PART 1 – GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of the contract including General and Supplementary Conditions and Division 1 Specification Sections apply to work of this section.

DESCRIPTION OF WORK:

Extent of each type of flashing and sheet metal work is indicated on drawings and by provisions of this section.

Types of work specified in this section include the following:

1. Metal counter flashing; and base flashing.
2. Metal eave strips and diverters. Verify location with Architect for all entry doors.
3. Exposed metal trim units, drip edge, flashing, fascia, gutters, downspouts, etc.
4. Metal perforated/vented soffit system.
5. Elastic flashing.

Integral masonry flashings are specified as masonry work in sections of Division 4.

SUBMITTALS:

Product Data; Flashing, Sheet Metal, Accessories: Submit manufacturer's product data, installation instructions and general recommendations for each specified sheet material and fabricated product.

JOB CONDITIONS:

Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

PART 2 - PRODUCTS

Color Finish on All Sheet Metal Flashing, Trim, Drip Edge, Fascia, Soffit, Flashing, Gutters, Downspouts: ASTM B 209, alloy 3003, temper H14, Kynar 500, 70% finish, 0.032" thick aluminum. The exposed finish shall consist of a 70% KYNAR 500® resin base coating applied to a cleaned, pretreated and primed surface. The dry film thickness of the exterior coating shall not be less than .90 mil minimum, inclusive primer. The interior color finish shall consist of a backer coat with a dry film thickness of 0.5 mil. A low gloss finish is required to minimize the appearance of oil canning.

- Color shall be selected from manufactures Standard Color pallet.

Gutters: Gauge: 24. Provide flat shapes, no rolled formed stiffeners or ribbed allowed. Form gutters in sections not less than 8 feet in length, complete with end pieces, outlet tubes and other special pieces as may be required. Join sections with riveted and soldered or sealed joints. Provide expansion-type slip joint at center of runs. Furnish gutter supports spaced at 36” on center constructed of same metal as gutters.

Downspouts: Gauge: 24. Form downspouts in sections approximately 10 feet long (no corrugated sections), complete with elbows and offsets. Join sections with not less than 1-1/2” telescoping joints.
Provide fasteners, designed to securely hold downspouts not less than 1" away from walls; locate fasteners at top and bottom and at approximately 5 feet on center in between.

**Aluminum-Metal Soffit System:**

A. Manufacturers:

1. Ply Gem/Mastic Aluminum Soffit (Basis of Design)
2. Alside Aluminum Soffits
3. Kaycan Aluminum

B. Types

1. Perforated Aluminum Soffit for ventilation.
   a. Envoy V-Groove by PlyGem/Mastic
   b. 15 sq. in./Lin. ft.
   c. Alumalure 2000 finish
   d. .019" thick
   e. 12" exposure or as indicated on drawings.
   f. Color to be selected by architect.

**METAL SOFFIT SYSTEM:**

   a. The panel shall have a configuration consisting of 1" interlocking ribs. The interlocking ribs are designed to conceal the panel fasteners. The panel shall provide a net coverage of 12" in width. Panel shall be smooth finish.

b. Vented and/or non-vented as indicated on drawings.

c. Panel shall conform to the following:

   I. Panel material as specified shall be 24 gage 50,000 psi.
      a) G90 Zinc-coated (galvanized)

   d. Fasteners for Soffit Liner Wall Panels (SLP):

      I. Shall be manufacturer’s fastener with hex washer head, cadmium or zinc plated.
      II. Shall be assembled with an EPDM washer.
      III. The fasteners shall be color coordinated with a premium coating system which protects against corrosion and weathering.

**VENTED FASCIA SYSTEM:**

A. Description: Shall consist of a single source for the metal fascia, clips, anchorage, and base installed onto the Metal Roof Trusses.

B. Finish: The exposed finish shall consist of a 70% KYNAR 500® resin base coating applied to a cleaned, pretreated and primed surface.

C. Products: Equal to ACS Structavent Fascia System, McCalla, Alabama 35111; Ph: 205-434-4974

**Elastic Sheet Flashing/Membrane:** Manufacturer's standard flexible, elastic, black, nonreinforced, flashing sheet of 50 - 65 mils thickness.
1. Provide EPDM synthetic rubber sheet equal to Nervastral Seal Pruf HD-20 except where metal is indicated.

Miscellaneous Materials and Accessories:

**Solder:** For use with steel or copper, provide 50 - 50 tin/lead solder (ASTM B 32), with rosin flux.

**Fasteners:** Same metal as flashing-sheet metal or, other noncorrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.

**Bituminous Coating:** FS TT-C-494 or SSPC - Paint 12, solvent type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.

**Mastic Sealant:** Polyisobutylene; nonhardening, nonskinning, non-drying, nonmigrating sealant.

**Epoxy Seam Sealer:** 2-part noncrossive metal seam cementing compound, recommended by metal manufacturer for exterior/interior non-moving joints including riveted joints.

**Adhesives:** Type recommended by flashing sheet manufacturer for waterproof/weather-resistant seaming and adhesive application of flashing sheet.

**Paper Slip Sheet:** 5-lb. rosin-sized building paper.

**Polyethylene Underlayment:** 6-mil carbonated polyethylene film; FS L-P-512.

**Reglets:** Metal or plastic units of type and profile indicated, compatible with flashing indicated, noncrossive.

**Metal Accessories:** Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed, noncrossive, size and gage required for performance.

**Roofing Cement:** Must be compatible with materials with which it comes in contact.

**FABRICATED UNITS:**

**General Metal Fabrication:** Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.

**Seams:** Fabricate nonmoving seams in sheet metal with flat-lock seams. For metal other than aluminum, tin edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer; rivet joints for additional strength where required.

**Expansion Provisions:** Where lapped or bayonet-type expansion provisions in work cannot be used, or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 2" deep, filled with mastic sealant (concealed within joints).

**Sealant Joints:** Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards.
Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

PART 3 - EXECUTION

INSTALLATION REQUIREMENTS:

General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual".

Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.

Underlayment: Where aluminum is to be installed directly on cementitious or wood substrates, install a slip sheet of red rosin paper and a course of polyethylene underlayment.

Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.

Install reglets to receive counter-flashing in manner and by methods indicated. Where shown in concrete, furnish reglets to trades of concrete work for installation as work of Division-3 sections. Where shown in masonry, furnish reglets to trades of masonry work, for installation as work of Division-4 sections.

1. Install counter-flashing in reglets, either by snap-in seal arrangement, or by wedging in place for anchorage and filling reglet with mastic or elastomeric sealant, as indicated and depending on degree of sealant exposure.

CLEANING AND PROTECTION:

Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes.

Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION
SECTION 13120 - PRE-ENGINEERED BUILDING [Revised 7.8.20]

PART 1 – GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of the Contract including General and Supplementary Conditions and Division1 Specifications sections apply to work specified in this Section.

SUMMARY:

Extent of pre-engineered buildings work is shown on drawings.

Building Type: The pre-engineered building system shown is a single story, rigid frame type metal building of the nominal length, width, eave height and roof pitch indicated.

1. Manufacturer's standard components may be used, providing components, accessories, and complete structure conform to architectural design appearance shown and to specified requirements.
2. Concrete floor and foundations and installation of anchor bolts are specified in a Division3 section. Provide anchor bolts (including sizes and lengths) and anchor bolt plan to Contractor for work by others.
3. Sealants and caulking are specified in Division7 section.
4. Provide blanket insulation under roof and inside walls as indicated on drawings and specified in Section 07200, Insulation.
5. Provide prefinished metal roof panels as indicated on drawings and specified in Section 07410, Preformed Metal Roofing.
6. Provide interior and exterior wall panels as indicated on drawings and specified in Section 07411, Metal Wall Panel and Section 09800, Acoustical Metal Wall Panel System.
7. Provide prefinished facia, vented/non-vented soffit systems, flashing, drip edge, trim, gutters and downspouts as indicated on drawings and specified in Section 07600, Flashing and Sheet Metal.

DESCRIPTION

Provide all materials, labor, equipment and services, and perform all operations in connection with the furnishing and installing of pre-engineered building, in accordance with the drawings and specifications, including the following:

1. Metal Framing Components
2. Metal Building Accessories
3. Workmanship
4. Inspection of Surfaces
5. Protection
6. Delivery, Samples and Shop Drawings
7. Guarantee and Warranty

SUBMITTALS:

Any deviation (deletions, additions or revisions thereof) from the requirements of the Contract Documents contained in a Submittal shall be clearly identified as a “Deviation from Contract Requirements” (or by similar language) within the Submittal in ‘RED’ and, in a letter transmitting the Submittal to the Architect, the Supplier and Contractor shall direct the Architect’s attention to, and request specific approval of, the specific deviations. Otherwise, the Architect’s approval of a Submittal does not constitute approval of any deviation from the requirements of the Contract Documents contained in the Submittal. Should any deviation be found at a later date, the Supplier and Contractor shall bear the responsibility and cost of all corrections required.

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MCKEE PROJECT NO. 2020.123

PRE-ENGINEERED BUILDING

13120-1

Revised 7.8.20
Product Data: Submit manufacturer's product information, specifications and installation instructions for building components and accessories. Submit sample warranty.

Shop Drawings: Submit complete erection drawings showing anchor bolts settings, sidewall, endwall, and roof framing, transverse cross sections, covering and trim details, and accessory installation details to clearly indicate proper assembly of building components.

1. The shop drawings MUST be submitted as an “overlay” drawing to the Architectural drawings.
2. The Contractor/supplier MUST provide the “overlay” drawings including the Architectural drawings in the complete submittal.
3. The “overlay” drawings must be submitted in ‘RED’ with the Architectural drawings in ‘BLACK’.

Samples: The contractor shall submit roofing samples of finished roofing system for pre-engineered buildings per Section 07410, Preformed Metal Roofing.

Certification: Submit written Certification and all structural calculations prepared and signed by a Professional Engineer, registered to practice in the State where building is to be erected, verifying that building design meets indicated loading requirements and codes of authorities having jurisdiction. Calculations shall clearly show all loads used for the design of each member. All column reactions at the foundation shall be provided for verification of the foundation design.

QUALITY ASSURANCE:

Design Criteria:

1. All items below shall be designed within the architectural design furring spaces. Refer to submittal requirements above for deviations made from the requirements of the Contract Documents.
2. Structural Framing: Design primary and secondary structural members and exterior covering materials for applicable loads and combinations of loads in accordance with the Metal Building Manufacturers Association's (MBMA) "Design Practices Manual".
3. Structural Steel: For design of structural steel members, comply with requirements of the American Institute of Steel Construction's (AISC) "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" for design requirements and allowable stresses.
4. Light Gage Steel: For design of light gage steel members, comply with requirements of the American Iron and Steel Institute's (AISI) "Specification for the Design of Cold Formed Steel Structural Members" and "Design of Light Gage Steel Diaphragms" for design requirements and allowable stresses.
6. Impact Resistance: Roof coverings installed on low-slope roofs (roof slope <2:12) shall resist impact damage based on the results of tests conducted in accordance with ASTM D 3746, ASTM D 4272, CGSB 37-GP-52M or the “Resistance to Foot Traffic Test “ FM 4470.

Design Loads: Building shall meet all applicable Codes.

1. Basic design loads include live load, wind load and up-lift, in addition to the dead load. Minimum acceptable design loads and deflection criteria are shown on the drawings.
2. Design each member to withstand stresses resulting from combinations of loads that produce the maximum allowable stresses in that member as prescribed in MBMA's "Design Practices Manual".

Manufacturer's Qualifications: Provide pre-engineered metal buildings as produced by a manufacturer with not less than 5 years successful experience in the fabrication of pre-engineered metal buildings of the type and quality required. Manufacturer will be a member of the MBMA.
Erector's Qualifications: Pre-engineered building shall be erected by a firm that has not less than 5 years successful experience in the erection of pre-engineered buildings similar to those required for this project, and that has been licensed by the manufacturer of the building system.

DELIVERY, STORAGE AND HANDLING:

Deliver and store prefabricated components, sheets, panels and other manufactured items so they will not be damaged or deformed.

Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering. Store metal sheets or panels so that water accumulations will drain freely. Do not store sheets or panels in contact with other materials which might cause staining.

PROJECT WARRANTY:

Contractor shall furnish 5 year Contractors Guarantee.

All roof warranties shall be provided to the Owner, by the Contractor at the Final Inspection to obtain the Substantial Completion.

The roof insulation shall be covered under the roof warranty as required by the manufacturer.

All roof warranties shall be provided to the Owner, by the Contractor at the Final Inspection to obtain the Substantial Completion.

Standard manufacturer’s roofing guarantees which contain language regarding the governing of the guarantee by any state other than the State of Alabama, must be amended to exclude such language and substituting the requirement that the Laws of the State of Alabama shall govern all such guarantees.

The roofing manufacture shall be required to provide documentation certifying that the roof design provided complies with the performance requirements as set forth in IBC Chapter 15, Section 1504. The documentation shall be attached to the roof warranty at the close out of the project.

PART 2 – PRODUCTS

Manufacturer: The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:

1. ACI Building Systems
2. American Buildings Company
3. Butler Buildings Company
4. Ceco Building Systems
5. Mesco Buildings
6. Morin Building Systems
7. NCI Building Systems
8. Nucor Building Systems
9. Varco-Pruden Building System

MATERIALS:

Metals:

1. Hot-Rolled Structural Shapes: Comply with requirements of ASTM A36 or A529.
2. Tubing or Pipe: Comply with requirements of ASTM A500, Grade B, ASTM A501, or A53.
3. Members Fabricated from Plate or Bar Stock: Provide 42,000 psi minimum yield strength. Comply with requirements of ASTM A529, A570 or A572.
4. Members Fabricated by Cold Forming: Comply with requirements of ASTM A607, Grade 50.
5. **Bolts for Structural Framing:** Comply with requirements of ASTM A307 or A325 as necessary for design loads and connection details.

**STRUCTURAL FRAMING:**

Rigid Frames shall be fabricated from hot-rolled structural steel. Provide built-up "I-beam" shape rigid frames consisting of either tapered or parallel flange beams and straight columns. Provide frames factory welded and shop painted. Furnish frames complete with attachment plates, bearing plates and splice members. Factory drill frames for bolted field assembly.

1. Provide length of span and spacing of frames indicated. Slight variations in length of span and frame spacing may be acceptable if necessary to meet manufacturer's standard, and if approved by the Architect.
2. Provide rigid frames at endwalls where indicated.

**End Wall Columns:** Provide factory welded, shop painted endwall columns built-up "I" shape welded plate.

**Wind Bracing:** Provide horizontal and adjustable wind bracing at roof only using diagonal cables or threaded steel rods; comply with requirements of ASTM A36 or A572, Grade D.

**Secondary Framing:**

The spacing of all purlins as shown on the drawings is diagrammatic, the Registered Professional Engineer for the Pre-Engineered Building shall be responsible for the design of the roof structure to support the framing to meet all state, federal and local code restrictions and structural requirements set forth by the structural engineer. It shall be the responsibility of the Pre-Engineered Building manufacture to coordinate with the Bidding Contractor the amount of erection required for the roof framing before bidding.

Provide not less than 16-ga. shop painted rolled formed sections for the following secondary framing members unless shown otherwise on structural contract drawings.

1. Purlins.
2. Eave struts.
3. Endwall rafters.
4. Flange bracing.
5. Sag bracing.

Provide not less than 14-ga. cold-formed galvanized steel sections for the following secondary framing members:

1. Base channels.
2. Sill angles.
3. Endwall structural members (except columns and beams).
4. Purlin spacers.

**Bolts:** Provide ASTM A307 bolts, at secondary structural connections. Provide zinc-plated or cadmium-plated bolts when structural framing components are in direct contact with roofing and siding panels. Primary structural connections to be made with ASTM A325 bolts.

**Shop Painting:** Clean surfaces to be primed of loose mill scale, rust, dirt, oil, grease, and other matter precluding paint bond. Follow procedures of SSPC-SP3 for power tool cleaning, SSPC-SP7 for brush-off blast cleaning, and SSPC-SPI for solvent cleaning.

1. Prime structural steel primary and secondary framing members. See Structural Steel 05500 page 3 - Structural Steel Prime Paint and page 5 - Shop Painting.
2. Prime galvanized members, after phosphoric acid pretreatment with manufacturer's standard zinc dust-zinc oxide primer.

**ROOFING, WALL PANELS, SHEET METAL ACCESSORIES & MISC. MATERIALS**

See Section 07410 – Preformed Metal Roofing  
See Section 07411 – Metal Wall Panels

**FACIA, SOFFIT, FLASHING, DRIP EDGE, TRIM, GUTTERS AND DOWNSPOUTS**

See Section 07600 – Flashing and Sheet Metal

**FABRICATION:**

**General:** Design prefabricated components and necessary field connections required for erection to permit easy assembly and disassembly. Fabricate components in such a manner that once assembled, they may be disassembled, repackaged and reassembled with a minimum amount of labor.

1. Clearly and legibly mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams and instruction manuals.

**Structural Framing:** Shop fabricate structural framing components to the indicated size and section complete with base plates, bearing plates and other plates required for erection, welded in place. Provide required holes for anchoring or connections either shop drilled or punched to template dimensions.

1. **Shop Connections:** Provide power riveted, bolted or welded shop connections.  
2. **Field Connections:** Provide bolted field connections.

**PART 3 – EXECUTION**

**ERECTION:**

**Framing:** Erect structural framing true to line, level and plumb, rigid and secure. Level base plates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use a non-shrinking grout to obtain uniform bearing and to maintain a level base line elevation. Moist cure grout for not less than 7 days after placement.

**Purlins and Girts:** Provide rake or gable purlins with tight fitting closure channels and fascias. Locate and space wall girts to suit door and window arrangements and heights. Secure purlins and girts to structural framing and hold rigidly to a straight line by sag rods.

**Bracing:**

Provide Temporary Cross Bracing as required for full height of bays. Temporary cross bracing shall be removed upon completion of final cross bracing.

Final Cross Bracing shall be as shown and described on the Structural Drawings. The Contractor shall furnish and install cross bracing as directed by the Structural Engineer – no exceptions. Portal frames are not permitted.

**Framed Openings:** Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical or electrical work. Securely attach to building structural frame.

**ROOFING, WALL PANELS, SHEET METAL ACCESSORIES & MISC. MATERIALS**

See Section 07410 – Preformed Metal Roofing  
See Section 07411 – Metal Wall Panels

A New Educational Facility for the  
West Morgan High School for the  
Morgan County Board of Education  
Decatur, Alabama

MCKEE PROJECT NO. 2020.123

PRE-ENGINEERED BUILDING  
13120-5

Revised 7.8.20
FACIA, SOFFIT, FLASHING, DRIP EDGE, TRIM, GUTTERS AND DOWNSPOUTS

See Section 07600 – Flashing and Sheet Metal

END OF SECTION
A New Educational Facility
for the
West Morgan High School
for the
Morgan County Board of Education
Decatur, Alabama

No. 1082
WALTER T. McKEE, JR.
MONTGOMERY, ALA.
### Door Schedule - Part D

<table>
<thead>
<tr>
<th>Room</th>
<th>Type</th>
<th>Size</th>
<th>Finish</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall</td>
<td>Common</td>
<td>8' x 8'</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>Common</td>
<td>10' x 12'</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Bath</td>
<td>Common</td>
<td>3' x 5'</td>
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<td></td>
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<tr>
<td>Kitchen</td>
<td>Common</td>
<td>8' x 10'</td>
<td>Red</td>
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<tr>
<td>Lobby</td>
<td>Common</td>
<td>16' x 20'</td>
<td>Blue</td>
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<tr>
<td>Library</td>
<td>Common</td>
<td>12' x 16'</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Conference Room</td>
<td>Common</td>
<td>14' x 22'</td>
<td>Purple</td>
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<tr>
<td>Print Shop</td>
<td>Common</td>
<td>10' x 15'</td>
<td>Pink</td>
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</tr>
<tr>
<td>Copy Room</td>
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<td>Storage</td>
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### Door Schedule - Part E

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<tr>
<td>Laboratory</td>
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<td>12' x 16'</td>
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<tr>
<td>Office</td>
<td>Mechanical</td>
<td>10' x 14'</td>
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<tr>
<td>Library</td>
<td>Mechanical</td>
<td>14' x 18'</td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td>Conference Room</td>
<td>Mechanical</td>
<td>16' x 20'</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Print Shop</td>
<td>Mechanical</td>
<td>18' x 24'</td>
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<td>Copy Room</td>
<td>Mechanical</td>
<td>12' x 18'</td>
<td>Pink</td>
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<tr>
<td>Storage</td>
<td>Mechanical</td>
<td>10' x 15'</td>
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<tr>
<td>Door 4</td>
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<tr>
<td>Door 5</td>
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<tr>
<td>Door 6</td>
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<td>48&quot; x 120&quot;</td>
<td>Black</td>
<td></td>
</tr>
</tbody>
</table>

### Sign Mounting Height

- Hallway: 8 ft
- Office: 9 ft
- Conference Room: 9 ft
- Print Shop: 9 ft
- Library: 9 ft
- Common Areas: 9 ft
- Storage: 9 ft

### Signage Notes:

- All signs must be visible from a distance of 100 ft.
- Signs must be read from both sides.
- Signs must be made of durable materials.
- Signs must be maintained and replaced as necessary.

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A. McKee and Associates

Sheet No.: A8.2

Drawn by: [Name]

Approved by: [Name]

Date: [Date]