

ADDENDUM NO. 1

TO: ALL PLAN HOLDERS

RE: BANKS FIRE STATION – CITY OF BANKS

ADDENDUM DATE: January 6, 2022

BID DATE: January 12th, 2022 – 2 P.M.

The Plans, Specifications and Contract Documents for the above referenced project are hereby modified as follows:

1. **TECHNICAL SPECIFICATIONS:** Replace Section A3 – Building with Attached Section A3 – Building Revised.

2. **CLARIFICATIONS:**
 - a. Ceiling in bathroom and conference room will be 4’x8’x1/2” drywall. No acoustical ceiling will be used.
 - b. A 3’x3’ landing must be constructed at the top of the stairs leading into the storage loft.
 - c. There are no windows or a counter shutter door in this job. Disregard those in the Technical Specifications.

ADDENDUM NO. 1 ISSUED BY:

A.L. FRANKS ENGINEERING



KIRON S. BROWNING, P.E.
Project Manager



TECHNICAL SPECIFICATIONS

SECTION A3 – BUILDING-REVISED

1. GENERAL: This section of these specifications covers the construction of the Fire Station.

- A. The intent of these metal building specifications and drawings is to establish a quality and performance level for structural design, material, durability and workmanship.
- B. All bidders must conform strictly to these specifications in their bid.
- C. The building shall be the design of a manufacturer who is regularly engaged in the fabrication of pre-engineered structures. All materials shall be new, unused, and free from defect.
- D. The metal building shall be as manufactured by Whirlwind, or approved equal.
- E. The following standards and criteria (of most recent issue) shall be used when applicable in the structural design of the building covered by this specification:

"Recommended Design Practices Manual"
Metal Bldg. Manufacturers Association

"Steel Construction Manual"
American Institute of Steel Construction

"Cold Formed Steel Design Manual"
American Iron and Steel Institute

"Aluminum Construction Manual"
The Aluminum Association

"Code for Welding in Building Construction"
American Welding Society

- F. The following criteria shall also be applicable in other phases of design:

Building Code having jurisdiction over the area in which the site is located.

Structural Steel Painting Council-Standards
Federal, Military and Commercial Standards

ASTM Standards

Ratings by:

Underwriters' Laboratories, Inc.

Factory Mutual Engineering Association for UL 580 Class 90

2. DESIGN LOADS:

- A. The basic design loads shall include live, wind, and earthquake (if applicable), in addition to dead load. All other design loads, whether they be of static, dynamic or kinetic nature, shall be considered as auxiliary loads.
- B. Combination of Loads:
 - (1) The combining of normal loads and auxiliary loads for design purposes shall be as prescribed and recommended by the Metal Building Manufacturers Association "Design Practices Manual" of recent issue.
- C. Certification:
 - (1) All bidders must submit with their bid proposal, a letter from the metal building manufacturer certifying that the building proposed will be furnished to meet or exceed all the above design load criteria and that all structural design will be in strict conformance with that prescribed in the MBMA "Design Practices Manual" of recent issue.
 - (2) After the awarding of the contract, complete structural analysis shall be submitted by the metal building manufacturer to the Engineer. The submittal shall bear the seal of a structural engineer registered in the State of Arkansas.

3. DESCRIPTION:

- A. The pre-engineered metal building covered by this specification is to be a rigid frame structure of steel (frames) rafter beams and columns, with two interim columns.
- B. The roof slope shall be 4" in 12".
- C. Interior column (supports) spacing shall be as specified by the manufacturer.

- D. Column spacing at the exterior walls and/or at the valleys shall be as shown on the construction drawings.

4. ROOF COVERING AND SUPPORTS: The roof construction shall carry an Underwriters' Laboratories Construction (Uplift) rating of not less than Class 90.

A. Roof Panels:

- (1) The exposed metal roof covering shall be standard 24 gauge "Standing Seam" panels of either zinc-coated steel or aluminum and shall be supplied with a factory (baked-on or laminated) color finish. The color finish shall be applied to the exterior (exposed) surface of the panel and shall be such composition as to provide 20 years of film and color life. Color shall be selected by the Engineer from those standards with the building manufacturer. Roof panels provide the specified load carrying capabilities and deflection requirements of this specification.
- (2) Deflection of the roof panel shall not exceed 1/180 of its span when supporting the applicable vertical live loads previously described.

B. Guarantee:

- (1) Durability of the roof panels due to rupture, structural failure or perforation shall be guaranteed for a period of 20 years by the building manufacturer. A specimen copy of the document must accompany the bid, clearly stating the conditions under which the guarantee is valid.

C. Purlins:

- (1) The purlin's configuration, thickness and spacing shall be the building manufacturer's standard provided all design criteria, including deflection, is met or exceeded.
- (2) The deflection of the purlin shall not exceed 1/240 of its span when supporting the applicable vertical live loads previously prescribed and any collateral loads required. Due to flexible ceiling.

D. Roof Openings:

- (1) Openings, 12" or smaller, may be flashed and sealed to the roof panel, providing complete structural support and weathertightness is maintained.

- (2) Openings, larger than 12" round or square, shall be framed with a welded metal base fabricated from .07" (minimum) thick aluminum. A vacuum molded base of acrylic-polyvinyl chloride shall also be considered adequate in lieu of metal. The base and its appurtenance shall be supported by the roof purlins and/or header framing (if required). The base shall have a minimum projection of 6" above the weather surface of the roof, and the configuration of the flanges shall match the roof panel. The flange-to panel joint shall be sealed with a nonhardening sealant and fastened in such a manner to provide complete support and weathertightness.

5. WALL COVERING AND SUPPORTS:

A. Wall Panels:

- (1) The wall panels shall be standard 26 gauge "R" panels of either zinc-coated steel or aluminum and shall be supplied with a factory (baked-on or laminated) color finish. The color finish shall be applied to the exterior (exposed) surface of the panel and shall be such composition as to provide 20 years of film and color life. Color shall be selected by the Engineer from those standards with the building manufacturer.
- (2) The covering width and configuration of the panel shall be the building manufacturer's standard provided all design criteria, including deflection, is met or exceeded.
- (3) The minimum span between the floor of the building and the first support girt shall be 3 feet 9 inches.
- (4) Exposed wall fasteners are self-drilling, stainless steel-capped without integral sealing washer. Color of fastener heads match the wall panel finish when specified. Concealed fasteners are self-drilling with the type and size as required by wall secondary structural members. Location and quantities of fasteners are manufacturer's standards based upon building design and/or finished appearance.

B. Guarantee:

- (1) The color (baked-on or laminated) finish for the wall panels shall be guaranteed by the building manufacturer for twenty (20) years against blistering, peeling, cracking, flaking, checking and chipping. Excessive color change and chalking shall be guaranteed for twenty (20) years. Color change shall not exceed 5 N.B.S. units

(per ASTM D2244.64T) and chalking shall not be less than a rating of 8 per ASTM D-659.

C. Girts:

- (1) The girt's configuration and thickness shall be the building manufacturer's standard provided all design criteria, including deflection and girt spacing, is met.
- (2) Based on a simple span, the deflection of the girts (supporting the wall covering) shall not exceed 1/180 of its span when supporting the applicable design load previously described.

6. STRUCTURAL STEEL PRIMER: All uncoated structural steel shall be given one (1) shop coat of rust inhibitive (primer) paint which meets or exceeds Federal Specifications TT-P664, or certification shall be submitted that it conforms to a recognized authoritative specification, such as from a Federal or Military authority or the Structural Steel Painting Council. Painting shall comply with Section A1 of these specifications. Finish coat per painting specifications.

7. INSULATION:

A. Roof:

- (1) Non-combustible roof insulation shall be R-11 3-1/2" and R-19 6" nominal thicknesses for a total of R-30 with a banded system. The combined assembly of insulation and its vapor barrier facing shall carry any Underwriters' Laboratories (U.L. Label) fire hazard rating indicating a flame spread of 25 or less.
- (2) The insulation shall be installed using the banded system and manufacturers recommendations. An overall "U" value no greater than .05 shall be provided.

B. Wall:

- (1) Noncombustible wall insulation shall be R-11 3-1/2" nominal thickness. The combined assembly of insulation and its vapor barrier facing shall carry any Underwriters' Laboratories (U.L. Label) fire hazard rating indicating a flame spread of 25 or less.

8. BUILDING ACCESSORIES:

A. Pedestrian Doors:

- (1) The standard of quality adopted for swing doors and frames shall be that established by the Steel Door Institute and that set forth as a minimum by the U. S. Department of Commerce Standard PS 4-66, relative to the manufacturer of 1¾ " thick flush steel doors.
- (2) All door sizes, swing and hand, shall be as shown on the drawings.
- (3) There shall be included all required hardware and accessories conforming to the drawings in addition to the necessary framing and fasteners required to properly install and to replace structurally the wall panels and/or framing displaced.
- (4) All door leaves, frames and astragals specified shall be manufactured from zinc-coated steel. The door leaves, frames and astragals shall be bonderized and given a baked-on prime coat of paint, shop applied.
- (5) Field cutting or burning of openings and/or wall framing shall not be permitted.
- (6) All locks shall be keyed with a Master Key system. Contractor to provide ten (10) keys.

B. Windows: All windows shall be of size and types shown on the drawings. There shall be included all required hardware and accessories conforming to the manufacturer's standards in addition to necessary framing and fasteners required to properly install and to replace structurally the wall panels and/or framing displaced. Field cutting or burning of openings and/or wall framing shall not be permitted.

- (1) Fixed or Project Aluminum Windows:
 - (a) All frame, ventilator, muntin, glazing bead and weathering members shall be Architectural Aluminum Manufacturer's Association Aluminum Alloy No. 6063 of suitable temper, extruded within commercial tolerances and free of defects impairing strength and/or durability.
 - (b) Exposed surfaces of all aluminum members, shall be a cleaned mill finish, conforming to AAMA Designation AA-M10.
- (2) Horizontal Sliding Windows:

- (a) Window units shall be furnished complete with glazed panels, screen panel, weather stripping, mastic and hardware.
 - (b) All frame sections of the window unit and insulating sash glass panels, and screened panels shall be aluminum.
- C. Metal Doors: Doors shall be the size shown on the plans with glazing if so noted. (Glazing to be 3/16".) Hollow core metal doors shall be 1³/₄" thick, made of 18 gauge metal with 16 gauge stiffeners spaced not to exceed 6". Doors shall be insulated with mineral wood.

Doors shall be furnished with standard duty cylindrical locksets, aluminum finished with A.S.A. universal strikes. Knobs shall have turn buttons on the inside. Furnish two keys with each lockset. Key doors same as D-101. Doors shall be equal to Ceco's Medallion Door. Where denoted on the plans, the doors shall have half-glass construction.

- D. Wood Doors: Doors shall be the size shown on the plans. Door shall be solid staved core door with vertical block, soft wood core. Door frame to be constructed of wood. Standard duty cylindrical locksets with two keys shall be furnished. Where noted on the drawings, the door shall be of half-glass construction.

9. OVERHEAD DOORS:

- A. Provide sectional insulated overhead doors of the dimensions and arrangements shown on the Drawings and with the following attributes:
- (1) Frame and Panels: Galvanized steel frame and steel panels, minimum 24 gauge, Grade A, structural carbon sheets, minimum fv = 33,000 psi.
 - (2) Panel Profile: Flat, ribbed or fluted.
 - (3) Track Type: Standard track.
 - (4) Operation: Automatic operation: Door Manufacturer recommendation.
 - (5) Steel Finish: Factory finished.
 - (6) Auxiliary Materials:
 - (a) Lifting handles and locking bars.

- B. Provide insulated sectional steel panels equivalent to "Series 593" Termacore Insulated Steel Door as manufactured by Overhead Door Corporation or approved equal.
- C. Doors shall be guaranteed against defective materials and workmanship for one (1) year.
- D. All doors shall be constructed to meet or exceed standard established under National Association of Garage Door Manufacturer's specifications 101-1975.

END OF SECTION