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ADDENDUM 003
RFB #1198
SUNSET MIDDLE AUDITORIUM
RELEASE DATE: 2/28/2020 at 4:30 pm

IMPORTANT NOTE TO POTENTIAL BIDDERS

**AN ADDENDUM 003
FOR THIS PROJECT HAS BEEN ISSUED.**

Please contact the offices of the project architect to review the full information regarding this bid opening date change

The Architects address and phone number is listed below:

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DATE: 02.28.2020
SUBJECT: Addendum 003
PROJECT: Sunset Middle School Auditorium
ANAS190052

This Addendum forms a part of the Contract Documents and modifies the original documents, dated 01.27.2020

2.1 GENERAL REVISIONS:

1. Pre Fab Canopies can be of aluminum components.

2.2 SPECIFICATION REVISIONS:

2. **Remove:**
Section 10 73 16-13 Metal Canopies

Replace with:
Section 10 71 13

2.3 SHEET REVISIONS:

1. See attached A3.01

END OF ADDENDUM 003

SECTION 10 71 13
ALUMINUM AWNINGS AND CANOPIES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Related work specified elsewhere includes:
 - 1. Section 05 50 00 - "Metal Fabrications"
 - 2. Section 06 10 00 - "Rough Carpentry"
 - 3. Section 07 60 00 - "Sheet Metal Flashing and Trim"
 - 4. Section 07 92 00 - "Joint Sealants"

1.02 SUMMARY:

- A. This Section includes prefinished, extruded aluminum, overhead hanger rod style manufactured canopy assemblies and all related work, as indicated on the Drawings and including in part, the following:
- B. Scope: The work in the Section includes all labor, materials, accessories, services and incidentals necessary for designing, supplying, installing and testing of the metal roofing, drainage, and systems described herein. Provide all flashing, fascia, caps, closures, trim, etc., which are associated with and/or come in contact with walkway canopy systems, in same metal and finish as roofing panels where exposed and where concealed, and make watertight junctions with work of other trades.

1.03 PERFORMANCE REQUIREMENTS:

- A. General: Design, fabricate, and install awnings to withstand loads from gravity, wind, snow, ponding, drift, seismic, and structural movement, including thermally induced movement; and to resist, without failure, other conditions of in-service use, including exposure to weather.
- B. Structural Performance: Provide awnings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Wind Loads: Determine loads based on the following minimum design wind pressures:
 - a. Wind load at the project site is **95 mph**, unless a greater wind load is indicated on Structural Drawings, or otherwise required by applicable codes and/or authorities having jurisdiction.
 - b. Uniform pressure of **20 psf**, acting upward or downward.
 - c. Wind Uplift: As a minimum, provide awning roof and vertical panel systems including supports meeting requirements of Underwriters Laboratories, Inc. for **Class 90** wind uplift resistance.
- C. Seismic Performance: Provide awnings capable of withstanding the effects of earthquake motions determined according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures," and as otherwise require by applicable codes and/or authorities having jurisdiction.
- D. Thermal Movements: Provide awnings that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections, tearing of fabric, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- E. Water Penetration: Provide roof and similar wall panel systems with no water penetration as defined in the test method, when tested in accordance with ASTM E 331 at a static air pressure differential of not less than 6.24 psf and not more than 12.0 psf.

1.04 SUBMITTALS:

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data including manufacturer's complete and current product specifications, standard details, certified product test results, installation instructions, and general recommendations, as applicable to materials and finishes for each component and for total walkway canopy system.

- C. Samples for Verification Purposes of Roof Panels, Vertical Panels and Trim, and Fascia/Gutter Sections.
 - 1. Provide sample panels 12-inches long by actual panel width, in the profile, style, color, and texture indicated. Include clips, battens, fasteners, closures, and other panel accessories.
- D. Shop Drawings showing layouts of structural support system and canopy system, roof and vertical panels, details of edge conditions, joints, corners, panel profiles, miscellaneous supports, anchorages, trim, flashings, closures, and special details. Distinguish between factory and field assembly work. The manufacturer's design Structural Engineer and technical engineering department shall approve the drawings before they are submitted.
 - 1. Shop Drawings shall be certified by manufacturer's Structural Engineer and bear his/her current, signed and dated Tennessee registration seal.

1.05 QUALITY ASSURANCE:

- A. Installer Qualifications: Engage an experienced Installer who has successfully completed at least 10 verifiable awning installations over the past 5 years, similar in material, design, and extent to those indicated for Project, and which is acceptable to manufacturer of awning products herein, as indicated by written statement by their manufacturer(s).
- B. Fabricator Qualifications: Manufacturer which has completed fabrication of at least 10 verifiable awning installations over the past 5 years, that employs experienced and skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
 - 1. Fabricator's responsibilities include in part, design and fabricating awnings and providing professional engineering services needed to assume engineering responsibility.
- C. Engineer Qualifications: A professional engineer legally authorized to practice in jurisdiction where Project is located and experienced in providing engineering services of the kind indicated that have resulted in the installation of metal awnings similar to this Project in material, design, and extent and that have a record of successful in-service performance.
- D. Superintendents and foremen, or other individual in the lead or supervisory position for any portion of the Work under this Contract shall have no less than 10-years verifiable experience in performing the type of work they are responsible for.
- E. Refer to Division 1 Section "Special Conditions" for additional information and minimum experience requirements.
- F. Source Limitations: Obtain awnings through one source from a single manufacturer.
- G. Welding: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code--Steel."
 - 2. AWS D1.2, "Structural Welding Code--Aluminum."
- H. Regulatory Requirements: Provide awnings complying with or exceeding requirements of authorities having jurisdiction.

1.06 PROJECT CONDITIONS:

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit installation of awnings in exterior locations to be performed according to manufacturers' written instructions, warranty requirements, and reviewed submittal data and shop drawings.
- B. Field Measurements: Where awning installation is indicated to fit to other work, verify dimensions of other work by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for fenestration operation throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.07 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver panels and other components so they will not be damaged or deformed. Package extruded components, vertical and roof panels for protection against transportation damage.
- B. Handling: Exercise care in unloading, storing, and erecting support system, panels and other system components to prevent bending, warping, twisting, and surface damage.

- C. Comply with manufacturer's written instructions and recommendations. Stack materials in stable and secure manner, on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering. Store metal panels so that they will not accumulate water. Do not store panels or other system components in contact with other materials that might cause staining, denting, or other surface damage.
 - 1. Any materials found stored directly on ground or paving, in standing water, etc., will be rejected, immediately removed from site, and replaced with new materials at the Contractor's expense.
 - 2. Distribute materials around the facility's structures, slabs, framing and roofs in such manner as to prevent any damage to structure, construction, improvements, etc.
- D. Deliver accessories, such as reglets, inserts, etc., which are to be installed by other trades and/or in conjunction with the work of other trades, far enough in advance so as not to delay the Work on the project.
- E. Refer to Division 1 Sections "Summary of Work" and "Special Conditions" for additional information and requirements regarding stored materials.

1.08 WARRANTY:

- A. Special Project Awnings and Wind Warranty: The manufacturer and installer shall jointly and severably, in writing, warrant that the awning / canopy system shall remain intact (without perceptible deformation), deteriorations of metals, metal finishes and other materials beyond normal weathering of applied finishes, and completely leak free for a period of **5-years** from the date of acceptance of the project (this warranty need not cover damage from winds exceeding the velocities and/or loading required by the applicable Building Code(s) as generated by a design velocity based on the 100-year probability wind speed).
 - 1. Repairs that become necessary, such as for leaks, wind damage or temperature stress while awning / canopy system is under warranty, shall be performed by the installer or manufacturer within 7-days of notification. Should for any reason, the installer not be able to perform the repairs, it shall be incumbent upon the manufacturer to do so. If repairs are not begun on time, Owner shall have work done by others and costs will be charged to the Contractor, with no detrimental effect or cancellation of the warranty.
- B. This warranty shall be in addition to, shall be in effect simultaneously with, and shall not alter other required project or product warranties or guarantees, and shall not limit other remedies available to the Owner.

PART 2 - PRODUCTS

2.01 MANUFACTURERS:

- A. Manufacturer: Subject to compliance with requirements, provide products of one of the following, equivalent in quality and design as "Basis of Design" canopy system:
 - 1. Mapes Industries, Inc.
 - 2. Peach Tree Protective Covers
 - 3. Superior Metal Products Co.
 - 4. Tennessee Valley Metals, Inc.
 - 5. Texas Aluminum Industries, Inc.
 - 6. CR Laurence / US Aluminum
- B. Product/Manufacturer Exterior Canopies: Subject to compliance with requirements, provide water-tight wall-hung, hanger rod supported canopy system and all related components equivalent to standard "20-lb Live Load Unit System", **increased as required for project site wind loads**, by one of the above named manufacturers, or other pre-approved manufacturer - properly submitted at least ten (10) days prior to original bid date in accordance with requirements of Section 01 00 00 - "Special Conditions," and subsequently accepted in writing or by addendum, and as follows:
 - 1. Corrugated Roof Deck Panels (for use except where noted as "Flush Soffit"): Decking shall consist of "cap and pan" extruded aluminum, 2 3/4-inches high, with minimum thickness of 0.075-inch. All panels shall interlock together with no exposed fasteners.

2. Flush Soffit Roof Deck Panels: Decking shall consist of 3" extruded flat soffit minimum .075" decking. All panels shall interlock together with no exposed fasteners.
3. Beams: Extruded aluminum, at least 6-inches high x 4-inches wide. Minimum metal thickness of 0.094-inch. Provide
4. Fascia: Extruded aluminum, See Drawings for size. 6-inch high x 4-inch wide minimum. Minimum metal thickness of 0.094-inch. Finish color to be selected by architect from manufacturer's standard anodized and 2-coat Kynar coated finish colors.
5. Concealed drainage. Water shall drain from covered surfaces into intermediate trough and be directed to front scupper.
6. Hanger rods and attachment hardware shall be polyester powder coated.
7. Flashings and Trim: Same metal and finish as roof deck, unless exposed to view. If exposed to view match finish colors selected by architect. Metal thickness not less than 0.040-inch.
8. Sealants: As recommended in writing by canopy manufacturer, or if not recommended by canopy manufacturer, as specified in Section 07 92 00 - "Joint Sealants."

2.02 MATERIALS:

- A. Aluminum Extrusions (minimum): Alloy and temper recommended by manufacturer for use intended and as required for proper application of finish indicated but not less than the strength and durability properties specified in ASTM B 221 for 6063-T6.
 1. Decking, beams, posts and fascia shall be extruded aluminum, alloy 6063-T6 in profile for applications indicated on the Drawings, and in greater thickness where indicated or otherwise required by the manufacturer's responsible design Engineer, by applicable codes, and/or project conditions.
- B. Aluminum Sheet (minimum): Alloy and temper recommended by manufacturer for use intended and as required for proper application of finish indicated but with not less than the strength and durability properties specified in ASTM B 209 for 5005-H15.
- C. Fasteners: All fasteners in the plane of the roof deck, wall panels and fascia/gutter shall be concealed wherever possible. No exposed fasteners which would penetrate the panels, flashings, etc., will be permitted. Penetrating type fasteners will be allowed only in the vertical plane (i.e. fastening of flashings, battens, trim, etc., and then only if neoprene washers are used externally). Materials used in all fasteners shall be non-magnetic (stainless steel). All exposed fasteners shall match adjacent material, finish and/or color. Length and diameter of screws shall be sufficient to meet design criteria.
- D. Closures: Precut closures as standard with canopy manufacturer, fabricated from same metal as that receiving closure(s), or from gray cross-linked closed-cell polyethylene composition foam, to the exact profile of the members with which it is to function.
- E. Sealants: Non-skinning, non-hardening, non-oxidizing butyl sealant, designed for metal-to-metal concealed joints. Field applied adhesive tape sealants shall be extruded polymeric butyl tape, non-skinning. Use no exposed sealants. Comply with minimum installation requirements of sealant manufacturer and Section 07900 - "Joint Sealers."
- F. Bituminous Coating: Cold-Applied asphalt mastic, SSPC-12, compounded for 15-mil dry film thickness per coat, and approved for the intended use by both the mastic and roofing manufacturers.
- G. Fasteners: Stainless steel bolts, anchors, and washers sized by canopy manufacturer. Hex screws shall be limited to concealed conditions. Exposed and visible fasteners shall be self-tapping screws wherever possible and self-drilling only as needed in finish to match adjacent metals.
- H. Non-Metallic Shrinkage-Resistant Grout:
 1. Pre-mixed, non-metallic, non-corrosive, non-staining product containing selected silica sands, portland cement, shrinkage compensating agents, plasticizing and water reducing agents, complying with CRD-621.

2. Products offered by manufacturer to comply with requirements for non-metallic, non-shrink grout include the following:
 - a. Euco N.S.; Euclid Chemical Company
 - b. Crystex; L & M Construction Chemicals.
 - c. Masterflow 713; Master Builders.
 - d. Five Star Grout; U.S. Grout Corp.
 - e. Upcon; Upco Chemical Division, USM Corp.
 - f. Propak; Protex Industries, Inc.

2.03 METAL FINISHES:

- A. Finish colors shall be selected by architect from manufacturer's standard colors.
- B.
 1. Exterior Finish – Kynar 500. Color shall be Dark Bronze

2.04 FABRICATION:

- A. General: Fabricate and finish panels, extrusions and accessories at the factory, by manufacturer's standard procedures and processes, as required to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and dimensional requirements and with structural requirements.
- B. Drainage: Unless specifically indicated otherwise, all drainage shall drain internally from the deck to the beams/fascia/gutter and out front scuppers.
- C. Flashings and Trim: Same metal and finish as roof deck unless specifically indicated otherwise, and unless other metal thickness not less than 0.040-inch is permitted by canopy manufacturer.
- D. Apply bituminous coating or other permanent separation materials on concealed panel surfaces where panels would otherwise be in direct contact with substrate materials that are noncompatible or could result in corrosion or deterioration of either material or finishes.

PART 3 - EXECUTION

3.01 GENERAL:

- A. Installer shall examine all substrates and verify that they are acceptable, which will be acknowledged and accepted by their beginning work. Installer shall verify that all expansion joints, blocking, etc., are securely anchored into place, and that substrate is clean and free of all debris or other substance detrimental to the aluminum awnings / canopy system work.
 1. Notify the Contractor in writing of conditions requiring corrections, for proper completion of the Work. Do not proceed until unsatisfactory conditions have been satisfactorily completed.

3.02 PANEL SUPPORTS AND ANCHORAGE:

- A. All panels, fascia/gutter, and other secondary structural panel support members and anchorage shall be installed in strict accordance with manufacturer's current written instructions and recommendations, and their Structural Engineer's reviewed Shop Drawings.
- B. Anchorage shall extend to concrete masonry (CMU) substrate. Brick and other veneers shall not be utilized for structural attachment of any structural component of the canopy.

3.03 INSTALLATION:

- A. General: Comply with manufacturer's current written instructions and recommendations for installation, as applicable to project conditions and supporting substrates. Anchor panels and other components of the work securely in place, with provisions for thermal and structural movement.
 1. Field cutting of panels and any other component by torch is not permitted.
- B. Accessories: Install all components required for a complete aluminum awning / canopy system, including in part, trim, copings, fascia/gutters, soffits, stops, mullions, corner units, closures, clips, seam covers, battens, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 1. Install water-tight flashing and counterflashings matching awning / canopy framing and finishes at all locations where awning / canopy system abuts buildings and other terminations at permanent construction.

- C. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of walkway canopy panel systems and accessories. Provide types of gaskets, sealants, and fillers indicated or, if not otherwise indicated, types recommended by walkway canopy manufacturer.
 - 1. Flash and seal panels to exclude weather.
 - 2. Counter flash over otherwise exposed flashings with metal and finish to match adjacent metal.
 - 3. Refer to other sections of these specifications for product and installation requirements applicable to indicated joint sealers.

- D. Installation Tolerances: Shim and align panel units within installed tolerance of 1/4-inch in 20'-0" on level/plumb/slope and location/line as indicated, and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.04 CLEANING AND PROTECTION:

- A. Damaged Units: Replace panels and other components of the work that have been damaged or have deteriorated beyond successful repair by means of finish touch-up or similar minor repair procedures, as determined solely by the Architect.
- B. Cleaning: Remove temporary protective coverings and strippable films as soon as each panel is installed. Upon completion of panel installation, clean finished surfaces as recommended in writing by walkway canopy system manufacturer, and maintain in a clean condition during construction.

END OF SECTION

