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ADDENDUM NO. 7
CLASSROOM ADDITION TO ELVIN HILL ELEMENTARY SCHOOL
Architect Job No. 25-34
January 9, 2026
DCM #2025854

BIDS DUE:
Tuesday, January 13, 2025, until
3:00 p.m., local time, held at
Shelby County Board of Education,
Facilities and Maintenance Building
125 Industrial Parkway
Columbiana, AL 35051

The Plans and Specifications are here by amended. The following supersedes all contrary and/or conflicting information and is made part of the contract documents.

SPECIFICATIONS

1. **DELETE** **SECTION 08513 – ALUMINUM WINDOWS:** IN ITS ENTIRETY.

2. **ADD** **SECTION 08520 – ALUMINUM WINDOWS:** ATTACHED TO REPLACE THE PREVIOUS ALUMINUM WINDOWS SPECIFICATION IN ITS ENTIRETY.

1.0 - GENERAL

1.1 Work Included

A. Furnish and install aluminum architectural windows complete with hardware and all related components as shown on drawings and specified in this section.

B. All windows shall be Winco (1450) Thermal AW-80 Casement Window. Peerless Windows or EFCO Windows meeting or exceeding this specification are also pre-approved. Other manufacturers requesting approval to bid their product as an equal must submit the following information 10 days prior to bid.
   1. A sample window (size and configuration) as per requirements of architect. (Only if requested by the Architect)
   2. Detail cuts and product data.
   3. Test reports documenting compliance with requirements of section 1.05.

C. Glass and Glazing
   1. All units shall be factory glazed.

1.2 Related Work

A. Section 07910 - Caulking and Sealants

1.3 Testing and Performance Requirements

A. Test Units
   1. Air, water, and structural test unit shall conform to requirements set forth in ANSI/AAMA/NWWDA 101/I.S.2-97.

B. Test Procedures and Performances
   1. All windows shall conform to ANSI/AAMA/NWWDA 101/I.S.2-97requirements for referenced window type in section 1.01B. In addition, the following specific performance requirements shall be met.
   2. Air Infiltration Test
      a. With window sash and ventilators closed and locked, test unit in accordance with ASTM E 283 at static air pressure of 6.24 psf.
      b. Air infiltration shall not exceed .1 cfm per square foot.
   3. Water Resistance Test
      a. With window sash and ventilators closed and locked, test unit in accordance with ASTM E 331 at static pressure difference of 12 psf.
      b. There shall be no uncontrolled water leakage.
   4. Uniform Load Deflection Test
      a. With window sash and ventilators closed and locked, test unit in accordance with ASTM E 330at a static air pressure difference (positive and negative) of 75.0 psf.
      b. During the course of the test, no member shall deflect more than 1/175 of its span.
   5. Uniform Load Structural Test
      a. With window sash and ventilators closed and locked, test unit in accordance with ASTM E 330 at a static air pressure difference of 75.0 psf.
      b. At conclusion of test there shall be no glass breakage, permanent damage to fasteners, hardware parts, support arms or actuating mechanisms, nor any other damage, which would cause the window to be inoperable.
   6. Condensation Resistance Test (CRF)

a. With window sash closed and locked, test unit in accordance with AAMA 1503.1.

7. Thermal Transmittance Test (Conductive U-Value)
   a. With window sash closed and locked, test unit in accordance with AAMA 1503.1.
   b. Conductive thermal transmittance (U-Value) shall not be more than .59 BTU/hr/sf/ per degrees F. **(U-Factor .59)**
8. Life Cycle Test
   a. Tested in accordance with AAMA 910, there shall be no damage to fasteners, parts, support arms, activating mechanisms, or any other damage, which would make the window inoperable. Subsequent air infiltration and water resistance tests shall not exceed specified requirements
9. Maximum Solar Heat Gain Coefficient **(SHGC) .25**
10. Maximum Visible Transmittance .35.

1.4 Quality Assurance

A. Provide test reports from AAMA accredited laboratory certifying the performance as specified in Section 1.05.

B. Test reports shall be accompanied by the window manufacturer's letter of certification stating that the tested window meets or exceeds the afore mentioned criteria for the appropriate ANSI/AAMA/NWWDA 101/I.S.2-97.

1.5 Submittals

A. Contractor or window manufacturer shall submit shop drawings, finish samples, test reports, and warranties, per requirements of architect.
   1. Shop Drawings: Include typical unit elevations, full- or half-scaled detail sections and typical installation details. Include type of glazing, screening, window finish, test reports, and warranties.
   2. Product Data: Manufacturer's specifications, recommendations and standard details for window units.
   3. Samples of materials may be requested without cost to owner, i.e. frame sections, corner samples, mullions, extrusions, anchors, and glass.
   4. Finish Samples to include full range of colors with bronzes and standard colors. Minimum of 10.

1.6 Delivery, Storage, and Handling

A. Store and handle windows and other components in strict compliance with manufacturer's instructions.

B. Protect units against damage from the elements, construction activities and other hazards before, during, and after installation.

1.7 Warranties

A. Total Window System
   1. The responsible contractor shall assume full responsibility and warrant for three years the satisfactory performance of the total window installation, which includes that of the windows hardware, glass (including insulated units), glazing, anchorage and setting system, sealing, flashing, etc. as it relates to air, water and structural adequacy as called for in the specifications and approved shop drawings.
   2. Warranty for insulated glass seal shall not be less than 10 years.
   3. Finish warranty shall not be less than 15 years.
   4. Warranties shall be issued by the window manufacturer. Prorated warranties are not acceptable.
   5. Any deficiencies due to such elements not meeting the specifications

shall be corrected by the responsible contractor at his expense during the warranty period.

2.0 - PRODUCTS

2.1 Materials

A. Aluminum
   1. Extruded aluminum shall be 6063-T6 alloy and temper, with a tensile strength of 24,000 PSI.

B. Hardware
   1. Locking handles shall be cam type and manufactured from solid zinc die cast with painted finish.
   2. Operating arms shall consist of 4-bar zinc plated steel arms or equal.

C. Weather Strip
   1. All weather strip shall be double Santoprene® thermo plastic rubber or equal.

D. Thermal Barrier:
   1. Poured-in-place structural thermal barrier shall transfer shear during bending and provide composite action between frame components.
   2. Thermal barrier pocket on aluminum extrusions shall be Azo-Braded to create a mechanical lock to improve the adhesion properties between the polyurethane polymer and the surface of the thermal barrier pocket.
   3. Window manufacturer must provide a warranty from the manufacturer of the polyurethane thermal barrier that warrants against product failure as a result of thermal shrinkage beyond 1/8 inch (3.2 mm) from each end and fracturing of the polyurethane for a period not to exceed ten years from the date of window manufacture.
   4. Thermal barrier's made of crimped in place polyamide (insulbar®) strips are not acceptable unless all strips are covered and tooled with Dow 795 silicone caulking to eliminate water migration.

E. Glass
   1. Insulated glass shall be as indicated. See Section 08810.

2.2 Fabrication

A. General
   1. All aluminum frame extrusions shall have a minimum wall thickness of .063".
   2. All aluminum vent extrusions shall have a minimum wall thickness of .125".
   3. Depth of main frame shall not be less than 4".
   4. Depth of vent shall not be less than 2".

B. Frame
   1. Frame components shall be assembled by means of mechanical fasting with screws. Joinery to be sealed with small joint sealant

C. Exterior and Interior Grid
   1. All grid pattern members shall be nominally 3/4" to 1-1/4"" wide in lite patterns shown on the window schedule. Muntin profile shall be a hollow extruded trapezoidal shape and shall be securely pinned to a

full perimeter beveled muntin base which shall be glazed directly into the glass pocket to prevent unauthorized removal. Manufacturer shall submit standard muntin profiles and dimension for architect's selection. At window manufacturer's option, muntin grids may be securely pinned to a perimeter bevel integral to the frame and/or sash. In no event shall the use of clip-on or removable muntins be used on this project.

D. Ventilator
1. All vent extrusions shall be tubular on all 4 sides.
2. Each corner shall be mitered and assembled by means mechanical fasting with screws. Joinery is sealed with small joint sealant.
3. Each vent shall have two rows of Santoprene® weather stripping installed in a specifically designed weather strip pocket for the extrusion.

E. Screens (Applicable only to windows requiring screens).
1. Extruded screen frames shall be fabricated from aluminum 6063-T6.
a. Screen mounting holes shall be pre-drilled at the factory.
b. Screen mesh shall be (enter aluminum, fiberglass, or stainless steel).
c. Screen mesh shall be so installed that the cloth may be easily replaceable.

F. Glazing
All units shall be glazed with butyl tape, silicone cap bead on the exterior, with glazing vinyl and extruded snap-in aluminum glazing bead on the interior.

G. Finish:
Finish all exposed areas of aluminum windows and components with (70% Kynar) AA-M12-C42-R1X & AAMA 2605-98 & ASCA 96.

3.0 - EXECUTION

3.1 Inspection

A. Job Conditions
1. Verify that openings are dimensionally correct and within allowable tolerances. Openings must be plumb, level, and clean. Provide a solid anchoring surface that is in accordance with approved shop drawings.

3.2 Installation

A. Use only skilled craftsmen for work to be done in accordance with approved shop drawings and specifications.

B. Set square and level aligning window faces in a single plane for each opening. Windows and materials must be set square and level. Adequately anchor window so when subjected to normal thermal movement, specified building movement, and specified wind loads, so windows will maintain a permanent position.

C. Adjust Windows for proper ease of operation after installation has been completed.

D. Contractor furnish and apply sealant, per manufacturers recommendations, to provide a weather tight installation at all opening perimeters. Wipe off excess material and leave all exposed surfaces and joints clean and smooth.

E. Use window flashings, sub-sills and end dams on all window installations.

3.3 Protection and Cleaning

A. After completion of window installation, windows shall be inspected, adjusted, and left in working order. Windows shall be left clean, free of labels, dirt, etc. Protection from this point shall be the responsibility of the General Contractor under substantial completion.

END OF SECTION