DESIGN & CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 2 TO PROJECT NO. 47725

CONSTRUCTION WORK
PROVIDE SNOW SHIELD FEATURES
EMPIRE STATE PLAZA
EAST PARKING GARAGE
PHILLIP STREET
ALBANY, NY

June 30, 2025

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

BIDDING REQUIREMENTS

1. DOCUMENT 001114 ADVERTISEMENT FOR BIDS: The last date for receipt of bids is changed from Wednesday, July 2, 2025, to 2:00pm on Wednesday, July 9, 2025.

SPECIFICATIONS

2. SECTION 107113 FIXED SUN SCREENS: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 107113 – 1 through 107113 – 7) noted "REVISED 06/30/2025".

END OF ADDENDUM

Brady Sherlock, P.E.
Director, Division of Design
Design & Construction

SECTION 107113 – FIXED SUN SCREENS

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. Engineering, fabrication, and installation of Decorative Façade Screens.

1.3 RELATED WORK SPECIFIED ELSEWHERE

A. Section 057000.0 – Decorative Metal; for aluminum extrusions attached to precast concrete building facades.

1.4 DEFINITIONS

A. Decorative Façade Screens: Exterior fire rated Architectural Decorative Tensile Mesh with fabricated vertical hemmed edges mounted with Aluminum Clamping and Tensioning System consisting of the following items:

1. Architectural Decorative Tensile Mesh.
2. Aluminum Clamping and Tensioning Systems.
3. Fasteners.

B. Maximum Working Load (MWL): Maximum static and/or dynamic load at which the product will still function without excessive friction, distortion, wear or permanent deformation of components. Above this load, bearing systems may fail, moving parts may seize and stainless steel or plastic components may begin to bend, stretch or otherwise deform. Maximum working loads shall not exceed half of the breaking load, and shall not be exceeded by maximum design loading.

C. Breaking Load (BL): The published approximate load at which a major failure can be expected to occur to some part of the structure when new. Plastic components may split, rivets may give way, shackles may break, and other metallic components may fracture. Products shall not be used at more than half of the breaking load, to provide a minimum safety factor of two. The consulting engineer shall confirm that an appropriate safety factor is employed for the purpose of the intended application and consistent with all regulations and standards.

D. The Maximum Working Loads, Breaking Loads, Minimum Yield Loads and Ultimate Loads detailed in this specification should only be considered in the context of the project application.

The consulting engineer shall confirm that an appropriate safety factor is employed for the purpose of the intended application and consistent with all regulations and standards.

1.5 REFERENCES

A. American Society for Testing and Materials (ASTM) as referenced herein and specifically the following:

1. ASTM D4851 - Standard Test Methods for Coated and Laminated Fabrics for Architectural Use.
2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
3. ASTM A307-00 - Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
4. ASTM A325-02 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.

B. American Iron and Steel Institute (AISI).

1. AISI Type 304.

C. American Welding Society (AWS).

1. AWS D1 1 - Structural Welding Code.
2. AWS 2.4 - Symbols for Welding and Nondestructive Testing.

D. Aluminum Association.

1. Specifications for Aluminum Structures.

E. National Fire Protection Association (NFPA).

1. NFPA 701 - Standard Methods of Fire Tests for Flame-Resistant Textiles and Films.

1.6 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.7 SUBMITTALS

A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.

B. Provide Qualification Data from Quality Control Submittals prior to submitting the remaining submittals in order specified below.

1. Submit Product Data, Shop Drawings, and Delegated Design submittals as one package.
2. Submit remaining Quality Controls Submittals.

3. Submit remaining submittals: Sample for verification and fabrication samples,
4. Contract Closeout Submittals.

C. Quality Control Submittals:

1. For manufacturer.
2. For Installer.
3. For delegated design engineer.
4. Sample Warranties: For special warranties.

D. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
2. Include manufacturer’s installation instructions.

E. Shop Drawings: For Decorative Façade Screens. Include plans, elevations, sections, full-size details, and attachments to other work.

1. Drawings to indicate all anchorage points along concrete structure, structural connection details, aluminum clamping and tensioning extrusion interface details, Architectural Decorative Tensile Mesh fabrication details including weld widths, and attachment details and the overall layout of mesh seaming.

F. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.

G. Delegated-Design Submittal: For Decorative Façade Screens, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

H. Contract Closeout Submittals:

1. Maintenance Data: For Decorative Façade Screens to include in maintenance manuals.

1.8 QUALITY ASSURANCE

A. Qualification Data: Fabrication and erection of a Decorative Facade Screen is limited to firms with proven experience in fabrication and construction of complex fabric membrane systems meeting the following minimum requirements:

B. Manufacturer’s Qualifications: Provide certification that the manufactuer is a member of the Advanced Textile Association (ATA); formerly Industrial Fabrics Association International (IFAI)

C. Installer Qualifications:

1. Provide the number of years that the Installer has been installing fabric structures. Installer to have been in continuous operation as a professional Fabric Membrane Structure and Decorative Façade Screen installer for a minimum of five (5) years.

2. Provide certification from the manufacturer that the Installer is certified to install Decorative Façade Screens provided by the manufacturer.
3. Provide a letter listing ten (10) projects of similar design and complexity where the Installer has erected custom PVDF coated polyester PES mech Decorative Façade Screens.

D. Delegated Design Engineer Qualifications:

1. Provide professional engineer's experience with providing delegated-design engineering services of the kind indicated, including documentation that engineer is licensed in the state in which Project is located.

    a. Engineering services to utilize Finite Element Analysis software that performs fabric form finding and takes into account fabric material properties and pre-stress characteristics.

E. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.

1. Do not change intended aesthetic effects, as judged solely by Director’s Representative, except with Director’s Representative's approval. If changes are proposed, submit comprehensive explanatory data to Director’s Representative for review.

1.9 WARRANTY

A. Special Assembly Warranty: Installer agrees to repair or replace components Decorative Facade Screen that fail in materials or workmanship within specified warranty period of one year from the date of Substantial Completion.

1. Failures include, but are not limited to, the following:

    a. Deterioration of Architectural Decorative Tensile Mesh including fabricated seams.
    b. Deterioration of Aluminum Clamping & Tensioning Extrusions and Fasteners, including metal finishes beyond normal weathering.

2. Warranty Period: Two years from date of Substantial Completion.

B. Architectural Decorative Tensile Mesh Product Warranty: Standard form in which manufacturer agrees to repair finishes or replace mesh that shows evidence of deterioration of PVDF coated polyester within specified warranty period.

1. Warranty Period: Ten years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 FABRICATION MANUFACTURER

A. Basis of Design: Provide the FlexFacades Decorative ‘Stretch’ Panel Screens supplied, engineered, fabricated by the following:

1. Manufacturer: Structurflex, LLC; 5165 Merriam Drive, Merriam, KS 66203; (816) 889-9000, www.flexfacades.com.

2.2 PERFORMANCE REQUIREMENTS

A. General: Provide a Decorative Facade Screen system that complies with requirements specified herein by testing the Subcontractor’s corresponding membrane system in accordance with the indicated test methods.

1. Architectural Decorative Tensile Mesh used on the façades to be PVDF coated polyester.

B. Structural Loads:

1. Wind Loads: As indicated on Drawings.
2. Other Design Loads: As indicated on Drawings.

C. Fire Performance:

1. Surface Burning Characteristics (ASTM E84):

a. Flame Spread: 5 max.
b. Smoke Generation (Tunnel Test): 20 max.

2. Flame Resistance (NFPA 701 Small Scale, UL 94):

a. Flame Out: 1 second after.
b. Char Length: 0.25-inch max.

D. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes:

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.3 SOURCE LIMITATIONS

A. Obtain all components of Decorative Façade Screens and accessories, from single manufacturer.

2.4 ALUMINUM CLAMPING & TENSIONING SYSTEM EXTRUSIONS

A. Extrusion Type: FlexFacades Aluminum Extrusions.

1. Horizontal Perimeter Extrusions, (FF-101) with Inset Cover (FF-303).

B. Materials:

1. Structural aluminum clamping systems: ASTM alloy 6061-T6.

C. Finish: Clear anodized.

2.5 ARCHITECTURAL DECORATIVE TENSILE MESH

A. Mesh Type: FlexFacades Type 1A Ventilated PVDF PES Mesh:

1. Product Manufacturer: Sioline, Product: Sieon Structura 235.

a. Porosity (Opacity): ca 35% open.
b. Color: Anthracite (7185).

2. Material Characteristics:

a. Yarn: 1670 Dtex.
b. Coating: PVDF lacquered polyvinyl.
c. Total Mass: 23 min. ounces/square yard min.
d. Flame Retardancy, NFPA 701: Passed.
e. ASTM E 84: Class A

2.6 FABRICATION

A. Fabricate aluminum extrusions with mitered corners and without sharp edges.

B. Stamp parts with appropriate mark number.

C. Fabricate aluminum free of oil, grease, and machining chips.

D. Tensile Mesh:

1. Take necessary care to plan and assemble the fabricated sections such that assembly has no shop patches. Seams, if any, to be patterned into a symmetrical and repetitive geometric arrangement within the assembly per fabrication manufacturer's engineering, shown on shop drawings and, where feasible, hidden by structural members. Utilize radio frequency (RF) welding bars to dull the sheen the welded seams of the said architectural decorative screen mesh.

2.7 FASTENERS:

A. Manufacturer's recommended fasteners based on qualified engineering analysis.

B. Finish: Type 304 stainless steel.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install Decorative Facade Screen and support structure plumb, level, and true.

B. Do not install damaged components.

C. Tension the Architectural Decorative Tensile Mesh between the perimeter Aluminum Clamping and Tensioning Extrusion systems.

D. Install Decorative Facade Screen and support structure per fabrication manufacturer’s instructions and approved engineered shop drawings.

3.3 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products.

C. Protect installed products and finished surfaces from damage during construction.

3.4 CLEANING

A. Clean installed products in accordance with manufacturer's instructions.

B. Do not use abrasive cleaners or power washing.

END OF SECTION 107118