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

ADDENDUM NO. 4 TO PROJECT NO. 47444

CONSTRUCTION, HVAC, PLUMBING AND ELECTRICAL WORK
REHABILITATE REST AREA
DOT REGION 9, TIOGA COUNTY
ROUTE 17/I-86
NICHOLS, NY

January 23, 2026

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.

CONSTRUCTION WORK SPECIFICATION

1. SECTION 085113 ALUMINUM WINDOWS: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 085113 – 1 thru 085113 – 5) noted "Revised 1/23/2026".

END OF ADDENDUM

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

SECTION 085113

ALUMINUM WINDOWS

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Joint Sealers: Section 079200.

1.02 REFERENCES

A. AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for windows, doors, and skylights; jointly published by the American Architectural Manufacturers Association (AAMA), the Window & Door Manufacturers Association (WDMA), and the Canadian Standards Association (CSA).

B. SMA 1004, Specifications for Aluminum Tubular Frame Screens for Windows; published by the Screen Manufacturers Association (SMA).

1.03 DEFINITIONS

A. Performance class designations according to AAMA/WDMA/CSA101/I.S.2/NAFS:
   1. AW: Architectural.
   2. HC: Heavy Commercial.
   3. C: Commercial.
   4. LC: Light Commercial.
   5. R: Residential.

B. Performance grade number according to AAMA/WDMA/CSA 101/I.S.2/NAFS:
   1. Design pressure number in pounds force per square foot used to determine the structural test pressure and water test pressure.

C. Structural Test Pressure: For uniform load structural test, is equivalent to 150 percent of the design pressure.

D. Minimum Test Size: Smallest size permitted for performance class (gateway test size). Products must be tested at minimum test size or at a size larger than minimum test size to comply with requirements for performance class.

1.04 PERFORMANCE REQUIREMENTS

A. General: Provide aluminum windows capable of complying with performance requirements indicated, based on testing manufacturer’s windows that are representative of those specified.
   1. Minimum Test Size: Size required by AAMA/WDMA 101/I.S.2/NAFS for gateway performance.

B. Structural Performance: Provide aluminum windows capable of withstanding the effects of the following loads, based on testing units representative of those indicated for Project that pass AAMA/WDMA 101/I.S.2/NAFS, Uniform Load Structural Test
   1. Design Wind Loads: Determine design wind loads applicable to Project from basic wind speed indicated in miles per hour at 33 feet above grade, according to ASCE 7-02, Section 6.5, "Method 2-Analytical Procedure" based on mean roof heights above grade indicated on Drawings.
      a. Basic Wind Speed: 110 mph.
      b. Importance Factor: 1.0.
      c. Exposure Category: B.
   2. Deflection: Design glass framing system to limit lateral deflections of glass edges to less than 1/175 of glass-edge length or 3/4 inch, whichever is less, at design pressure based on testing performed in accordance with ASTM E330 for both positive and negative pressure as defined by AAMA/WDMA/CSA 101/I.S.2/A440; Uniform Load Deflection Test or Uniform Load Structural Test.

C. Thermal Movements: Provide aluminum windows, including anchorage, 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 joint sealants, failure of connections, 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 degrees F, ambient.

1.05 SUBMITTALS

A. Shop Drawings: Show fabrication details and connections to adjacent construction.

B. Product Data: Catalog sheets, specifications, and installation instructions for each type window unit.

C. Samples:
   1. Corner section of frame, sash, and insect screen.
   2. Color Samples: Manufacturer's standard color finishes.

D. Quality Control Submittals:
   1. Installer's Qualifications Data:
      a. Name of each person who will be performing the Work and their employer's name, business address and telephone number.
      b. Names and addresses of 3 similar projects that each person has worked on during the past 5 years.

1.06 QUALITY ASSURANCE

A. Certification: Each window unit shall bear the AAMA or WDMA Certification label.

B. Qualifications: The person(s) installing the windows and their Supervisor shall be personally experienced in window installations and shall have been regularly employed by a Company installing windows for a minimum of 5 years.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver windows in protective containers, marked with identification for window location.

B. Store and handle windows in a manner that will not cause damage to the finish.

PART 2 PRODUCTS

2.01 ALUMINUM WINDOW TYPES/GRADE/PERFORMANCE CLASS

A. Comply with the AAMA/WDMA/CSA 101/I.S.2/A440, NAFS requirements for the following window designation(s):
   1. Performance Class and Grade: HC40.

B. Condensation-Resistance Factor (CRF): Provide aluminum windows tested for thermal performance according to AAMA 1503, showing a CRF of 45.

C Thermal Transmittance: Provide aluminum windows with a whole-window, U-factor maximum indicated at 15-mph exterior wind velocity and winter condition temperatures when tested according to AAMA 1503.
   1. U-Factor: 0.45 Btu/sq. ft. x h x degree F or less.

D. Solar Heat-Gain Coefficient (SHGC): Provide aluminum windows with a whole-window SHGC maximum of 0.61, determined according to NFRC 200 procedures.

2.02 MATERIALS

A. Frame and Sash Members: Extruded Aluminum, 6063 alloy T5 temper.

B. Fasteners: Aluminum or Stainless steel.
   1. Exposed Fasteners: Phillips flat-head screws. Match the finish of the member being fastened.

C. Compression Weatherstripping:
   1. Neoprene Gaskets: ASTM D 2000.
   2. PVC Gaskets: ASTM D 2287.
   3. Expanded Neoprene Gaskets: ASTM C 509

D. Sliding Weatherstripping:
   1. Woven Pile: AAMA 701.2.

E. Thermal Break: Provide manufacturer’s standard continuous thermal barrier.

F. Insect Screens: Manufacturer's standard removable unit for each operable sash, designed not to interfere with sash operation.
   1. Frame: Extruded or formed aluminum 0.040 inch minimum wall thickness, mitered or coped joints, concealed mechanical fasteners.
   2. Retainer Spline: Vinyl.
   3. Screen Mesh: Manufacturer's standard or recommended screen.

G. Bituminous Coating: Cold-applied asphalt mastic complying with SSPC-PAINT 12, compounded for 30-mil thickness per coat.

H. Type M Glass: Organically Sealed Insulating Glass Units; ASTM C 1036, applicable Type and Class for glass indicated below, quality q3 for Type I glass; manufacturer's standard edge construction of spacers and sealants permanently bonded to glass surfaces and hermetically sealed to provide a dehydrated air space 1/2 inch thick with -60 degrees F. dew point; fabricated of the following glass:
   1. Exterior Glass: Clear float glass with Low-E coating on surface 2.
   2. Interior Glass: Clear float glass.
   3. Filling: Fill air space between glass lites with air.

2.03 FINISHES

A. Prepare the aluminum surfaces for finishing in accordance with the Aluminum Association recommendations and standards.

B. Finish all exposed aluminum surfaces. Process all components of each assembly simultaneously to attain uniform color.

C. Finish: Color Anodized, NAAMM AA-M21C22A42, heavy colored, (minimum thickness 0.7 mils), integral color anodized finish.
   1. Color: As selected by the Director from manufacturer's full range of colors.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine surfaces to receive aluminum windows for defects that will adversely affect the execution and quality of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

A. Install the Work of this Section in accordance with the manufacturer's printed instructions, except as shown or specified otherwise.

B. Paint aluminum surfaces in contact with masonry or incompatible metals with bituminous coating.

C. Anchor window units securely in place, plumb, level, aligned, without warp of frames or sash.

3.03 ADJUSTING

A. Adjust operating sash and hardware for smooth operation and weathertight closure. Lubricate hardware and other moving parts, except parts in contact with weatherstripping.

3.04 CLEANING

A. Clean aluminum surfaces promptly after installation.

END OF SECTION