

*****ADDENDUM TWO*****

**BID NUMBER 13-033
Renovations to Buildings 1 & 2
Pawtucket Water Supply Board
239 Grotto Avenue
Pawtucket, Rhode Island**

August 16, 2013

NOTICE:

This Addendum modifies, amends and supplements designated part of the CONTRACT DOCUMENTS for the project identified as "Renovations to Buildings 1 & 2", 239 Grotto Avenue, Pawtucket, Rhode Island, dated April 15, 2013 and Addendum 1, dated August 15, 2013 are hereby made a part thereof by reference, and shall be as binding as though inserted in its entirety in the locations designated hereunder. It shall be the responsibility of the Contractor to notify all subcontractor and suppliers he proposes to use for the various parts of the work of any changes or modifications contained in this Addendum. No claim for additional compensation due to lack of knowledge of the contents of this Addendum will be considered.

Specifications:

1. Section 08 33 10 COILING OVERHEAD DOORS
 - a. Insert section in its entirety. (See Attached)

NOTICE TO ALL CONTRACTORS:

Contractors shall call our office to verify number of Addendum issued at least 24 hours in advance of bid submission. Failure to acknowledge receipt of this addendum on the bid form may, at the sole discretion of the Owner, serve as justification to reject bid.

END OF WRITTEN ADDENDUM

SECTION 08 33 10 - OVERHEAD COILING DOORS**PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Insulated service doors

- B. Related Sections:

- 1. Division 5 Section "Metal Fabrications" for miscellaneous steel supports.
 - 2. Division 9 Section "Painting" for finish painting of factory-primed doors.

1.3 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Design overhead coiling doors, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- B. Structural Performance, Exterior Doors: Exterior overhead coiling doors shall withstand the wind loads, the effects of gravity loads, and loads and stresses within limits and under conditions indicated according to SEI/ASCE 7.
 - 1. Wind Loads: Uniform pressure of 20 lbf/sf, acting inward and outward.
 - 2. Deflection Limits: Design overhead coiling doors to withstand design wind load without evidencing permanent deformation or disengagement of door components.
- C. Operability under Wind Load: Design overhead coiling doors to remain operable under uniform pressure of 20 lbf/sf wind load, acting inward and outward.
- D. Operation Cycles: Provide overhead coiling door components and operators capable of operating for not less than number of cycles indicated for each door. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.

1.4 SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory. Include the following:
 - 1. Construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
 - 2. Rated capacities, operating characteristics, and furnished accessories.

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- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data. Include plans, elevations, sections, details, and attachments to other work.
1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 2. Show locations of replaceable fusible links.
- C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
1. Include similar Samples of accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
1. Curtain Slats: 12 inches long.
 2. Bottom Bar: 6 inches long.
 3. Guides: 6 inches long.
 4. Brackets: 6 inches square.
 5. Hood: 6 inches square.
- E. Delegated-Design Submittal: For overhead coiling doors indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
1. Detail fabrication and assembly of seismic restraints.
 2. Summary of forces and loads on walls and jambs.
- F. Qualification Data: For qualified Installer.
- G. Seismic Qualification Certificates: For overhead coiling doors, accessories, and components, from manufacturer.
- H. Oversize Construction Certification: For door assemblies that exceed size limitations of labeled assemblies.
- I. Operating and Maintenance Data: For overhead coiling doors to include in maintenance manuals.
- 1.5 QUALITY ASSURANCE
- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for both installation and maintenance of units required for this Project.
- B. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.

1.6 WARRANTY

- A. Provide a two (2) year manufacturer's warranty warranting overhead coiling doors to be free from defects in materials and workmanship for 2-years.

PART 2 - PRODUCTS

2.1 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:
1. Steel Door Curtain Slats: Zinc-coated (galvanized), cold-rolled structural steel sheet; complying with ASTM A 653/A 653M, with G90 (Z275) zinc coating; nominal sheet thickness (coated) 0.0359 inch (0.91 mm) for exterior sheets and 0.0239 inch (0.61 mm) for interior sheets and as required to meet requirements.
 2. Insulation: Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely within slat faces. Insulation fill shall be CFC free, and an Ozone Depletion Potential of zero (0); flame spread index of zero (0); smoke developed index of ten (10). Minimum R value of 8.0 for door assembly as calculated by the ASHRAE Handbook.
 3. Metal Interior Curtain-Slat Facing: Match metal of exterior curtain-slat face.
 4. Gasket Seal: Provide insulated slats with manufacturer's standard interior-to-exterior thermal break or with continuous gaskets between slats.
- B. Endlocks for Doors: Malleable-iron casings galvanized after fabrication, secured to curtain slats with galvanized rivets or high-strength nylon. Provide locks on not less than alternate curtain slats for curtain alignment and resistance against lateral movement.
- C. Bottom Bar for Doors: Consisting of two angles, each not less than 1-1/2 by 1-1/2 by 1/8 inch thick; fabricated from manufacturer's standard hot-dip galvanized steel, to match curtain slats and finish.
- D. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

2.2 HOOD

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging. Interior mounted doors shall have internal header baffle.

1. Galvanized Steel: Nominal **0.028-inch** thick, hot-dip galvanized steel sheet with **G90** zinc coating, complying with ASTM A 653/A 653M.

2.3 LOCKING DEVICES

- A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on both left and right jamb sides, operable from coil side.
- B. Chain Lock Keeper: Suitable for padlock.

2.4 CURTAIN ACCESSORIES

- A. Weatherseals: Equip each exterior door with weather-stripping gaskets fitted to entire perimeter of door for a weathertight installation, unless otherwise indicated.
 1. At door head, use **1/8-inch** thick, replaceable, continuous sheet secured to inside of hood.
 2. At door jambs, use replaceable, adjustable, continuous, flexible, **1/8-inch** thick seals of flexible vinyl, rubber, or neoprene.
- B. Push/Pull Handles: Equip each push-up-operated or emergency-operated door with lifting handles on each side of door, finished to match door.
 1. Provide pull-down straps or pole hooks for doors more than **84 inches** high.

2.5 COUNTERBALACING MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, welded or seamless carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than **0.03 in./ft.** of span under full load.
- C. Spring Balance: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.
- D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.
- E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

2.6 DOOR ASSEMBLY

- A. Insulated Service Door: Overhead coiling door formed with curtain or metal interlocking slats.

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1. Basis of Design Product: Subject to compliance with requirements, provide ACME Rolling Doors or comparable product by one of the following:
 - a. Alpine Overhead Doors, Inc.
 - b. AlumaTek, Inc.
 - c. C.H.I Overhead Doors.
 - d. Cit-Gates.
 - e. Cookson Company.
 - f. Cornell Iron Works, Inc.
 - g. Dynamic Closures Corp.
 - h. Lawrence Roll-Up Doors, Inc.
 - i. Mahon Door Corporation.
 - j. Overhead Door Corporation.

 - B. Operation Cycles: Not less than 50,000 and 20 cycles per day.

 - C. Curtain R-Value: Minimum 8.0 for door assembly as calculated by the ASHRAE Handbook.

 - D. Door Curtain Material: Galvanized steel.

 - E. Door Curtain Slats: Flat profile slats of manufacturer's standard center to center height.
 1. Insulated-Slat Interior Facing: Metal

 - F. Curtain Jamb Guides: Galvanized steel for service doors with exposed finishing matching curtain slats. Provide continuous integral wear strips to prevent metal to metal contact and to minimize operational noise.

 - G. Hood: Match curtain material and finish.
 1. Shape: Round
 2. Mounting: Face of wall.

 - H. Locking Device: Equip door with slide bolt for padlock and chain lock keeper.

 - I. Chain hoist operator.
 1. Provide operator with through-wall shaft operation.
 2. Provide operator with manufacturer's standard removable operating arm.

 - J. Door Finish
 1. Factory Prime Finish: Manufacturer's standard baked on two coat polyester finish system in gray color.
 2. Interior Curtain-Slat Facing: Match finish of exterior curtain-slat face.

2.7 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.8 STEEL AND GALVANIZED-STEEL FINISHES

- A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install overhead coiling doors, hoods, and operators at the mounting locations indicated for each door.
- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
 - 1. Perform installation and startup checks according to manufacturer's written instructions.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
 - 3. Test door closing when activated by detector or alarm-connected fire-release system.
 - 4. Reset door-closing mechanism after successful test.

3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide weathertight fit around entire perimeter.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 08 33 10