

Invitation for Bid #15439033 New Bedford MA

Aluminum Picket Guardrail

ADDENDUM # 1 October 27, 2014

It has come to the attention of the City of New Bedford that there are questions or comments concerning the IFB for this project that should be addressed and shared with all the prospective vendors who will be submitting a proposal. The following shall be incorporated into the subject Invitation for Bid # 15439033 for Aluminum Picket Guardrail.

Question # 1: Delay of Bid & Addition of Site Visit

In view of the likelihood that it will take weeks to address the questions and concerns, the Bid Date for this procurement will be postponed to Thursday November 13, 2014 at 2:00 PM in accordance with other criteria in the Invitation for Bid document. As a means for providing an opportunity for all prospective bidders to get a first-hand look at the now completed East Rodney French section of the Hurricane Dike Walkway, a non-mandatory site walk through is scheduled for Wednesday November 5, 2014 at 10:00 AM meeting at the street gate adjacent to the boat ramp off East Rodney French Boulevard just north of Frederick Street.

A revised Specification section 2832 , two revised design sheets and a new bid price sheet accompany this addendum.

Question # 2: Responsibility for Engineering, Layout & Detailing

There was a question about Attachment #2 Specification Section 2832 Aluminum Picket Guardrail Part I Paragraph 1.02 Submittals Sub-Paragraph A concerning who is responsible for the detailed engineering of the barricade rail system and supplying of the Shop Drawings including engineering calculations stamped by a Massachusetts Registered Engineer. It has been determined that the City of New Bedford DPI will assume responsibility for initial engineering for the East Rodney French Boulevard Hurricane Dike Walkway portion and will provide an as-built record drawing to the successful bidder who will perform the final layout and detailed design and custom detailing of the aluminum picket guardrail based on the record drawing information. Therefore disregard the specific requirement mentioned above concerning engineering calculations stamped by a Massachusetts Registered Professional Engineer. The initial engineering aspects to be accomplished by DPI will include but not be limited to the following:

1. Establish a baseline traverse for local horizontal and vertical reference for precision location control along the East Rodney French Boulevard section of the Hurricane Dike.

2. Locate by instrument survey the PVC conduit projections and electrical hand-holes (for electrical lighting) along the landward side of the East Rodney French section of the Hurricane Dike and the sluice gate operators along the ocean side with sufficient accuracy to establish precise locations in reference to both horizontal baseline and vertical elevation reference.
3. Locate by instrument survey sufficient intermediate points between the PVC projection locations along the path of the proposed aluminum guardrail with sufficient accuracy to establish precise vertical grades and horizontal deflections/curves of the edge of walkway along the landward side.
4. Locate by instrument survey sufficient points along the seaward side of the walkway along the path of the proposed aluminum guardrail with sufficient accuracy to establish precise vertical grades and horizontal deflections/curves of the seaward edge of walkway.
5. Location survey will be accomplished with sufficient accuracy to provide adequate existing conditions data of the East Rodney French Boulevard Hurricane Dike Walkway section to enable layout and design of the aluminum guardrail along the landward and seaward walkway portions including the sloped ramp areas. The collected survey data will be adequate enough to allow layout and detailing of the guardrail sections along those walkway areas where customization may be necessary.

Question # 3: Design Change in Nominal Section Length

In an effort to avoid substantial customization in order to achieve proper fit and appearance the nominal straight section length is reduced from 24'-0" to 8'-0" and the intermediate posts have been increased in size to four inch (4") and redesigned to accommodate connection with the bottom, intermediate and top rails. Please refer to the revised design sheets that show three 8 foot nominal straight picket sections with two 4 inch intermediate posts to make up the nominal 24 foot spacing between light posts.

Question # 5: Size of Light Post

There was a question about the size of the light posts. The design drawings indicate the size of the light post at four (4) inch square and this is in conflict with the size of the end posts mentioned in the Specifications Part 2 Products, Paragraph 2.01 Aluminum Picket Guardrail, Sub-Paragraph F. In an effort to ensure that there is some adjustment available during installation, the light posts will be standardized at five inch (5") square and the specifications were revised accordingly.

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Question # 6: Type of Post on Ocean Side of Walkway

There was a question about the size of the post to be incorporated on the ocean side aluminum guardrail. The design will remain the same in style and in lieu of the light mounting pipe a solid cap without the Schedule 10 pipe will be used to cap the tops of the posts at the 24'-0" nominal spacing.

Question # 7: Removable Guardrail Sections

There are three locations along the East Rodney French Boulevard portion of walkway where access to a sluice gate operator will be required. The aluminum guardrail design shall incorporate an eight foot (8') section of removable guardrail at these specific locations by means of two four foot (4') hinged sections that will swing in toward the walkway away from the ocean side and be provided with hardware to enable padlocking the gated section.

Question # 8: Guardrail at Ramp Section

There was a question about whether a guardrail will be required on the ocean side of the ramp near Street Gate # 3 off East Rodney French Boulevard. The guardrail is intended to be located on both sides of every section of walkway. The particular section on the east side of the ramp will terminate at a custom made bull-nose section at the top of the ramp where it intersects with the land side guardrail that continues south along the hurricane crest walkway to the Street Gate # 3.

Question # 3: Delivery of Materials

All fabricated aluminum guardrail sections and hardware shall be delivered to the City of New Bedford Department of Public Infrastructure facility at 1105 Shawmut Avenue, New Bedford MA.

Question # 4: Change in Status for the Clark Cove Portion

In Specifications Section 2832, Part I General, Paragraph 1.01 Scope of Work, Sub-Paragraph B the Clark Cove Portion of the Scope of Work is eliminated from this procurement bid.

CITY OF NEW BEDFORD

BID PRICE SHEET

The undersigned propose to furnish the goods/services required per bid specifications to the City of New Bedford for the amount listed below

EAST RODNEY FRENCH BOULEVARD HURRICANE WALKWAY SECTION

Approximately 7000 LF of Nominal 8'-0" Straight Rake Level Guardrail sections, and 500 LF of Nominal 8'-0" Straight Rake Non-Level Guardrail sections, and 100 LF of Nominal 4'-0" Straight Rake Level Guardrail sections, and 100 LF of Nominal 4'-0" Straight Rake Non-Level Guardrail sections, and 300 LF of Custom Fabricated Compound Curved Guardrail sections.

Bid Amount \$ _____ **(numerical)**

Bid Amount _____ **(words)**

Name of Vendor:

Address: _____

()

Tel: _____

City/State/Zip: _____

Fax: **()** _____

By: _____

(Type or Print Name of Person Signing Quotation and Title)

Date: _____

(Signature)

SECTION 02832

ALUMINUM PICKET GUARDRAIL

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Furnish all materials and incidentals necessary to install the 42-inch high aluminum picket guardrail as shown on the Drawings and as specified herein.
- B. The length of fencing panels shall be as follows:

East Rodney French Boulevard Barrier Walk

- a. 500 Linear Feet of straight rake 8 foot non-level Guardrail sections
- b. 7,000 Linear Feet of straight rake 8 foot level Guardrail sections
- c. 100 Linear Feet of straight rake 4 foot level Guardrail sections
- d. 100 Linear Feet of straight rake 4 foot non-level Guardrail sections
- e. 300 Linear Feet of Custom Fabricated Compound Curved Guardrail sections

The above quantities are estimated and for comparison of bids only.

1.02 SUBMITTALS

- A. Shop Drawings: Supply shop drawings at an approved scale for location, installation, railing anchoring system, and erection of all parts of the work under this Section. Drawings shall include engineering calculations stamped by a Massachusetts Registered Professional Engineer and shall conform to the current International Building Code, Occupational Safety and Health Administration (OSHA) requirements, and the requirements specified herein. (City of New Bedford to supply as built drawings showing horizontal and vertical layout data for control and estimating of guardrail placement.)
- B. Product Information: Provide manufacturer's data showing installation and limitations in use. Supply Certificates of Compliance for all materials required for fabrication and installation. Include all conditions or limitations of the design necessary to achieve the necessary strength for the loading specified.
- C. Material Selection and Samples: Submit samples showing the complete range of colors, textures and finishes available for all components required for construction. Provide one sample segment of fence picket including post, caps, connectors and finish. The sample shall include a 5-in light post and a 4-inch intermediate post as detailed on the attached sketches.
- D. Letter certifying that railing system is in compliance with IBC and OSHA requirements.
- E. Letter of guarantee as required in paragraph 1.06 below.

1.03 REFERENCE SPECIFICATIONS

- A. Where reference is made to one of the following standards, the revision in effect at the time of the bid opening shall apply. References herein to any technical society, organization, group or body are made in accordance with the following:
 - 1. American Architectural Manufacturers Association
 - a. AAMA 611 - Voluntary Standards for Anodized Architectural Aluminum
 - 2. ASTM American Society for Testing and Materials

- a. ASTM B 209 -Specification for Aluminum and Aluminum-Alloy Sheet and Plate
 - b. ASTM B 221 - Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
 - c. ASTM B117-Practice for Operating Salt-Spray (Fog) Apparatus.
 - d. ASTM D523 – Test Method for Specular Gloss .
 - e. ASTM D714 – Test Method for Evaluating Degree of Blistering in Paint.
 - f. ASTM D822 – Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
 - g. ASTM D1654 – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
 - h. ASTM D2244 – Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
 - i. ASTM D2794 – Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
 - j. ASTM D3359 – Test Method for Measuring Adhesion by Tape Test.
3. Occupational Safety and Health Administration (OSHA)
 4. International Building Code (IBC)

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5. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.04 QUALITY ASSURANCE

- A. For each type of product required for the work of this Section, provide products of one manufacturer and source for consistency.
- B. Codes and Standards: Perform aluminum picket fence work in compliance with applicable requirements of governing authorities having jurisdiction. Workmanship and finish shall be equal to the best practice of modern shops for each item of work.
- C. The work of this Section shall be completely coordinated with the work of other Sections. Verify dimensions and work of other trades with adjoin materials of this Section before manufacturing items specified.

1.05 DELIVERY, STORAGE AND HANDLING

- A. All fence materials shall be shipped to New Bedford Massachusetts, Department of Public Infrastructure, 1105 Shawmut Avenue, New Bedford, MA.02746 and stockpiled with protective measures to ensure non-damaged, 'like new' products at the time of installation. Broken, bent, twisted or otherwise damaged products shall not be used and shall be disposed of in a legal manner to an off site location and shall be replaced with new products at no cost to the Owner.
- B. All guardrail materials shall be delivered, stored and handled in accordance with manufacturer's recommendation so as to preclude damage of any nature.

1.06 WARRANTY

- A. Provide a certificate of guarantee against defects in materials or workmanship for a period of 1 year following acceptance of work by the Engineer.

PART 2 PRODUCTS

2.01 ALUMINUM PICKET GUARDRAIL

- A. Aluminum Picket Guardrail shall conform to ARS System SP2009E 3 line aluminum picket rail extruded aluminum guard rail, Class 1 clear anodized aluminum, 42-in high with removable 8-ft panels as manufactured and distributed by American Railing Systems Inc; 1813 McClelland Avenue, Erie, PA 16510 or approved equal www.americanrailing.com. The model numbers provided herein are in reference to American Railing System's catalogue and are provided for reference only.
- B. Top Rail: 3" OD by 2-5/8" high, ARS9E.
- C. Intermediate Rail: 2" x 1" nested channels ARS68S and ARS68I.
- D. Bottom Channel: 2 inch x 1 inch open bottom, ARS68A.
- E. Line Posts: 4" square with welded top covers spaced per drawing details, ARS12P with ARS238 welded surface mount shoe. Line post spacing shall be 8 ft – 0 in and post locations shall be coordinated with lighting conduit locations within concrete slab.
- F. End Section and Light Posts: 5" square with top tenon and plate welded to top of post to receive light attachment and horizontal rail attachment clips and ARS538 welded surface mount shoe. Light post shall be 24ft-0in on center. Exact spacing shall be confirmed in the field. Light fixtures to be provided by Owner. Provide removable cap for post and tenon mount prior to fabrication of light posts. Prior to fabrication of light posts, post tenon mount dimensions shall be confirmed with lighting manufacturer/ Owner. Post locations shall be coordinated with lighting conduit locations within concrete slab.
- G. Pickets: 1.02" wide x 3/4" deep spaced at 5" OC, ARS60
- H. Post Mounting: Posts welded to cast aluminum shoes, shoes anchor bolted into substrate with stainless steel anchors with required size to transfer load

- I. Connections: Concealed fasteners; mechanically fastened using stainless steel self-tapping screws and aluminum pop rivets; weep holes where connections would interfere with free draining of trapped water.
- J. Posts shall be mounted to concrete pavement per manufacturer's instructions. Post locations shall correspond to existing light conduit sleeve locations formed within the pavement.
- K. Non-shrink grout shall be mixed as recommended by the picket manufacturer to give the necessary consistency for placing and to a minimum compressive strength of 3,000 lbs per square inch in three days.
- L. The railing system fabricator shall be responsible for design of a system adequate to conform to the requirements of OSHA, IBC and the detailed requirements of the Drawings and as specified herein.
- M. Prior to fabrication, manufacturer shall coordinate with Owner/Contractor for exact dimensions and locations of wiring in the field.
- N. There shall be no loose connections or sloppy fits in the fence framework. The fence framework shall withstand all wind and other forces due to weather.
- O. A touch up repair kit shall be provided to the Owner.

PART 3 EXECUTION

Not Needed.

END OF SECTION

