Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

February 27, 2020

SUBJECT: Route FAU 1334 (Howard Street)
Section 17-00281-00-RS (Evanston)
Cook County
Contract No. 61G30
Item 160
March 6, 2020 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. **Revised pages 137 – 145 of the Special Provisions.**
2. **Revised sheet 246 of the Plans.**

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

Jack A. Elston, P.E.
Bureau Chief, Design and Environment

CAST IRON TREE GRATES

Description. Work under this item shall consist of furnishing and installing the 4' x 6' and 4' x 10' cast iron tree grates, grate frame, P.C.C thickened slab, granular material, and lava rock mulch, as shown on the plans or as ordered by the Engineer, and specified herein, and must conform to the requirements of applicable portions of the Standard Specifications.

General Requirements.

Material
The material must be gray iron castings conforming to A.S.T.M. A48 or A-48-75, class 35 or 5B, and Article 1006.14 of the Standard Specifications. Concrete must be Class SI and conform to the requirements of Section 1020 of the Standard Specifications.

Design
Grate pattern must comply with ADA Guidelines for equal access. Tree grates will be 1.5" thick with accompanying frame. Grate will consist of two halves with 24" minimum diameter opening for trees. Grate openings must meet or exceed ADA Standard. Grate dimensions will be specified in plans or by the Commissioner. Grate halves must be bolted together with tamperproof bolts. The frames and grates shall be imprinted with cast letters indicating "City of Chicago" or "City of Evanston" at the locations indicated per the standard detail drawings included in the contract plans.

Frame
Frame must be 1 ¾" x 1 ¾" x ¼" steel frame, or must coordinate with grate dimensions, surrounding the entire perimeter of the tree pit. Frame must be manufactured with anchor tabs for concrete installation.

Finish

- Surface Preparation:

The top surface must be cleaned in accordance with Section 506 for Method 2 (power or hand tool cleaning) and must be free of all loose rust and loose mill scale.

- Coating:

Before installation, in an effort to reduce the appearance of oxidation, all surfaces (top, bottom and edges) of the grates are to be coated and rubbed with two applications of a Type 1 Membrane Curing Compound meeting the requirements of Article 1022.01 of the Standard Specifications, or alternative compound as approved by the Commissioner.

Surface preparation and coating will not be measured and paid for separately but will be included in the cost of all items listed herein.

Shop Drawings
Shop drawings of all items related to the manufacture and installation of the tree grate and frame must be submitted and approved by Engineer before fabrication.

Manufacturer
Tree grates can be supplied by the following suggested manufacturers:

a. Neenah Foundry, Neenah, Wisconsin
b. Urban Accessories, Woodinville, WA;
c. Ironsmith, Palm Desert, CA;
d. Fairweather/Olympic Foundry, Seattle, WA.

And must match in similarity the following Neenah tree grate styles; square R-8713, rectangle R-8811. See details for specific dimensions.

Fasteners
Tree grate halves must be joined together with tamper resistant bolts with tamper resistant bolt assembly packages as provided by the manufacturer. Eliminate drill tap, c'sink and assemble for (24) 3/8-16 x 2" flat hd. stnls. stl. screw with pin (kit no. 90357). Tree grates must be secured from beneath only.

Inspection
Installation assumes responsibility for performance.

Surface conditions
Examine frame, concrete ledge, or ground surface to receive grate. The seat for the grates must be cleaned prior to setting the grates. Correct conditions to comply with manufacturer's recommended installation procedures.

Opening to receive grates & frame installation
Sub-base granular material Type B must be placed and compacted to 95% proctor prior to installation of frame. Frame will then be placed on top of compacted sub-base surface. Wood forms must be placed inside frame to prevent concrete seepage into pit area, and expansion joints placed on the outside of the frame.

Tree grate frame shall be installed in thickened concrete slab at tree pit perimeter as indicated in plans
and as recommended by manufacturer.

If installing grate at back of curb, a C-channel must be installed at curb to accept tree grate frame. If installing grate at pavers on concrete slab, an L-channel must be installed at the slab to accept tree grate frame. Hilti-type Anchoring system for C-channel or L-channel must have a minimum shear capacity of 12 kips live wheel load. Detailed product information must be submitted for approval prior to installation.

Join Grate Halves
Bring tree grate halves together around tree at a level to allow easy access to underside. Join sections at preformed holes using temper-resistant bolt packages provided by manufacturer as suggested. The cost for this work and equipment will be incidental to these items.

Warranty
Manufacturer's written warranty must be handed over to Engineer prior to installation of grates.

Material under Grate
Lava rock shall be black, ½ inch diameter to 1-inch diameter, 3 inches minimum in depth, clean and free of foreign matter, sticks, stones, and clods. The cost of furnishing and installing lava rock mulch will be included in the cost of this item.
Lava rock must meet the bottom of the tree grates and filled around the opening level with grade.

The Contractor must remove all litter and plant debris before mulching. The Contractor must repair grade by raking and adding topsoil as needed, before mulching. Care must be taken not to bury leaves, stems, or vines under mulch material.

All finished mulch areas must be left smooth and level to maintain a uniform surface and appearance. All tree grate areas or work areas must be clean of debris and mulch, prior to leaving the site.

Method of Measurement. CAST IRON TREE GRATES will be measured for payment per each tree pit constructed, complete in place.

Basis of Payment. The work under this item will be paid for at the contract unit price per each as shown in the Schedule of Unit Prices for CAST IRON TREE GRATES, which price will include; all necessary excavation, furnishing and placing the granular base, forms, reinforcement, concrete, lava rock, and any other work needed to complete the construction of the tree grate supports. No separate measurement nor payment must be made for Class SI Concrete, castings, frames or other appurtenant work, the cost of which will included in the unit price each for CAST IRON TREE GRATES.

DECORATIVE GATEWAY ELEMENT

Description. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to furnish, deliver, and install ornamental metal fabrications, all mounting hardware, as shown in the Contract Plans and as herein specified, all complete and subject to the terms and conditions of the Contract, and as directed by the Engineer. Pole, foundation and all labor, tools, equipment and materials necessary to furnish, deliver and install pole and foundation is included in this pay item.

Decorative Gateway Element, as shown on the Drawings and specified herein, include but are not necessarily limited to the following:

A. Identifier- Dimensions as specified in plans
   a. Panel Assemblies
      i. Thermal or Water Jet Cut Aluminum Panels with digital graphics printed on vinyl sheeting adhered to panel
      ii. Thermal or Water Jet Cut Painted Aluminum Panels
      iii. All anchoring hardware and accessories required
   b. Cast Aluminum Mounting Collars
   c. Anchoring accessories such as straps, gussets, tubes, and couplings, including all hardware and materials required to complete, assemble and install each fabrication
   d. Warranties

General Requirements.

Fabricator Qualifications: Provide ornamental metal fabrications by a firm specializing in the type of ornamental metal work shown on the Drawings and described herein as evidenced by past experience. Upon request, the fabricator must submit such required evidence to the Engineer establishing compliance with the specified experience.

Preferred fabricators:

Duroweld, 1565 Rockland Road, Lake Bluff, IL 60044, 847-680-3064, Ron Harris or David Thomas.

Western Remac Inc, 170 Internationale Parkway, Woodridge IL, 60517, 630-972-7770

MK Signs, 4900 N Elston Ave, Chicago Il, 60630, 773-545-444, Anthony Cilia

Fabricator Responsibilities: Provide ornamental metal fabrications and accessories of the assembly by a firm having undivided responsibility for the design, fabrication and installation as shown on the Drawings and specified herein.

Graphics: Digital output ready graphics will be supplied to the Contractor by the Commissioner. The Contractor will develop finished artwork and all necessary attachments for the Identifier.

Submittals.

Product Data: For each product specified herein or on drawings.

Samples:

A. Color samples: For each color to be used for vinyl graphics, polycarbonate light ring and for painted color finishes.

B. Panel Assembly and Graphic Approval Samples: Submit 24”x24” sample of typical section of Light pole Identifier including thermal or water jet cut aluminum panel assemblies for approval of quality, connections, finish and color fidelity of all colors shown.

Shop Drawings.

A. The drawings are for design intent only. The Identifier fabricator is responsible for the proper engineering of all items. The structure, dimensions, and specifications for all items shall be indicated in the shop drawings.

B. Provide shop drawings for all items including:

1. Complete fabrication and installation drawings for each sign type. Indicate dimensions, materials, finishes, fastenings, anchorage, jointing, sealing, backing, utility requirements, rough-in, and adjacent site conditions.

2. Details: Thermal or Water Jet Cut areas, graphics, metal materials, dimensions, gages, finishes, methods of fabrication, fasteners, fittings, accessories, supports, framing and anchors. Show adjacent construction and method of anchorage of fabricated items, including electrical components.

3. Additional elements required to clearly convey the fabrication and installation requirements.

C. Minimum 1” = 1’-0” scaled color print of each ornamental metal fabricated item as shown and specified on the Drawings.

D. Shop drawings shall be signed and sealed by a licensed structural engineer responsible for their preparation.

1. Details on drawings indicate a design approach for sign fabrication but do not necessarily include all fabricating details required for the complete structural

integrity of the signs, erecting, and service at the installed locations, nor do they necessarily consider the preferred shop practices of the individual Fabricators. Therefore, it shall be the responsibility of the fabricator to perform the complete structural design of the signs and to incorporate all the reasonable safety factors necessary to protect the Owner, its representatives, and Designer against public liability. Designs which survive rational engineering analysis will be acceptable, provided that shop drawings, including structural design are approved by the Owner. Signs must meet all applicable local, state, and federal codes, as well as testing laboratory listings where required.

E. Subsequent iterations for submittal will be incidental to this item.

F. Maintenance data: For installed products, including precautions against harmful cleaning materials and methods.

G. Pre-Product Sample: One sample of pre-production casting of typical aluminum mounting collars and other accessories- bracelets, brackets, gussets, plates, straps, tubes and couplings required for assembly.

Materials.

Metal Material: Alloy and temper must be of adequate strength and durability, and capable of performing function of holding identifier securely in place without bending or deforming.

1. Aluminum Plate and Sheet: ASTM 8209, SOOS-H16, or alloy and temper as recommended by manufacturer.

2. Aluminum Extrusions: ASTM 8221, 6O63-T5, or alloy and temper as recommended by manufacturer.

3. Aluminum Bars, Rods and Wire: ASTM 8211.

4. Stainless Steel: Provide the most suitable austenitic alloy, form and finish required to produce the Work. Type 304 or 316, and low carbon Type 304L or 316L for components to be welded, unless otherwise noted.

    a. Stainless Steel Casting; Type 316

    b. Stainless Bars and Shapes; ASTM A276

Fasteners: Use fasteners fabricated from same basic metal or alloy as the metal fastened, and finished to match in color and texture, unless otherwise specified. Comply with Federal Specification (GSA) FF-S- 92 for machine screws. Do not use metals that are corrosive or incompatible with joined materials.

Mounting collars: Cast aluminum two-piece clamps to receive panel assemblies.

Vinyl sheeting with digitally printed graphics: Retroreflective vinyl sheeting shall conform with Illinois Department of Transportation Standard Specifications for Road and Bridge Construction Article 1091.03. Manufacturer shall submit product data for digital printing method for approval by Commissioner.
Provide bracelets, brackets, gussets, plates, straps, tubes and couplings with each fabricated assembly, as may be required for proper support and anchorage to the construction and for other work. Cut, reinforce, drill and tap fabricated metal work as may be required to receive other items of work.

Fabrication.

Fabricate and assemble all items in the shop and mark each item to ensure proper installation at the project site. Disassemble for shipment only to the extent required by shipping limitations.

Carefully match parts of the fabrication to maintain continuity of line and design. Joint all parts with hairline contact, flush and smooth with adjacent surfaces. Form joints exposed to weather to be watertight. Remove all mold marks so as to produce smooth, even surfaces, free of blemishes and surface shadows.

Fabricate and thermal or water jet cut to the thicknesses, sizes and shapes shown on the Drawings, or as required to produce work of adequate strength and durability, without objectionable deflections. Perform all cutting by machine. Plane cut edges which are to be welded. Use proven details of fabrication, as required to achieve proper assembly and alignment of the various components of the work. Provide finished fabrications with surfaces, exposed to view, which do not exhibit pitting, stains, marks, discolorations or other imperfections on the finished units.

Delivery and Handling.

Deliver fabrications to the project site clearly marked for proper identification. Wrap fabrications to protect finish from damage during delivery, storage and handling. Deliver to site when supporting construction is completed and prepared for fabrication installation.

Handle materials at the job site in such a manner as to prevent damage. Immediately remove from the job site, damaged or otherwise unsuitable material when so ascertained.

Examination and Preparation.

Contractor must examine all parts of supporting structures and conditions under which ornamental work is to be erected, and notify Engineer in writing of conditions detrimental to proper and timely completion of the work. Correct conditions that affect the proper installation of the ornamental metal fabrications. Fabrication and/or installation of ornamental metal and associated items constitutes acceptance of the existing conditions by the Contractor.

Field Measurements: Where ornamental fabrications are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Provide a full size Mock-Up Installation: Prior to the start of production prepare the following for the Engineer's review.

A. Panel Assemblies of cut Aluminum painted and with vinyl graphics

B. Anchoring accessories such as straps, gussets, tubes, and couplings, including all hardware and materials required to complete, assemble and install each fabrication

The Engineer's review of the mock-ups will be for final acceptance of material finish, conformance with general quality prior to production and does not relieve the Ornamental Metal Fabricator from the responsibility and conformance of requirements as herein specified.

Finish.

Metal Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

Paint Finish:

A. Color: as indicated on drawings.

B. Written approval of color by Engineer must be obtained prior to ordering and application of paint.

C. Field cleaning and touch-up painting must only be done between May 1 and October 31.

Protection: Protect fabrication surfaces and corners by covering with padding and kraft paper or plastic covering prior to shipment from the fabrication shop.

Attachments: Bracelets, collars, couplings, and hardware necessary to assemble Gateway Monument/Light pole Identifier must be provided with dimensions as shown on the Drawings. All exposed fasteners shall be stainless steel and finished to match in color and texture metal being fastened, unless otherwise specified. Do not use metals that are corrosive or incompatible with joined materials.

Installation.

Examine all surfaces and conditions of the installation to receive ornamental metal fabrications. Installation of the ornamental metal fabrications and associated construction constitutes acceptance of the existing materials and conditions.

Verify dimensions and conditions of the supporting structures at the project site.

Provide protection of in-place construction, surfaces and materials which can be damaged during the installation of this work. Patch, repair or replace any such construction damaged during the work of this section as reviewed and approved by the Commissioner at no additional cost to the Commissioner.

Set ornamental metal fabrications accurately as measured from established building lines and levels, plumb and in true alignment with existing and previously completed new work. Allow for expansion and contraction of materials and building construction.

Anchor securely in place in the manner shown on the final reviewed shop drawings and the final reviewed mock-up samples, using specified anchors. Separate aluminum and steel fabrications using plastic washers.

Do not cut or abrade finishes which cannot be completely restored in the field. Return units with such finishes to the shop for required alterations, followed by complete refinishing.

Remove protective coverings when there is no longer any danger of damage to the ornamental metal fabrications from other work yet to be performed in the same location. Restore protective coverings which have been removed or damaged during shipment or installation of the work, or if such other work is yet to be performed.

Repair and refinish all damaged surfaces of fabrications that will affect the appearance and performance of finish coatings. Submit materials and methods of surface repair and repainting to the Commissioner for review prior to application. Damaged surfaces will be repaired and refinished at no additional cost to the Commissioner. Remove and replace or remove and factory refinish any fabrication which, if after review and decision by the Commissioner, cannot be successfully field repaired at no additional cost to the Commissioner.

Method of Measurement. This work shall be measured per each DECORATIVE GATEWAY ELEMENT assembly furnished and installed.

Basis of Payment. This item of work will be paid for at the Contract Unit Price per each for DECORATIVE GATEWAY ELEMENT which will include all labor, furnishing, placing and installation, equipment, materials including painted metal and vinyl artwork panels, bracelets, mounting banner arms, mounting hardware, pole and foundation and any incidental work necessary to complete work as specified.