



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 9, 2012

SUBJECT: Lewis & Clark (Memorial Tower)
Project TE-00D8(142)
Section 10-00026-02-LS (Hartford)
Madison County
Contract No. 97484
Item 142
January 20, 2012 Letting
Addendum (A)

NOTICE TO PROSPECTIVE BIDDERS:

Due to clarify information necessary to revise the following:

1. Pages 9 - 16 of the Special Provisions.

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

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Scott Stitt, P.E.
Acting Engineer of Design and Environment

A handwritten signature in cursive script, reading "Ted B. Walschleger P.E.", with the initials "AE" written to the right.

By: Ted B. Walschleger, P.E.
Engineer of Project Management

TENSILE SHADE STRUCTURE

Tensile shade structure shall be a free-standing pre-engineered structural system, roughly 30' x 30' in dimension, shaped and located as indicated on the plans and details.

Canopy shall be octagonal in shape (as illustrated on the drawings) with side lengths of 12 feet (finished structure), and be supported by a cable-less tensioning system. Structure shall support canopy on four-11' high "T" structures fabricated of 5" (min.) diameter steel posts. Post columns shall be plumb and upper "T" segments shall be tilted so as to create a hyperbolic paraboloid shape in the canopy. Minimum clearance from pavement surface to lowest point of canopy shall be 9 feet.

Structure shall be fabricated of 5" diameter steel posts with mill finish for painting. Paint shall be metallic silver in color. The Contractor shall submit paint product information and color samples for approval by the Engineer. All connection hardware shall be 316 stainless steel. Steel and paint shall meet domestic source and application per 106.01 of the Standard Specifications.

Canopy fabric shall be durable, long lasting, high strength, light-weight, knitted, fire-rated polyethylene fabric designed for use in tensile structures and come with the manufacturer's standard UV warranty of 10 years. Canopy perimeter shall be edged with a double layer of exposed Sunbrella solution dyed, acrylic-covered polyester webbing (with no internal cable) and sewn with GoreTex Tenara thread. Fabric shall meet the following technical specifications:

FABRIC SPECIFICATIONS	WARP	WEFT
Breaking Force (AS 2001.2.3.1-2001)	134 lbf	454 lbf
Breaking Extension (AS 2001.2.3.1-2001)	86.1%	56.2%
Tear Resistance (AS 2001.2.10 -1986)	24 lbf	42 lbf
Bursting Force (AS 2001.2.19 -1986)	Face	372 lbf
Weight:	Average 7 oz. / SY	
Fire Standard Compliant: Polytex 230 meeting the following Fire Standards: NFPA 701-204, ASMT E-84 class (A) , CAFM - 1315		

Canopy color: Cappuccino.

The Contractor shall submit canopy product information and color samples for approval by the Engineer prior to preparation of shop drawings.

Canopy connection hardware shall be stainless steel.

Footing details shown on the drawings must be verified and final design completed by a Structural Engineer based on the Tensile Shade Structure manufacture selected. It is estimated that 3 cubic yards of concrete shall be required for the footings. The contractor is responsible for preparation and submittal of shop drawings (sealed by a Structural Engineer registered in the State of Illinois) of the Tensile Shade Structure (Steel Post and fabric system) and concrete footing. The design shall consider loading criteria, local building codes, wind speed (minimum 90 mph w/3 second gust) and exposure, snow loading, soil type and conditions and support/foundation details.

Potential tensile shade structure suppliers include but are not limited to:

Tensile Shade Products, LLC
525 East Roger Road
Tuscon, AZ 85705
(520) 903-0414
www.tensileshadeproducts.com

Parasol
4240 North 136th Avenue
Holland, MI 49240
(800) 354-7721
www.parasolnet.com

Shade Comforts, Inc.
77 Solano Square, Suite 238
Benicia, CA 94510
(707) 746-5080
www.shadecomforts.com

This work shall include providing all materials and required construction and installation of the complete Tensile Shade Structure as illustrated on the plans, including layout; shop drawings; site preparation, grading, excavation, backfill and compaction; reinforced concrete footings; structural steel; high-strength fabric and other incidental items. This work will be paid for at the contract unit price per each for TENSILE SHADE STRUCTURE.

BOARDWALK STRUCTURE

The proposed project includes the construction of a boardwalk as shown on the plans. The boardwalk shall be constructed according to the details shown on the plans. The Contractor is responsible for preparation and submittal of shop drawings (sealed by a Structural Engineering registered in the State of Illinois) of the footings and wood structure. The Contractor shall submit Data Sheets on each product to be used, including preparation instructions and recommendations; storage and handling requirements and recommendations; and installation methods. Coordinate work with related trades; scribe and cope timbers for accurate fit. Allow installation of related work to avoid cutting and patching. Follow all industry best practices.

The boardwalk structure concrete footings shall be constructed as shown and described on the plans and shall follow the standard practices identified in the IDOT Standard Specifications. It is estimated that 11 cubic yards of concrete are required for the footings.

The boardwalk timber shall meet all requirements identified in the Western Red Cedar Lumber Association guidelines. The manufacturer shall be a member of the Western Red Cedar Lumber Association and capable of providing all cedar timber materials specified in this section. The installer shall have five (5) years experience installing cedar timber structures of the type and size of project. The wood shall be western red cedar, grade C and better clear, saw

textured and seasoned. Discard timbers that are warped, twisted, bowed, crooked or otherwise defective. The boardwalk shall be finished with a translucent, water repellant, fungus and mildew resistant coating that is resistant to ultraviolet light.

All hardware, connectors, fasteners, nails and plates shall be double hot-dipped galvanized or stainless steel (No. 304 stainless steel) unless indicated otherwise on the plans.

This work shall include providing all materials and required construction and installation for the complete Boardwalk Structure as shown on the plans, including layout; shop drawings; site preparation, grading, excavation, backfill and compaction; construction of the reinforced concrete footings and timber structure beams, decking and curbing and all other items. This work will be paid for at the contract unit price each for BOARDWALK STRUCTURE.

IRRIGATION SYSTEM SPECIAL

This work shall consist of the construction of a system comprised of pipes, valves, sensors, couplers, sleeves, spray heads and all other necessary materials to provide for the uniform watering of trees, plants, and lawn areas as shown on the plans.

The Contractor shall provide a detailed plan showing the location of all materials, a detailed list of materials, and the manufacturer and manufacturer's specifications for each item to the Engineer for approval prior to beginning work. The plan shall also include the location of all sprinkler heads and spray patterns.

This work will be measured as lump sum.

This work will be paid for at the contract lump sum price for IRRIGATION SYSTEM SPECIAL.

REMOVE AND RELAY END SECTIONS

This work shall consist of the removal of an existing precast reinforced concrete flared end section, 12" from the end of the existing 12" concrete culvert located just south of the tower and relaying the same end section at the end of the proposed pipe culvert.

The Contractor shall construct a toe wall at the end of the relayed end section as shown on Highway Standard 542301. The joint between the proposed pipe culvert and end section shall be sealed according to the Standard Specifications.

The Contractor shall not damage the existing end section during removal, moving, and relaying operations. If the end section is damaged due to the Contractor's negligence, he/she shall replace the damaged end section with a new end section at no additional cost to the contract.

This work will be measured for payment as each.

This work will be paid for at the contract unit price per each for REMOVE AND RELAY END SECTIONS.

INTERPRETIVE SIGNAGE COMPLETE

This work shall include new signs supplied and installed by the Contractor.

Quality Assurance

- A. The structural integrity, installation methods, workmanship, finishes, appearance and durability of each of the different elements in this project shall meet or exceed the highest established industry quality standards. Execution of any testing procedures required for this quality assurance shall be the responsibility of the contractor directly in charge of each of those elements. Test results shall be documented with actual materials and/or production samples.
- B. Responsibilities
 - 1. It shall be the responsibility of the **Contractor** to furnish and install the elements, any structural support system not furnished by others, and all connections and accessories required to provide a complete installation.
 - 2. The **Contractor** shall provide concrete footings for signs requiring them. The **Contractor** shall provide templates and other needed coordination drawings to those doing the concrete work where fabricated items or their anchors are to be imbedded into concrete or masonry.
- C. Warranty

Products and workmanship for all components of the project shall be warranted for a minimum of ten (10) years from the date of final acceptance. Sign face to be warranted to cover normal wear and use, and that the product will not delaminate, peel, blister, crack or fade for a period of ten (10) years from the date of purchase.

Manufacturers and contractors shall provide copies of written statements of warranty to the **Engineer** prior to final acceptance.

Submittals

Submit the following to **Engineer** for approval:

- A. Shop Drawings of all constructed elements including plans, elevations, sections, mounting and construction details, coordination drawings to show relationship to items provided by other trades, finishes, and all materials used.

- B. Samples of all replicated metals.
- C. Product data indicating that materials for use are consistent with supplied design documents.
- D. Engineer's drawings as noted under Quality Assurance.
- F. Finish stain and paint samples.
- G. Photos of work in progress as requested by **Engineer**.
- H. All art and copy layouts prepared by **Contractor** for proofing.
 - 1. Submit lab test color sample of sign face for verification of color and resolution.
 - 2. Submit digitally created copy or graphics in full-scale size where practical; otherwise, submit material in as large a scale as practical.
 - 3. Multiple submittals may be required; allow ample time to avoid delays in work schedule.
 - 4. Allowance for final review by client for errors and omissions in image content and text content.
 - 5. Submit proofs of any art files that have been altered during the production and proofing process. Allow stage for final review by client for errors and omissions in image content and text content and submit additional proofs as required to verify corrections are in place.
- I. Records of paint or stain mixing equations and any other pertinent information for use in making repairs and replacing parts in the future.

Products

- A. Sign Face - Graphic Panels
 - 1. See panel dimensions on pages 17 and 18.
 - 2. Graphic panels are to be fabricated in (DHPL) Digital High Pressure Laminate; graphic sign material composed of plastic resins, a digitally imaged graphic, and surfaced by a layer of translucent exterior UV / graffiti overlay protection. The entire panel, including exterior overlay, bonded under heat and extreme pressure to form a composite panel.
 - 3. 12 color printing, 200 dpi or higher.
 - 4. Exterior grade with graffiti protected surface.

5. Graphic panels to be pre-drilled with threaded inserts.
- B. Sign Posts and Pedestals
1. Pedestals to be double posts constructed of aluminum.
 2. Sign posts, pedestals, and mounting plate to be powder coated in black.
 3. Bolts to be stainless steel. Bolts to be tamper resistant.

Delivery, Storage, Handling

- A. Inspect all buy-out material upon receipt from the manufacturer. Reject any defective or damaged materials and replace with new.
- B. Deliver elements to the project site in undamaged protective packaging labeled with specific contents.
- C. Delay delivery of elements until footings and other required work is complete and the construction site is ready to receive the sign elements.
- D. Any material that becomes damaged during manufacturing, shipping, or during installation shall be replaced at no additional cost to the Owner.

Project Conditions

- A. Coordinate with **Engineer** to verify location of signs, so that the signs are "Fit in Field" verified at time of installation.
- B. Coordinate installation of work with other project construction. Do not begin installation until potentially damaging conditions are corrected in the installation area. Coordinate with **Engineer**.

Installation

General

- A. Site Examination
 1. Verify that footings, blocking and backings have been installed in the appropriate locations for anchoring.
 2. Do not install work until potentially damaging construction operations in the installation areas are completed.

B. Location

1. Comply with location information on plans except where project conditions require adjustment of said locations. Coordinate with **Engineer** to verify location of signs, so that the signs are "Fit in Field" verified at time of installation.
2. Install work in correct locations, plumb and level (unless otherwise indicated), without rack or warp.
3. The **Contractor** shall provide concrete footings for signs requiring them and shall provide templates and other needed coordination drawings to those doing the concrete work where fabricated items or their anchors are to be imbedded into concrete or masonry.

C. Attachment

1. All elements are to be securely and permanently attached at locations shown unless otherwise indicated.
2. Unless indicated otherwise, conceal all fasteners. Where concealment is not possible, countersink hardware and fill.
3. Provide engineered concrete footings and integral mounting bolts as required.

Adjust And Clean

- A. Remove packing material from elements and leave units in clean condition, ready for use.
- B. Repair or remove and replace defective work as directed upon completion of installation.
- C. After installation, clean all exposed surfaces, touch-up as required, and remove or refinish damaged or soiled areas.
- D. Turn over all keys (anti-vandal hex keys) and replacement information for same to Owner.

Protection

- A. Advise **Engineer** of procedures and precautions for protection of materials and installed sign elements from damage by work of other trades.
- B. Protect sign elements against damage during remainder of construction period.

- C. Remove all temporary protection when the work is ready to be turned over to the Owner.

Basis of Payment

This work will be paid for at the contract unit price per each for INTERPRETIVE SIGNAGE COMPLETE.

For color version of the graphic panels, contact Ms. Therese McKee at Signature Design, 727 N. 1st St., Ste. 340, St. Louis, MO 63102, Phone: 314-621-6333.