DANE COUNTY DEPT. OF PUBLIC WORKS, HIGHWAY & TRANSPORTATION

1919 Alliant Energy Center Way Madison, Wisconsin 53713 Office: 608/266-4018 ♦ Fax: 608/267-1533 Public Works Engineering Division Public Works Solid Waste Division

ADDENDUM

Wednesday, January 17, 2018

ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

RFB NO. 317047 - ADDENDUM NO. 1

FRYES FEEDER CREEK SNOWMOBILE BRIDGE

<u>BIDS DUE</u>: TUESDAY, JANUARY 23, 2018, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. Section 32 34 00

1.4 Design Requirements

Change: "At minimum bridge shall be capable of supporting 20,000 lbs. vehicle load mid span" to "At minimum bridge shall be capable of supporting 14,000 lbs. vehicle load mid span".

If any additional information about this Addendum is needed, please call Ryan Shore at 608/266-4475, shore@countyofdane.com.

Sincerely, *Ryan Shore*Project Manager

Enclosures: Section 32 34 00

RFB No. 317047 - 1 - rev. 06/17

SECTION 32 34 00

PREFABRICATED STEEL BRIDGE

PART 1 GENERAL

1.1 SECTION SUMMARY

A. Section Includes

- 1. Basic Information
- 2. Features of Design
- 3. Design Requirements

1.2 BASIC INFORMATION

- A. This specification is for a clear span bridge designed to carry trail maintenance equipment (tractor units, etc.) and snowmobile traffic.
- B. Contractor is responsible for hiring a licensed Professional Engineer (PE), registered in the State of Wisconsin, to design and approve bridge and bridge end anchorage structures. Construction drawings stamped by the Engineer must be submitted to Public Works Project Manager for approval prior to beginning construction.
- C. Owner has secured all necessary County/State erosion control/waterway/zoning permits.

1.3 FEATURES OF DESIGN

A. Site Regrading

1. Re-grade bridge approaches and add 3/4" crushed limestone as needed to allow smooth transition for snowmobiles and trail maintenance equipment (tractor units, etc.).

B. Span:

- 1. Total span for the bridge shall be approximately 50-feet length.
- 2. Bridge shall be a clear span design with bridge anchorage structures on either end and no central support.
- 3. Contractor shall verify span. Location of new bridge anchorage structures shall not significantly change bridge span.

C. Width:

1. Width of usable bridge deck shall be a minimum of 12'. Usable bridge deck shall be defined as shortest distance across (perpendicular to centerline) bridge deck from any component above bridge deck.

D. Structural Steel

- 1. All structural steel shall meet ASTM-A 572 Grade 50/A992 with minimum yield strength of 50,000 psi.
- 2. All structural steel shall be primed with red oxide primer, military standard TT-P-664D.

Contractor to touch up in field as required.

3. Structural steel size shall be determined by Wisconsin licensed Professional Engineer.

E. Railings:

- 1. Railings shall be MCA treated Southern Yellow Pine #1.
- 2. Horizontal safety railings shall cover both sides of bridge for entire span of bridge. Railings shall be a minimum of 42" above bridge deck.
- 3. Additional safety protection shall be installed between bridge deck and horizontal railing for the entire span length. Protection between deck and railings shall be designed to prevent a 6" sphere from passing through.

F. Deck

- 1. Bridge deck shall be wooden deck supported on structural steel and conform to WDNR loading guidelines.
- 2. Wood shall be MCA treated Southern Yellow Pine #1. Fresh cut ends of wood shall be treated to prevent deterioration.

G. Bridge anchorage structures

- 1. Design of bridge anchorage structure is responsibility of contractor
- 2. Acceptable bridge anchorage structures types include; concrete wall bridge anchorage structures, helical pilings, portable bridge footing with riser, concrete piers, or pan-style bridge anchorage system. Bridge anchorage structures are to be designed by registered Wisconsin professional engineer. Submit stamped drawings to Public Works Project Manager.

H. Miscellaneous

- 1. All hardware shall be galvanized or stainless steel grade 304.
- 2. Provide steel tread plate as required.
- 3. All disturbed areas shall be seeded with Reinders No Mow/Low Grow (or equivalent) at rate of 6 lbs. per 1,000 sq. ft.
- 4. An urban/net free erosion control mat shall be placed over all newly seeded areas and stapled per manufacturer's instructions, including disturbed areas underneath bridge.
- 5. Contractor is responsible for ensuring design, materials, and method of construction meet DNR regulations.
- 6. Contractor will remove existing bridge from site and place on bank, in location approved by owner. Owner is responsible for disposal of existing bridge.

1.4 DESIGN REQUIRMENTS:

A. Design of bridge and bridge anchorage structures shall be done by Professional Engineer registered in the state of Wisconsin.

B. Bridge Structure:

- 1. Bridge design load shall be capable of supporting snowmobile traffic and trail maintenance equipment (tractor units, etc.) as determined by engineer.
- 2. At minimum bridge shall be capable of supporting 60 lbs. pedestrian live load per square foot.

Prefabricated Steel Bridge RFB No. 317047 32 34 00 - 2

- 3. At minimum bridge shall be capable of supporting 14,000 lbs. vehicle load mid span.
- 4. Design shall conform with Wisconsin Department of Natural Resources (WDNR) guidelines and all applicable requirements for permitting by the state of Wisconsin.

PART 2 PRODUCTS

2.1 PREFABRICATED BRIDGE MANUFACTURERS

- A. The following is a list of approved prefabricated bridge manufacturers:
 - 1. Custom Manufacturing Inc.
 - 2. Wickcraft, Inc.
 - 3. Wheeler Bridge
 - 4. American Bridge
 - 5. Continental Bridge Manufacturing
- B. See section 01 00 00 Basic Requirements, for information on requesting substitutions.

PART 3 EXECUTION

3.1 ERECTION

- A. Protect waterway from debris and pollution. All applicable county, state, and federal regulations must be followed.
- B. Contractor shall be responsible for repairing damage to site and staging areas caused by equipment or materials.
- C. Contractor responsible for erosion control methods and maintenance throughout project duration. Prior to project completion, all disturbed areas shall be temporarily covered with straw mulch by the end of the day prior to forecasted measurable rain events. All disturbed areas shall be permanently seeded and covered with urban/net free erosion control mat upon completion of the project.