

INGHAM COUNTY ROAD COMMISSION

**AUSTIN E. CAVANAUGH ADMINISTRATION BUILDING
301 Bush Street, P.O. Box 38, Mason, MI 48854-0038**

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Managing Director**

January 11, 2012

BRIDGE DESIGN - REPLACEMENT REQUEST FOR PROPOSAL

Re: Replacement of the Zimmer Road Bridge over the Red Cedar River
Section 27, Williamstown Township, Ingham County, Michigan

To whom it may concern:

The Ingham County Road Commission (ICRC) is requesting proposals to provide design, and other related professional services to replace the Zimmer Road Bridge over the Red Cedar River in accordance with the Michigan Department of Transportation (MDOT), Michigan Department of Environmental Quality (MDEQ), Michigan Department of Natural Resources (MDNR), and other required review agency requirements.

The method of securing professional engineering services will be accomplished using a two-part submittal approach. Invited consultants are requested to submit bridge design Qualification Statements and Price Proposals for services as generally described herein. Replacement of the Zimmer Road Bridge over the Red Cedar River is planned to be incorporated in a construction project that includes reconstruction of Zimmer Road from south of M-43 (Grand River Avenue) to Haslett Road. As such, all bridge design deliverables, including but not limited to, plans, specifications, and engineer's estimates are to be incorporated into the overall project documents to create one master set of contract documents. The road portion of the design will be performed by ICRC staff. Professional design services shall satisfy MDOT, Local Agency Services requirements and include, but is not limited to, the following tasks:

- ◇ Obtain and compile topographic survey information using electronic data collection equipment. Survey data shall be based on ICRC provided vertical and horizontal datum. The data shall be sufficient in scope to demonstrate conformity with existing ICRC survey data, to model existing and proposed hydraulics, perform an efficient design, and construct the new structure. Survey control points are to be permanent in nature so that they can be used for construction staking.
- ◇ Plans shall be prepared so that the Ingham County Road Commission can provide construction staking, engineering, and inspection for the project solely from coordinate information, elevation data, and dimensioning illustrated on the plans.
- ◇ Perform hydraulic modeling, scour analysis, and prepare permit applications to obtain all required permits for installation of the replacement structure.
- ◇ Obtain sufficient soils information to perform design and construction engineering. For Price Proposal purposes, plan on 4 – 75 foot borings. If mutually agreed upon, ICRC may modify the geotechnical effort or field adjust the boring depth to fit conditions during drilling operations.
- ◇ Perform social, economic, and environmental evaluations and obtain all required permits and clearance letters. Prepare MDOT programming for ICRC signature.

- ◇ Design structure using HL-93-mod loading using MDOT and AASHTO criteria.
- ◇ Prepare TS&L submittal and Grade Inspection plans, specification, and estimates for MDOT review and attend review and Grade Inspection meetings.
- ◇ Deliver all appropriate plans, special provisions, and Engineer's Estimate, in digital format, ready for Local Agency Programs processing.
- ◇ Deliver complete, MDOT approved final plans complete with P.E. seal using mylar media. Final plans shall also be delivered in 3D digital format using MicroStation V8 or V8i software.
- ◇ Provide shop drawing review and approval and limited construction engineering assistance to ICRC inspection personnel during construction.
- ◇ Provide NBI post construction inspection report, scour evaluation, and LFR load rating for the structure in accordance with NBI and MDOT criteria. Input appropriate and complete data into the MDOT, MBIS system so that ICRC is compliant with state and federal requirements.

The existing structure is a three-span, 29 foot wide x 155 foot long steel beam bridge with concrete deck and concrete substructure. The abutments are founded on wood piles and the piers are founded on spread footings. The structure was built in 1956. Existing bridge plans can be viewed at the ICRC office in Mason, upon request. ICRC has received Local Bridge Program funding for this important regional project.

The design team will need to consider a single span or multi-span continuous beam, two-lane wide bridge with a width appropriate for the proposed roadway geometrics. Determining an efficient centerline profile for the roadway, in the vicinity of the bridge, will likely be an iterative process that will need to balance proposed road vertical improvements while providing sufficient hydraulic capacity for the Red Cedar River. The consultant must coordinate design features and structure design limits with ICRC staff to optimize the two designs. Costs for that effort shall be included in their proposal. The bridge replacement plans, complementing and compatible with the road plans, shall be completed on or before December 14, 2012, so that construction can occur during early in the 2013 construction season. Lastly, a design team representative will be required to attend up to three stakeholder meetings or public hearings as part of their project design duties. Costs for those meetings are to be included in the not to exceed design fee.

Please contact the following person if you have any questions:

Robert H. Peterson, P.E.
 Director of Engineering
 Phone: (517) 676-9722 ext 336
 rpeterson@inghamcrc.org

We request that all responding consultants submit Qualification Statements and not to exceed, itemized Price Proposals, in separate sealed envelopes, by **4:00 PM, February 28, 2012**. All proposal information will be confidential, except fee information. After the design contract has been awarded, respondents will receive fee information only, so that they can individually determine where they were with respect to other respondents.

Sincerely,

INGHAM COUNTY ROAD COMMISSION



Robert H. Peterson, P.E.
 Director of Engineering