

INGHAM COUNTY ROAD COMMISSION

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

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**William M. Conklin, P.E.
Managing Director**

January 11, 2012

PROFESSIONAL SERVICES - BRIDGE PREVENTATIVE MAINTENANCE REQUEST FOR PROPOSAL

Re: Professional bridge design services for the following bridges:

1. Holt Road Bridge over Deer Creek, Sections 14 & 23, Wheatfield Township
2. Gramer Road Bridge over the Red Cedar River, Section 1, Leroy Township
3. Webberville Road Bridge over the Red Cedar River, Sections 2 & 3, Leroy Township

To whom it may concern:

The Ingham County Road Commission (ICRC) is requesting proposals to provide professional bridge design, proposal preparation, and other related services for preventative maintenance (PM) work for the Holt Road bridge, Gramer Road bridge, and Webberville Road bridge 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 bridges received Local Bridge Program funding for fiscal year 2013. ICRC proposes to have work for all three bridges contained in one project proposal and desires the PM work to begin as early as practicable in the 2013 construction season.

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. Professional design services shall satisfy ICRC and MDOT, Local Agency Services requirements including, but not limited to, the following tasks:

- ◇ Obtain and compile thorough existing condition information, sufficient enough to fully detail the PM work illustrated on the attached bridge repair cost estimates.
- ◇ Prepare plans and specifications (hereafter collectively referred to as the "proposal") so that the Ingham County Road Commission can provide construction layout, engineering, and inspection for the project solely from information contained within the proposal.
- ◇ Submit permit applications and obtain all required permits for the proposed PM work.
- ◇ Perform social, economic, and environmental evaluations and obtain all required permits and clearance letters. Prepare MDOT programming for ICRC signature.
- ◇ Prepare TS&L submittal and Grade Inspection plans, specification, and estimates for MDOT review and approval. Attend all meetings through the design and letting phases of the project.
- ◇ Deliver all appropriate plans, special provisions, and Engineer's Estimate, in digital format, in accordance with the MDOT, Local Agency Programs requirements.

- ◇ Deliver fully developed, 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 construction engineering assistance to ICRC inspection personnel during construction.

The existing structures are of similar construction; built in either 1954 or 1955 with the Holt Road structure being a single span and the other two being three-span continuous steel beam structures with continuous concrete decks. Existing bridge plans can be viewed at the ICRC office in Mason, upon request. ICRC has received \$668,000 of 2013 Local Bridge Program funding for this important regional project. The ICRC may provide all construction engineering for the project or solicit proposals from the successful design consultant to provide those services.

The project shall be ready for an early February 2013 letting, at the latest, so that construction can occur as early as possible during 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

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**2012 CALL FOR PROJECTS
BRIDGE REPAIR COST ESTIMATE**

ENGINEER: Amy Trahey DATE: 8/11/2009
LOCATION: Holt Road over Deer Creek
PRIMARY REPAIR STRATEGY: **Replace Railings, Full Paint**

DECK AREA: 778.1 SFT
DECK DIM: 27.9' (L) x 27.89' (W)

STRUCTURE ID: 33200026000B010

STR. TYPE: **Steel Multi-Stringer**

WORK ITEM	QUANTITY	DIMENSION	UNIT COST	TOTAL
NEW BRIDGE				
Multiple spans, Concrete (add demo. & road approach & traffic control)		SFT	\$135.00 /SFT	
Multiple spans, Steel (as above)		SFT	\$155.00 /SFT	
Single span (or multi span over water), Concrete (as above)		SFT	\$160.00 /SFT	
Single span (or multi span over water), Steel (as above)		SFT	\$180.00 /SFT	
Pedestrian Bridge (includes removal, add traffic control)		SFT	\$240.00 /SFT	
Other				
NEW SUPERSTRUCTURE				
Concrete (includes removal of old super & new railing, add traffic control & approach)		SFT	\$110.00 /SFT	
Steel (as above)		SFT	\$135.00 /SFT	
Over Water (add to new superstructure cost)		SFT	\$25.00 /SFT	
Other		SFT	/SFT	
WIDENING				
Added portion only, _____ ft of width (add road approach widening)		SFT	\$175.00 /SFT	
Other				
NEW DECK				
Includes removal of old deck & new railing (add traffic control & approach)		SFT	\$70.00 /SFT	
Other				
DEMOLITION				
Entire bridge, grade separation		SFT	\$27.00 /SFT	
Entire bridge, over water		SFT	\$35.00 /SFT	
Other				
SUPERSTRUCTURE REPAIR				
Concrete Deck Patch (includes hand chipping)		SFT	\$39.00 /SFT	
HMA Cap (no membrane - add bridge rail if req'd)		SFT	\$1.40 /SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$4.60 /SFT	
Removal of Concrete Wearing Course (latex) or Epoxy Overlay		SFT	\$3.00 /SFT	
Removal of HMA Overlay		SFT	\$1.00 /SFT	
Epoxy Overlay		SYD	\$32.00 /SYD	
Shallow Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$25.00 /SFT	
Deep Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$26.00 /SFT	
PCI Beam End Repair (\$2000-\$4000 per beam end)		EA	\$3,000.00 EA	
Repair Structural Steel (\$2400 bolted, \$6200 welded)		EA	\$5,000.00 EA	
High Load Hit Repair (PCI Beam)		SFT	\$210.00 /SFT	
Paint Structural Steel	1,883.3	SFT	\$9.00 /SFT	\$16,949.25
Partial Painting		SFT	\$18.00 /SFT	
Pin & Hanger replacement (includes temporary supports)		EA	\$7,650.00 EA	
Other				
SUBSTRUCTURE REPAIR				
Pier repair (measured x 2) Replace unit if spalled area > 30%		CFT	\$300.00 /CFT	
Pier repair over water (measured x 2)		CFT	\$350.00 /CFT	
Pier replacement		CFT	\$68.00 /CFT	
Abutment repair (measured x 2)	36.0	CFT	\$300.00 /CFT	\$10,800.00
Temporary Supports for Substructure Repair		EA	\$1,850.00 EA	
Slope Protection repairs		SYD	\$65.00 /SYD	
Other				
MISCELLANEOUS				
Expansion or Construction Joints (includes removal)		FT	\$480.00 /FT	
Bridge Railing, remove and replace	55.8	FT	\$225.00 /FT	\$12,555.00
Thrie Beam Railing retrofit		FT	\$32.00 /FT	
Deck Drain Extensions	2.0	EA	\$600.00 EA	\$1,200.00
Scour Countermeasures	1.0	LSUM	\$20,000.00 LSUM	\$20,000.00
Other				
ROAD WORK				
Approach Pavement, 91/2" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$8.00 /SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$38.00 /FT	
Guardrail Anchorage to Bridge (<40')	4.0	quads	\$1,400.00 /quad	\$5,600.00
Guardrail, Type B or T (beyond GR anchorage to bridge, <200')	200.0	FT	\$21.00 /FT	\$4,200.00
Guardrail Ending (end section)	4.0	EA	\$1,800.00 /EA	\$7,200.00
Roadway Approach work (beyond approach pavement)		LSUM	LSUM	
Utilities		LSUM	LSUM	
Other				
TRAFFIC CONTROL - Unit Cost to be determined by Region or TSC T&S				
Part Width Construction		LSUM	LSUM	
Crossovers		EA	\$150,000.00 EA	
Temporary Traffic Signals		set	\$18,000.00 /set	
RR Flagging		LSUM	LSUM	
Detour		LSUM	LSUM	
Other				
CONTINGENCY (10% - 20%) (use higher contingency for small projects)	20.0	%	\$79,000.00	\$16,000.00
MOBILIZATION (estimate at 5% but put "10% max" in pay item description) (per Design Update 2009-	5.0	%	\$95,000.00	\$5,000.00
INFLATION (assume 5% per year, beginning in 2009)	15.0	%	\$100,000.00	\$15,000.00

(DOES NOT INCLUDE PE & CE)

CONSTRUCTION TOTAL**\$115,000.00**

**2012 CALL FOR PROJECTS
BRIDGE REPAIR COST ESTIMATE**

ENGINEER: Amy Trahey DATE: 8/11/2009

DECK AREA: 3,537.7 SFT
DECK DIM: 119.8' (L) x 29.53' (W)

STRUCTURE ID: 33200106000B010

LOCATION: Gramer Road over Red Cedar River

PRIMARY REPAIR STRATEGY: **Replace Railings, Patch Substructure, Full Patch**STR. TYPE: **Steel Multi-Stringer**

WORK ITEM	QUANTITY	DIMENSION	UNIT COST	TOTAL
NEW BRIDGE				
Multiple spans, Concrete (add demo. & road approach & traffic control)		SFT	\$135.00 /SFT	
Multiple spans, Steel (as above)		SFT	\$155.00 /SFT	
Single span (or multi span over water), Concrete (as above)		SFT	\$160.00 /SFT	
Single span (or multi span over water), Steel (as above)		SFT	\$180.00 /SFT	
Pedestrian Bridge (includes removal, add traffic control)		SFT	\$240.00 /SFT	
Other				
NEW SUPERSTRUCTURE				
Concrete (includes removal of old super & new railing, add traffic control & approach)		SFT	\$110.00 /SFT	
Steel (as above)		SFT	\$135.00 /SFT	
Over Water (add to new superstructure cost)		SFT	\$25.00 /SFT	
Other		SFT	/SFT	
WIDENING				
Added portion only, _____ ft of width (add road approach widening)		SFT	\$175.00 /SFT	
Other				
NEW DECK				
Includes removal of old deck & new railing (add traffic control & approach)		SFT	\$70.00 /SFT	
Other				
DEMOLITION				
Entire bridge, grade separation		SFT	\$27.00 /SFT	
Entire bridge, over water		SFT	\$35.00 /SFT	
Other				
SUPERSTRUCTURE REPAIR				
Concrete Deck Patch (includes hand chipping)		SFT	\$39.00 /SFT	
HMA Cap (no membrane - add bridge rail if req'd)		SFT	\$1.40 /SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$4.60 /SFT	
Removal of Concrete Wearing Course (latex) or Epoxy Overlay		SFT	\$3.00 /SFT	
Removal of HMA Overlay		SFT	\$1.00 /SFT	
Epoxy Overlay		SYD	\$32.00 /SYD	
Shallow Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$25.00 /SFT	
Deep Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$26.00 /SFT	
PCI Beam End Repair (\$2000-\$4000 per beam end)		EA	\$3,000.00 EA	
Repair Structural Steel (\$2400 bolted, \$6200 welded)		EA	\$5,000.00 EA	
High Load Hit Repair (PCI Beam)		SFT	\$210.00 /SFT	
Paint Structural Steel	6,738.8	SFT	\$9.00 /SFT	\$60,648.75
Partial Painting		SFT	\$18.00 /SFT	
Pin & Hanger replacement (includes temporary supports)		EA	\$7,650.00 EA	
Other				
SUBSTRUCTURE REPAIR				
Pier repair (measured x 2) Replace unit if spalled area > 30%		CFT	\$300.00 /CFT	
Pier repair over water (measured x 2)		CFT	\$350.00 /CFT	
Pier replacement		CFT	\$68.00 /CFT	
Abutment repair (measured x 2)	20.0	CFT	\$300.00 /CFT	\$6,000.00
Temporary Supports for Substructure Repair		EA	\$1,850.00 EA	
Slope Protection repairs		SYD	\$65.00 /SYD	
Other				
MISCELLANEOUS				
Expansion or Construction Joints (includes removal)		FT	\$480.00 /FT	
Bridge Railing, remove and replace	239.6	FT	\$225.00 /FT	\$53,910.00
Thrie Beam Railing retrofit		FT	\$32.00 /FT	
Deck Drain Extensions		EA	\$600.00 EA	
Scour Countermeasures	1.0	LSUM	\$20,000.00 LSUM	\$20,000.00
Other				
ROAD WORK				
Approach Pavement, 91/2" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$8.00 /SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$38.00 /FT	
Guardrail Anchorage to Bridge (<40')	4.0	quads	\$1,400.00 /quad	\$5,600.00
Guardrail, Type B or T (beyond GR anchorage to bridge, <200')	200.0	FT	\$21.00 /FT	\$4,200.00
Guardrail Ending (end section)	4.0	EA	\$1,800.00 /EA	\$7,200.00
Roadway Approach work (beyond approach pavement)		LSUM	LSUM	
Utilities	1.0	LSUM	\$7,500.00 LSUM	\$7,500.00
Other				
TRAFFIC CONTROL - Unit Cost to be determined by Region or TSC T&S				
Part Width Construction	1.0	LSUM	\$25,000.00 LSUM	\$25,000.00
Crossovers		EA	\$150,000.00 EA	
Temporary Traffic Signals		set	\$18,000.00 /set	
RR Flagging		LSUM	LSUM	
Detour		LSUM	LSUM	
Other				
CONTINGENCY (10% - 20%) (use higher contingency for small projects)	20.0	%	\$190,000.00	\$38,000.00
MOBILIZATION (estimate at 5% but put "10% max" in pay item description) (per Design Update 2009-	5.0	%	\$228,000.00	\$11,000.00
INFLATION (assume 3% per year, beginning in 2009)	15.0	%	\$239,000.00	\$36,000.00

(DOES NOT INCLUDE PE & CE)

CONSTRUCTION TOTAL**\$275,000.00**

**2012 CALL FOR PROJECTS
BRIDGE REPAIR COST ESTIMATE**

ENGINEER: Amy Trahey DATE: 8/11/2009
LOCATION: Webberville Road over Red Cedar River
PRIMARY REPAIR STRATEGY: **Replace Railings, Full Paint**

DECK AREA: 3,537.7 SFT
DECK DIM: 119.8' (L) x 29.53' (W)

STRUCTURE ID: 33200104000B010

STR. TYPE: **Steel Multi-Stringer**

WORK ITEM	QUANTITY	DIMENSION	UNIT COST	TOTAL
NEW BRIDGE				
Multiple spans, Concrete (add demo. & road approach & traffic control)		SFT	\$135.00 /SFT	
Multiple spans, Steel (as above)		SFT	\$155.00 /SFT	
Single span (or multi span over water), Concrete (as above)		SFT	\$160.00 /SFT	
Single span (or multi span over water), Steel (as above)		SFT	\$180.00 /SFT	
Pedestrian Bridge (includes removal, add traffic control)		SFT	\$240.00 /SFT	
Other				
NEW SUPERSTRUCTURE				
Concrete (includes removal of old super & new railing, add traffic control & approach)		SFT	\$110.00 /SFT	
Steel (as above)		SFT	\$135.00 /SFT	
Over Water (add to new superstructure cost)		SFT	\$25.00 /SFT	
Other		SFT	/SFT	
WIDENING				
Added portion only. _____ ft of width (add road approach widening)		SFT	\$175.00 /SFT	
Other				
NEW DECK				
Includes removal of old deck & new railing (add traffic control & approach)		SFT	\$70.00 /SFT	
Other				
DEMOLITION				
Entire bridge, grade separation		SFT	\$27.00 /SFT	
Entire bridge, over water		SFT	\$35.00 /SFT	
Other				
SUPERSTRUCTURE REPAIR				
Concrete Deck Patch (includes hand chipping)		SFT	\$39.00 /SFT	
HMA Cap (no membrane - add bridge rail if req'd)		SFT	\$1.40 /SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$4.60 /SFT	
Removal of Concrete Wearing Course (latex) or Epoxy Overlay		SFT	\$3.00 /SFT	
Removal of HMA Overlay		SFT	\$1.00 /SFT	
Epoxy Overlay		SYD	\$32.00 /SYD	
Shallow Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$25.00 /SFT	
Deep Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$26.00 /SFT	
PCI Beam End Repair (\$2000-\$4000 per beam end)		EA	\$3,000.00 EA	
Repair Structural Steel (\$2400 bolted, \$6200 welded)		EA	\$5,000.00 EA	
High Load Hit Repair (PCI Beam)		SFT	\$210.00 /SFT	
Paint Structural Steel	8,086.5	SFT	\$9.00 /SFT	\$72,778.50
Partial Painting		SFT	\$18.00 /SFT	
Pin & Hanger replacement (includes temporary supports)		EA	\$7,650.00 EA	
Other				
SUBSTRUCTURE REPAIR				
Pier repair (measured x 2) Replace unit if spalled area > 30%		CFT	\$300.00 /CFT	
Pier repair over water (measured x 2)		CFT	\$350.00 /CFT	
Pier replacement		CFT	\$68.00 /CFT	
Abutment repair (measured x 2)		CFT	\$300.00 /CFT	
Temporary Supports for Substructure Repair		EA	\$1,850.00 EA	
Slope Protection repairs		SYD	\$65.00 /SYD	
Other				
MISCELLANEOUS				
Expansion or Construction Joints (includes removal)		FT	\$480.00 /FT	
Bridge Railing, remove and replace	239.6	FT	\$225.00 /FT	\$53,910.00
Thrie Beam Railing retrofit		FT	\$32.00 /FT	
Deck Drain Extensions	6.0	EA	\$600.00 EA	\$3,600.00
Scour Countermeasures	1.0	LSUM	\$20,000.00 LSUM	\$20,000.00
Other				
ROAD WORK				
Approach Pavement, 91/2" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$8.00 /SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$38.00 /FT	
Guardrail Anchorage to Bridge (<40')	4.0	quads	\$1,400.00 /quad	\$5,600.00
Guardrail, Type B or T (beyond GR anchorage to bridge, <200')	200.0	FT	\$21.00 /FT	\$4,200.00
Guardrail Ending (end section)	4.0	EA	\$1,800.00 /EA	\$7,200.00
Roadway Approach work (beyond approach pavement)		LSUM	LSUM	
Utilities		LSUM	LSUM	
Other				
TRAFFIC CONTROL - Unit Cost to be determined by Region or TSC T&S				
Part Width Construction	1.0	LSUM	\$25,000.00 LSUM	\$25,000.00
Crossovers		EA	\$150,000.00 EA	
Temporary Traffic Signals		set	\$18,000.00 /set	
RR Flagging		LSUM	LSUM	
Detour		LSUM	LSUM	
Other				
CONTINGENCY (10% - 20%) (use higher contingency for small projects)	20.0	%	\$192,000.00	\$38,000.00
MOBILIZATION (estimate at 5% but put "10% max" in pay item description) (per Design Update 2009-	5.0	%	\$230,000.00	\$12,000.00
INFLATION (assume 5% per year, beginning in 2009)	15.0	%	\$242,000.00	\$36,000.00

(DOES NOT INCLUDE PE & CE)

CONSTRUCTION TOTAL

\$278,000.00