



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

RICK SNYDER
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

January 30, 2012

Mr. John D. Niemela, Director
County Road Association of Michigan
P.O. Box 12067
Lansing, Michigan 48901-2067

Mr. Matt Bach, Director of Communications
Michigan Municipal League
320 N. Washington Square, Suite 100
Lansing, Michigan 48933-1288

Dear Mr. Niemela and Mr. Bach:

LOCAL BRIDGE PROGRAM
Deadline For Applications – MAY 1, 2012

The Michigan Department of Transportation (MDOT) is soliciting applications for candidate projects for the Local Bridge Program; selected projects will be funded during the 2015 fiscal year. Enclosed are the application requirements. Do not submit projects which cannot be committed to construction within the 2015 fiscal year. The applications can be submitted by the local agency owner or their consultant. The total number of applications from any one local agency is limited to five (5). Submitting more than five applications from one agency will be cause to reject all applications submitted.

To be eligible for bridge funds, the structure must meet the definition of a bridge, defined as a structure with a total clear span of more than 20 feet, measured along the centerline of the roadway over a stream, watercourse, or opening. For a span bridge, this means the clear opening span, measured face to face at the inside of the abutments, is greater than 20 feet. A multi-unit culvert is considered a bridge if the total length as measured along the centerline of the roadway is greater than 20 feet and the distance between the culvert units is less than half the diameter of the smallest unit. This description is referenced in item number 112 of the "Michigan Structure Inventory and Appraisal Coding Guide." There are many multi-unit culverts under local agency jurisdiction that qualify as bridges and; thus, are required to be on the structure inventory and regularly inspected. Please check multi-unit culverts in your area to see if they qualify under the definition of a "bridge."

A list of all locally owned bridges in Michigan with their Federal Sufficiency Ratings (FSRs), which was compiled in January 2012, has been posted on the MDOT website and can be accessed at: http://www.michigan.gov/documents/mdot_Local_Bridge_Data_for_FSR_and_Call_for_Applications_148254_7.pdf.

Replacement projects must have an FSR value less than or equal to 50 to be eligible for the Local Bridge Program. Rehabilitation projects are eligible provided their FSR values are between

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0 and 80. Preventive Maintenance work is eligible for all bridges. An application must list the specific work being applied for in the preventative maintenance and/or rehabilitation categories.

Enclosed is the current scoping document, dated 12/07/2011, which indicates per unit cost estimates of various rehabilitation and preventive maintenance options. This information will be helpful in determining estimated construction costs for different types of repairs. All estimates for projects to be constructed in 2015 should incorporate an annual inflationary factor of four percent. If the structure is over a railroad, include the railroad's flagging and construction fees.

To assist in the bridge scoping and fix selection process, refer to MDOT's Scoping Manual located at http://www.michigan.gov/mdot/0,1607,7-151-9622_11044_11367-243045--,00.html; specifically, pages 30 through 48 of Chapter 5, *Signs of Pavement & Bridge Distress and Fix Selection Guidelines*. Another valuable resource for managing bridge inventory and developing an optimum bridge preservation strategy is the *Local Bridge Asset Management Guide and Sample Preservation Plan May 2011* found at http://www.michigan.gov/mdot/0,4616,7-151-9625_25885_40558--,00.html, under General Instructions.

Replacement

Replacement projects involve replacing the entire substructure, superstructure, deck and necessary approach work. For replacement projects, the average cost per square foot (sft) of proposed deck area should be estimated, at a minimum, at \$200/sft for rural roadways and \$220/sft for urban roadways. If a multi-use path or sidewalk is planned but does not currently exist, the estimate needs to clearly indicate the costs of these items. If the project is selected for funding, a master plan showing the path or sidewalk must be provided in order for them to be considered participating within the Local Bridge Program.

The approach costs should be estimated using a minimum of \$25,000 per station, with a minimum approach cost of \$100,000. The estimate needs to account for public utilities such as water mains and sewers, which will need to be altered during construction. Also, if the structure is within a substandard horizontal or vertical alignment, the estimate must account for any possible increase in approach distance.

Replacement projects need to meet the current American Association of State Highway and Transportation Officials (AASHTO) guidelines and the Load Factor Resistance Design criteria. The minimum overall estimated cost for a replacement project including approach work should be \$300,000.

Rehabilitation

Based on the Federal Highway Administration's Highway Bridge Program (HBP), rehabilitation is defined as, the major work required to restore the structural integrity of a bridge as well as work necessary to correct major safety defects. These projects are required to meet the AASHTO guidelines. If a rehabilitation project is over water, a scour analysis will be required

during the design phase and the existing foundations will need to be shown to be stable under a scour event. A structure that is not found to be stable during a scour event may not be allowed to proceed to contract. If making the structure stable results in a change in scope, it may be necessary to re-apply during a future call for applications.

Estimated repair costs for bridge rehabilitation projects will vary by the type of work. Include publicly owned utility relocation costs. Examples of rehabilitation work eligible for funding under the program include:

- full deck replacement (with or without painting of steel beams)
- superstructure replacement
- structure widening
- demolition of existing bridge

Preventive Maintenance

Preventative Maintenance applications can be a single bridge or multiple bridges submitted for similar preventive maintenance work into one application. This can include multiple agencies working together to submit one application. A multiple bridge application will count as one of the five applications any one agency is allowed to submit per year. The Region Bridge Councils will review a multiple structure application as one package and will not rate each structure independently. Preventive Maintenance activities are eligible under the Local Bridge Program.

When applying for a multiple bridge preventative maintenance project, submit each structure individually. For electronic submission, select “PM-Multiple Structure” as the type of work on each form. For paper submission, identify on the cover sheet that each bridge is part of a “PM-Multiple Structure” application. Examples of Preventive Maintenance include:

- painting only (full, zone, or spot painting)
- pin and hanger replacement
- slope paving repair
- joint replacement and repair
- drainage system repair (bridge deck drains and bridge approach downspouts)
- scour countermeasures
- concrete crack sealing
- concrete patching and repair
- approach pavement relief joint installation
- HMA overlay
- shallow deck overlay (removing and replacing concrete surface above the top mat of steel reinforcement)
- deep deck overlay (removing and replacing the concrete surface below the top mat of steel reinforcement)
- temporary supports

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- expansion or construction joint repair
- guard rail beam retrofit or installation
- substructure repairs

***NOTE:** If a bridge has a single load posting instead of the 3 truck posting, a Load Rating Summary sheet should be included in the application with an explanation as to why only a single load posting is shown.*

The data found on the Structure Inventory and Appraisal (SI&A) form is used in many of the formula rating point calculations and is one item looked at by your Region Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. When completing an application, the data stated in the supporting documents must match the data found in the SI&A form. Conflicting information may be cause to reject an application.

MDOT bridge personnel will review submitted applications for completeness, check the eligibility based on the FSR requirement, and determine the preliminary (computer generated) rating points. Local Agency Program bridge staff will perform site visits, verify appropriate scopes of work, and create written site reports. The applications, preliminary rating points, and the site visit reports will then be forwarded to the respective Region Bridge Council for their review and the addition of the discretionary rating points.

The preventive maintenance, structure rehabilitation and replacement, and approach construction costs may be eligible for a maximum of 95 percent participation from federal and/or state funds. The right-of-way, design engineering, and construction engineering costs are not eligible for Local Bridge Program funds.

The Local Bridge Advisory Board (LBAB) has set a policy for projects coming in over application estimate. If, at the grade inspection stage, the project estimate exceeds the application estimate, the Region Bridge Council may review the project. The council can decide to accept the project at the increased estimate, cap the project at a percentage above the application estimate, or delay the project until the following year. Please take due diligence in getting the most reasonable application estimates.

All applications must include the requirements listed on the enclosed pages. All bridge applications submitted in previous years that have not been selected for funding have been discarded. Region Bridge Councils and the Local Bridge Advisory Board will only consider applications submitted during the current year's call. Incomplete applications will be rejected and will be returned to the local agency.

Applications can be submitted using the MDOT Website at http://www.michigan.gov/mdot/0,4616,7-151-9625_25885_40558---,00.html. From this location

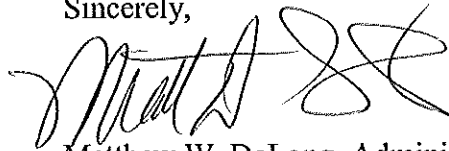
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you can access the electronic form to submit your application electronically. Please be sure your Structure Number is correct and have your signed resolution, SI&A, Bridge Inspection Report, cost estimate, location and detour maps, project narrative, letters of support, and photos ready to include as attachments. If you are unable to submit your attachments electronically, please submit physical copies of your applications via mail or delivery service.

Applications submitted via mail or delivery service must be postmarked no later than May 1, 2012. Applications postmarked or submitted on the MDOT Website after May 1, 2012, will be rejected and returned to the local agency. We encourage you to submit your applications early if they are complete.

If you have any questions, or need further information, please contact Mr. Keith Cooper, Bridge Program Manager, at (517) 373-2346.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt DeLong', written over a horizontal line.

Matthew W. DeLong, Administrator
Development Services Division

Enclosure

APPLICATION REQUIREMENTS (Standard and Emergency Applications)

1. Include the most recent Structure Inventory and Appraisal (SI&A) form and Bridge Inspection form (BIR). These forms must have been updated within the 24-month period, prior to May 1, 2012. The data found on the SI&A form is used in many of the formula rating point calculations and is one item looked at by your Region Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. The SI&A and BIR forms must be updated electronically on MBIS prior to the May 1, 2012, deadline. Do not send in any marked up forms as we can not update the data for you.

2. Submit a legible map (8 ½" X 11") showing:
 - a. Emergency facilities such as fire stations, hospitals or police stations.
 - b. Schools and other significant traffic generating facilities.
 - c. The alternate routes or detours which must be used as a result of load limits or closures.
 - d. Do not color code this map, it will be reproduced on a black and white scanner/copier.

3. For all applications, include a minimum of two photographs of the following:
 - a. One showing the structure's alignment.
 - b. One showing the structure's profile view.
 - c. If the bridge is posted, include one photograph of the bridge clearly showing the current posting sign. These photos need to be of good quality in order to reproduce copies on a black and white scanner/copier.

4. For **rehabilitation** and **preventive maintenance** applications, also include photographs of the following:
 - a. The deck showing the areas of delamination and patches.
 - b. The substructure units showing areas of delaminations/spalls.
 - c. The beams showing areas of cracks and delamination for concrete and local areas of corrosion and/or local failure for steel.
 - d. The photos need to be of good quality in order to reproduce copies on a black and white scanner/copier.

5. Submit a narrative which includes the following:
 - a. The responsible local agency contact person's name, title and telephone number.
 - b. **Clearly indicate whether the application is for rehabilitation, replacement, and preventive maintenance. For rehabilitation and preventive maintenance, clearly specify work requested for funding.**
 - c. A statement explaining the economic importance of the structure.
 - d. In a short paragraph, if there is currently a detour for the structure, explain "Existing detour currently affects"
 - e. In a short paragraph, if the structure is or would be closed, explain "If the structure is closed, the detour would affect...."
 - f. If the structure is closed, what year the structure was closed.
 - g. A statement of any maintenance done on the structure either past or present.

6. Submit a breakdown of the estimated replacement, rehabilitation, and preventive maintenance as follows:

A. Approach Construction		(A) \$	
B. Structure Construction		(B) \$	
Total (A & B)	Total	\$	

7. Submit a "**Priority List**" listing all the structures that you want rated. Any application not containing a total priority list of all applications will be considered incomplete, and will be rejected and returned to the owner.
8. **For each application**, submit a current resolution, signed and dated, from the governing board supporting the project. Resolutions from previous applications will not be accepted. Letters of local support are recommended but are not mandatory.
9. Do not staple the application together or put in a booklet or binder, as it needs to be reproduced on a black and white scanner/copier.
10. Any application that is not complete will be rejected and returned to the local agency. Common examples of incomplete applications are those that are missing updated SI&A forms, photos of postings, load ratings, missing resolutions, and priority lists. All completed applications must be postmarked by the May 1, 2012, deadline.
11. All applications must have a Federal Sufficiency Rating, FSR, value between 0 and 100. A list of all locally owned bridges in Michigan with their respective FSR values has been placed on MDOT's website. For replacement projects, the FSR value must be less than 50. For rehabilitation projects, the FSR value must be between 0 and 80. All bridges are eligible for preventive maintenance.
12. Previous years' applications have been discarded. The Region Bridge Councils and the Local Bridge Advisory Board will only review applications submitted during the current call for applications. After the applications have been reviewed and projects have been selected for funding, all non-funded bridge applications will be discarded.
13. Clearly indicate whether the application is for rehabilitation, replacement, or preventive maintenance. For rehabilitation and preventive maintenance, clearly specify the work requested for funding.

Submit all applications to:

Rita Levine
Local Agency Programs-Design Division, MDOT
425 West Ottawa Street
P.O. Box 30050
Lansing, Michigan 48909
Phone: (517) 373-0041

ENGINEER: _____ DATE: _____ DECK AREA: _____ SFT _____ STRUCTURE ID: _____
 LOCATION: _____ DECK DIM: _____
 PRIMARY REPAIR STRATEGY: _____ STR. TYPE: _____

WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
NEW BRIDGE				
Multiple Spans, Concrete (add demo. & road approach & traffic control)		SFT	\$150.00 /SFT	
Multiple Spans, Steel (as above)		SFT	\$180.00 /SFT	
Single Span or Over Water, Concrete (as above)		SFT	\$190.00 /SFT	
Single Span or Over Water, Steel (as above)		SFT	\$210.00 /SFT	
Pedestrian Bridge (includes removal, add traffic control)		SFT	\$285.00 /SFT	
Other				
NEW SUPERSTRUCTURE				
Concrete (includes rem of old super, new railing, add t.c. & approach)		SFT	\$110.00 /SFT	
Steel (as above)		SFT	\$160.00 /SFT	
Over Water (add to new superstructure cost)		SFT	\$28.00 /SFT	
Other				
WIDENING				
Added portion only. _____ ft of width (add road approach widening)		SFT	\$190.00 /SFT	
Other				
NEW DECK				
Includes removal of old deck & new railing (add t.c. & approach)		SFT	\$65.00 /SFT	
Other				
DEMOLITION				
Entire bridge, grade separation		SFT	\$27.00 /SFT	
Entire bridge, over water		SFT	\$36.00 /SFT	
Other				
SUPERSTRUCTURE REPAIR				
Concrete Deck Patch (includes hand chipping)		SFT	\$33.00 /SFT	
Full Depth Patch		SFT	\$70.00 /SFT	
HMA Cap (no membrane - add bridge rail if req'd)		SFT	\$1.20 /SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$4.50 /SFT	
Removal of Concrete Wearing Course (latex)		SFT	\$2.00 /SFT	
Removal of HMA Overlay or Epoxy Overlay		SFT	\$1.00 /SFT	
Epoxy Overlay		SYD	\$34.00 /SYD	
Shallow Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$23.00 /SFT	
Deep Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$24.00 /SFT	
PCI Beam End Repair (\$2000-\$4000 per beam end)		EA	\$3,000.00 EA	
Repair Structural Steel (\$2000 bolted, \$6000 welded)		EA	\$5,000.00 EA	
High Load Hit Repair (PCI Beam)		SFT	\$200.00 /SFT	
Paint Structural Steel		SFT	\$9.00 /SFT	
Partial Painting		SFT	\$18.00 /SFT	
Pin & Hanger replacement (includes temporary supports)		EA	\$6,000.00 EA	
Other				
SUBSTRUCTURE REPAIR				
Pier repair (measured x 2) Replace unit if spalled area > 30%		CFT	\$180.00 /CFT	
Pier repair over water (measured x 2)		CFT	\$200.00 /CFT	
Pier replacement		CFT	\$70.00 /CFT	
Abutment repair (measured x 2)		CFT	\$180.00 /CFT	
Temporary Supports for Substructure Repair		EA	\$1,500.00 EA	
Slope Protection repairs		SYD	\$80.00 /SYD	
Other				
MISCELLANEOUS				
Expansion or Construction Joints (includes removal)		FT	\$450.00 /FT	
Bridge Railing, remove and replace (type 4 \$210, aesthetic parapet \$260)		FT	\$235.00 /FT	
Thrie Beam Railing retrofit		FT	\$34.00 /FT	
Deck Drain Extensions		EA	\$500.00 EA	
Scour Countermeasures		LSUM	LSUM	
Other				
ROAD WORK				
Approach Pavement, 12" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$11.50 /SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$37.50 /FT	
Guardrail Anchorage to Bridge (<40')		quads	\$1,500.00 /quad	
Guardrail, Type B or T (beyond GR anchorage to bridge, <200')		FT	\$21.50 /FT	
Guardrail Ending (end section)		EA	\$1,850.00 /EA	
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	\$250,000.00 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)		%	\$0.00	\$0.00
MOBILIZATION (estimate at 5% but put "10% max" in pay item description)	5.0	%	\$0.00	\$0.00
INFLATION (assume 5% per year, beginning in 2013)		%	\$0.00	\$0.00

(DOES NOT INCLUDE PE & CE)

CONSTRUCTION TOTAL**\$0.00**