

AGENDA REPORT

TO: Mayor & City Commission
FROM: Ken Hibl, City Manager
DATE: November 17, 2016
RE: Purchase Materials to Reconstruct Woodlawn Bridge

For the Agenda of November 21, 2016

Background The City's bridge that spans the Tobacco River on Woodlawn Avenue has unexpectedly and surprisingly failed, which has required the City to impose a 3-Ton weight limit; install lane delineation posts in the middle of the bridge; and conduct frequent structural inspections until such time the bridge can be repaired or replaced.

The City Staff has spent considerable time consulting with Gourdie-Fraser, the City's engineering firm of record, the past month regarding the best course of action available to repair or replace the failed bridge. With the recommendations (*see copies of att'd GFA Emails*) of our engineering company, we have determined our only option is to replace the bridge; the best replacement option is a similar new wooden bridge. The lead time from order to delivery of the bridge materials is estimated to be ten (10) weeks – exclusive of installation time, which is estimated to be another four to five days.

The City Commission is asked to approve the expenditure of funds to allow us to place the order for materials for a new wooden bridge.

Issues & Questions Specified Should the City Commission authorize the expenditure of funds to allow the purchase of the needed materials to replace the failed Woodlawn Bridge with a new wooden bridge?

Alternatives

1. Authorize the expenditure of funds to allow the purchase of the needed materials to replace the failed Woodlawn Bridge with a new wooden bridge .
2. Authorize funds to purchase materials for an alternative (concrete, steel, etc) type of bridge.
3. Direct the bridge not be replaced.
4. Set aside the matter for further consideration and/or deliberation.

Financial Impact Material costs for a new wooden bridge is quoted as \$69,500 (*see copy of Krenn Bridge quotation & GFA Email*). Note that this quotation is for materials only. As reflected in the GFA Email, installation costs are anticipated to be approximately \$15K. We are still evaluating whether we are capable of installing the new bridge components – thereby potentially saving an estimated \$5K-\$10K – or whether we should hire a professional bridge contractor; we will advise the Commission once we've made that determination. A budget amendment will be required for this purchase; our Fiscal Over-Sight & Budget Committee is scheduled to convene at 5pm on Nov 21st to consider the expenditure.

Recommendations I recommend that the City Commission authorize the expenditure of funds (\$69,500) to purchase the materials needed to reconstruct the wooden bridge on Woodlawn Avenue by adoption of Resolution 2016-132 (*copy att'd*).

Attachments

1. GFA Emails.
2. Krenn Bridge Quotation.
3. Resolution 2016-132.

From: Craig Goodrich [craig@gfa.tc]
Sent: Wednesday, November 02, 2016 9:25 AM
To: Ken Hibl; Steven Kingsbury; Alan Jessup
Cc: Terry Boyd; Bradley Link
Subject: Woodlawn Bridge
Attachments: City of Clare - CQ.DOCX

Good Morning:

I received a phone call from Bob Krenn yesterday afternoon and would like to document the costs verbally given to me.

I have attached the material costs to this email from Krenn Timber Bridge.

New Bridge deck would include 14" thick decking, spreader beams and timber railings.

Materials delivered to the site.....	\$69,500.00
Installation by Josh Adams...estimated..	<u>15,000.00</u>
Total estimated cost..	\$84,500.00

This bridge would be constructed to last for the next 40 years.

Bridge inspection would only be necessary every two years as required. Cost typically several \$300.00 estimated.

New spreader beams. Replacing the single one currently in place.

Material cost for spreader beams	\$4,000.00
Freight estimate	1,000.00
Installation by Josh Adams estimated..	<u>5,000.00</u>
Total estimated cost..	\$10,000.00

This repair may buy the City approximately 3-5 years of use. This bridge will have to be load rated to determine what that value would be. A load rating will cost approximately \$600.00 We do estimate that this rating may be up to a ten ton load limit. This bridge will also be required to be inspected quarterly at a cost of approximately \$300.00 per visit.

Delivery time of materials to the site may take up to ten weeks however I have been told that that is the worst case. Spreader beams may be able to be shipped in three weeks.

Josh Adams is a contractor located in northeast Michigan that specializes in the installation of the Krenn Timber Bridge.

Bob Krenn has indicated that if the City wished to use their own forces to remove and install the decking with their own equipment that he would make the time to help organize and direct the team on how to install the materials. This may be a method to save some additional money.

Hope this helps.

Craig Goodrich

Craig Goodrich

| Municipal Specialist



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From: Heather Jamison [heatherj@gfa.tc]
Sent: Monday, November 14, 2016 4:07 PM
To: Ken Hibl
Cc: Craig Goodrich
Subject: Woodlawn Bridge

Ken-

I did receive some follow up information from Ryan Loerich at Contech. His total material cost estimate for the steel and concrete decking is \$66,295.00. I spoke to a few local contractors, but could not get a firm installation cost, as no one was very familiar with this product to be able to accurately estimate a cost.

That being said, I also spoke with Josh Adams, of Adams Marine Construction. He is comfortable at around \$15,000 for the removal and disposal of the existing bridge deck, and the installation of a new timber deck.

Based on the similar costs for the structure materials, and the unknown cost of installation for the Contech product, I recommend using the timber bridge products discussed with Krenn Timber Bridge. Costs not accounted for in this budget are grading approaches on each end of the new deck, and HMA surfacing, up to approximately 100 feet in each direction from the structure, which should be considered for another \$8,000-\$12,000. I have a call into Mr. Krenn to get a more defined timeline of the structure delivery.

Please let me know if you have any additional questions.

Heather Jamison, PE

Transportation Specialist/Project Manager



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KRENN TIMBER BRIDGE, INC.

6835 S. 6th Street, Kalamazoo, MI 49009 ** 269-207-7483 ** krenntimber@gmail.com

October 31, 2016

Mr. Craig Goodrich

Dear Craig:

In response to your request for a quote on a treated timber bridge for the City of Clare, we are pleased to offer the following:

Woodlawn Drive

26' Long, (1 Span @ 26') 26.67' Clear Roadway (28' Out to Out) Onto existing timber abutments

New superstructure to be 14" deep timbers

Includes 4 x 10 Timber Railing

Material Estimate Delivered to Jobsite..... \$69,500.00 (does not include installation)

Material Cost for 3 New Spreader Beams to attach to existing bridge deck \$4,000.00 (does not include freight)

Package includes Copper Napthenate Douglas Fir material cut and drilled prior to treatment and pre-assembled to the extent possible for easy installation. Includes all hot dipped galvanized hardware for assembly of structure. Bridge is designed for HL-93 Vehicle Load. The above price includes design drawings sealed by a Registered Engineer in the State of Michigan. Preliminary design drawings can be available within 10 working days after receipt of order. Delivery of materials can be offered in 10 to 12 weeks after approval of drawings and/or notice to proceed.

Thank you for the opportunity to quote on your needs.

Sincerely,

KRENN TIMBER BRIDGE, INC.

Bob Krenn

Bob Krenn
President

RESOLUTION 2016-132

A RESOLUTION OF THE CLARE CITY COMMISSION AUTHORIZING THE EXPENDITURE OF FUNDS TO PURCHASE MATERIEALS NEEDED FOR THE REPLACEMENT OF THE WOODLAWN BRIDGE.

WHEREAS, the City-owned bridge that spans the Tobacco River on Woodlawn Avenue in Clare has failed; and

WHEREAS, the City has completed its due diligence to determine whether the bridge can be repaired or whether it has to be replaced; and

WHEREAS, after consultation with representatives of Gourdie-Fraser, the City's engineer of record, and discussing all available options in respect to repair or replacement, it has been determined that the bridge cannot be economically repaired, thus the best option is to replace said bridge with a structure of similar construction and material composition as the existing bridge; and

WHEREAS, Gourdie-Fraser has obtained a quotation for needed bridge materials from the company that constructed the original bridge, thereby eliminating the need to replace the bridge abutments and other associated structural foundation components; and

WHEREAS, Gourdie-Fraser has advised the City that said quotation is reasonable and comparable to the costs of other bridge options.

NOW THEREFORE BE IT RESOLVED THAT the City Commission hereby authorizes the expenditure of \$69,500 for the purchase of bridge materials from Krenn Timber Bridge, Incorporated of Kalamazoo, Michigan, said materials needed to replace the failed, City-owned Woodlawn Bridge.

BE IT FURTHER RESOLVED THAT the City Commission concurrently approves an amendment to the City's approved Fiscal Year 2016/2017 Budget and associated Capital Improvement Schedule for the stated amount and directs its Treasurer & Finance Director to take all actions necessary and associated with said amendment.

ALL RESOLUTIONS AND PARTS OF RESOLUTIONS INsofar AS THEY CONFLICT WITH THE PROVISIONS OF THIS RESOLUTION BE AND THE SAME ARE HEREBY RESCINDED.

The Resolution was introduced by Commissioner _____ and supported by Commissioner _____. The Resolution declared adopted by the following roll call vote:

YEAS:

NAYS:

ABSENT:

Resolution approved for adoption on this 21st day of November 2016.

Diane Lyon, City Clerk