

# The City of Lee's Summit

## **Legislation Text**

File #: BILL NO. 17-121, Version: 1

AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME. (PWC 5/16/17)

#### Issue/Request:

AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME

### **Key Issues:**

The Langsford Road Bridge Rehabilitation (which is under Langsford Road at the intersection of SE
Ridgeview Drive) is an existing, double barrel, Corrugated Metal Pipe (CMP) storm water culvert
The project is included in the current Capital Improvement Plan and will be funded by the Capital
Improvements Sales Tax and is incorporated into the FY 2017-2018 budget.
In 2012, City Staff issued RFQ No. 44112-D to conduct a Qualification Based Selection for professional
engineering services, in accordance with state statutes and local procurement policies, and Bartlett & West
was determined to be the top ranking firm
For this modification, Bartlett & West satisfactorily conducted negotiations for the scope and fee with
City Staff
Engineering services include design, bidding assistance, and inspection services during construction

#### Proposed City Council Recommendation:

FIRST MOTION: I move for a second reading of AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME.

SECOND MOTION: I move for adoption of AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME.

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### Background:

The initial agreement was executed in 2012 and included three major elements:

- 1) The design of a replacement culvert under SW Murray Road, south of the 3rd Street intersection. The Murray Road culvert replacement project was successfully completed in the summer of 2016.
- 2) Evaluation of the Chipman Road Bridge over the Union Pacific Railroad. The Engineer has submitted an evaluation of this bridge, and City staff used this information to develop design plans for repairs to this bridge. The contract to repair this bridge is awarded, and the repairs should be completed over the summer.
- 3) Evaluation of three CMP sites, two on Ward Road and the Langsford Road Bridge.

The Langsford Road Bridge report concluded the flow lines of the CMP have rusted and in some areas there are holes in the flow line of the CMP. The term "bridge" is used because of its open span length of both pipes is greater than 20 feet when combined, even though it is an underground culvert. The structural integrity of the CMP was not considered compromised, but the report recommended preventive and corrective maintenance be undertaken in order to mitigate additional deterioration that would likely jeopardize the structural integrity of the bridge. A failure in the bridge would cause Langsford Road to be closed and incur a significantly higher cost to repair.

A corrective action matrix was submitted with the report. The matrix included estimated costs and estimated life expectancy for two types of repairs and full replacement of the CMP with a reinforced concrete box. The full replacement option is the costliest option but gives the longest life expectancy. One repair option that was studied is a complete lining of the CMP with a special concrete mixture. This technology is relatively new so the life expectancy has not been validated, and the cost is nearing that of the full replacement option.

The other repair option is building a concrete flow line within the CMP, which is the basis for the scope of services in this contract. The concrete flow line is time tested, about one-tenth the cost of the other options, and has a life expectancy of 10 to 20 years.

The special concrete mixture option was eliminated because it is a newer technology for which the life expectancy has not been validated, and the estimated cost is extremely high. The full replacement is not an option to pursue at this time because the pipe is still structurally sound. However, it may need to be considered in the future. The concrete flow line was chosen as the most cost effective solution that could give the CMP an extra ten years of life, and perhaps longer depending on the performance of the concrete flow line. The concrete flow line repair can also be undertaken without any disruptions to traffic.

## Impact/Analysis:

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Timeline:

Start: June 2017 Finish: March 2018

## Other Information/Unique Characteristics:

Bartlett & West will also perform all construction inspection activities for this project because the work will be performed within a confined space requiring specialized training and equipment.

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Presenter: Scott Ward, Senior Staff Engineer

#### Recommendation:

Staff recommends approval of AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME.

Committee Recommendation: The Public Works Committee voted unanimously 3-0 to recommend to City Council approval of AN ORDINANCE AUTHORIZING THE EXECUTION OF MODIFICATION NO. 1 TO THE AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES WITH BARTLETT & WEST INC., FOR THE LANGSFORD ROAD BRIDGE REHABILITATION (RFQ NO. 44112-D) IN THE AMOUNT OF \$76,874.50 FOR A REVISED CONTRACT AMOUNT OF \$364,315.50, AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT FOR THE SAME.