

## Legislation Text

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**File #:** BILL NO. 18-142, **Version:** 1

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An Ordinance authorizing award of Bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05. (PWC 8-21-18)

Issue/Request:

An ordinance authorizing award of bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05

Key Issues:

- 1) This project was authorized by Council in June 2017 as part of the FY 2018 - FY 2022 Capital Improvement Plan (CIP) and will be funded from the CIP Sales Tax for road projects.
- 2) The existing culvert consists of two large-diameter corrugated metal pipes (CMP) crossing under NE Langsford Road.
- 3) Overall the pipes are in fair condition, though the bottom of the pipes have various stages of deterioration.
- 4) This project will install a concrete flow line to cover the bottom portion of each pipe. Additional minor repairs will be performed at various locations.
- 5) Traffic will not be impacted by this project. All work will be performed inside the pipes or at each end.
- 6) LEXECO, Inc., was the low bidder and is qualified to do the work.

Proposed City Council Committee Motion:

FIRST MOTION: I move for a second reading of an ordinance authorizing the award of bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05.

SECOND MOTION: I move for adoption of an ordinance authorizing award of bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05.

Background:

These culverts are inspected every two years by MODOT (Missouri Department of Transportation) and City staff. A recent inspection noted deficiencies in the bottom of the pipes. In a proactive approach, City staff included the Langsford Road culverts into an engineering study that evaluated several culvert / bridge structures.

The study revealed rust along the bottom of the pipes and in some cases a complete deterioration of the pipe bottom. At the time of the study the pipes were not structurally compromised.

The study recommended three possible courses of action for the Langsford Road culverts. One option was a complete replacement of the corrugated metal pipes with a reinforced concrete box, and the other two options were different methods of repair. Staff reviewed costs of the three options, the traffic impact of a

complete replacement and the expected increase of service life from the repairs. The new reinforced concrete box had the highest cost and longest life expectancy. The two repair methods were budgetary opposites with a difference of nearly a million dollars. The more expensive repair method cost nearly as much as the complete replacement option, but it did not have an equivalent service life. The less expensive repair method has an expected service life extension of 10 years, and it may last longer depending on a variety of factors. Within the extended service life, staff can review the full replacement option and research lining technologies that may come down in cost.

Impact/Analysis:

- 1) Project is well within the overall project funding of \$1.1M. The larger budget was based on initial programming estimates to cover the cost of full replacement, if warranted. More detailed engineering studies and evaluations concluded that the concrete lining proposed in this contract would be more than sufficient to extend the culvert life 15 to 30 years for a fraction of the cost.
- 2) The low bid is 10% above the engineer's estimate
- 3) The submitted bids show several relatively close price groupings, but a wide spread between the highest and lowest bids.
- 4) The design engineer reviewed the bids, and City staff is in agreement with the design engineer's conclusions. The design engineer believes:
  - a) This type of work is difficult to estimate. While there are defined quantities, the improvements are constructed within the pipes. Each pipe is 520 feet long and is treated as a confined space, which requires special training.
  - b) The time of year may have played a role in the higher than expected costs.
  - c) The area is developed, and the contractor's staging area is limited, unless the contractor strikes a deal with an adjacent property owner.

Timeline:

Start: Sept 2018

Finish: Dec 2018

Other Information/Unique Characteristics:

Project number 322420-C was advertised on the City's website and on QuestCDN (a nationwide, online, construction bidding system). Ten contractors downloaded the project plans and four contractors bid on the project. LEXECO has worked for the City of Lee's Summit on other capital projects and has performed well. LEXECO recently completed an identical type of project for KDOT (Kansas Department of Transportation), and the KDOT engineer was complimentary of LEXECO's performance.

Because the pipes are classified as a confined space, City staff will not perform the inspection. Bartlett & West has trained, confined space personnel and will provide inspection services.

Dena E. Mezger, P.E., Director of Public Works

Recommendation: Staff recommends approval an ordinance authorizing award of bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05

Committee Recommendation: The Public Works Committee voted unanimously 4-0 to recommend to City

Council approval of an ordinance authorizing award of bid No. 322420-C for the NE Langsford Road Culvert Repair at SE Ridgeview Drive Project to LEXECO, Inc., in the amount of \$269,372.05.