

Legislation Text

File #: BILL NO. 21-166, **Version:** 1

An Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an agreement for the same. (PWC 8/9/21)

Issue/Request:

An Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an agreement for the same.

Key Issues:

- Pursuant to Ordinance No. 8666, the City and Intuition & Logic, Inc. (hereinafter "Engineer") entered into an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) dated July 16, 2019 (hereinafter "Base Agreement").
- The City and Engineer modified the Base Agreement pursuant to Modification No. 1 dated September 29, 2020, and Modification No. 2 dated April 22, 2021 (more detailed information can be found on the Ordinance).
- Engineer has submitted a proposal with estimated costs to provide expanded floodway mapping and CLOMR preparation for the project and surrounding area.
- The City desires to further modify the Base Agreement, as amended, with Engineer to provide said engineering services (hereinafter "Modification No. 3").

Proposed Committee Motion:

I move to recommend to City Council approval of an Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an agreement for the same.

Proposed City Council Motion:

FIRST MOTION: I move for a second reading of an Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an agreement for the same.

SECOND MOTION: I move for adoption of an Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an agreement for the same.

Background:

The City initiated a capital improvement project to mitigate structural flooding of properties on SE Hackamore Drive and SE Secretariat drive. These projects met the criteria of (a) written statement claiming structure flooding, and (b) the root cause of flooding is related to lack of public infrastructure. These projects of were funded by the 2017 Capital Improvements sales tax renewal.

Intuition & Logic, Inc. was retained as the Engineer to evaluate potential concepts to resolve the issue. These ranged from buying out the affected properties to a more holistic approach of regional detention for the entire watershed to limit the risk of additional flooding on other properties, or "re-flooding" the affected properties. Regional detention would also serve as an economic development component by providing the stormwater infrastructure to manage the increased runoff that could be caused by future development of the large agricultural tracts of land upstream.

Modification No. 2 allowed for remapping and elevation certificates for the structure on SE Secretariat Drive to reflect the changes made by the earthwork in that area. That modification also included construction phase services.

This Modification No. 3 expands the scope of the floodplain mapping efforts and authorizes the Engineer to proceed with floodplain and floodway mapping of the entire stream. Most of the field survey work has already been completed.

The preferred option of regional detention was pursued until the property owners were unwilling to negotiate the sale of property to build the basins. At that time, the project shifted to design for adding additional stormwater pipe and inlets along Hackamore Drive, combined with site grading along the stream near Secretariat Drive.

The residential subdivision along Hackamore Drive is upstream from Secretariat. This stream generally runs from Raintree Lake to Lake Winnebago, and has large areas for flood hazards areas mapped by FEMA. As such, any work along Hackamore that changes the flow patterns of stormwater could affect other properties along

the stream.

Mapping and modeling is necessary to ensure that any work to improve stormwater at one location does not have adverse impacts downstream. Another issue with this location is FEMA mapping and modeling was completed many years ago with very limited data. Then in 2017, FEMA revised the flood hazard maps using updated rainfall data, without updating the topographic data. This significantly increased the size of the flood hazard areas. The City has the opportunity to update the topographic data to develop a more accurate flood hazard map because the City is modifying public infrastructure that discharges directly into this stream.

Remapping will lower the Base Flood Elevation throughout the reach, potentially reducing flood insurance premiums for residents along this stream. Remapping will help set the stage for future development upstream. The large tracts of undeveloped land could cause significant increases in stormwater runoff when that land is developed. Those changes in runoff could re-flood properties along Secretariat Drive. Mapping this stream will provide the data necessary to design future developments upstream in ways to prevent adverse stormwater impacts in this area. If not mapped as part of this project, the City may require future developers to conduct similar mapping studies.

Remapping the tributary will also include other changes which have taken place within the watershed, which were not incorporated when FEMA updated the floodplain mapping in 2017. Items missing from the FEMA mapping to be added with this work include updated topography and the bridge over the stream at SE Saddlebrook Drive. This type of mapping and modeling is similar to the previous work done by the City near SE Carolina Court and Battery Point between Langsford Road and Third Street.

Impact/Analysis:

This modification will allow for remapping of the floodplain along Tributary G1 from Mandan Lane to near MO-150, which will benefit residents along the stream via lowered Base Flood Elevation on their property.

Timeline:

Fall 2021

Michael Park, Director of Public Works

Staff recommends approval.

Committee Recommendation: The Public Works Committee voted unanimously 4-0 to recommend to City Council approval of an Ordinance approving Modification No. 3 to an Agreement for Professional Engineering Services for Stormwater - SE Hackamore Drive & SE Secretariat Drive (RFQ No. 543-32272B) between the City of Lee's Summit, Missouri, and Intuition & Logic Inc., for an increase of \$58,714.50 for the amended services, with an amended not to exceed amount of \$383,048.80, and authorizing the City Manager to execute an

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