MODIFICATION NO. 3 TO AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR STORMWATER – SE HACKAMORE DRIVE & SE SECRETARIAT DRIVE (RFQ NO. 543-32272B)

THIS MODIFICATION TO AGREEMENT made and entered into this ____ day of _____, 2021, by and between the City of Lee's Summit, Missouri (hereinafter "City"), and Intuition & Logic, Inc. (hereinafter "Engineer").

WITNESSETH:

- **WHEREAS**, City and 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"); and
- **WHEREAS**, City and Engineer modified the Base Agreement pursuant to Modification No. 1 dated September 29, 2020, to evaluate possible alternatives to address structural flooding of properties along SE Hackamore Drive and SE Secretariat Drive; and
- **WHEREAS**, City and Engineer further modified the Base Agreement, as amended, pursuant to Modification No. 2 dated April 22, 2021, to provide design and construction services for flood proofing 4409 SE Secretariat Drive and upgrade the enclosed storm system near the 200 block of SE Hackamore Drive; and
- **WHEREAS,** City and Engineer desire to further amend the provisions of the Base Agreement, as amended, as provided herein; and
- **WHEREAS**, Engineer has submitted a proposal for the amended engineering services and an estimate of engineering costs to perform said services; and
- **WHEREAS**, the City Manager is authorized and empowered by City to execute contracts providing for professional engineering services.
- **NOW THEREFORE**, in consideration of the mutual covenants and considerations herein contained, **IT IS HEREBY AGREED** by the parties hereto to amend the following Articles contained in the Base Agreement, as amended, as follows:

ARTICLE I SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Article I of the Base Agreement, as amended, is hereby further amended as shown in *Exhibit A*, attached hereto and incorporated herein by reference.

ARTICLE II OPTIONAL SERVICES TO BE PROVIDED BY ENGINEER

Article II of the Base Agreement, as amended, is hereby further amended as shown in *Exhibit A*, attached hereto and incorporated herein by reference.

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ARTICLE IV PAYMENTS TO THE ENGINEER

Article IV of the Base Agreement, as amended, is hereby further amended to provide additional compensation to Engineer as follows:

- A. The additional compensation to be paid to Engineer for the amended Basic Services described in Article I of this Modification No. 3 above shall not exceed the total sum of <u>Fifty-One Thousand Four Hundred Ninety-Two & 50/100 Dollars (\$51,492.50)</u>.
- B. The additional compensation to be paid to Engineer for the amended Optional Services described in Article II of this Modification No. 3 above shall not exceed the total sum of Seven Thousand Two Hundred Twenty-Two Dollars (\$7,222.00).
- C. The amended total not to exceed amount for both the Basic Services and Optional Services is Three Hundred Eighty-Three Thousand Forty-Eight & 80/100 Dollars (\$383,048.80).

ARTICLE VIII ALL OTHER TERMS REMAIN IN EFFECT

All other terms of the Base Agreement, as amended, not amended by this Modification No. 3 to Agreement shall remain in full force and effect.

This Modification No. 3 to Agreement shall be binding on the parties thereto only after it has been duly executed and approved by City and Engineer.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties have executed on the day of, 2021.	e caused this Modification to Agreement to be
	CITY OF LEE'S SUMMIT, MISSOURI
	Stephen A. Arbo, City Manager
ATTEST:	
City Clerk Trisha Fowler Arcuri	
APPROVED AS TO FORM:	
Office of City Attorney	
	INTUITION & LOGIC, INC.
	BY: TIMOTHY DEAN TITLE: PROSECT MANYBER
ATTEST:	
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EXHIBIT A - Lee's Summit, MO - CLOMR from Survey Sections

The purpose of the following scope of services is to provide Tributary G floodplain and floodway mapping using surveyed cross sections and prepare and submit a CLOMR application to FEMA for the remapping. The revised floodplain and floodway will be delineated on updated LiDAR data for the project area. This scope of services includes an option to prepare floodplain and floodway delineations for the one Zone A headwater reaches and include them in the CLOMR application to FEMA.

1.0 Zone AE Modeling

I&L will provide the revised floodplain mapping of Tributary G upstream of Mandan Lane. Mapping will include revised floodplain delineation, flood elevations, and a delineated floodway. The eastern Zone A tributary and western Zone A headwater reach will be re-projected as an updated Zone A using an open channel manning's calculation and normal depth based on the contributing flowrate. I&L will provide revised floodplain maps to City for review and comment.

- 1.1 East Zone A Hydrology
 - I&L will start with the hydrology from the Alternatives Analysis and prepare for FEMA submittal. I&L will receive the hydrology report from the City for the proposed 291 development that drains into the East Tributary and include the discharge in the hydrology breakdown for the watershed.
- 1.2 West Zone A Hydrology I&L will start with the hydrology from the Alternatives Analysis and prepare for FEMA submittal.
- 1.3 Effective Model

 I&L will use the FEMA regulatory model from the Alternatives Analysis and prepare calculation section for FEMA submittal.
- 1.4 Duplicate Effective Model I&L will use the duplicate effective model from the Alternatives Analysis and prepare calculation section for FEMA submittal.
- 1.5 Corrected Effective Model
 - I&L will use the corrected effective model from the Alternatives Analysis and prepare calculation section for FEMA submittal. This was the model used to prepare the alternatives analysis scenarios from and includes the corrections regarding the un-modeled existing bridge crossings. The effective model cross sections were re-cut from the current LiDAR surface. The bridge crossing data was from survey.
- 1.6 Existing Conditions Model
 - Combine survey cross sections and GIS into one terrain model. Add current terrain model to update the Corrected Effective Model. Include floodproofing along SE Secretariat in existing conditions terrain model. Perform floodway scenario analysis. Run FEMA Check-RAS, review messages and either revise the model or provide explanation why the message is not applicable. Prepare calculation section for FEMA submittal.
 - 1.6.1 Update model with survey data and revised terrain.
 - 1.6.2 Incorporate floodproofing along SE Secretariat in the model.
 - 1.6.3 Normal Depth calculations for East and West Tributaries to support reprojection of Zone A.
 - 1.6.4 Floodway Analysis
 - 1.6.5 Perform Check RAS
 - L.6.6 Prepare Flood Data Tables and Profiles
- 1.7 Prepare Revised Mapping
 - 1.7.1 Develop Topographic Work Maps
 - 1.7.2 Develop FIRM Panels

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1.8 Submittal

I&L will prepare summaries of hydrologic and hydraulic modeling process, results, maps and tables into one PDF document and submit to the CITY electronically via email or other file sharing method. The CITY will review submittal material and provide comments.

1.9 Respond to CITY comments.

2.0 Public Notification Regarding FEMA Re-Mapping

This work consists of the 30-day public notification and response for the CLOMR application.

2.1 Public Notification letter

I&L will coordinate a public review and comment period to satisfy the CLOMR requirements and inform residents of the remapping results.

2.1.1 Open House Coordination

I&L will prepare a draft letter for the CITY's use in notifying residents adjacent to the project. The resident notification letter will be the basis for public notification and comment as required for the CLOMR. I&L will use FEMA's notification template to prepare the letter. The sending of the letter represents the start of the required 30-day public review and comment period.

2.2 Public Comment Review and Response

I&L will review and respond to all comments received from the public during the public notification period. I&L will coordinate with the City to obtain any comments sent directly to the City. I&L will compile all the comments from the public notification and Open House into one summary with responses for inclusion with the CLOMR submittal to FEMA. The summary will include the notification methodology and timeframes.

3.0 FEMA CLOMR

I&L will prepare the CLOMR application, submit the application to FEMA and respond to FEMA comments. CLOMR submittal fees are included as follows below:

- 3.1 Prepare CLOMR Application
- 3.2 Submit to CITY
- 3.3 Respond to CITY comments
- 3.4 1st Submittal to FEMA
- 3.5 Respond to FEMA comments
- 3.6 2nd Submittal to FEMA
- 3.7 Respond to FEMA comments
- 3.8 3rd (Final) Submittal to FEMA
- 3.9 FEMA Review fees
 - 3.9.1 \$8,250 LOMR Based on Bridge, Culvert, Channel, Hydrology, or Combination Thereof
 - 3.9.2 \$10,000 Physical Map Revision (4 panels at \$2,500 per panel) (Panels 55, 532, 551, & 553)
 - 3.9.3 \$600 4409 SE Secretariat Single-Lot/Single-Structure CLOMR-F
 - 3.9.4 \$425 4409 SE Secretariat Single-Lot/Single-Structure LOMR-F Based on As-Built Information (CLOMR-F previously issued by FEMA)

4.0 DETAILED MODELING ON ZONE A REACHES

I&L will provide the revised floodplain mapping of Tributary G upstream of Mandan Lane. Mapping will include revised floodplain delineation, flood elevations, and a delineated floodway. The eastern Zone A

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tributary headwater reach will be included in the model to establish a floodplain with elevations and delineate a floodway. I&L will provide revised floodplain maps to City for review and comment. The West Zone A reach will remain an unnumbered Zone A reach.

- 4.1 Surveying
 - None
- 4.2 Existing Conditions Model
 Combine survey cross sections and
 GIS into one terrain model. Add
 current terrain model to update
 the Corrected Effective Model.
 Perform floodway scenario
 analysis. Run FEMA Check-RAS,
 review messages and either revise
 the model or provide explanation
 why the message is not applicable.
 Prepare calculation section for
 FEMA submittal.
- 4.3 Delineate Floodway
 - 4.3.1 Prepare Flood Data Tables and Profiles
 - 4.3.2 Perform Check RAS
- 4.4 Prepare Revised Mapping
 - 4.4.1 Develop Topographic Work Maps
 - 4.4.2 Develop FIRM Panels



FEMA National Flood Hazard Layer (NFHL) illustrating existing Zone A, Zone
AE and LOMAs

OPTIONAL SERVICES

1.0 Public Open House Regarding FEMA Re-Mapping

This work is assumed to be a separate public open house from the design open house as this will affect a different group of residents.

- 1.1 Open House
 - I&L will coordinate one public open house to inform residents of the remapping results.
 - 1.1.1 Open House Coordination
 I&L will coordinate the open house date, time, location and advertising with the CITY and prepare a draft letter for the CITY's use in notifying residents adjacent to the project.
 - 1.1.2 Open House Presentation I&L will prepare a brief presentation in Microsoft Power Point for use in presenting the results and setting expectations. I&L will email a PDF of the presentation to the CITY for review and comment and incorporate the CITY comments into the final documents prior to the meeting. The presentation is intended to run on a loop (no presenter) near the welcome desk.
 - 1.1.3 Open House Exhibits and Forms

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I&L will prepare meeting exhibits, sign in sheets, comment sheets and other meeting material as necessary. I&L will email a PDF of the exhibits, Agenda and Forms to the CITY for review and comment and incorporate the CITY comments into the final documents prior to the meeting.

- 1.1.4 Open House Refreshments I&L will supply water, healthy snacks, and coffee for attendees.
- 1.1.5 Open House Summary
 I&L will prepare meeting summary notes in PDF format and submit them to the CITY via
 email. I&L will incorporate any comments received from the CITY into the meeting notes.

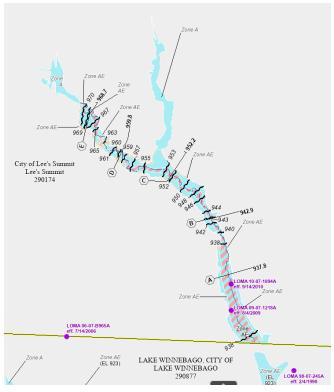
1.2 ALTERNATIVE – Virtual Open House

In the event a traditional open house is not practical, I&L will coordinate and provide material for a virtual public open house to satisfy the CLOMR requirements and inform residents of the project as follows:

- 1.2.1 Virtual Open House Coordination
 I&L will coordinate the virtual open house with the CITY webmaster or appropriate CITY
 website and social media personnel and prepare a draft letter for the CITY's use in notifying
 residents adjacent to the project of the upcoming virtual event. The resident notification
 letter will be the basis for public notification and comment as required for the CLOMR.
- 1.2.2 Virtual Open House Presentation I&L will prepare a brief presentation with audio narrative as an on-line video for use in presenting the project and setting expectations. I&L will email the presentation to the CITY for review and comment and incorporate the CITY comments into the final video prior to upload to the website.
- 1.2.3 Open House Exhibits and Forms I&L will prepare exhibits, on-line sign in sheets, comment sheets and other meeting material as necessary. I&L will email a PDF of the exhibits and Forms to the CITY for review and comment and incorporate the CITY comments into the final documents prior to upload to the website.
- 1.2.4 Virtual Open House

 The virtual open house will be available for public log in, viewing and comment for a period of one to several weeks as determined by the CITY.

1.2.5 Open House Summary



FEMA National Flood Hazard Layer (NFHL) illustrating existing Zone A, Zone AE and LOMAs

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I&L will prepare meeting summary notes in PDF format and submit them to the CITY via email. I&L will incorporate any comments received from the CITY into the meeting notes.