



CHRISTOPHER B. BURKE ENGINEERING, LTD.

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September 11, 2015

Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

Attention: Kurt Corrigan – Transportation and Engineering Manager

Subject: **Proposal for Professional Engineering Services**
Spring Creek Letter of Map Revision Request
Cook and Will County, Orland Park, Illinois

Dear Mr. Corrigan:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to provide professional services to the Village of Orland Park (Village) for the preparation of a Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR) application for Spring Creek. This proposal includes our Understanding of the Assignment, Scope of Services and Fee.

UNDERSTANDING OF ASSIGNMENT

Spring Creek is located on the western side of Orland Park and is a tributary to Hickory Creek, eventually discharging into the Des Plaines River just south of Joliet. Spring Creek was previously studied and a LOMR issued by FEMA that lowered the Base Flood Elevation by up to 5 feet in some areas. CBBEL and the Village do not agree with the methodology and/or the results of the previous study and the Village would CBBEL to re-study the creek using recent historical data and generally accepted engineering practices. The study limits would mimic those of the original study and extend from Will-Cook Road/118th Street to the headwaters of Spring Creek.

SCOPE OF SERVICES

Based on our experience with similar projects, our Scope of Services is detailed below:

Task 1 – Supplemental Topographic Field Survey: CBBEL will primarily utilize the Village's GIS information and Cook County topographic to determine watershed boundaries and tributary areas. Additional and/or more detailed information will likely be needed in areas that have been updated or recently modified such as culvert crossing, bridges,

roadways, etc. CBBEL will collect the data as needed to provide accurate, up-to-date information for the existing and proposed conditions models.

Task 2 – Revised Hydrologic and Hydraulic Modeling: The existing effective hydrologic and/or hydraulic models will be acquired for the watercourse, beginning from approximately 118th Street. The models will extend upstream to the headwaters of Spring Creek just west of 108th Avenue. The model will be revised to incorporate the latest topography and any new or additional survey information as previously mentioned. The model will then be used to generate 2-, 10-, 50-, 100-, and 500-year flood profiles using design storms event peak flows generated by the hydrologic model. All hydraulic modeling will be converted to NAVD 88 as required by FEMA.

Task 3 – Floodplain Map Preparation: Once the hydrologic and hydraulic modeling has been finalized, CBBEL will map the 100- and 500-year floodplain boundaries for the studied Spring Creek using the previously mentioned Village/Cook topography. The 100-year and 500-year floodplain and the floodway boundaries will be determined for study area.

Task 4 – LOMR Submittal to IDNR-OWR: CBBEL will prepare a LOMR request and submit to IDNR-OWR for review and concurrence. This task also includes coordination with IDNR-OWR and response to any review comments. IDNR-OWR may require the issuance of a Public Notice. It is assumed that the Village will provide the names and addresses of these owners. This task assumes two responses to the IDNR-OWR comments.

Task 5 – FEMA LOMR Request Application Submittal:

- The LOMR request submittal package will include the following items:
- The FEMA MT-2 Application/Certification forms,
- Topographic Work Map (Revised Spring Creek floodplain and floodway boundaries delineated on the aerial topography along with the locations of the hydraulic model cross-sections),
- Annotated effective FIRM showing the revised Spring Creek 100-year floodplain and floodway,
- Effective Hydraulic Models Input/output,
- The LOMR request submittal package will be first sent to the Village for their review and signature on the MT-2 Form 1 (Revision Requested and Community Official). The LOMR request submittal package then will be forwarded to the IDNR-OWR for review and approval of the revised floodway boundary. After receiving IDNR-OWR's approval, the LOMR submittal package will be forwarded to FEMA for their review and issuance the LOMR. The LOMR will officially revise the Spring Creek floodplain and floodway boundaries.

Task 6 – Agency Coordination: As needed, CBBEL will meet with, prepare responses to or provide additional data requests from the four agencies (Will County, Cook County, IDNR-OWR and FEMA).

FEE

The estimated costs for the tasks provided above are as follows:

TASK	DESCRIPTION	COST
1	Supplemental Field Topographic Survey	\$ 4,500
2	Revised Hydrologic and Hydraulic Modeling	\$ 7,000
3	Floodplain Map Preparation	\$ 1,650
4	LOMR Submittal to IDNR-OWR	\$ 2,150
5	FEMA LOMR Application Submittal	\$ 6,500
6	Agency Coordination	\$ 1,200
	Subtotal	\$23,000
	Direct Costs	\$ 1,000
	Total	\$24,000

THIS PROPOSAL DOES NOT INCLUDE ANY FEES ASSOCIATED WITH THE REVIEW PROCESS. REVIEW FEES MAY BE REQUIRED BY BOTH IDNR-OWR AND FEMA.

We will bill you at the hourly rates specified on the attached Schedule of Charges and establish our contract in accordance with the previously agreed upon General Terms and Conditions. Direct costs for blueprints, photocopying, mailing, overnight delivery, messenger services and report compilation are included in the fee. These General Terms and Conditions are expressly incorporated into and are an integral part of this contract for professional services. Please note that any requested meetings or additional services are not included in the preceding fee and will be billed at the attached hourly rates.

Please sign and return one copy of this agreement as an indication of acceptance and notice to proceed. Please feel free to contact us anytime.

Sincerely,



Christopher B. Burke, PhD, PE, D.WRE, Dist.M.ASCE
President

Encl. 2010 Schedule of Charges

THIS PROPOSAL, SCHEDULE OF CHARGES AND GENERAL TERMS & CONDITIONS ACCEPTED FOR
THE VILLAGE OF ORLAND PARK:

BY: _____

TITLE: _____

DATE: _____

CHRISTOPHER B. BURKE ENGINEERING, LTD.
STANDARD CHARGES FOR PROFESSIONAL SERVICES
JANUARY, 2010

<u>Personnel</u>	Charges* (\$/Hr)
Principal	240
Engineer VI	210
Engineer V	173
Engineer IV	138
Engineer III	125
Engineer I/II	102
Survey V	178
Survey IV	132
Survey III	127
Survey II	100
Survey I	78
Resource Planner V	112
Resource Planner IV	108
Resource Planner III	100
Resource Planner I/II	88
Engineering Technician V	150
Engineering Technician IV	132
Engineering Technician III	107
Engineering Technician I/II	97
CAD Manager	138
Assistant CAD Manager	126
CAD II	125
CAD I	98
GIS Specialist III	120
GIS Specialist I/II	67
Landscape Architect	138
Environmental Resource Specialist V	154
Environmental Resource Specialist IV	134
Environmental Resource Specialist III	114
Environmental Resource Specialist I/II	94
Environmental Resource Technician	90
Administrative	88
Engineering Intern	53
Survey Intern	53
Information Technician III	97
Information Technician I/II	62

Direct Costs

Outside Copies, Blueprints, Messenger, Delivery Services, Mileage Cost + 12%

*Charges include overhead and profit