

## CHRISTOPHER B. BURKE ENGINEERING LTD.

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX(847) 823-0520

June 14, 2011

Village of Orland Park Public Works Department 15655 Ravinia Avenue Orland Park, IL 60462

Attention:

Mr. Ed Wilmes - Director of Public Works and Engineering

Subject:

Proposal for Professional Engineering Services for Preliminary Design of

the Catalina Stormwater Improvements

Dear Mr. Wilmes:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to the Village of Orland Park (Village) for professional engineering services related to the evaluation and design of stormwater facilities to provide an increased level of protection and reduce the risk of future flood events for the Catalina Subdivision. Included in this proposal is our Understanding of the Assignment, Scope of Services and Estimate of Fee.

## **UNDERSTANDING OF THE ASSIGNMENT**

The majority of the Catalina Subdivision was constructed in the 1970's, prior to the implementation of modern stormwater management techniques and standards, and as a result, the area experiences frequent and extensive street flooding. Due to the flooding, CBBEL has evaluated the area on a number of occasions with the most recent being August of 2010, when a Flooding History Evaluation was prepared. As a part of the Flooding History Evaluation, CBBEL prepared several stormwater storage alternatives of varying sizes and depths that could be accommodated within the Commonwealth Edison (ComEd) Right-Of-Way (ROW). Conceptual level construction estimates varied from approximately \$1.5 to \$3.7 million depending on the size and depth of the alternative chosen. It is our understanding that the Village would like CBBEL to determine the appropriate size of storage facility and associated conveyance pipes to significantly reduce or eliminate the frequent and persistent street flooding, and consequently lessen the potential for future flooding of any residential structures in the area. Once a design is determined, CBBEL will prepare a Preliminary Grading and Utility plan depicting the proposed improvements and a detailed Engineer's Estimate of Probable Cost.

## SCOPE OF SERVICES

We propose the following scope of services to develop and evaluate the stormwater improvements options in the Catalina Subdivision.

Task 1 — Stormwater Modeling and Project Evaluation: Utilizing the Village's orthophotographic mapping and the Cook County 2-foot topography, CBBEL will develop existing and proposed conditions hydrologic and hydraulic models of the Catalina area using XP-SWMM simulation software. The existing conditions model will be developed using historical rainfall data for the area and calibrated based on specific rainfall events that resulted in flooding of the streets. Once calibrated, CBBEL will prepare a proposed conditions model based on the conceptual designs prepared to meet ComEd's requirements for the development of storage areas within their ROW. The proposed conditions model will allow CBBEL to evaluate several storage alternatives under varying rainfall frequencies and intensities and select the design that meets the Village's objectives for flood reduction. The result of the evaluation will be presented to the Village for review and direction.

Task 2 – Preliminary Grading and Utility Plan: Based on Task 1, CBBEL will prepare a Preliminary Grading and Utility Plan. The preliminary plan will show the size and layout of the proposed storage basin and how it will tie into the existing grades surrounding the project area. The plan will also show the approximately size, location and invert of the pipes that will be needed to safely convey the stormwater runoff from the streets into the storage basin. If needed, CBBEL will also provide or assist with coordination efforts for ComEd.

<u>Task 3 – Detailed Engineer's Estimate of Probable Cost</u>: Once a design has been selected and Tasks 1 and 2 are completed, CBBEL will prepare a detailed Engineer's Estimate of Probable Cost. The cost estimate will include Final Engineering Design and Plans, Construction Observation, Permitting and Construction.

## **ESTIMATE OF FEE**

We estimate the following fees to complete the Scope of Services outlined above for the Catalina Stormwater Improvements.

TASKS	AMOUNT
TASK 1 – Stormwater Modeling and Project Alternative Evaluations	\$ 4,500.00
TASK 2 – Preliminary Grading and Utility Plan	\$ 4,000.00
TASK 3 – Detailed Engineer's Estimate of Probable Cost	\$ 1,000.00
GRAND TOTAL	\$ 9,500.00

We will bill you at the hourly rates specified on the previously accepted Schedule of Charges and establish our contract in accordance with the previously accepted General



Terms and Conditions for the Village of Orland Park. Direct costs for blueprints, photocopying, mailing, overnight delivery, messenger services and report compilation are not included in the Fee Estimate. These General Terms and Conditions are expressly incorporated into and are an integral part of this contract for professional services. It should be emphasized that any requested meetings or additional services are not included in the preceding Fee Estimate 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, F.ASCE President

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

BY:	
TITLE:	
DATE:	