

CHRISTOPHER B. BURKE ENGINEERING, LTD.

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

April 12, 2012

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

Attention:

Mr. John Ingram - Infrastructure Maintenance Director

Subject:

Proposal for Professional Engineering Services for Catalina Subdivision – Stormwater Improvements

Dear Mr. Ingram:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to provide professional engineering services for the design of stormwater improvements for the Catalina Subdivision. This proposal includes our Understanding of the Assignment, Scope of Services and Estimated Fee.

UNDERSTANDING OF ASSIGNMENT

Late last year, CBBEL completed a detailed hydrologic and hydraulic analysis for several stormwater improvement alternatives aimed at reducing the risk of flooding by providing varying levels of protection in the Catalina Subdivision. Based on the results of the analysis, the Village would like to proceed with the design of Alternative 2, which includes two interconnected detention basins located within the Village-owned Commonwealth Edison (ComED) Right-Of-Way (ROW). Alternative 2 also includes the construction of relief storm sewers to convey runoff from each of the cul-de-sacs on Tulip Court, Sunflower Court, Primrose Court, and Orchid Court to the new detention basins. Additionally, the Village would like to investigate the possibility of constructing additional detention on the west side of 80th Avenue to provide a higher level of protection against future flooding. CBBEL will collect the necessary data to determine the feasibility and costs associated with constructing stormwater storage and associated conveyance pipes west of 80th Avenue. CBBEL will provide the Village with a report summarizing the results of the feasibility analysis and a recommendation regarding moving the project forward.

SCOPE OF SERVICES

Based on our experience with similar projects, our anticipated scope of services is detailed below:

<u>Task 1 – Topographic Survey</u>: The survey will be used as a base map for design purposes. Included are the following survey tasks:

- 1. Horizontal Control: Utilizing state plane coordinates (NAD'83, Illinois East Zone, 1997 Adjustment); CBBEL will establish recoverable primary control.
- Vertical Control: Establish site benchmarks for construction purposes, tied to the NAVD 88 Vertical Datum. A level circuit will be run throughout the project, establishing benchmarks and assigning a vertical datum on the horizontal control points.
- 3. Research at the Cook County Recorder's Office.
- Field recon and survey to locate existing monumentation and Right-of-way evidence.
- 5. Analyze Record and Field Data necessary to compute approximate Right-of-Way throughout project limits.
- 6. All trees of 6 inch caliber or greater to be surveyed. Provide tree size, location and elevation on survey.
- 7. All above and below ground utilities including, but not limited to: water, sanitary sewer, storm sewer, telephone, electric, cable and gas, etc. Identify size, type, rim, and invert elevations.
- 8. Existing hardscape improvements located in the project limits including paving, curbs, light fixtures, walks, street signs, parking, fencing and gates, approximate R-O-W, and adjacent building façade & overhangs (if any).
- 9. Office calculations and plotting of field and record data.
- 10. Office contouring of field data and one foot contour intervals.
- 11. Drafting of existing conditions Plan at a scale of 1"=20'.

<u>Task 2 – Utility Coordination:</u> CBBEL will identify utilities that may have facilities within the project limits and send a Preliminary Utility Request to all known utility companies to obtain pertinent information. Based on the information received from the utility companies, CBBEL will include locations of all facilities on the plans, identify potential conflicts with the proposed project and design the proposed improvements to minimize utility conflicts.

<u>Task 3 – Hydrologic and Hydraulic Modeling</u>: Based on Task 1, CBBEL will update the hydrologic and hydraulic modeling to reflect the actual field conditions. If needed, CBBEL will revise the design of the proposed detention basins and associated conveyance system to reduce the risk of future flooding in the Catalina Subdivision. CBBEL will also utilize the updated hydrologic and hydraulic modeling and the topographic survey to analyze the feasibility of constructing stormwater storage west of 80th Avenue.

<u>Task 4 – Preliminary Engineering:</u> CBBEL will prepare preliminary plans, specifications and cost estimates for the two project areas. We assume the two project areas will all be included into one set of construction documents to be completed under a single contract.

We estimate the following plan sheets will be required with associated work hours:

SHEET HOURS	No. of Sheets	Avg. Hours PER SHEET	Hours
Title Sheet	1	6	6
General Notes/ Summary of Quantities/ Typical Sections	1	16	16
Alignment Ties & Benchmarks	2	8	16
Sewer Plan & Profile (3 panel-20' scale)	7	24	168
Grading Plans	2	24	48
Erosion Control & Landscaping Plans & Details	3	12	36
Construction Details	1	8	8
Specifications	-	-	10
Cost Estimates/Quantity Calculations	-	-	20
QA/QC Reviews	-	-	8
Total	17		336*

^{*} Represents hours to complete Tasks 4 and 7.

Preliminary Plans, Specifications and a Cost Estimate will be submitted to the Village for review. This task includes one review meeting with Village Staff.

<u>Task 5 – ComEd Coordination:</u> Although the Village owns the ROW where ComEd has its utility towers located, it is anticipated that a significant amount of coordination will be required during the design and construction of the proposed stormwater improvements. CBBEL will coordinate with ComEd during the design process to determine any potential restrictions or other utilities that may be present and modify the design accordingly. CBBEL will also provide ComEd with Preliminary Plans for review and comment once completed.

<u>Task 6 – Permitting:</u> If needed based on the final design, CBBEL will coordinate with the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) to obtain approval for construction of the project.

<u>Task 7 – Final Engineering:</u> Upon meeting with the Village staff to review their comments on the preliminary submittal, CBBEL will revise and finalize the contract documents and cost estimate. During this task the exact letting date will be determined and an estimated

construction schedule will be provided.

<u>Task 8 – Bid Assistance</u>: CBBEL will assist the Village in advertising for bids, distribute plans and specifications to all bidders, and be present at the bid opening. CBBEL will review and tabulate all of the bids and make a recommendation of award.

<u>Task 9 – Feasibility Analysis:</u> Based on the results of Tasks 1 and 3, CBBEL will analyze the potential for constructing detention basins on the west side of 80th Avenue. The ROW on the west side of 80th Avenue is not Village-owned and would require approval from ComEd. Additionally, 80th Avenue is a Cook County roadway that would require a permit and approval to construct a conveyance pipe under. Once the feasibility analysis is completed, CBBEL will prepare a report detailing the results of the feasibility analysis for storage west of 80th Avenue.

FEE

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

TASK	DESCRIPTION	Cost
1	Topographic Survey	\$9,600
2	Utility Coordination	\$1,200
3	Hydrologic & Hydraulic Modeling	\$6,200
4	Preliminary Engineering	\$27,200
5	ComEd Coordination	\$5,000
6	Permitting	\$3,600
7	Final Engineering	\$18,100
8	Bid Assistance	\$800
9	Feasibility Analysis	\$4,600
	Direct Costs	\$ 500
	Total	\$ 76,800

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 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, C. T.
Christopher B. Bucke, PhD, PE, D.WRE, F.ASCE
President
Attachment: Standard Charges
THIS PROPOSAL, PREVIOUSLY ACCEPTED SCHEDULE OF CHARGES AND GENERAL TERMS AND CONDITIONS ACCEPTED FOR THE VILLAGE OF ORLAND PARK:
BY:
TITLE:
DATE:

CHRISTOPHER B. BURKE ENGINEERING, LTD. STANDARD CHARGES FOR PROFESSIONAL SERVICES JANUARY, 2007

Personnel	Charges' <u>(\$/Hr)</u>
Principal	219
Engineer VI	192
Engineer V	157
Engineer IV	126
Engineer III	117
Engineer I/II	95
Survey V	157
Survey,IV	120
Survey III	115
Survey II	90
Survey I	70
Resource Planner V	107
Resource Planner IV	101
Resource Planner III	92
Resource Planner II	84
Engineering Technician IV	120
Engineering Technician III	99
Engineering Technician I/II	91
CAD Manager	126
Assistant CAD Manager	120
CAD II	117
CAD!	91
GIS Specialist III	112
GIS Specialist I/II	63
Environmental Resource Specialist V	140
Environmental Resource Specialist IV	126
Environmental Resource Specialist III	107
Environmental Resource Specialist I/II	87
Environmental Resource Technician	82
Administrative	82
Engineering Intern	48
Survey Intern	48
Information Technician III	88
Information Technician I/II	56

Direct Costs

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

Charges include overhead and profit

Christopher B. Burke Engineering, Ltd. reserves the right to increase these rates and costs by 5% after December 31, 2007.