



**CHRISTOPHER B. BURKE** ENGINEERING, LTD.  
9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX(847) 823-0520

April 5, 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  
Creekside Subdivision – South Drainage 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 storm sewer improvements for the southern portion of the Creekside Subdivision. This proposal includes our Understanding of the Assignment, Scope of Services and Estimated Fee.

#### **UNDERSTANDING OF ASSIGNMENT**

The southern portion of the Creekside Subdivision is located immediately north of 143<sup>rd</sup> Street on Creek Crossing Drive. Residents in this area have reported extensive street and rear yard flooding. The particular area of interest is around 14240 Creek Crossing Drive where flooding occurs in the rear and side yards and in a low lying section of Creek Crossing Drive in the front of the house during heavy rainfalls. Before the Creekside Subdivision was built, the area in front of the 14240 Creek Crossing Drive appears as though it were a small drainage swale that directed water toward Long Run Creek. Under existing conditions, drainage from north and south of 14240 Creek Crossing Drive and from approximately 1.5 acres of Long Run Subdivision Phase 2 drains toward this area. It also appears that runoff tributary to Creekside Drive located to the north of Creek Crossing Drive was conveyed overland to the low lying section of Creek Crossing Drive. There are no overland flow routes from the existing low lying area of the street to the detention basin and the existing 18-inch storm sewer cannot convey the runoff to the pond, which results in excessive ponding and flooding of this area. The Village would like to construct improvements to the storm sewer system in this area to reduce the ponding in the street and alleviate the associated flooding.

## **SCOPE OF SERVICES**

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

**Task 1 – Topographic Survey:** 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); CBEL will establish recoverable primary control.
2. 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.
4. 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 caliper 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'.

**Task 2 – Utility Coordination:** CBEL 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, CBEL 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.

**Task 3 – Hydraulic Modeling:** Based on Task 1, CBBEL will update the hydraulic model to reflect the actual field conditions. If needed, CBBEL will revise the design and proposed system to convey the runoff to the detention basin and reduce the risk of future flooding at this location.

**Task 4 – Preliminary Engineering:** 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<br>PER SHEET | HOURS      |
|--------------------------------------------------------|---------------|-------------------------|------------|
| Title Sheet                                            | 1             | 6                       | 6          |
| General Notes/ Summary of Quantities/ Typical Sections | 1             | 12                      | 12         |
| Alignment Ties & Benchmarks                            | 1             | 6                       | 6          |
| Existing/Proposed Plan & Profile (3 panel-20' scale)   | 1             | 32                      | 32         |
| Traffic Control & Protection (Typ Sects & Notes)       | 1             | 8                       | 8          |
| Construction Details                                   | 1             | 8                       | 8          |
| Specifications                                         | -             | -                       | 10         |
| Cost Estimates/Quantity Calculations                   | -             | -                       | 8          |
| QA/QC Reviews                                          | -             | -                       | 4          |
| <b>Total</b>                                           | <b>6</b>      |                         | <b>94*</b> |

*\* Represents hours to complete Tasks 4 and 6.*

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

**Task 5 – Final Engineering:** 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.

**Task 6 – Bid Assistance:** 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.

### FEE

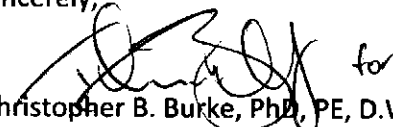
The costs of the services provided are as follows and will not be exceeded without prior approval:

| TASK | DESCRIPTION             | COST             |
|------|-------------------------|------------------|
| 1    | Topographic Survey      | \$1,800          |
| 2    | Utility Coordination    | \$ 600           |
| 3    | Hydraulic Modeling      | \$2,000          |
| 4    | Preliminary Engineering | \$5,600          |
| 5    | Final Engineering       | \$4,000          |
| 6    | Bid Assistance          | \$ 600           |
|      | Direct Costs            | \$ 250           |
|      | <b>Total</b>            | <b>\$ 14,850</b> |

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,

 for  
Christopher B. Burke, 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**

| <u>Personnel</u>                       | <u>Charges*</u><br><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 I                                  | 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.