

## CHRISTOPHER B. BURKE ENGINEERING, LTD.

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February 10, 2014

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

Attention:

Mr. Frank Stec - Director of Parks and Building Maintenance

Subject:

Proposal for Professional Engineering Services

Police Station Parking Lot Evaluation and Reconstruction

Dear Mr. Stec:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to the Village of Orland Park (Village) to provide professional engineering services related to a geotechnical evaluation of the Police Station asphalt parking lot and rehabilitation/reconstruction recommendations. This proposal includes our Understanding of the Assignment, Scope of Services and Estimated Fee.

#### UNDERSTANDING OF ASSIGNMENT

CBBEL understands that the asphalt parking lot at the Village's Police Station shows widespread signs of failure. The Village would like CBBEL to perform a geotechnical exploitation to determine possible causes for the failure and provide recommendations for reconstruction or rehabilitation of the lot. The porous pavement portion of the parkinglot is not experiencing any failure and is not included in this proposal.

CBBEL will coordinate with Testing Service Corporation to provide the geotechnical services for the subsurface exploration and testing analysis. Based on the results of the geotechnical study, CBBEL will prepare a memorandum summarizing the results of the study and provide recommendations for reconstructing or rehabilitating the parking lot. Once a recommended course of action has been selected by the Village, CBBEL will prepare preliminary engineering plan sheets based off of the original design sheets provided by the Village.

#### **SCOPE OF SERVICES**

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

 $\underline{Task}\ 1 - \underline{Geotechnical\ Services}$ : The objectives of the geotechnical study are to explore soil conditions and provide recommendations for pavement design in connection with the proposed pavement reconstruction/rehabilitation. Included are the following geotechnical tasks:

1.Boring Program: We are proposing to drill eight (8) soil borings extended to a depth of 10 feet as part of our Geotechnical Exploration. Total drilling footage on this basis is estimated to be about 80 lineal feet. At each boring location, the existing pavement will be measured. For the purposes of this proposal, we have assumed that the boring locations will be accessible to conventional drilling equipment. In this regard, they should not be located in standing water, within wooded or landscaped areas, or on steeply sloping ground. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration or crop damage (if required) is also not included in the project budget. TSC will utilize personnel who are trained in layout procedures to stake the borings in the field. Ground surface elevations for each borehole will be determined by level survey methods (benchmark to be provided). Utility clearance for the borings will be obtained by contacting JULIE (Joint Utility Locating Information for Excavators). Secondary and /or private underground utility lines will have to be marked by the property owner or their agents; a private locator can be hired (at an added cost) if necessary.

Soil samples will primarily be obtained by split-spoon methods, with thin-walled tube also taken if conditions dictate. Sampling will be performed at  $2\frac{1}{2}$ -foot intervals for the first 15 feet and not exceed 5-foot intervals below this level. A representative portion of the split-spoon samples will be placed in a glass jar with screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with any boreholes in pavement areas to be backfilled immediately and patched at the surface.

- 2. <u>Laboratory Testing</u>: Samples obtained from the borings will be examined by experienced laboratory personnel in order to verify field descriptions as well as to visually classify in accordance with the Unified Soil Classification System. Laboratory testing will include moisture content and dry unit weight determinations as well as measurements of unconfined compressive strength by direct or indirect methods, as appropriate. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval.
- 3. <u>Engineering Report</u>: Upon completion of drilling and testing, TSC will prepare an engineering report summarizing field and laboratory test date, including a boring location plan and computer generated boring logs. The report will address anticipated soil and groundwater conditions impacting site development, based upon

the information obtained from the borings. It will also provide recommendations to guide design and specifications preparation pertaining the geotechnical issues relevant to the structure or purpose described herein. These may include:

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill replacement and compaction for pavements.

<u>Task 2 – Pavement Analysis and Recommendations:</u> Upon completion of Task 1, CBBEL will review and the geotechnical engineering report and prepare a memorandum summarizing the results and provide alternatives for reconstructing or rehabilitation the parking lot. If multiple recommendations are provided, CBBEL will prepare cost estimates for each alternative.

<u>Task 3 – Preliminary Engineering</u>: Once the Village has selected a preferred alternative, CBBEL will prepare preliminary engineering plan sheets for the reconstruction/rehabilitation. The plan sheets will be based on the original design plans for the Police Station to be provided by the Village. The preliminary engineering plan sheets will not be Final Engineering plans, but will provide adequate detailed information to allow a contractor to perform the proposed improvements.

FEE

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

Task	DESCRIPTION	Соѕт
1	Geotechnical Services	\$ 4,550
2	Pavement Analysis and Recommendations	\$ 1,200
3	Preliminary Engineering	\$ 2,250
	Total	\$ 8,000

We will bill you at the hourly rates specified on the attached Schedule of Charges and establish our contract in accordance with the previously accepted General Terms and Conditions for Orland Park.

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

Attachment: Standard Charges

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

BY:

TITLE:

DATE:

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.

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

	Charges
<u>Personnel</u>	(\$/Hr)
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
CADI	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.