

ORDINANCE NO. 1975-19

AN ORDINANCE AUTHORIZING THE EXECUTION  
OF AN AGREEMENT BY AND BETWEEN CHRISTOPHER B. BURKE  
ENGINEERING AND THE VILLAGE OF HAWTHORN WOODS REGARDING  
ACCEPTANCE OF A PROPOSAL FOR PROFESSIONAL ENGINEERING  
SERVICES FOR MEADOWLARK PARK AND ARBORETUM AND DECI/NPDES  
INSPECTIONS

BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Hawthorn Woods, Illinois, that the Mayor and Village Clerk be, and the same are, hereby authorized and directed to accept the proposal from CBBEL for professional design, engineering and services related to DECI/NPDES Inspections regarding the Meadowlark Park and Arboretum project for a price not to exceed, \$48,990.00, in substantially the form attached hereto as Exhibit "A," and, by this reference, made a part hereof.

The foregoing Ordinance was adopted by a roll call vote as follows:

AYES: Kaiser, Kosik, Riess, Corrigan, DiMaggio, David

NAYS: Ø

ABSENT AND NOT VOTING: Ø

APPROVED: Joseph Mancino  
Joseph Mancino, Mayor

ATTEST: Donna Lobaito  
Donna Lobaito, Village Clerk

ADOPTED: Sept. 23, 2019

APPROVED: Sept 23, 2019

**CHRISTOPHER B. BURKE ENGINEERING, LTD.**

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

August 12, 2019

**REVISED: August 28, 2019**

Village of Hawthorn Woods  
2 Lagoon Drive  
Hawthorn Woods, IL 60047

Attention: Brian Sullivan

Subject: Proposal for Professional Engineering Services  
Meadowlark Park Site Design and DECI/NPDES Inspections

Dear Mr. Sullivan:

CBBEL is pleased to provide this proposal for Professional Design Engineering and DECI/NPDES Inspection Services related to the proposed Meadowlark Park Site located in the Village of Hawthorn Woods. Included in this proposal is our Understanding of Assignment, Scope of Services, and Fee Estimate.

**UNDERSTANDING OF THE ASSIGNMENT**

It is our understanding that the Village wishes to construct a passive park site on Meadowlark Drive in Hawthorn Woods, IL. The proposed park is located in the bottom of the dry-bottom detention basin for the Lake Lorraine Estates – Unit 1. As such, the park site will be subject to frequent flooding. The detention basin contains wetlands which we have received a boundary confirmation and Preliminary Jurisdictional Determination (PJD) from the US Army Corp of Engineers on the wetland limits. The proposed site plan for the park will avoid wetland impacts. This area has experienced drainage problems in the past. As part of this project, we will provide solutions to help alleviate the drainage problems. The purpose of this proposal will be to complete hydrologic and hydraulic modeling, prepare Engineering Plans and permit submittals for the Village's use (NOT for bidding purposes) and provide DECI Inspections during construction. It is our understanding the following items will be provided to CBBEL from Signature Group.

- Preliminary Grading Plan
- Site Layout of the proposed trees

**SCOPE OF SERVICES**

**Task 1 – Modeling and Permitting Phase Hydrologic Modeling for Meadowlark Detention Basin:** CBBEL will analyze the hydrology for the area tributary to the detention basin. CBBEL will collect all available information regarding the basin from Village staff and any plans, plats, etc. We will develop a hydrologic model to determine the critical duration 100-year High Water Level (HWL) for the detention basin using the updated Bulletin 70

rainfall data. We will also determine the 6-month through 50-year peak water elevations in the basin to assist the landscape architect with design of the park features. We will also utilize the model to develop drainage improvements for the park including the culvert under Meadowlark Drive and the detention basin overflow as well as the site amenities such as the bridge crossings of the wetland. The hydrologic model will also be utilized to demonstrate that the proposed improvements do not cause an adverse impact upstream or downstream of the park.

**Task 2 – Detention Basin Storage Analysis:** The proposed fill quantities below the HWL of the detention basin will be determined. In accordance with the WDO, the required amount of compensatory storage (overall 1:1 ratio) will be determined. We will work with the landscape architect to determine the appropriate location for the compensatory storage excavation. This will be an iterative process and we have provided for two iterations. Additional iterations will be billed on a Time and Material basis.

**Task 3 – Stormwater Management Report and Watershed Development Permit:** We will prepare a report summarizing the information we determined in Tasks 1-3. This report will include all necessary calculations and print out of hydrologic models sufficient for the Village to issue itself a Watershed Development Permit. Wetland permitting is not included in this task as it is our understanding no wetland impacts are proposed as part of this project.

**DESIGN ENGINEERING PHASE**

**Task 4 – Preliminary Engineering Plans (90% Submittal)**

CBBEL will prepare engineering plans, in accordance with all applicable Village, IDOT, and other agency standards. Plans will be prepared using MicroStation CAD software. These plans will be forwarded to the Village and Signature Group for final review and comments.

CBBEL will NOT be preparing any pay items or specifications and estimates since the Village will complete the construction with their own forces.

Plan sheets will be developed and are anticipated to consist the following:

SHEET	# OF SHEETS	HOURS PER SHEET	HOURS
Title Sheet	1	8	8
General Notes	1	8	8
Grading Plan	1	12	12
Soil Erosion and Sediment/Landscaping Plan	1	12	12
SE/SC Notes and Details	3	10	30
Construction Details	1	8	8
TOTAL	8		78

**Task 5 – QA/QC Submittal and Final Plans, Specifications and Cost Estimate (100% Submittal)**

CBBEL will make the final revisions to the 90% submittal based on the review comments from the Village and permitting agencies. The Village will perform a QA/QC review and then

CBBEL will finalize the documents. CBBEL will provide plans to the Village in the requested hard copy and electronic format.

**Task 6 – NOI Preparation and Submittal:** CBBEL will prepare and submit a Notice of Intent (NOI) to the IEPA for the above-mentioned site. This task includes a project notification submittal to State Historic Preservation Office (SHPO) and the Illinois Department of Natural Resources (IDNR). If additional consultation is requested by IDNR or IHPA, the work associated with the consultation(s) will be covered under a separate contract release or by a CCR.

**Task 7 – SWPPP Preparation and Submittal:** CBBEL will prepare a Storm Water Pollution Prevention Plan (SWPPP) for the project in accordance with Part IV of the NPDES ILR10 General Permit. Please note the completion of this task will require input from the project engineer and signed certification statements from all contractors, subcontractors, and the operator as identified in the SWPPP. This task also covers the submittal of an electronic copy of the SWPPP to the IEPA.

**Task 8 – Meetings**

If the Village desires, one CBBEL employee will attend the monthly progress meetings with the design and construction team and Village Staff. CBBEL assumes 4 meetings.

**CONSTRUCTION ENGINEERING PHASE**

**Task 9 – Construction Staking**

**Contour Line Staking:** The location and elevation of the contour lines will be staked and graded. Stakes will be placed at 50-foot intervals and 25-foot spacing for curves. This task is for a one-time staking.

**Utility Staking:** Culverts shall have a stake set at its center. In addition, all culverts shall have a double offset stake set (typically at 15 feet and 25 feet). One hub shall be graded to indicate the cut to the invert elevation. This task is for a one-time staking.

**Bituminous Path Staking:** The bituminous path shall be staked for line and finished grade. Stakes shall be offset on 1 side of the path with lath and will be staked on a 4-foot offset. The path will be staked on a 50-foot spacing for the tangents and a 25-foot spacing on curves. This task is for a one-time staking.

**Playground Staking:** 1 hub and 1 lath will be staked at the center of each playground area, the hub will be graded to the finished grade elevation. This task is for a one-time staking.

**Task 10 – Routine Site Inspections and Reports for NPDES Compliance:** Per Part IV.D.4 of the NPDES permit, CBBEL will monitor “disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days”. **Site Inspections will be completed by a Lake County Designated Erosion Control Inspector (DECI).**

Per Part IV.D.4.d of the NPDES permit, CBBEL will prepare a report summarizing the scope of the observation site visit, name(s) and qualifications of personnel making the observation site visit, the date(s) of the site visit, major observations relating to the implementation of the SWPPP, and actions taken in response to previous observations. CBBEL will provide The Village a copy of each report. It is the responsibility of the Village to retain the report as part of the SWPPP for at least three years from the date that the permit coverage is terminated

(Part IV.D.4.d), and to sign the report in accordance with Part VI.G (Signatory Requirements). This proposal covers routine site inspections and reporting services from October 1, 2019 through December 31, 2019. It is assumed that the project will achieve substantial completion by December 31, 2019 and that routine site inspections and reports will be reduced to monthly during January 2020-February 2020 (pending weather conditions). This proposal also assumes that the Village will complete routine and post-storm site inspections and reports from March 1, 2020 through vegetation establishment and NPDES permit closeout during the spring 2020 growing season. Additional site inspections and reports will be billed on a Time and Materials basis.

**Task 11 - Post Storm Site Inspections and Reports for NPDES Compliance:** Per Part IV.D.4 of the NPDES permit, CBBEL will complete the above-mentioned site inspection and report "within 24 hours of the end of a storm or by the end of the following business or work day that is that is 0.5 inches or greater." Because CBBEL cannot predict the number of storm events, the cost associated with this task is an estimate. CBBEL has allowed for 6 post storm or thaw event inspections and reports from October 1, 2019 through February 28, 2020. If more than 6 post-storm inspections are required, the storm event inspections and reports will be billed on a time and materials basis. Post-storm site inspections and reports will be completed by a Lake County DECI.

**Task 12 - On-Call ILR10 NPDES Consulting and Agency Coordination:** Throughout the life of the project, meetings with The Village, contractors, and others can be anticipated. CBBEL will provide miscellaneous storm water, best management practice, and general environmental consulting services to The Village. This task will also allow CBBEL to provide necessary support throughout the life of the project that is not specifically outlined in this proposal. CBBEL has budgeted for our attendance at an additional 3 site meetings to occur outside of the regularly scheduled NPDES site inspections.

**Task 13 - NOT Preparation and Submittal:** CBBEL will prepare and submit a Notice of Termination (NOT) to the IEPA when all construction activities have been completed and the site has been permanently stabilized, as defined by the IRL10.

**Task 14 - Record Drawings:** Thomson Surveying, Ltd. (TSL) will include: the record drawing exhibit and will include ground shots throughout the property every 50 feet to generate 1-foot interval contours. Elevations will be provided to the nearest 0.10 feet.

- Horizontal and vertical control will be referenced to the nearest Illinois State plane coordinate system and NAVD 88
- The record drawing exhibit will include an outline of the playground equipment, as well as location of the path throughout the property.
- The record drawing exhibit will field locate all new underground utilities with rim elevation, invert elevations/directions for all accessible structures.

**ESTIMATE OF FEE**

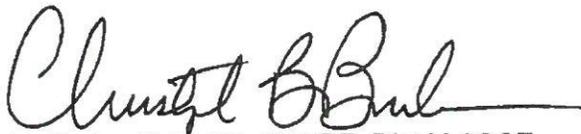
CBBEL estimates the following fees for the tasks described above.

<b>TASK</b>	<b>DESCRIPTION</b>	<b>FEE</b>
1	Hydrologic Modeling for Meadowlark Detention Basin	\$ 6,500
2	Detention Basin Storage Analysis	\$ 3,000
3	Stormwater Management Report and Watershed Development Permit	\$ 4,000
4	Preliminary Engineering Plans (90% Submittal)	\$ 9,000
5	QA/QC Submittal and Final Plans, Specifications and Cost Estimate (100% Submittal)	\$ 1,000
6	NOI Preparation and Submittal	\$ 700
7	SWPPP Preparation and Submittal	\$ 2,000
8	Meetings	\$ 1,200
9	Construction Staking	\$ 5,540
10	Routine Site Inspections and Reports for NPDES Compliance	\$ 6,500
11	Post Storm Site Inspections and Reports for NPDES Compliance	\$ 2,200
12	On-Call ILR10 NPDES Consulting and Agency Coordination	\$ 1,150
13	NOT Preparation and Submittal	\$ 250
14	Record Drawings	\$ 4,950
	Direct Costs	\$ 1,000
	<b>TOTAL</b>	<b>\$ 48,990</b>

We will bill you at the hourly rates specified in our previously agreed upon 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 Estimated Fee. We will not exceed the fee without written permission of the client. All items not included in this proposal will be billed on a time and material basis. The General Terms and Conditions are expressly incorporated into and are an integral part of this contract for professional services.

Please sign and return one copy of this proposal 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

THIS PROPOSAL ACCEPTED FOR THE VILLAGE OF HAWTHORN WOODS:

BY:  \_\_\_\_\_

TITLE: Mayor \_\_\_\_\_

DATE: Sept. 23, 2019 \_\_\_\_\_

LMF  
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