



ORDINANCE NO. 2198-22

AN ORDINANCE RATIFYING AND CONFIRMING THE EXECUTION OF A PREVIOUSLY EXECUTED AGREEMENT—CHRISTOPHER B. BURKE ENGINEERING, LTD.

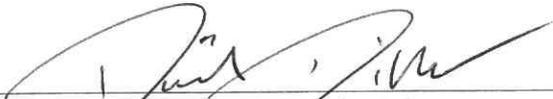
BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Hawthorn Woods, Illinois, that this ordinance is ratification in furtherance of a previously executed Proposal for Professional Engineering Services for Updating the Pavement Management Report with Christopher B. Burke Engineering, Ltd. Such Agreement is by and between the Village of Hawthorn Woods and Christopher B. Burke Engineering, Ltd., a copy of which is attached hereto as Exhibit "A", and, by this reference made a part hereof.

The foregoing Ordinance was adopted by the Village Board of the Village of Hawthorn Woods, Illinois, on September 26, 2022:

AYES: Kaiser, David, McCarthy, Rycalio, Bayer

NAYS: 0

ABSENT AND NOT VOTING: Russo

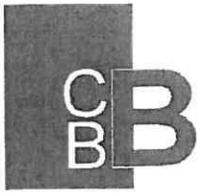
APPROVED: 
Dominick DiMaggio, Mayor

ATTEST: 
Donna Lobaito, Village Clerk

PASSED: September 26, 2022

APPROVED: September 27, 2022

PUBLISHED: October 12, 2022

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

9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

August 1, 2022

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

Attention: Pam Newton, Chief Operating Officer

Subject: Proposal for Professional Engineering Services for updating the Pavement Management Report

Dear Ms. Newton:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal for professional engineering services for updating the Pavement Management Report. This proposal includes our Understanding of the Assignment, Scope of Services, and Estimate of Fee. All work performed under this proposal will be in accordance with our Master Agreement for Village Engineering Services.

UNDERSTANDING OF THE ASSIGNMENT

Christopher B. Burke Engineering, Ltd. (CBBEL) understands that the Village of Hawthorn Woods has requested this proposal to update Pavement Management Report with the latest revision date of October 5, 2018. As part of this evaluation, a rating system will be developed to determine the Village's overall pavement condition. CBBEL will develop a report outlining the various pavement maintenance strategies, pavement management cycle, and costs associated with each strategy.

As part of the assignment CBBEL will prepare the excel spreadsheet and provide an updated exhibit of the Village's Street & parking lot networks and associated ratings. This will include all of the Hawthorn Woods Country Club (HWCC) streets in one Pavement Management Report, as well as the five (5) parking lots under Village jurisdiction and the cost to replace all large-diameter culverts within the Village limits.

SCOPE OF SERVICES

We propose the following scope of services to complete the pavement evaluation and pavement management study.

Task 1 – Pavement Evaluation and Data Collection: This task includes the field inspection of each street and parking lot within the Village limits under the jurisdiction of Hawthorn Woods. This evaluation will be done by CBBEL and will be a visual inspection only. Pictures of various segments and pavement distress types will be taken in order to calibrate Village

staff on the PCI value during future pavement evaluations. The following describes the rating system anticipated for this project.

PAVEMENT CONDITION INDEX

The pavement condition index (PCI) can be defined as the current condition of each individual street segment. This index has been developed as a number between 0 and 10, with 1 as the highest or best condition. The rating system models the Pavement Surface Evaluation and Rating System (PASER) developed by the Transportation Information Center at the University of Wisconsin – Madison. A PCI value of 1 denotes a distress free pavement, whereas a 10 implies a failed pavement. The following is a chart that defines the PCI value, visible pavement distress and general pavement treatment associated with the PCI value.

This chart describes the PASER rating system in detail and provides a description of all the rating levels from 1 to 10 and what can be expected for each rating level. Note that individual pavements will not have all of the types of distress listed for any particular rating.

SURFACE RATING	VISIBLE DISTRESS	GENERAL CONDITION/ TREATMENT MEASURES
Not Accepted	Data not collected	Street not included in cost estimate.
1 New	None	New or current construction. New overlay.
2 Excellent	Little to none	Recent construction.
3 Very Good 4 Good	<ul style="list-style-type: none"> • No longitudinal crack, expect reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). • Very slight or no raveling, surface shows some traffic wear. • Longitudinal cracks (open 1/4") spaced due to reflection or paving joints. • Transverse crack (open 1/4") spaced 10 feet or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	Recent overlay. Little or no maintenance required. First signs of aging. Maintain with routine crack filling.
5 Fair	<ul style="list-style-type: none"> • Slight raveling (loss of lines) and traffic wear. • Longitudinal cracks (open 1/4" – 1/2") due to reflection and paving joints. • Transverse cracking (open 1/4"-1/2") some spaced less than 10 feet. • Slight to moderate flushing or polishing. Occasional patching in good condition.	Show signs of aging, sound structural condition. Could extend life with rejuvenators, micro surfacing or overlay.
6 Fair	<ul style="list-style-type: none"> • Moderate to severe raveling (loss of lines and coarse aggregate). • Longitudinal cracks (open 1/2:") show some slight raveling and secondary cracks. First signs of longitudinal cracks near wheel path or edge. • Transverse cracking and first signs of block cracking. Slight crack raveling (open 1/2"). • Extensive to severe flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Needs micro surfacing or overlay. May need strengthening from patching or overlay
7 Poor	<ul style="list-style-type: none"> • Severe surface raveling. • Multiple longitudinal and transverse cracking with slight raveling. • Block cracking (over 25 – 50%) of surface). • Patching in fair condition. Slight rutting or distortions (1" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from patching and overlay.

SURFACE RATING	VISIBLE DISTRESS	GENERAL CONDITION/ TREATMENT MEASURES
8 Poor	<ul style="list-style-type: none"> • Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. • Block cracking over 50% of surface. • Some alligator cracking (less than 25% of surface). • Patches in fair to poor condition. • Moderate rutting or distortion. Occasional potholes.	Need patching and overlay. Consider partial reconstruction.
9 Very Poor	<ul style="list-style-type: none"> • Alligator cracking (over 25% of surface). • Severe distortions (over 2" deep). • Extensive patching in poor condition. • Potholes. 	Severe deterioration. Need partial reconstruction with extensive base repair.
10 Failed	<ul style="list-style-type: none"> • Severe distress with extensive loss of surface integrity. 	Failed. Needs total reconstruction.

Task 2 – Data Compilation and Database: Upon completion of Task 2, CBBEL will complete the Pavement Database. Each street segment and parking lot will be assigned a PCI number ranging from 1-10, with 1 as the highest or best condition. Items included in the pavement database will include length, width, total area, base type, surface type and last known surface date. The database will also serve as a tool to program the various pavement maintenance techniques to each street segment and parking lot.

Task 3 – Pavement Management Report: Prior to the report being written, the Village will provide guidance if the goal is a “x” Year Program or a “x” Dollars per Year Program. CBBEL will provide a written report summarizing the findings of the updated evaluation. The report will include a recommended pavement maintenance program that will illustrate the various maintenance techniques and costs associated with each technique. Typical pavement cross sections will be included as part of the report. A maintenance plan will be included in the report. The plan will provide a maintenance budget for the Village. The Final Report will be submitted to the Village in January 2023.

With the development of this report, CBBEL will provide a Village-wide, colored map of the various programs and program years. The pavement information and mapping information will be incorporated into separate layers of the Village’s GIS system upon availability.

Also, the report will include the following information:

- An overall recommend annual budget.
- Discussion of possible grants and possible FAU routes.
- Discussion of the Village typical section.
- Address the number of miles of streets that have not been surfaced or accepted.

Task 4 – Coordination Meeting: CBBEL will meet with Village personnel to discuss the existing Pavement Condition Index, pavement database, and the recommended treatments based on various life cycles. This meeting will be to reconfirm with the Village the expected deliverable items.

