

September 10, 2021

Mr. Kevin Lehmann  
Engineer – Public Improvements Technician  
Village of Orland Park  
15655 S. Ravinia Avenue  
Orland Park, Illinois 60462

***Subject: Village of Orland Park - Fernway Road & Ditch Reconstruction - Phases 7, 8, and 9  
Engineering Services***

Dear Mr. Lehmann:

The Village of Orland Park and Baxter & Woodman, Inc. have proven to be an effective team for designing infrastructure improvements, and confirming your vision becomes reality during construction oversight. Our staff is familiar with the design challenges of the Fernway Subdivision, and we are ready to leverage our experience to complete the final phases of this project. We are pleased to submit this proposal to the Village to perform design engineering for roadway and stormwater improvements at the following locations:

<b><u>Road</u></b>	<b><u>Limits</u></b>	<b><u>Length (feet)</u></b>
Sherwood Drive	163 <sup>rd</sup> Street to Laurel Drive	459
Sherwood Drive	Laurel Drive to 339' North	339
161 <sup>st</sup> Place	88 <sup>th</sup> Avenue to Laurel Drive	620
Laurel Drive	Sherwood Drive to 162 <sup>nd</sup> Street	470
Laurel Drive	62 <sup>nd</sup> Street to 161 <sup>st</sup> Street	333
Laurel Drive	161 <sup>st</sup> Street to 212' North	212
162 <sup>nd</sup> Street	88 <sup>th</sup> Avenue to Laurel Drive	798
Chadbourd Drive	90 <sup>th</sup> Avenue to 89 <sup>th</sup> Avenue	772
Chadbourd Drive	89 <sup>th</sup> Avenue to 88 <sup>th</sup> Avenue	477
Byron Drive	Chadbourne Drive to 171' South	171
89 <sup>th</sup> Avenue	Chadbourne Drive to 164 <sup>th</sup> Street	626
90 <sup>th</sup> Avenue	Chadbourne Drive to 164 <sup>th</sup> Street	628
164 <sup>th</sup> Street	Byron Drive to 89 <sup>th</sup> Avenue	191
164 <sup>th</sup> Street	89 <sup>th</sup> Avenue to 88 <sup>th</sup> Avenue	464
164 <sup>th</sup> Street	90 <sup>th</sup> Avenue to 89 <sup>th</sup> Court	387
164 <sup>th</sup> Street	89 <sup>th</sup> Court to Byron Drive	197
Byron Drive	164 <sup>th</sup> Street to 163 <sup>rd</sup> Street	456
163 <sup>rd</sup> Street	Byron Drive to 640' West	640
163 <sup>rd</sup> Street	Byron Drive to 88 <sup>th</sup> Avenue	633
89 <sup>th</sup> Court	164 <sup>th</sup> Street to 194' South	194

Our project understanding, scope of services, and engineering fee are presented below.

## **Project Understanding**

The Village plans to reconstruct the above roads and add an 18-inch wide concrete ribbon curb/shoulder to help support the pavement edges. The Village also plans to improve the stormwater management system at the locations listed above. Design engineering will consist of a topographical survey, field evaluation, review of geotechnical data, preparation of plans, specifications, construction cost estimate, and bid documents.

Construction layout will be performed by a resident project representative during the construction phase under a separate construction engineering services contract. Construction services are not included in this scope of work.

## **Scope of Services**

### **1. PROJECT INITIATION AND DATA COLLECTION**

- A. TOPOGRAPHIC SURVEY - Perform topographic survey within the project limits including driveways and cross streets. Storm sewers will be surveyed to determine rim and invert elevations, as well as pipe sizes. State plane coordinates and NAVD 88 will be used for horizontal and vertical controls.
- B. FIELD EVALUATION - Perform a field evaluation of the existing conditions. At driveway locations, the following tasks will be completed:
  - 1) Estimate quantities for driveway patching
  - 2) Identify existing condition of mailboxes and record photo log
  - 3) Identify other appurtenances such as curbs and headwalls that may be affected
- C. MULTI-YEAR PROGRAM CARRYOVER - Village and construction staff will be consulted to apply *lessons learned* during construction of the previous year's section.
- D. UTILITIES - Contact JULIE for potentially impacted utility companies. Initiate utility coordination by contacting utility companies that have facilities along the project limits and requesting utility atlas maps. Potential conflicts will be identified, avoided when feasible, and relocations will be coordinated when necessary.

### **2. ENVIRONMENTAL COORDINATION AND PERMITTING**

- A. EcoCAT - Submit an EcoCAT information request through the Illinois Department of Natural Resources (IDNR) website to identify potentially impacted natural resources. Should potential impacts be identified, consultation may be required. Providing additional project information and fees as may be required for consultation are not included in the scope of this Project and would be a separate expense to the Village if required. Unique design measures to mitigate impacts from the EcoCAT will also be considered additional services.

- B. HISTORIC PRESERVATION COORDINATION - Submit necessary documentation to the Illinois Historical Preservation Agency (IHPA) to obtain a “no significant historical resources” statement for the area of the Project.
  - C. CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) - The contractor will provide testing during construction to comply with Form 663. CCDD testing and completion of Form 663 is not included in this scope, and the amount of potentially contaminated soils will be determined during construction.
  - D. NPDES, SWPPP, IEPA - Complete Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI), and obtain National Pollutant Discharge Elimination System (NPDES) permit from Illinois Environmental Protection Agency (IEPA). Erosion Control Plan Sheets are not anticipated to be required; rather, this work will be described using Notes and Standard Drawings.
  - E. We understand that work in the regulatory floodplain will require coordination with Illinois Department of Natural Resources – Office of Water Resources (INDR-OWR) and a permit if necessary. We understand that compliance with Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) Watershed Management Ordinance (WMO) requirements will require coordination and a permit if necessary. It is anticipated that work near crossings of Tinley Creek will not include work with the *Waters of the U.S.*, and work related to USACE permitting and wetland impacts mitigation is not included in this scope.
3. STORMWATER ANALYSIS AND DESIGN
- A. STORMWATER ANALYSIS - Ditch grading calculations will be developed based on existing hydrology, with ditches modeled to confirm clearance. Compensatory storage calculations will be computed for areas within Zone AE floodway and floodplain of Tinley Creek. Driveway and road culverts will be sized according to modeling calculations.
  - B. DESIGN DEVELOPMENT – Perform watershed delineations, ditch calculations, and culvert calculations; assess the need for closed drainage via storm sewers. Information (grades, profiles, pay items, quantities, and specifications) necessary to incorporate the proposed stormwater design into the contract plans will be determined.
4. PLAN PREPARATION
- A. PAVEMENT REHABILITATION - The Village will obtain Pavement Core Samples and Soil Borings. This information will be reviewed to determine if remedial treatments or modifications to the pavement and/or aggregate base are necessary. Eighteen-inch (18”) wide concrete ribbon curbs/shoulders or barrier curb and gutter (at intersection radius returns only) will be added.
  - B. SPECIFICATIONS - Prepare special provisions in accordance with Village guidelines to specify items not covered by the Standard Specifications for Road and Bridge Construction.

- C. DETAILED DRAWINGS - Complete required plan sheets necessary for bidding including: Cover, General Notes, Summary of Quantities, Typical Sections, Cross Sections, and Construction Details.
  - D. FINAL PLANS - Prepare bidding documents consisting of plan view schematics, Contract Proposal, Schedule of Prices, and Engineer's Estimate of Cost.
5. BIDDING ASSISTANCE - Provide design assistance and clarification for bid documents. Assist the Village with coordination and scheduling during the bid process. Provide documents for bidding and assist the Village in solicitation of bids from as many qualified bidders as possible, attend bid opening to receive and evaluate bids, tabulate bids, and make a recommendation to the Village for an award of contract.
6. QC/QA – Perform in-house peer and milestone reviews of analysis and design by senior staff prior to submittals and finalization of contract documents.
7. PROJECT MANAGEMENT - Plan, schedule, and control the activities that must be performed to complete the Project including budget, schedule, and scope. Coordinate with Village and project team to confirm the goals of the Project are achieved. Prepare and submit monthly invoices and provide regular updates to the Village.

### **Engineering Fee**

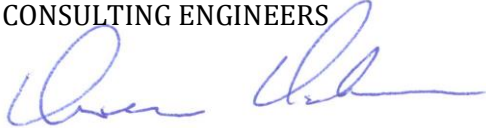
The Owner shall pay the Engineer for the services performed or furnished as stated above, based upon the Engineer's standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel, which in total will not exceed **\$199,990**. All terms and conditions of the Master Agreement dated October 1, 2020, with the Village of Orland Park shall apply.

We appreciate the opportunity to work with the Village of Orland Park on this important Project, and we are available to begin work immediately upon your notice to proceed. We anticipate completing the above scope of services within six months of receiving the notice to proceed. It is anticipated that the notice to proceed will be given in late summer/fall, design activities will occur during fall/winter; and construction will occur in spring 2022. If you find this proposal acceptable, **please sign one copy and return for our files.**

Please do not hesitate to contact me at 815-444-3370 or [ddabros@baxterwoodman.com](mailto:ddabros@baxterwoodman.com) or Jay Coleman at 815-444-3277 or [jcoleman@baxterwoodman.com](mailto:jcoleman@baxterwoodman.com) if you have any questions or need additional information.

Sincerely,

BAXTER & WOODMAN, INC.  
CONSULTING ENGINEERS



Dennis Dabros, P. E.  
Vice President

Attachment

**VILLAGE OF ORLAND PARK, IL**

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

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

DATE: \_\_\_\_\_

<b>Village of Orland Park</b>					
<b>Fernway Road &amp; Ditch Reconstruction Phases 7, 8 and 9</b>					
	<b>Labor Category</b>	<b>Hours</b>	<b>Labor</b>	<b>Expense</b>	<b>Total Compensation</b>
<b>Overall Project Total</b>		<b>1,465.00</b>	<b>193,465.00</b>	<b>6,525.00</b>	<b>199,990.00</b>
01 Project Initiation and Data Collection		312.00	37,580.00	975.00	38,555.00
	Engineer V	16.00	2,960.00		
	Engineer IV	16.00	2,720.00		
	Engineer I	20.00	2,200.00		
	Survey Manager	100.00	12,500.00		
	Surveyor, Project	120.00	12,000.00		
	CADD Tech III	40.00	5,200.00		
02 Environmental Coordination and Permitting		242.00	33,980.00	5,450.00	39,430.00
	Engineer V	40.00	7,400.00		
	Engineer IV	16.00	2,720.00		
	Engineer II	170.00	22,100.00		
	Engineer I	16.00	1,760.00		
03 Stormwater Analysis and Drainage Design		350.00	49,350.00	100.00	49,450.00
	Engineer V	70.00	12,950.00		
	Engineer II	280.00	36,400.00		
04 Plan Preparation		475.00	56,825.00	0.00	56,825.00
	Engineer V	25.00	4,625.00		
	Engineer IV	50.00	8,500.00		
	Engineer III	80.00	12,000.00		
	Engineer I	180.00	19,800.00		
	Engineer Tech I	140.00	11,900.00		
05 Bidding Assistance		20.00	3,520.00	0.00	3,520.00
	Engineer V	8.00	1,480.00		
	Engineer IV	12.00	2,040.00		
06 QC/QA		32.00	5,920.00	0.00	5,920.00
	Engineer V	24.00	4,440.00		
	Engineer V	8.00	1,480.00		
07 Project Management		34.00	6,290.00	0.00	6,290.00
	Engineer V	34.00	6,290.00		