

CIVIL ENGINEERS LAND SURVEYORS LAND PLANNERS

March 22, 2019

Mr. Paul G. Shumejko, Transportation Engineering Manager DPS Engineering Division City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

RE: 2019 Concrete Replacement Program City of Rochester Hills, Michigan Proposal #9-C775 Surveying Layout, Construction Inspection and Engineering Assistance City File No: E19-001

Dear Mr. Shumejko:

In response to your request, we have reviewed the project requirements relative to performing construction administration services for the 2019 Concrete Replacement Program. Pursuant to the progress schedule, this project is scheduled for completion on September 31, 2019. The estimated cost for construction is \$2,400,000. This project is a part of Rochester Hills 2016-2021 Capital Improvement Plan for street improvements and is being funded 100% by the City.

Based on our review of the expected character of work and general understanding of the overall project requirements having completed similar projects in the past, we have identified the following scope of work required to perform construction administration services for the development of these projects:

SCOPE OF WORK

1. <u>Construction Layout</u>

Perform construction layout services to provide the contractor and inspectors vertical and horizontal control to construct the proposed improvements in accordance with the approved plans. We understand that "witness" staking is required at 5 foot off existing back of curb to re-establish the new curb elevation at a minimum of 50-foot intervals along strait segments or larger radius segments, and 25-foot intervals along small radius curved segments such as a cul-de-sac. Additionally, construction staking is required for proposed ADA ramps where applicable. We will record the location of the offset stakes in case they need to be re-staked and used to compute new slope percentages if needed. We will provide cut sheets for all stakes with the hub grade, existing curb grade, and a cut of fill from the hub to the curb. Below we have prepared an estimated budget of anticipated stakeout costs for this project. Invoices for stakeout will be charged against this budget based upon actual hours worked, as authorized, including travel time and office support, for the various classifications of personnel. Office support is also included in the budget per the job classifications, invoicing rates and anticipated hours of involvement to provide the work. Office support includes scheduling/assigning the survey crews and developing layout coordinates.

Lump Sum Fee: \$59,496.00

Mr. Paul G. Shumejko, Transportation Engineering Manager City of Rochester Hills – City File No: E18-027 Proposal #9-C775 March 22, 2019 Page 2

2. Engineering Assistance & Construction Inspection

Complete all work associated with the Inspection and Construction Administration phase of the project. This phase of the project includes, but is not limited to the following items of work:

- Attend Preconstruction meeting
- Document and resolve public complaints
- Assist with stakeholder coordination throughout construction, such as with the schools, US Postal Service, garbage collectors, police and fire personnel, etc.
- Resolve contractor disputes as may arise during the project
- Assist in resolving contractor claims for additional compensation
- Correspond and coordinate with City staff and officials throughout the project development
- Respond to Contractor's requests for information, review shop drawings and submittals
- Prepare additional drawings and hold site visits to solve problems relative to unforeseen conditions.
- Prepare regular project update summaries for City staff and officials
- Attend project meetings as necessary
- Provide all construction oversight supervision to assure project is constructed in conformance with the plans and specifications.
- Provide all required construction inspection services to document daily operations and quantities of work in an Inspector's Daily Report (IDR).
- Deliver required Notices of Construction to residences & businesses and coordinate with City staff/operations.
- Coordinate with Material Testing Company retained by the City to review, understand and document material related concerns. Implement corrective action plan as necessary. Documents same in an IDR.
- Document and resolve changed field conditions
- Obtain project photos that document the progress of the work
- Prepare project closeout punch list

Lump Sum Fee: \$158,400.00

3. <u>Reimbursable Expenses</u>

Reimbursable expenses including costs involving the reproduction of drawings, specifications, presentation boards, etc. required by the project, except those utilized by NFE in the development of the project will be invoiced based on time and materials in accordance with the attached fee schedule.

Lump Sum Fee: \$500.00

Mr. Paul G. Shumejko, Transportation Engineering Manager City of Rochester Hills - City File No: E18-027 Proposal #9-C775 March 22, 2019 Page 3

Based on the work outlined above, we submit the following engineering fee for your approval:

WORK

WORK	ESTIMATED FEE
Construction Layout	\$59,496.00
Engineering Assistance and Construction Inspection	\$158,400.00
Reimbursable Expenses	\$500.00

TOTAL NOT-TO-EXCEED AMOUNT:

We submit the following cost breakdown as evidence of our expected costs associated with performing construction administration services for this project:

CONSTRUCTION LAYOUT

Classification	Description of Work	Estimate <u>Hours</u>	Hourly <u>Rate</u>	<u>Amount</u>
2 Person Survey Crew	Construction Layout	360	\$139.00	\$50,040.00
Land Survey Technician	Coordinate Preparation	80	75.00	6,000.00
Survey Coordinator	Scheduling	36	96.00	3,456.00

Subtotal Construction Layout \$59,496.00

<u>\$218,396.00</u>

ENGINEERING ASSISTANCE AND CONSTRUCTION INSPECTION					
<u>Classification</u>	Description of Work	Estimate <u>Hours</u>	Hourly <u>Rate</u>	<u>Amount</u>	
Engineer II	Site Inspection	1200	\$78.00	\$93,600.00	
Inspection Technician	Site Inspection	400	64.00	25,600.00	
Associate	Field Review and Oversight	320	100.00	32,000.00	
Principal	Review & Coordination	60	120.00	<u>7,200.00</u>	

Subtotal Inspection & Construction Management: \$158,400.00

REIMBURSABLES

Blueprinting, delivery charges, etc.

\$500.00

Subtotal Reimbursables: \$500.00

TOTAL NOT-TO-EXCEED AMOUNT: \$218,396.00

Mr. Paul G. Shumejko, Transportation Engineering Manager City of Rochester Hills – City File No: E18-027 Proposal #9-C775 March 22, 2019 Page 4

Please be advised that invoices will be based on actual hours and work required as approved by your office and the not-to-exceed amount will not be exceeded unless authorized by our office. We look forward to working with you on this important project for the City.

If you have any questions or require further information, please feel free to contact me.

Sincerely, Nowak & Fraus Engineers

Jeffrey J. Huhta, P.E., P.S. Managing Partner

Recommended By: CITY OF ROCHESTER HILLS

Allan E. Schneck, P.E., DPS Director

Approved By: CITY OF ROCHESTER HILLS

Bryan K. Barnett, Mayor

Date: March 22, 2019

Date:

Date: