

March 29, 2019

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

Re: 2019 Asphalt Road & Sidewalk Programs
Professional Services for Survey Staking, Construction Inspection and Engineering Assistance
Job No.: PR19-152

Dear Mr. Shumejko:

Spalding DeDecker is pleased to have this opportunity to provide survey staking, construction contract administration, construction inspection and engineering assistance to the City of Rochester Hills. Below is our understood scope of services for the Asphalt and Sidewalk Programs based upon review of the bid book and plan set your office has provided. We look forward to working with you and your staff soon.

SCOPE OF SERVICES

CONSTRUCTION ADMINISTRATION, ENGINEERING, AND INSPECTION

We understand the scope of services will include, construction contract administration and construction inspection of the reconstruction of the roads and/or sidewalk included in the Stratford Knolls Subdivision (1), Rookery Woods Subdivision (1), Pine Trace Village (2), Hitchman's Haven Subdivision (3), Star Batt Drive (4), and Hampton Circle Sidewalk (5). In addition to inspection services we have previously provided for the City, and will do so again on this project, we understand that the construction contract administration duties are also included for this project, and as a result, we are prepared to perform the following responsibilities, as well:

- Coordinate and hold Pre-construction meeting
- Document and resolve public complaints
- Prepare and review daily inspection reports, including, pictures and sketches; provide all documentation to the City
- Assist with stakeholder coordination throughout construction, such as with the schools, US Postal Service, garbage collectors, police and fire personnel, etc.
- Provide weekly progress updates for the City's use in updating media and residents
- Coordinate, conduct, and provide meeting minutes for construction progress meetings if requested.
- Coordinate materials testing and geotechnical inspections; document and resolve any testing deficiencies
- Provide coordination to resolve utility conflicts

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All survey services will be directly managed by Mr. Mike DeDecker, and construction administration, inspection, and engineering services will be directly managed by Mr. Clark French. Any contract service questions or concerns may be addressed to Mr. Ted Meadows.

SURVEYING: CONSTRUCTION LAYOUT/SURVEY STAKING

Our work will be generally as-needed, and will vary from site to site. We understand that the only area including full reconstruction is Star Batt Drive, which will require considerably more survey involvement than the other sites. The other sites include mill and overlay work, and do not include the full depth removal of the existing roadway.

For the four sites included on sheets 1 through 3, we would not anticipate the contractor or the field inspection staff to require staking. There may be particular ADA ramps that require some additional support and assistance, but we understand that in Rochester Hills constructing these is generally the responsibility of the contractor, with the forms or final concrete placement to be checked and confirmed by construction observers. If long sections of curb need to be removed, they may also request that we witness the location prior to removal by placing stakes at an offset to the curb, which would then be used to reconstruct the curb at the original location and elevation. We have carried a survey allowance for Hitchman's Haven and Rookery Woods in our computations, but have not included any budget for Pine Trace Village or Stratford Knolls.

For the Hampton Circle Sidewalk, we will provide staking for the proposed sidewalk and ADA ramps. This will include providing elevations that will be computed in reference to the existing conditions.

We understand that there are specific ADA ramps adjacent to some of these projects that will need to be modified because the present conditions do not appear to meet the ADA standards. Our scope on these will include obtaining measurements for a small topographical survey and analysis in the office or on site to field-engineer the grades.

The Star Batt Drive site includes a full reconstruction. We will perform a pre-construction topographical survey with narrow limits which include the roadway itself and a small portion of the connection driveways. This will include full cross-sections of the roadway to measure and document existing conditions. An accurate digital terrain model will be computed, with contours displayed at 0.1' intervals. We will analyze the topographical survey, and see if there are opportunities to field-engineer the elevations to a small degree to improve the profile or cross-sections. In general, the goal will be to replace the new road at the same general elevations as the existing roadway.

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For Starr Batt Drive, we will also use an Unmanned Aerial System (UAS) consisting of a DJI Phantom 2 aerial platform and high definition camera to remotely measure supplemental data. This will include a pre-construction flight, up to two progress flights during construction, and one final flight after the major paving construction has been completed. For each flight, we will capture high definition, low altitude imagery which will be combined to create an ortho-mosaic image that is geo-centered and true to scale. For the initial and final flights, we will also generate a point cloud from the imagery. The point cloud will generally be accurate to a tolerance of 0.1' horizontally and 0.3' vertically, and can be used to supplement traditional on the ground conventional measurements. The scope for the two progress flights will include creating the ortho-mosaic image to show the current conditions. Additional services that can be added include performing a second pass of the site to obtain video footage.

Performing as-built measurements and preparing record drawings is not included in the current scope of services. If budget remains, we can discuss with your staff if they would like us to measure any final as-built measurements for the roadway.

SCHEDULE

We are prepared to begin all services described herein immediately upon authorization, but understand the work will be scheduled based on the contractor's schedule.

FEE

Our proposed not-to-exceed fee to perform the services described herein are as follows:

- Survey Staking: \$ 55,000.00
- Inspection and Engineering Assistance: \$384,800.00
- Total: \$439,800.00

This fee shall not be exceeded without prior written approval from your office. Invoices will be submitted monthly based on actual hours incurred in accordance with our approved rate schedule.


If the above terms are acceptable, please provide us with written authorization to proceed. We understand that this would likely be provided after the funding has been approved by City Council. Thank you for considering us for this work, and please don't hesitate to contact me with any questions.

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SPALDING DEDECKER ASSOCIATES, INC.

Witnesses:

1) 
2) 

By: 
Ted Meadows
Spalding DeDecker Associates, Inc.
905 South Boulevard East
Rochester Hills, Michigan 48307
Tax I.D. # 38-1598901
Telephone: 248-844-5400

CITY OF ROCHESTER HILLS

WITNESSES:

1) _____
2) _____

Recommended :

By: _____
Allan E. Schneck, PE

Approved:

By: _____
Honorable Mayor Bryan K. Barnett

cc: Allan E. Schneck, PE, Public Services Director
Paul Davis, PE, City Engineer
Tracey Balint, PE, Public Utilities Engineer