March 1, 2017

Mr. Paul Shumejko, P.E., PTOE Transportation Engineer - DPS/Engineering Division City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

Re:

2017 Asphalt Rehabilitation Program

Professional Services for Survey Staking, Construction Inspection and Engineering Assistance

Job No.: PR17-060

Dear Mr. Shumejko:

Spalding DeDecker is pleased to have this opportunity to provide survey staking, construction inspection engineering services to the City of Rochester Hills. Below is our understood scope of services for the Asphalt Program based upon review of the RFP, bid book, and plan set you have provided, as well as further discussion with you on February 27, 2017. We look forward to working with you soon.

SCOPE OF SERVICES

SURVEY

We understand that the scope of services will include construction layout for segments of Rochester Industrial Court, Rochester Industrial Lane, Rochester Industrial Drive, and Fire Station No. 1 Rear Access road being reconstructed shown in the maps provided to us by your office. Also construction layout for Sump Pump lines along Clear Pointe Court, and Brookfield Court. This will include the following:

Curb or Edge of Asphalt Staking (For Reconstruction Sections)

- Set at least one pair of benchmarks at each site using GPS-derived NAVD'88 elevations. The datum will be established using GPS measurements, but we will perform the actual grading by more precise methods such as using a total-station or optical level.
- Set back of curb or edge of asphalt 5' offset stakes graded to the existing curb in 50' intervals
 along straight segments or larger radius segments, and 25' intervals along small radius curved
 segments such as a cul-de-sacs. This will be done prior to demolition of the curbs so we can
 obtain the hub grade and existing curb grade at the same time. Staking for both sides of the

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roadway will be performed at the same time, although the construction will actually be partwidth removal and replacement.

- We will record the location of offset stakes in case they need to be re-staked and used to compute new slope percentages if needed. We will provide a station/offset report for the stakes set based on an approximate centerline baseline computed in the office based on the recorded position of the stakes.
- We will provide cut sheets for all stakes with the hub grade, existing curb grade, and a cut or fill from the hub to the curb or edge of asphalt.
- We understand that the contractor will notify within 48 hours what streets need staking as they progress.

Sump Line Staking

- Set at least one pair of benchmarks at each site using GPS-derived NAVD'88 elevations. The datum will be established using GPS measurements, but we will perform the actual grading by more precise methods such as using a total-station or optical level.
- Provide limited graded offset stakes if required to maintain positive drainage for sump lines.

ADA Ramp Staking

- Limited or no stakes will be needed for ADA ramps. The contractor and inspector or engineering staff will work together to match existing grades at ADA compliance.
- We understand the contractor will notify within 48 hours what streets need staking as they progress.

Contingency

This includes an allowance for additional field checks or staking which may arise. For instance,
no staking is anticipated on the mill and overlay streets, but the construction observers or
contractor may request that stationing is marked in the field. This would also provide a small
budget for checking ADA ramps.

All survey services will be directly managed by Mr. Mike DeDecker.

INSPECTION AND ENGINEERING ASSISTANCE

We understand the scope of services will include construction inspection of the reconstruction of Rochester Industrial Ct, Rochester Industrial Ln, Rochester Industrial Dr, and Fire Station No. 1 Rear Access road. We will also perform construction inspection for rehabilitation of Horizon Ct, Brookfield Ct, Clear Pointe Ct, New Life Ln, Willow Grove Ln, Fairfield Dr, Cedaredge, Ridgecrest, Innsbrook Dr, Innsbrook Ct and the ADA improvements at Midvale Dr and Hickory Lawn. For the Construction Contract Administration of the project, we understand the City will be preparing pay estimates and change orders, and as a result, we are prepared to perform the following engineering assistance responsibilities:

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- Attend Pre-con
- 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
- Coordinate materials testing and geotechnical inspections; document and resolve any testing deficiencies
- Provide coordination to resolve utility conflicts

All inspection and engineering assistance services will be directly managed by Mr. Ted Meadows.

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, with a completion date of August 15, 2017.

FEE

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

• Survey Staking: \$ 34, 013.00

Inspection and Engineering Assistance: \$174,200.00
 Total: \$208,213.00

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.

SPALDING DEDECKER ASSOCIATES, INC.	
Witnesses:	
1) Leith June 1 Keins Sirois 2) Alyssa Wamboid	By: Cheryl Gregory, PE 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	
	Recommended:
WITNESSES:	
1) Keith Ceps 2) Paul Chunk 3/3/17	By: Allan E. Schneck, PE
PAUL SHUME Theo 3-3-17	Approved:
	Ву:
	Honorable Mayor Bryan K. Barnett

attachment

Cc: Allan Schneck, PE, Public Services Director Paul Davis, PE, City Engineer P. Rasor, PE, Spalding DeDecker 2017 Rochester Hills Asphalt Road Program PR17-060 3/1/17

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		Director	Senior Project Manager	Senior Project Surveyor	Project Surveyor	Mapping Specialist	CAD Technician III	One-person Crew	Two-person Crew	Survey Crew Chief	Survey Assistant		Curb or	Sump
	Linear Feet	10	14	95	96	30	34	52	50	53	54		Road	Line
Street	of Curb	\$160	\$150	\$130	\$115	\$ 90	\$ 85	\$115	\$160	\$ 95	\$ 65	Cost	Staking	Staking
ROCHESTER INDUSTRIAL PARK														
Rochester Industrial Cl		0.5	1			5			8	0.5		\$2,008	Yes	No
Rochester Industrial Ln		0.5	#1 5		3.79	5			8	0.5		\$2,008	Yes	No
Rochester Industrial Dr		2	4			20			50	2		\$10,910	Yes	No
Total	5260	3	6			30			66	3		\$14,925		
CHICHESTER														
Clear Pointe Ct		1.5	3			8			20			\$4,610	No	Yes
NORTH FAIRVIEW FARMS														
Brookfield Ct		0.5	1			8	- 1		10			\$2,550	No	Yes
Cedaredge Rd													No	No
Fairfield Dr													No	No
Ridgecrest												1	No	No
HEARTPEACE HILLS														
New Life Ln													No	No
HIDDEN HILLS														
Willow Grove Ln			-										No	No
AVONCROFTS									-				110	- 110
Hickory Lawn													No	No
GRANT M. JOHNS										_			110	110
Midvale Dr													No	No
FIRE STATION ACCESS DRIVE													110	110
Fire Station #1 Rear Access		0.5	1		-	- 5	-		10	0.5		\$2,328	Yes	No
HORIZON CT		0.0							10	0.0	-1	72,020	100	110
Horizon Ct													No	No
BROOKDALE WOODS										-			140	NO
Innsbrook Dr											_		No	No
Innsbrook Ct													No	No
CONTINGENCY													INO	140
Allowance for misc. field checks.														
marking stationing, etc.									60			\$9,600		
Total	10526	5.5	16.5			51			106	3.5		\$34,013		



2017 Rochester Hills Asphalt Program PR17-060 3-1-17

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1	CE Services								<u> </u>		.,		
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2		Removal	Milling	Sump Lines	Earth Excavation/ Crack Repair	Aggregate Base	Edge Drain	Curb & Gutter	ADA Improvements	Paving	Restoration	Pavement Marking	
3	Street	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Total Days
4	ROCHESTER INDUSTRIAL PARK	12			13	6	6	3		3	1	. 2	46
5	Rochester Industrial Ct												
6	Rochester Industrial Ln												
7	Rochester Industrial Dr												
8	FIRE STATION ACCESS DRIVE												
9	Fire Station #1 Rear Access	2			5	5				2	1		15
10	HORIZON CT												
11	Horizon Ct		1		3			1		1	1		7
12	NORTH FAIRVIEW FARMS		-										
13	Brookfield Ct		1	2	3			1		1	1		9
14	CHICHESTER	_				-							
15	Clear Pointe Ct		1	2	3			1		1	1		9
16	HEARTPEACE HILLS												- 0
17	New Life Ln		1		2			1		1	1		6
	HIDDEN HILLS												
19	Willow Grove Ln		2		5			2		2	1		12
20	GRANT M. JOHNS												12
21	Midvale Dr								2				2
	AVONCROFTS												
23	Hickory Lawn								2				2
	NORTH FAIRVIEW FARMS		3		7			4		3	1		18
25	Fairfield Dr												
26	Cedaredge Rd												
27	Ridgecrest												
28	BROOKDALE WOODS		2		3			4		2	1		12
29	Innsbrook Dr												
30	Innsbrook Ct												
31	Total Days	14	11	4	44	11	6	17	4	16	9	2	138
32	10% Contingency										-	-	152
33	Inspection Hours (10 Hours per Day)												1520
34	Inspection Cost (\$85 per Hour)												\$129,200
35	CCA Hours												450
36	CCA Cost (\$100 per Hour)												\$ 45,000
37	Total Cost												\$174,200
38					-						- 1		
39		7	SPA	DIN	NG D	EDE	CKE	R					
40		V			surveying E			11					1
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