

January 4, 2018

City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

Attn: Paul Davis, Deputy Director / City Engineer

HRC Job No. 20170486

Re: Judson Park Subdivision Speed Study
Potomac Drive, Tallahassee Drive and Roseview Drive

Dear Mr. Davis:

At your request, Hubbell, Roth & Clark, Inc. (HRC) has prepared a speed study to address speeding concerns from homeowners within the Judson Park Subdivision and determined if any countermeasures are warranted. The following includes a summary of the background, speed study, results, and conclusion/recommendation.

Background

The City of Rochester Hills received a Traffic Information Survey indicating speeding and cut-through traffic concerns from several homeowners in the Judson Park Subdivision. The Traffic Information Survey was indicated the locations of their concerns were on Shenandoah Drive, Mohawk Lane, Roseview Drive, Tallahassee Drive and Potomac Drive. The homeowner identified the speeding issue to occur throughout the day and the cut-through traffic to occur during high traffic periods between 6:45 to 7:30 AM and 2:30 to 3:00 PM.

The speed limit for all these local roads is 25 miles per hour (MPH). However, the speed limit sign on Roseview Drive off of Brewster Road was not visible. Due to the speeding concerns from residents, the City of Rochester Hills placed a set of tubes at four locations to determine the actual vehicular speeds and volumes for these roads. The actual location of the tubes is shown in **Attachment A**

- Tallahassee Drive between Gettysburg and Shenandoah, counter 6044
- Roseview Drive between Potomac and Brewster, counter 6045
- Potomac Drive between Mohawk and Tallahassee, counter 6046
- Potomac Drive between N Adams and Tallahassee, counter 6047

The spot speeds and volumes at all locations were gathered from the tubes on Thursday, November 30, 2017. The weather was sunny and partly cloudy. The City of Rochester Hills then asked HRC to analyze the raw data and prepare a letter report of the findings.

PRINCIPALS

Daniel W. Mitchell | Nancy M.D. Faught
Keith D. McCormack | Jesse B. VanDeCreek
Roland N. Alix | Michael C. MacDonald
James F. Burton | Charles E. Hart

SENIOR ASSOCIATES

Gary J. Tressel | Randal L. Ford
William R. Davis | Dennis J. Benoit
Robert F. DeFrain | Thomas D. LaCross
Albert P. Mickalich | Timothy H. Sullivan
Thomas G. Maxwell

ASSOCIATES

Marvin A. Olane | Marshall J. Grazioli
Donna M. Martin | Colleen L. Hill-Stramsak
Bradley W. Shepler | Karyn M. Stickel
Jane M. Graham | Todd J. Sneathen
Aaron A. Uranga | Salvatore Conigliaro

Speed Study Results

HRC analyzed the raw data provided by the City of Rochester Hills and determined the average and 85th percentile speeds along with the average daily traffic (ADT) at each tube setup. A summary of the results of the speed and volume studies at each of the four locations is provided below. A detailed breakdown of both the speeds and volumes is provided in **Attachments B and C**, respectively.

Speed Study Results for counter 6044: Tallahassee Drive

Average Speed = 27 MPH (WB = 27 MPH; EB = 26 MPH)
85th Percentile Speed = 32 MPH (WB = 32 MPH; EB = 31 MPH)
ADT = 268 vehicles (WB = 165 vehicles; EB = 103 vehicles)

Speed Study Results for counter 6045: Roseview Drive

Average Speed = 26 MPH (WB = 27 MPH; EB = 25 MPH)
85th Percentile Speed = 32 MPH (WB = 32 MPH; EB = 30 MPH)
ADT = 273 vehicles (WB = 155 vehicles; EB = 118 vehicles)

Speed Study Results for counter 6046: Potomac Drive

Average Speed = 24 MPH (SB = 24 MPH; NB = 24 MPH)
85th Percentile Speed = 29 MPH (SB = 31 MPH; NB = 29 MPH)
ADT = 601 vehicles (SB = 354 vehicles; NB = 247 vehicles)

Speed Study Results for counter 6047: Potomac Drive

Average Speed = 26 MPH (SB = 27 MPH; NB = 25 MPH)
85th Percentile Speed = 31 MPH (SB = 32 MPH; NB = 30 MPH)
ADT = 452 vehicles (SB = 236 vehicles; NB = 216 vehicles)

Speeds on residential streets having a chronic speed compliant problem typically have 85th percentile speeds of 31 MPH or higher according to City practice. The 31 MPH threshold is exceeded on Tallahassee Drive in both directions, on westbound Roseview Drive and on southbound Potomac Drive in two locations.

For locations that have speed issues such as these three streets in the Judson subdivision, the City has a traffic calming program for installing speed humps or other traffic calming devices. If the homeowners along Potomac Drive between Adams Road and Tienken Road, Tallahassee Drive between Gettysberg Ct. and Shenandoah Drive, and Roseview Drive between Potomac Drive and Shenandoah Drive are interested in pursuing the City's traffic calming program, the homeowners should approach the city on the next steps in the process.

Conclusion

All four streets in the subdivision meet the City's definition of a chronic speeding location as the 85th percentile speed exceeds 31 MPH.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

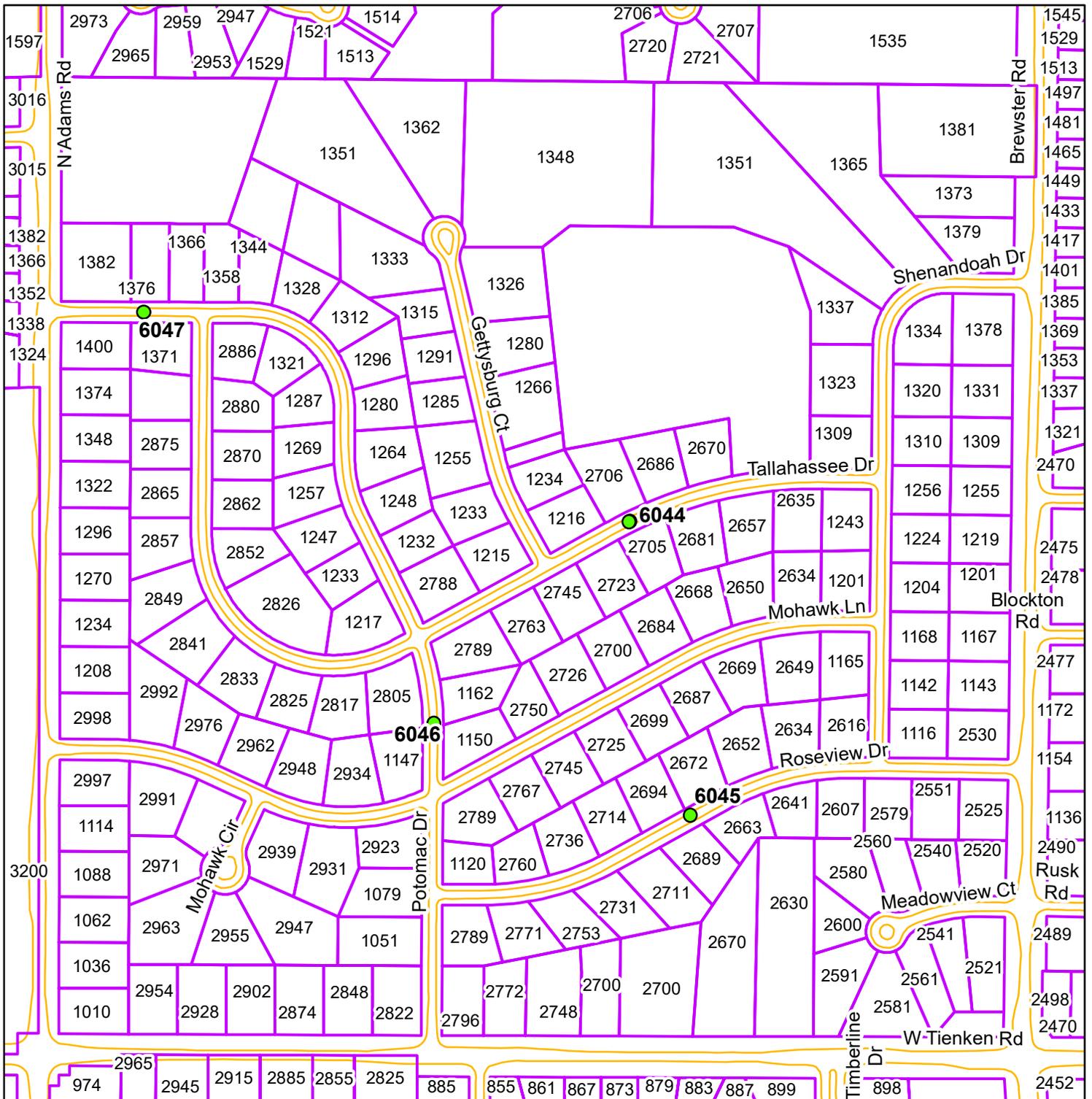
Lia Michaels

Lia Michaels, PE, PTOE
Project Engineer

LFM/bjl

Attachments: A – Tube Locations
B – Spot Speeds
C – Volumes

pc: HRC; File



Legend

- Edge of Road
- Parcel Lines
- Count Points

**Speed/Cut Through Study
Judson Park Subdivision**

400 200 0 400 Feet



1 in = 400 ft



Although the information provided by this map is believed to be reliable, its accuracy is not warranted in any way. The City of Rochester Hills assumes no liability for any claims arising from the use of this map.

Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824
Consulting Engineers Since 1915

Site Code: 6044
 Tallahassee Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	WB	EB	Total						
12:00 AM		*	*	*						
01:00		*	*	*						
02:00		*	*	*						
03:00		*	*	*						
04:00		*	*	*						
05:00		*	*	*						
06:00		*	*	*						
07:00		*	*	*						
08:00		*	*	*						
09:00		3	8	11						
10:00		4	5	9						
11:00		7	4	11						
12:00 PM		11	5	16						
01:00		4	4	8						
02:00		17	18	35						
03:00		10	7	17						
04:00		10	5	15						
05:00		10	11	21						
06:00		4	3	7						
07:00		3	0	3						
08:00		3	1	4						
09:00		2	3	5						
10:00		1	3	4						
11:00		0	1	1						
Total		89	78	167						
Percent		53.3%	46.7%							
AM Peak	-	11:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	7	8	-	-	-	-	-	-	11
PM Peak	-	14:00	14:00	-	-	-	-	-	-	14:00
Vol.	-	17	18	-	-	-	-	-	-	35

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Start Time	30-Nov-17 Thu	WB	EB	Total						
12:00 AM		0	1	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		1	1	2						
06:00		10	1	11						
07:00		68	14	82						
08:00		5	7	12						
09:00		2	3	5						
10:00		5	4	9						
11:00		4	2	6						
12:00 PM		5	8	13						
01:00		3	2	5						
02:00		12	13	25						
03:00		19	12	31						
04:00		5	8	13						
05:00		11	8	19						
06:00		5	8	13						
07:00		5	5	10						
08:00		3	3	6						
09:00		1	1	2						
10:00		1	1	2						
11:00		0	1	1						
Total		165	103	268						
Percent		61.6%	38.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	68	14	-	-	-	-	-	-	82
PM Peak	-	15:00	14:00	-	-	-	-	-	-	15:00
Vol.	-	19	13	-	-	-	-	-	-	31

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 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	WB	EB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	1							1
04:00		1	0							1
05:00		0	0							0
06:00		9	3							12
07:00		66	12							78
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		76	16							92
Percent		82.6%	17.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	66	12	-	-	-	-	-	-	78
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		330	197							527
Percent		62.6%	37.4%							
ADT		ADT 272	AADT 272							

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Start Time	29-Nov-17 Wed	EB	WB	Total
12:00 AM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		5	5	10
10:00		4	5	9
11:00		5	3	8
12:00 PM		5	4	9
01:00		1	1	2
02:00		21	8	29
03:00		9	6	15
04:00		10	8	18
05:00		8	7	15
06:00		11	9	20
07:00		5	5	10
08:00		1	3	4
09:00		2	4	6
10:00		2	0	2
11:00		0	3	3
Total		89	71	160
Percent		55.6%	44.4%	
AM Peak	-	09:00	09:00	09:00
Vol.	-	5	5	10
PM Peak	-	14:00	18:00	14:00
Vol.	-	21	9	29

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Start Time	30-Nov-17 Thu	EB	WB	Total						
12:00 AM		1	0	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		1	1	2						
06:00		7	13	20						
07:00		11	50	61						
08:00		10	4	14						
09:00		5	4	9						
10:00		3	2	5						
11:00		7	9	16						
12:00 PM		6	7	13						
01:00		3	4	7						
02:00		14	10	24						
03:00		12	11	23						
04:00		7	9	16						
05:00		15	9	24						
06:00		5	5	10						
07:00		3	5	8						
08:00		1	5	6						
09:00		4	3	7						
10:00		2	3	5						
11:00		1	1	2						
Total		118	155	273						
Percent		43.2%	56.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	11	50	-	-	-	-	-	-	61
PM Peak	-	17:00	15:00	-	-	-	-	-	-	14:00
Vol.	-	15	11	-	-	-	-	-	-	24

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Start Time	01-Dec-17 Fri	EB	WB	Total
12:00 AM		0	0	0
01:00		0	0	0
02:00		0	0	0
03:00		0	1	1
04:00		0	0	0
05:00		0	1	1
06:00		4	13	17
07:00		12	53	65
08:00		*	*	*
09:00		*	*	*
10:00		*	*	*
11:00		*	*	*
12:00 PM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		*	*	*
10:00		*	*	*
11:00		*	*	*
Total		16	68	84
Percent		19.0%	81.0%	
AM Peak	-	07:00	07:00	07:00
Vol.	-	12	53	65
PM Peak	-	-	-	-
Vol.	-	-	-	-
Grand Total		223	294	517
Percent		43.1%	56.9%	
ADT		ADT 263	AADT 263	

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 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	SB	NB							Total
12:00 AM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		19	13							32
10:00		11	12							23
11:00		17	7							24
12:00 PM		17	9							26
01:00		19	24							43
02:00		50	17							67
03:00		30	17							47
04:00		26	22							48
05:00		27	20							47
06:00		16	17							33
07:00		6	7							13
08:00		4	11							15
09:00		2	3							5
10:00		0	2							2
11:00		1	3							4
Total		245	184							429
Percent		57.1%	42.9%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	19	13	-	-	-	-	-	-	32
PM Peak	-	14:00	13:00	-	-	-	-	-	-	14:00
Vol.	-	50	24	-	-	-	-	-	-	67

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Start Time	30-Nov-17 Thu	SB	NB	Total
12:00 AM		1	1	2
01:00		0	0	0
02:00		0	0	0
03:00		0	0	0
04:00		0	0	0
05:00		8	5	13
06:00		20	10	30
07:00		82	44	126
08:00		33	11	44
09:00		12	6	18
10:00		10	8	18
11:00		27	7	34
12:00 PM		12	20	32
01:00		16	5	21
02:00		31	29	60
03:00		34	24	58
04:00		19	9	28
05:00		22	21	43
06:00		13	12	25
07:00		3	13	16
08:00		2	15	17
09:00		6	3	9
10:00		3	2	5
11:00		0	2	2
Total		354	247	601
Percent		58.9%	41.1%	
AM Peak	-	07:00	07:00	07:00
Vol.	-	82	44	126
PM Peak	-	15:00	14:00	14:00
Vol.	-	34	29	60

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 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	SB	NB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	1							1
04:00		2	0							2
05:00		6	2							8
06:00		16	10							26
07:00		81	51							132
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		105	64							169
Percent		62.1%	37.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	81	51	-	-	-	-	-	-	132
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		704	495							1199
Percent		58.7%	41.3%							
ADT		ADT 619	AADT 619							

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 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	SB	NB							Total
12:00 AM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		11	15							26
10:00		9	11							20
11:00		11	8							19
12:00 PM		14	9							23
01:00		15	16							31
02:00		44	17							61
03:00		29	12							41
04:00		21	18							39
05:00		25	17							42
06:00		8	8							16
07:00		12	9							21
08:00		3	1							4
09:00		5	1							6
10:00		5	1							6
11:00		1	3							4
Total		213	146							359
Percent		59.3%	40.7%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	11	15	-	-	-	-	-	-	26
PM Peak	-	14:00	16:00	-	-	-	-	-	-	14:00
Vol.	-	44	18	-	-	-	-	-	-	61

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 Potomac Dr
 Rocheser Hills, MI
 Date Printed: 20-Dec-17

Start Time	30-Nov-17 Thu	SB	NB	Total						
12:00 AM		2	1	3						
01:00		1	1	2						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	1	1						
05:00		0	2	2						
06:00		5	10	15						
07:00		16	53	69						
08:00		25	16	41						
09:00		12	9	21						
10:00		6	5	11						
11:00		14	12	26						
12:00 PM		11	14	25						
01:00		10	7	17						
02:00		36	28	64						
03:00		22	10	32						
04:00		20	6	26						
05:00		24	16	40						
06:00		10	7	17						
07:00		6	10	16						
08:00		5	4	9						
09:00		8	3	11						
10:00		2	0	2						
11:00		1	1	2						
Total		236	216	452						
Percent		52.2%	47.8%							
AM Peak	-	08:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	25	53	-	-	-	-	-	-	69
PM Peak	-	14:00	14:00	-	-	-	-	-	-	14:00
Vol.	-	36	28	-	-	-	-	-	-	64

Hubbell, Roth & Clark, Inc.

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 Potomac Dr
 Rocheser Hills, MI
 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	SB	NB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		1	1							2
03:00		0	0							0
04:00		0	2							2
05:00		0	1							1
06:00		3	8							11
07:00		12	57							69
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		16	69							85
Percent		18.8%	81.2%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	12	57	-	-	-	-	-	-	69
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		465	431							896
Percent		51.9%	48.1%							
ADT		ADT 467	AADT 467							

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 Date Printed: 20-Dec-17

Tallahassee WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	4	1	2	2	0	0	0	0	0	0	0	0	9	19-28	5
07:00	1	3	7	27	22	5	1	0	0	0	0	0	0	0	66	26-35	49
08:00	5	1	2	5	2	1	0	0	0	0	0	0	0	0	16	26-35	7
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	6	4	13	34	26	8	1	0	0	0	0	0	0	0	92		
Percent	6.5%	4.3%	14.1%	37.0%	28.3%	8.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	07:00	07:00	07:00	07:00	07:00								07:00		
Vol.	5	3	7	27	22	5	1								66		
PM Peak																	
Vol.	16	18	65	152	73	20	2	0	0	0	0	0	0	0	346		
Percent	4.6%	5.2%	18.8%	43.9%	21.1%	5.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 21 MPH
 50th Percentile : 27 MPH
 85th Percentile : 32 MPH
 95th Percentile : 36 MPH

Stats
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 225
 Percent in Pace : 65.0%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 27 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
P.O. Box 824
Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6044
Tallahassee Dr
Rochester Hills, MI
Date Printed: 20-Dec-17

Tallahassee EB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3	24-33	2
07:00	0	3	2	4	3	0	0	0	0	0	0	0	0	0	12	24-33	7
08:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4	15-24	3
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1	4	5	6	4	0	0	0	0	0	0	0	0	0	20		
Percent	5.0%	20.0%	25.0%	30.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	07:00	07:00	07:00	07:00										07:00		
Vol.	1	3	2	4	3										12		
PM Peak																	
Vol.	13	13	54	80	32	7	2	0	0	0	0	0	0	0	201		
Percent	6.5%	6.5%	26.9%	39.8%	15.9%	3.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 20 MPH
50th Percentile : 26 MPH
85th Percentile : 31 MPH
95th Percentile : 34 MPH

Stats
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 134
Percent in Pace : 66.7%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%
Mean Speed(Average) : 26 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6044
 Tallahassee Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Tallahassee WB, Tallahassee EB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	1	0	4	2	3	2	0	0	0	0	0	0	0	0	12	21-30	6
07:00	1	6	9	31	25	5	1	0	0	0	0	0	0	0	78	26-35	56
08:00	5	2	4	6	2	1	0	0	0	0	0	0	0	0	20	21-30	10
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	7	8	18	40	30	8	1	0	0	0	0	0	0	0	112		
Percent	6.3%	7.1%	16.1%	35.7%	26.8%	7.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	07:00	07:00	07:00	07:00	07:00								07:00		
Vol.	5	6	9	31	25	5	1								78		
PM Peak																	
Vol.	29	31	119	232	105	27	4	0	0	0	0	0	0	0	547		
Percent	5.3%	5.7%	21.8%	42.4%	19.2%	4.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 20 MPH
 50th Percentile : 27 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 351
 Percent in Pace : 64.2%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 27 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6044
 Tallahassee Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	WB	EB	Total						
12:00 AM		*	*	*						
01:00		*	*	*						
02:00		*	*	*						
03:00		*	*	*						
04:00		*	*	*						
05:00		*	*	*						
06:00		*	*	*						
07:00		*	*	*						
08:00		*	*	*						
09:00		3	8	11						
10:00		4	5	9						
11:00		7	4	11						
12:00 PM		11	5	16						
01:00		4	4	8						
02:00		17	18	35						
03:00		10	7	17						
04:00		10	5	15						
05:00		10	11	21						
06:00		4	3	7						
07:00		3	0	3						
08:00		3	1	4						
09:00		2	3	5						
10:00		1	3	4						
11:00		0	1	1						
Total		89	78	167						
Percent		53.3%	46.7%							
AM Peak	-	11:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	7	8	-	-	-	-	-	-	11
PM Peak	-	14:00	14:00	-	-	-	-	-	-	14:00
Vol.	-	17	18	-	-	-	-	-	-	35

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
P.O. Box 824
Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6044

Tallahassee Dr

Rochester Hills, MI

Date Printed: 20-Dec-17

Start Time	30-Nov-17 Thu	WB	EB	Total						
12:00 AM		0	1	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		1	1	2						
06:00		10	1	11						
07:00		68	14	82						
08:00		5	7	12						
09:00		2	3	5						
10:00		5	4	9						
11:00		4	2	6						
12:00 PM		5	8	13						
01:00		3	2	5						
02:00		12	13	25						
03:00		19	12	31						
04:00		5	8	13						
05:00		11	8	19						
06:00		5	8	13						
07:00		5	5	10						
08:00		3	3	6						
09:00		1	1	2						
10:00		1	1	2						
11:00		0	1	1						
Total		165	103	268						
Percent		61.6%	38.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	68	14	-	-	-	-	-	-	82
PM Peak	-	15:00	14:00	-	-	-	-	-	-	15:00
Vol.	-	19	13	-	-	-	-	-	-	31

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6044
 Tallahassee Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	WB	EB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	1							1
04:00		1	0							1
05:00		0	0							0
06:00		9	3							12
07:00		66	12							78
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		76	16							92
Percent		82.6%	17.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	66	12	-	-	-	-	-	-	78
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		330	197							527
Percent		62.6%	37.4%							
ADT		ADT 272	AADT 272							

Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824
Consulting Engineers Since 1915

Site Code: 6045
 Roseview Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Roseview Dr EB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4	15-24	3
07:00	1	0	4	5	2	0	0	0	0	0	0	0	0	0	12	21-30	9
08:00	4	0	4	3	1	2	0	0	0	0	0	0	0	0	14	21-30	7
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	5	1	10	8	4	2	0	0	0	0	0	0	0	0	30		
Percent	16.7%	3.3%	33.3%	26.7%	13.3%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	06:00	07:00	07:00	07:00	08:00									08:00		
Vol.	4	1	4	5	2	2									14		
PM Peak																	
Vol.	26	20	62	91	30	4	3	1	0	0	0	0	0	0	237		
Percent	11.0%	8.4%	26.2%	38.4%	12.7%	1.7%	1.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 17 MPH
 50th Percentile : 25 MPH
 85th Percentile : 30 MPH
 95th Percentile : 34 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 153
 Percent in Pace : 64.6%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 25 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045
 Roseview Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Roseview Dr WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
06:00	0	0	4	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	13	21-30	9
07:00	0	0	7	23	17	5	1	0	0	0	0	0	0	0	0	0	0	0	53	26-35	40
08:00	2	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	21-30	5
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2	1	13	33	22	5	1	0	0	0	0	0	0	0	0	0	0	0	77		
Percent	2.6%	1.3%	16.9%	42.9%	28.6%	6.5%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	07:00	07:00	07:00	07:00	07:00												07:00		
Vol.	2	1	7	23	17	5	1												53		
PM Peak																					
Vol.	17	20	71	110	69	13	3	0	0	0	0	0	0	0	0	0	0	0	303		
Percent	5.6%	6.6%	23.4%	36.3%	22.8%	4.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 20 MPH
 50th Percentile : 26 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 181
 Percent in Pace : 59.7%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 27 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
P.O. Box 824
Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045

Roseview Dr

Rochester Hills, MI

Date Printed: 20-Dec-17

Roseview Dr EB, Roseview Dr WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/30/17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	14-23	2
06:00	1	0	10	7	1	0	0	1	0	0	0	0	0	0	20	21-30	17
07:00	0	1	6	27	21	3	3	0	0	0	0	0	0	0	61	26-35	48
08:00	1	2	7	2	2	0	0	0	0	0	0	0	0	0	14	21-30	9
09:00	1	1	1	1	5	0	0	0	0	0	0	0	0	0	9	26-35	6
10:00	0	0	1	2	2	0	0	0	0	0	0	0	0	0	5	24-33	4
11:00	3	1	4	5	2	1	0	0	0	0	0	0	0	0	16	21-30	9
12 PM	2	0	6	4	1	0	0	0	0	0	0	0	0	0	13	21-30	10
13:00	0	1	2	2	2	0	0	0	0	0	0	0	0	0	7	19-28	4
14:00	2	3	5	8	5	1	0	0	0	0	0	0	0	0	24	21-30	13
15:00	1	2	8	10	1	1	0	0	0	0	0	0	0	0	23	21-30	18
16:00	2	1	6	4	2	1	0	0	0	0	0	0	0	0	16	21-30	10
17:00	3	2	5	7	7	0	0	0	0	0	0	0	0	0	24	25-34	14
18:00	1	1	2	6	0	0	0	0	0	0	0	0	0	0	10	21-30	8
19:00	1	2	2	3	0	0	0	0	0	0	0	0	0	0	8	19-28	5
20:00	0	1	2	1	2	0	0	0	0	0	0	0	0	0	6	15-24	3
21:00	1	1	1	3	1	0	0	0	0	0	0	0	0	0	7	26-35	4
22:00	1	1	0	2	1	0	0	0	0	0	0	0	0	0	5	26-35	3
23:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	19-28	2
Total	20	21	70	96	55	7	3	1	0	0	0	0	0	0	273		
Percent	7.3%	7.7%	25.6%	35.2%	20.1%	2.6%	1.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	08:00	06:00	07:00	07:00	07:00	07:00	06:00							07:00		
Vol.	3	2	10	27	21	3	3	1							61		
PM Peak	17:00	14:00	15:00	15:00	17:00	14:00									14:00		
Vol.	3	3	8	10	7	1									24		

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
P.O. Box 824
Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045

Roseview Dr

Rochester Hills, MI

Date Printed: 20-Dec-17

Roseview Dr EB, Roseview Dr WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
06:00	0	1	6	5	5	0	0	0	0	0	0	0	0	0	17	21-30	11
07:00	1	0	11	28	19	5	1	0	0	0	0	0	0	0	65	26-35	47
08:00	6	1	5	7	2	2	0	0	0	0	0	0	0	0	23	21-30	12
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	7	2	23	41	26	7	1	0	0	0	0	0	0	0	107		
Percent	6.5%	1.9%	21.5%	38.3%	24.3%	6.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	06:00	07:00	07:00	07:00	07:00	07:00										
Vol.	6	1	11	28	19	5	1										
PM Peak																	
Vol.	43	40	133	201	99	17	6	1	0	0	0	0	0	0	540		
Percent	8.0%	7.4%	24.6%	37.2%	18.3%	3.1%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 19 MPH
50th Percentile : 26 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Stats
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 334
Percent in Pace : 61.9%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%
Mean Speed(Average) : 26 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045
 Roseview Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	EB	WB	Total
12:00 AM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		5	5	10
10:00		4	5	9
11:00		5	3	8
12:00 PM		5	4	9
01:00		1	1	2
02:00		21	8	29
03:00		9	6	15
04:00		10	8	18
05:00		8	7	15
06:00		11	9	20
07:00		5	5	10
08:00		1	3	4
09:00		2	4	6
10:00		2	0	2
11:00		0	3	3
Total		89	71	160
Percent		55.6%	44.4%	
AM Peak	-	09:00	09:00	09:00
Vol.	-	5	5	10
PM Peak	-	14:00	18:00	14:00
Vol.	-	21	9	29

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045
 Roseview Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	30-Nov-17 Thu	EB	WB	Total						
12:00 AM		1	0	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		1	1	2						
06:00		7	13	20						
07:00		11	50	61						
08:00		10	4	14						
09:00		5	4	9						
10:00		3	2	5						
11:00		7	9	16						
12:00 PM		6	7	13						
01:00		3	4	7						
02:00		14	10	24						
03:00		12	11	23						
04:00		7	9	16						
05:00		15	9	24						
06:00		5	5	10						
07:00		3	5	8						
08:00		1	5	6						
09:00		4	3	7						
10:00		2	3	5						
11:00		1	1	2						
Total		118	155	273						
Percent		43.2%	56.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	11	50	-	-	-	-	-	-	61
PM Peak	-	17:00	15:00	-	-	-	-	-	-	14:00
Vol.	-	15	11	-	-	-	-	-	-	24

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6045
 Roseview Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	EB	WB	Total
12:00 AM		0	0	0
01:00		0	0	0
02:00		0	0	0
03:00		0	1	1
04:00		0	0	0
05:00		0	1	1
06:00		4	13	17
07:00		12	53	65
08:00		*	*	*
09:00		*	*	*
10:00		*	*	*
11:00		*	*	*
12:00 PM		*	*	*
01:00		*	*	*
02:00		*	*	*
03:00		*	*	*
04:00		*	*	*
05:00		*	*	*
06:00		*	*	*
07:00		*	*	*
08:00		*	*	*
09:00		*	*	*
10:00		*	*	*
11:00		*	*	*
Total		16	68	84
Percent		19.0%	81.0%	
AM Peak	-	07:00	07:00	07:00
Vol.	-	12	53	65
PM Peak	-	-	-	-
Vol.	-	-	-	-
Grand Total		223	294	517
Percent		43.1%	56.9%	
ADT		ADT 263	AADT 263	

Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824
Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	19-28	1
05:00	2	0	3	1	0	0	0	0	0	0	0	0	0	0	6	21-30	4
06:00	1	0	5	6	4	0	0	0	0	0	0	0	0	0	16	21-30	11
07:00	9	7	24	32	8	1	0	81	21-30	56							
08:00	6	1	3	12	6	2	0	0	0	0	0	0	0	0	30	26-35	18
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	18	8	35	52	18	4	0	135									
Percent	13.3%	5.9%	25.9%	38.5%	13.3%	3.0%	0.0%										
AM Peak	07:00	07:00	07:00	07:00	07:00	08:00											
Vol.	9	7	24	32	8	2											
PM Peak																	
Vol.																	
Total	112	49	185	254	110	18	6	0	734								
Percent	15.3%	6.7%	25.2%	34.6%	15.0%	2.5%	0.8%	0.0%									

15th Percentile : 14 MPH
 50th Percentile : 25 MPH
 85th Percentile : 31 MPH
 95th Percentile : 34 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 439
 Percent in Pace : 59.8%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 24 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac NB

Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	999	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19-28	1	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	*	1	
06:00	1	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	21-30	7	
07:00	1	2	19	24	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	21-30	43	
08:00	5	2	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	26-35	13	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	8	5	26	33	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85			
Percent	9.4%	5.9%	30.6%	38.8%	14.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak	08:00	07:00	07:00	07:00	08:00	07:00																						07:00		
Vol.	5	2	19	24	7	1																						51		
PM Peak																														
Vol.	55	43	178	192	47	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	516			
Percent	10.7%	8.3%	34.5%	37.2%	9.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				

15th Percentile : 17 MPH
 50th Percentile : 24 MPH
 85th Percentile : 29 MPH
 95th Percentile : 32 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 370
 Percent in Pace : 71.7%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 24 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac SB, Potomac NB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	19-28	1
05:00	3	0	4	1	0	0	0	0	0	0	0	0	0	0	8	19-28	5
06:00	2	1	10	8	5	0	0	0	0	0	0	0	0	0	26	21-30	18
07:00	10	9	43	56	12	2	0	0	0	0	0	0	0	0	132	21-30	99
08:00	11	3	4	18	13	2	0	0	0	0	0	0	0	0	51	26-35	31
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	26	13	61	85	30	5	0	0	0	0	0	0	0	0	220		
Percent	11.8%	5.9%	27.7%	38.6%	13.6%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	07:00	07:00	08:00	07:00									07:00		
Vol.	11	9	43	56	13	2									132		
PM Peak																	
Vol.	167	92	363	446	157	19	6	0	0	0	0	0	0	0	1250		
Percent	13.4%	7.4%	29.0%	35.7%	12.6%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 16 MPH
 50th Percentile : 25 MPH
 85th Percentile : 29 MPH
 95th Percentile : 33 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 809
 Percent in Pace : 64.7%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 24 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	29-Nov-17 Wed	SB	NB							Total
12:00 AM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		19	13							32
10:00		11	12							23
11:00		17	7							24
12:00 PM		17	9							26
01:00		19	24							43
02:00		50	17							67
03:00		30	17							47
04:00		26	22							48
05:00		27	20							47
06:00		16	17							33
07:00		6	7							13
08:00		4	11							15
09:00		2	3							5
10:00		0	2							2
11:00		1	3							4
Total		245	184							429
Percent		57.1%	42.9%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	19	13	-	-	-	-	-	-	32
PM Peak	-	14:00	13:00	-	-	-	-	-	-	14:00
Vol.	-	50	24	-	-	-	-	-	-	67

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	30-Nov-17 Thu	SB	NB	Total						
12:00 AM		1	1	2						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		8	5	13						
06:00		20	10	30						
07:00		82	44	126						
08:00		33	11	44						
09:00		12	6	18						
10:00		10	8	18						
11:00		27	7	34						
12:00 PM		12	20	32						
01:00		16	5	21						
02:00		31	29	60						
03:00		34	24	58						
04:00		19	9	28						
05:00		22	21	43						
06:00		13	12	25						
07:00		3	13	16						
08:00		2	15	17						
09:00		6	3	9						
10:00		3	2	5						
11:00		0	2	2						
Total		354	247	601						
Percent		58.9%	41.1%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	82	44	-	-	-	-	-	-	126
PM Peak	-	15:00	14:00	-	-	-	-	-	-	14:00
Vol.	-	34	29	-	-	-	-	-	-	60

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6046
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Start Time	01-Dec-17 Fri	SB	NB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	1							1
04:00		2	0							2
05:00		6	2							8
06:00		16	10							26
07:00		81	51							132
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
12:00 PM		*	*							*
01:00		*	*							*
02:00		*	*							*
03:00		*	*							*
04:00		*	*							*
05:00		*	*							*
06:00		*	*							*
07:00		*	*							*
08:00		*	*							*
09:00		*	*							*
10:00		*	*							*
11:00		*	*							*
Total		105	64							169
Percent		62.1%	37.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	81	51	-	-	-	-	-	-	132
PM Peak	-	-	-	-	-	-	-	-	-	-
Vol.	-	-	-	-	-	-	-	-	-	-
Grand Total		704	495							1199
Percent		58.7%	41.3%							
ADT		ADT 619	AADT 619							

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6047

Potomac Dr

Rochester Hills, MI

Date Printed: 20-Dec-17

Potomac SB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total	Pace Speed	Number in Pace
11/30/17	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	19-28	1
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24-33	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5	21-30	4
07:00	0	1	4	8	2	1	0	0	0	0	0	0	0	0	0	16	21-30	12
08:00	4	1	8	8	3	1	0	0	0	0	0	0	0	0	0	25	21-30	16
09:00	0	1	2	5	4	0	0	0	0	0	0	0	0	0	0	12	25-34	9
10:00	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	6	24-33	5
11:00	1	2	2	3	6	0	0	0	0	0	0	0	0	0	0	14	26-35	9
12 PM	1	0	5	5	0	0	0	0	0	0	0	0	0	0	0	11	21-30	10
13:00	0	2	1	5	2	0	0	0	0	0	0	0	0	0	0	10	26-35	7
14:00	4	1	11	14	5	1	0	0	0	0	0	0	0	0	0	36	21-30	25
15:00	0	0	7	8	6	1	0	0	0	0	0	0	0	0	0	22	21-30	15
16:00	1	0	5	11	1	1	1	0	0	0	0	0	0	0	0	20	21-30	16
17:00	1	3	1	14	4	1	0	0	0	0	0	0	0	0	0	24	26-35	18
18:00	0	0	2	5	2	1	0	0	0	0	0	0	0	0	0	10	26-35	7
19:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6	21-30	5
20:00	0	1	2	1	0	1	0	0	0	0	0	0	0	0	0	5	21-30	3
21:00	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	8	21-30	7
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10-19	2
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	19-28	1
Total	12	14	60	99	40	9	2	0	0	0	0	0	0	0	0	236		
Percent	5.1%	5.9%	25.4%	41.9%	16.9%	3.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	11:00	08:00	07:00	11:00	06:00	00:00									08:00		
Vol.	4	2	8	8	6	1	1									25		
PM Peak	14:00	17:00	14:00	14:00	15:00	14:00	16:00									14:00		
Vol.	4	3	11	14	6	1	1									36		

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6047
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24-33	1	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
06:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3	19-28	3	
07:00	0	1	4	5	2	0	0	0	0	0	0	0	0	0	0	12	21-30	9	
08:00	5	0	4	3	6	1	0	0	0	0	0	0	0	0	0	19	25-34	9	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Total	5	1	10	9	9	1	0	0	0	0	0	0	0	0	0	35			
Percent	14.3%	2.9%	28.6%	25.7%	25.7%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak	08:00	07:00	07:00	07:00	08:00	08:00													
Vol.	5	1	4	5	6	1												19	
PM Peak																			
Vol.	23	22	126	193	93	22	5	0	0	0	0	0	0	0	0	484			
Percent	4.8%	4.5%	26.0%	39.9%	19.2%	4.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				

15th Percentile : 21 MPH
 50th Percentile : 26 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 319
 Percent in Pace : 65.9%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 27 MPH

Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824
Consulting Engineers Since 1915

Site Code: 6047
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac NB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24-33	1	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2	
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1	
06:00	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	8	21-30	6	
07:00	0	2	20	25	10	0	0	0	0	0	0	0	0	0	0	57	21-30	45	
08:00	0	2	5	7	5	0	0	0	0	0	0	0	0	0	0	19	26-35	12	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Total	0	4	30	36	18	0	0	0	0	0	0	0	0	0	0	88			
Percent	0.0%	4.5%	34.1%	40.9%	20.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak		07:00	07:00	07:00	07:00														
Vol.		2	20	25	10													57	
PM Peak																			
Vol.	28	38	140	175	66	3	0	0	0	0	0	0	0	0	0	450			
Percent	6.2%	8.4%	31.1%	38.9%	14.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				

15th Percentile : 20 MPH
 50th Percentile : 25 MPH
 85th Percentile : 30 MPH
 95th Percentile : 33 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 315
 Percent in Pace : 70.0%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 25 MPH

Hubbell, Roth & Clark, Inc.

555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48303-0824

Consulting Engineers Since 1915

Site Code: 6047
 Potomac Dr
 Rochester Hills, MI
 Date Printed: 20-Dec-17

Potomac SB, Potomac NB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
12/01/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	25-34	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
06:00	0	0	4	5	2	0	0	0	0	0	0	0	0	0	11	21-30	9
07:00	0	3	24	30	12	0	0	0	0	0	0	0	0	0	69	21-30	54
08:00	5	2	9	10	11	1	0	0	0	0	0	0	0	0	38	25-34	21
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	5	5	40	45	27	1	0	0	0	0	0	0	0	0	123		
Percent	4.1%	4.1%	32.5%	36.6%	22.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	07:00	07:00	07:00	08:00									07:00		
Vol.	5	3	24	30	12	1									69		
PM Peak																	
Vol.	51	60	266	368	159	25	5	0	0	0	0	0	0	0	934		
Percent	5.5%	6.4%	28.5%	39.4%	17.0%	2.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 20 MPH
 50th Percentile : 26 MPH
 85th Percentile : 31 MPH
 95th Percentile : 34 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 634
 Percent in Pace : 67.9%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%
 Mean Speed(Average) : 26 MPH