APPENDIX C

Capacity Analysis Results

Summary

Reports

Intersection LOS and Delay Results

LOS (sec/veh)

Scenario 1: 2024 Background Opening Day	Eastbound	Westbound	Northbound	Southbound	Intersection
Hague Road & Carrigan Road (AM Peak)	A (5.6)	(n/a)	B (10.1)	A (2.2)	**A (5.4)**
Hague Road & Carrigan Road (PM Peak)	A (6.3)	(n/a)	B (10.3)	A (3.2)	**A (7.7)**
Hague Road & 206th Street (AM Peak)	(n/a)	C (19.5)	- (-)	A (8.4)	- (-)
Hague Road & 206th Street (PM Peak)	(n/a)	F (>180)	- (-)	B (10.4)	- (-)
Hague Road &196th Street (AM Peak)	A (2.4)	A (7.8)	A (2.5)	A (3.7)	**A (4.2)**
Hague Road &196th Street (PM Peak)	A (3.1)	A (9.4)	A (6.2)	A (4.4)	**A (6.1)**
196th Street & James Road (AM Peak)	A (7.7)	- (-)	(n/a)	B (11.1)	**- (-)**
196th Street & James Road (PM Peak)	A (8.0)	- (-)	(n/a)	B (12.9)	**- (-)**
206th Street & James Road (AM Peak)	A (0.0)	A (8.4)	B (10.7)	A (0.0)	**- (-)**
206th Street & James Road (PM Peak)	A (0.0)	A (8.2)	C (17.5)	C (20.2)	**- (-)**

Intersection LOS and Delay Results

LOS (sec/veh)

Scenario 2: 2024 Opening Day	Eastbound	Westbound	Northbound	Southbound	Intersection
Hague Road & Carrigan Road (AM Peak)	A (5.7)	(n/a)	A (9.6)	A (2.5)	**A (5.8)**
Hague Road & Carrigan Road (PM Peak)	A (6.4)	(n/a)	B (10.3)	A (3.3)	**A (7.7)**
Hague Road & 206th Street (AM Peak)	(n/a)	A (6.9)	A (6)	A (8.9)	A (8)
Hague Road & 206th Street (PM Peak)	(n/a)	A (7.4)	A (7)	A (8.5)	A (7.6)
Hague Road &196th Street (AM Peak)	A (2.9)	A (7.9)	A (2.7)	A (3.9)	**A (4.2)**
Hague Road &196th Street (PM Peak)	A (3.3)	B (11.6)	B (19.4)	A (4.4)	**B (13.2)**
196th Street & James Road (AM Peak)	A (7.8)	- (-)	(n/a)	B (12.5)	**- (-)**
196th Street & James Road (PM Peak)	A (8.2)	- (-)	(n/a)	C (15.1)	**- (-)**
206th Street & James Road (AM Peak)	A (0.0)	A (8.9)	C (17.4)	A (0.0)	**- (-)**
206th Street & James Road (PM Peak)	A (0.0)	A (8.5)	D (31.3)	D (26.8)	**- (-)**
Hague Road & Proposed Access C (AM Peak)	C (19.5)	C (24)	A (9)	A (8)	**- (-)**
Hague Road & Proposed Access C (PM Peak)	D (29)	E (43.8)	A (8.6)	A (9.6)	**- (-)**
Hague Road & Proposed Access B (AM Peak)	(n/a)	A (9.9)	- (-)	A (7.9)	**- (-)**
Hague Road & Proposed Access B (PM Peak)	(n/a)	B (14.1)	- (-)	A (9.5)	**- (-)**
Hague Road & Proposed Access A (AM Peak)	B (13.6)	B (13.7)	A (8.2)	A (7.6)	**- (-)**
Hague Road & Proposed Access A (PM Peak)	D (25.2)	D (26.6)	A (8.3)	A (9.2)	**- (-)**
206th Street & Proposed Access D (AM Peak)	A (7.6)	A (8.4)	B (13.8)	C (15.1)	**- (-)**
206th Street & Proposed Access D (PM Peak)	A (8.8)	A (8.5)	C (20.6)	D (29.8)	**- (-)**

Intersection LOS and Delay Results

LOS (sec/veh)

Scenario 3: 2034 Background Horizon Year	Eastbound	Westbound	Northbound	Southbound	Intersection
Hague Road & Carrigan Road (AM Peak)	A (5.4)	(n/a)	B (10)	A (2.1)	**A (5.3)**
Hague Road & Carrigan Road (PM Peak)	A (6.2)	(n/a)	B (10.1)	A (2.9)	**A (7.5)**
Hague Road & 206th Street (AM Peak)	(n/a)	A (5.7)	A (5.7)	A (8.5)	**A (7.8)**
Hague Road & 206th Street (PM Peak)	(n/a)	A (5.8)	A (5.7)	A (8.3)	**A (6.7)**
Hague Road &196th Street (AM Peak)	A (2.1)	A (7.6)	A (2.4)	A (3.6)	**A (4)**
Hague Road &196th Street (PM Peak)	A (2.8)	A (8.5)	A (4.7)	A (4.1)	**A (5.1)**
196th Street & James Road (AM Peak)	A (7.8)	- (-)	(n/a)	B (11.4)	**- (-)**
196th Street & James Road (PM Peak)	A (8.1)	- (-)	(n/a)	B (13.3)	**- (-)**
206th Street & James Road (AM Peak)	A (0)	A (8.4)	B (10.9)	A (0)	**- (-)**
206th Street & James Road (PM Peak)	A (0)	A (8.3)	C (18.4)	C (21.4)	**- (-)**

Intersection LOS and Delay Results

LOS (sec/veh)

Scenario 4: 2034 Horizon Year	Eastbound	Westbound	Northbound	Southbound	Intersection
Hague Road & Carrigan Road (AM Peak)	A (5.5)	(n/a)	A (9.5)	A (2.4)	A (5.7)
Hague Road & Carrigan Road (PM Peak)	A (6.3)	(n/a)	B (10.1)	A (3)	A (7.5)
Hague Road & 206th Street (AM Peak)	(n/a)	A (6.8)	A (5.8)	A (8.7)	A (7.8)
Hague Road & 206th Street (PM Peak)	(n/a)	A (6.8)	A (6.3)	A (8.3)	A (7.2)
Hague Road &196th Street (AM Peak)	A (2.4)	A (7.7)	A (2.5)	A (3.6)	A (4)
Hague Road &196th Street (PM Peak)	A (3)	B (10.4)	A (9.8)	A (4.1)	A (8)
196th Street & James Road (AM Peak)	A (7.8)	- (-)	(n/a)	B (12.7)	- (-)
196th Street & James Road (PM Peak)	A (8.2)	- (-)	(n/a)	C (15.7)	- (-)
206th Street & James Road (AM Peak)	A (0)	A (8.9)	C (18)	A (0)	- (-)
206th Street & James Road (PM Peak)	A (0)	A (8.6)	D (34.2)	D (28.5)	- (-)
Hague Road & Proposed Access C (AM Peak)	C (20.4)	D (25.9)	A (9.1)	A (8)	- (-)
Hague Road & Proposed Access C (PM Peak)	D (31.5)	E (49.5)	A (8.7)	A (9.7)	- (-)
Hague Road & Proposed Access B (AM Peak)	(n/a)	B (10)	- (-)	A (7.9)	- (-)
Hague Road & Proposed Access B (PM Peak)	(n/a)	B (14.6)	- (-)	A (9.6)	- (-)
Hague Road & Proposed Access A (AM Peak)	B (13.9)	B (14)	A (8.2)	A (7.6)	- (-)
Hague Road & Proposed Access A (PM Peak)	D (27)	D (28.5)	A (8.4)	A (9.3)	- (-)
206th Street & Proposed Access D (AM Peak)	A (7.6)	A (8.4)	B (14.1)	C (15.7)	- (-)
206th Street & Proposed Access D (PM Peak)	A (8.9)	A (8.6)	C (21.7)	D (32.8)	- (-)

Scenario 1

AM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 1 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	91	7.0	121	7.0	0.127	11.3	LOS B	0.5	14.4	0.21	0.62	0.21	36.3
8	T1	22	7.0	29	7.0	0.127	5.1	LOS A	0.5	14.4	0.21	0.62	0.21	32.6
Approach		113	7.0	151	7.0	0.127	10.1	LOS B	0.5	14.4	0.21	0.62	0.21	35.5
North: Hague Road - SB														
4	T1	99	3.0	125	3.0	0.210	1.9	LOS A	0.9	23.1	0.27	0.31	0.27	34.0
14	R2	102	1.0	129	1.0	0.210	2.5	LOS A	0.9	23.1	0.27	0.31	0.27	32.3
Approach		201	2.0	254	2.0	0.210	2.2	LOS A	0.9	23.1	0.27	0.31	0.27	33.1
West: Carrigan Road - EB														
5	L2	68	3.0	80	3.0	0.089	11.0	LOS B	0.5	12.1	0.37	0.63	0.37	31.2
12	R2	415	2.0	488	2.0	0.349	4.7	LOS A	2.6	65.0	0.41	0.50	0.41	37.0
Approach		483	2.1	568	2.1	0.349	5.6	LOS A	2.6	65.0	0.41	0.52	0.41	36.0
All Vehicles		797	2.8	973	2.9	0.349	5.4	LOS A	2.6	65.0	0.34	0.48	0.34	35.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	6.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	81	66	29	336	234
Future Vol, veh/h	29	81	66	29	336	234
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	80	80	85	85
Heavy Vehicles, %	6	6	8	11	6	6
Mvmt Flow	35	98	83	36	395	275

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1166	101	0	0	119	0
Stage 1	101	-	-	-	-	-
Stage 2	1065	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.16	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.254	-
Pot Cap-1 Maneuver	210	943	-	-	1444	-
Stage 1	913	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	142	943	-	-	1444	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	221	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	379	1444	-
HCM Lane V/C Ratio	-	-	0.35	0.274	-
HCM Control Delay (s)	-	-	19.5	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.5	1.1	-

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 1 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	6	0.0	8	0.0	0.290	7.8	LOS A	1.5	38.9	0.37	0.33	0.37	28.1
8	T1	189	9.0	242	9.0	0.290	2.3	LOS A	1.5	38.9	0.37	0.33	0.37	31.4
18	R2	53	4.0	68	4.0	0.290	2.8	LOS A	1.5	38.9	0.37	0.33	0.37	30.6
Approach		248	7.7	318	7.7	0.290	2.5	LOS A	1.5	38.9	0.37	0.33	0.37	31.2
East: 196th Street - WB														
1	L2	117	4.0	146	4.0	0.235	9.8	LOS A	1.1	28.5	0.44	0.66	0.44	33.9
6	T1	2	8.0	3	8.0	0.235	4.0	LOS A	1.1	28.5	0.44	0.66	0.44	26.5
16	R2	67	16.0	84	16.0	0.235	4.5	LOS A	1.1	28.5	0.44	0.66	0.44	29.2
Approach		186	8.4	233	8.4	0.235	7.8	LOS A	1.1	28.5	0.44	0.66	0.44	32.0
North: Hague Road - SB														
7	L2	62	23.0	78	23.0	0.351	8.4	LOS A	2.0	54.7	0.42	0.39	0.42	31.0
4	T1	222	12.0	278	12.0	0.351	2.4	LOS A	2.0	54.7	0.42	0.39	0.42	32.1
14	R2	1	18.0	1	18.0	0.351	3.2	LOS A	2.0	54.7	0.42	0.39	0.42	26.3
Approach		285	14.4	356	14.4	0.351	3.7	LOS A	2.0	54.7	0.42	0.39	0.42	31.8
West: 196th Street - EB														
5	L2	4	6.0	7	6.0	0.100	7.2	LOS A	0.4	9.5	0.49	0.37	0.49	27.4
2	T1	34	3.0	58	3.0	0.100	1.8	LOS A	0.4	9.5	0.49	0.37	0.49	28.5
12	R2	15	0.0	25	0.0	0.100	2.6	LOS A	0.4	9.5	0.49	0.37	0.49	29.8
Approach		53	2.4	90	2.4	0.100	2.4	LOS A	0.4	9.5	0.49	0.37	0.49	28.8
All Vehicles		772	10.0	997	9.8	0.351	4.2	LOS A	2.0	54.7	0.41	0.43	0.41	31.4

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	176	205	6	15	10
Future Vol, veh/h	1	176	205	6	15	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	80	80	62	62
Heavy Vehicles, %	0	4	9	0	0	0
Mvmt Flow	1	212	256	8	24	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	264	0	-	0	474	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	214	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1312	-	-	-	553	784
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1312	-	-	-	552	784
Mov Cap-2 Maneuver	-	-	-	-	552	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	826	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1312	-	-	-	626
HCM Lane V/C Ratio	0.001	-	-	-	0.064
HCM Control Delay (s)	7.7	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	385	0	5	98	0	0	0	1	0	0	0
Future Vol, veh/h	0	385	0	5	98	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	78	78	78	25	25	25	90	90	90
Heavy Vehicles, %	0	3	0	14	6	0	0	0	0	0	0	0
Mvmt Flow	0	428	0	6	126	0	0	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	126	0	0	428	0	0	566	566	428	568	566	126
Stage 1	-	-	-	-	-	-	428	428	-	138	138	-
Stage 2	-	-	-	-	-	-	138	138	-	430	428	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1473	-	-	1070	-	-	438	436	631	437	436	930
Stage 1	-	-	-	-	-	-	609	588	-	870	786	-
Stage 2	-	-	-	-	-	-	870	786	-	607	588	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1473	-	-	1070	-	-	436	433	631	432	433	930
Mov Cap-2 Maneuver	-	-	-	-	-	-	436	433	-	432	433	-
Stage 1	-	-	-	-	-	-	609	588	-	870	781	-
Stage 2	-	-	-	-	-	-	865	781	-	603	588	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	10.7	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	631	1473	-	-	1070	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-	0.006	-	-	-
HCM Control Delay (s)	10.7	0	-	-	8.4	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	78	45	45
Average Queue (ft)	16	6	11
95th Queue (ft)	53	29	36
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	124	9	112
Average Queue (ft)	47	0	29
95th Queue (ft)	89	5	76
Link Distance (ft)	799	738	331
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	34	83	94	96
Average Queue (ft)	9	23	18	25
95th Queue (ft)	31	63	59	75
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	SB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	15
95th Queue (ft)	36
Link Distance (ft)	5281
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: James Road & 206th Street

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	27	9
Average Queue (ft)	2	0
95th Queue (ft)	12	5
Link Distance (ft)	830	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	23	28
Average Queue (ft)	7	2
95th Queue (ft)	23	14
Link Distance (ft)	184	353
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hague Rd & Proposed Access B

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Hague Rd & Proposed Access A

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 9: Proposed Access D & 206th Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

PM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 1 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	442	0.0	497	0.0	0.561	11.9	LOS B	4.0	99.1	0.50	0.66	0.50	36.0
8	T1	155	1.0	174	1.0	0.561	5.7	LOS A	4.0	99.1	0.50	0.66	0.50	32.2
Approach		597	0.3	671	0.3	0.561	10.3	LOS B	4.0	99.1	0.50	0.66	0.50	35.0
North: Hague Road - SB														
4	T1	88	0.0	106	0.0	0.220	2.9	LOS A	0.9	22.7	0.51	0.45	0.51	33.7
14	R2	90	0.0	108	0.0	0.220	3.5	LOS A	0.9	22.7	0.51	0.45	0.51	31.7
Approach		178	0.0	214	0.0	0.220	3.2	LOS A	0.9	22.7	0.51	0.45	0.51	32.7
West: Carrigan Road - EB														
5	L2	143	0.0	168	0.0	0.149	10.5	LOS B	0.9	22.7	0.34	0.61	0.34	31.3
12	R2	327	2.0	385	2.0	0.273	4.5	LOS A	2.0	50.0	0.36	0.48	0.36	37.1
Approach		470	1.4	553	1.4	0.273	6.3	LOS A	2.0	50.0	0.36	0.52	0.36	35.0
All Vehicles		1245	0.6	1438	0.7	0.561	7.7	LOS A	4.0	99.1	0.45	0.57	0.45	34.6

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	85.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	345	389	124	282	235
Future Vol, veh/h	55	345	389	124	282	235
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	88	88	85	85
Heavy Vehicles, %	3	0	0	3	1	0
Mvmt Flow	68	426	442	141	332	276

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1453	513	0	0	583	0
Stage 1	513	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Critical Hdwy	6.43	6.2	-	-	4.11	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	143	565	-	-	996	-
Stage 1	599	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	87	565	-	-	996	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	229	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	285	0	5.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	322	996	-
HCM Lane V/C Ratio	-	-	1.534	0.333	-
HCM Control Delay (s)	-	-	285	10.4	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	28.1	1.5	-

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 1 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	31	0.0	37	0.0	0.814	11.2	LOS B	12.4	322.8	0.93	0.82	1.07	26.9
8	T1	576	7.0	686	7.0	0.814	5.9	LOS A	12.4	322.8	0.93	0.82	1.07	30.0
18	R2	135	1.0	161	1.0	0.814	6.2	LOS A	12.4	322.8	0.93	0.82	1.07	29.2
Approach		742	5.6	883	5.6	0.814	6.2	LOS A	12.4	322.8	0.93	0.82	1.07	29.7
East: 196th Street - WB														
1	L2	135	4.0	161	4.0	0.471	12.1	LOS B	2.6	66.4	0.79	0.91	0.89	33.4
6	T1	39	0.0	46	0.0	0.471	6.0	LOS A	2.6	66.4	0.79	0.91	0.89	26.2
16	R2	81	2.0	96	2.0	0.471	6.4	LOS A	2.6	66.4	0.79	0.91	0.89	28.8
Approach		255	2.8	304	2.8	0.471	9.4	LOS A	2.6	66.4	0.79	0.91	0.89	30.6
North: Hague Road - SB														
7	L2	118	3.0	136	3.0	0.447	8.5	LOS A	2.8	70.8	0.56	0.46	0.56	30.8
4	T1	288	1.0	331	1.0	0.447	2.7	LOS A	2.8	70.8	0.56	0.46	0.56	32.8
14	R2	11	0.0	13	0.0	0.447	3.3	LOS A	2.8	70.8	0.56	0.46	0.56	26.0
Approach		417	1.5	479	1.5	0.447	4.4	LOS A	2.8	70.8	0.56	0.46	0.56	32.0
West: 196th Street - EB														
5	L2	12	0.0	16	0.0	0.090	7.1	LOS A	0.3	8.5	0.53	0.45	0.53	27.2
2	T1	30	0.0	39	0.0	0.090	1.8	LOS A	0.3	8.5	0.53	0.45	0.53	28.3
12	R2	18	0.0	23	0.0	0.090	2.8	LOS A	0.3	8.5	0.53	0.45	0.53	29.6
Approach		60	0.0	78	0.0	0.090	3.1	LOS A	0.3	8.5	0.53	0.45	0.53	28.4
All Vehicles		1474	3.7	1744	3.7	0.814	6.1	LOS A	12.4	322.8	0.79	0.72	0.87	30.4

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	309	297	9	14	17
Future Vol, veh/h	17	309	297	9	14	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	78	78
Heavy Vehicles, %	0	2	20	0	0	0
Mvmt Flow	20	372	345	10	18	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	355	0	-	0	762	350
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	412	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1215	-	-	-	376	698
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1215	-	-	-	368	698
Mov Cap-2 Maneuver	-	-	-	-	368	-
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1215	-	-	-	497
HCM Lane V/C Ratio	0.017	-	-	-	0.08
HCM Control Delay (s)	8	0	-	-	12.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	401	6	8	387	1	8	0	4	1	0	0
Future Vol, veh/h	0	401	6	8	387	1	8	0	4	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	83	83	83	67	67	67	25	25	25
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	446	7	10	466	1	12	0	6	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	467	0	0	453	0	0	937	937	450	940	940	467
Stage 1	-	-	-	-	-	-	450	450	-	487	487	-
Stage 2	-	-	-	-	-	-	487	487	-	453	453	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1105	-	-	1118	-	-	247	267	613	246	266	600
Stage 1	-	-	-	-	-	-	592	575	-	566	554	-
Stage 2	-	-	-	-	-	-	566	554	-	590	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1105	-	-	1118	-	-	245	264	613	241	263	600
Mov Cap-2 Maneuver	-	-	-	-	-	-	245	264	-	241	263	-
Stage 1	-	-	-	-	-	-	592	575	-	566	547	-
Stage 2	-	-	-	-	-	-	559	547	-	584	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	17.5	20.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	306	1105	-	-	1118	-	-	241
HCM Lane V/C Ratio	0.059	-	-	-	0.009	-	-	0.017
HCM Control Delay (s)	17.5	0	-	-	8.2	0	-	20.2
HCM Lane LOS	C	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	71	116	66
Average Queue (ft)	23	43	25
95th Queue (ft)	59	92	56
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	781	70	237
Average Queue (ft)	578	13	109
95th Queue (ft)	986	43	200
Link Distance (ft)	799	738	331
Upstream Blk Time (%)	18		
Queuing Penalty (veh)	73		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	111	454	113
Average Queue (ft)	13	48	164	32
95th Queue (ft)	40	88	416	80
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)			2	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	58	43
Average Queue (ft)	8	20
95th Queue (ft)	36	40
Link Distance (ft)	2572	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: James Road & 206th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	48	32	20
Average Queue (ft)	3	8	1
95th Queue (ft)	22	28	8
Link Distance (ft)	830	5281	634
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	32	27
Average Queue (ft)	7	2
95th Queue (ft)	25	14
Link Distance (ft)	184	353
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hague Rd & Proposed Access B

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Hague Rd & Proposed Access A

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 9: Proposed Access D & 206th Street

Movement	WB
Directions Served	T
Maximum Queue (ft)	736
Average Queue (ft)	266
95th Queue (ft)	992
Link Distance (ft)	1713
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	33
Queuing Penalty (veh)	0

Network Summary

Network wide Queuing Penalty: 73

Scenario 2

AM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 2 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	149	7.0	199	7.0	0.235	11.3	LOS B	1.1	30.2	0.24	0.61	0.24	36.6
8	T1	60	7.0	80	7.0	0.235	5.1	LOS A	1.1	30.2	0.24	0.61	0.24	32.8
Approach		209	7.0	279	7.0	0.235	9.6	LOS A	1.1	30.2	0.24	0.61	0.24	35.4
North: Hague Road - SB														
4	T1	115	3.0	146	3.0	0.238	2.2	LOS A	1.0	26.1	0.35	0.35	0.35	33.8
14	R2	101	1.0	128	1.0	0.238	2.8	LOS A	1.0	26.1	0.35	0.35	0.35	32.1
Approach		216	2.1	273	2.1	0.238	2.5	LOS A	1.0	26.1	0.35	0.35	0.35	33.0
West: Carrigan Road - EB														
5	L2	67	3.0	79	3.0	0.090	11.2	LOS B	0.5	12.2	0.40	0.64	0.40	31.2
12	R2	435	2.0	512	2.0	0.373	4.8	LOS A	2.8	71.6	0.46	0.52	0.46	36.8
Approach		502	2.1	591	2.1	0.373	5.7	LOS A	2.8	71.6	0.45	0.54	0.45	35.9
All Vehicles		927	3.2	1143	3.3	0.373	5.8	LOS A	2.8	71.6	0.38	0.51	0.38	35.0

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 2 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	120	8.0	150	8.0	0.237	6.0	LOS A	0.8	22.3	0.43	0.57	0.43	38.4
18	R2	60	11.0	75	11.0	0.237	6.0	LOS A	0.8	22.3	0.43	0.57	0.43	36.6
Approach		180	9.0	225	9.0	0.237	6.0	LOS A	0.8	22.3	0.43	0.57	0.43	37.8
East: 206th Street - WB														
1	L2	83	6.0	100	6.0	0.206	10.3	LOS B	0.8	20.7	0.28	0.59	0.28	36.3
16	R2	111	6.0	134	6.0	0.206	4.4	LOS A	0.8	20.7	0.28	0.59	0.28	35.3
Approach		194	6.0	234	6.0	0.206	6.9	LOS A	0.8	20.7	0.28	0.59	0.28	35.7
North: Hague Road - NB														
7	L2	358	6.0	421	6.0	0.640	11.5	LOS B	4.8	124.5	0.42	0.60	0.42	36.4
4	T1	283	6.0	333	6.0	0.640	5.5	LOS A	4.8	124.5	0.42	0.60	0.42	37.0
Approach		641	6.0	754	6.0	0.640	8.9	LOS A	4.8	124.5	0.42	0.60	0.42	36.7
All Vehicles		1015	6.5	1213	6.6	0.640	8.0	LOS A	4.8	124.5	0.40	0.59	0.40	36.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 2 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	6	0.0	8	0.0	0.354	8.0	LOS A	1.9	51.2	0.43	0.35	0.43	27.9
8	T1	235	9.0	301	9.0	0.354	2.5	LOS A	1.9	51.2	0.43	0.35	0.43	31.3
18	R2	53	4.0	68	4.0	0.354	3.0	LOS A	1.9	51.2	0.43	0.35	0.43	30.4
Approach		294	7.9	377	7.9	0.354	2.7	LOS A	1.9	51.2	0.43	0.35	0.43	31.0
East: 196th Street - WB														
1	L2	117	4.0	146	4.0	0.264	10.0	LOS B	1.2	32.4	0.50	0.69	0.50	33.9
6	T1	2	8.0	3	8.0	0.264	4.3	LOS A	1.2	32.4	0.50	0.69	0.50	26.5
16	R2	78	16.0	97	16.0	0.264	4.9	LOS A	1.2	32.4	0.50	0.69	0.50	29.2
Approach		197	8.8	246	8.8	0.264	7.9	LOS A	1.2	32.4	0.50	0.69	0.50	31.8
North: Hague Road - SB														
7	L2	81	23.0	101	23.0	0.525	8.8	LOS A	3.7	103.5	0.53	0.41	0.53	30.8
4	T1	344	12.0	430	12.0	0.525	2.7	LOS A	3.7	103.5	0.53	0.41	0.53	31.8
14	R2	1	0.0	1	0.0	0.525	3.0	LOS A	3.7	103.5	0.53	0.41	0.53	26.1
Approach		426	14.1	533	14.1	0.525	3.9	LOS A	3.7	103.5	0.53	0.41	0.53	31.6
West: 196th Street - EB														
5	L2	4	6.0	7	6.0	0.116	7.6	LOS A	0.4	11.1	0.57	0.44	0.57	27.3
2	T1	34	3.0	58	3.0	0.116	2.2	LOS A	0.4	11.1	0.57	0.44	0.57	28.4
12	R2	15	0.0	25	0.0	0.116	3.0	LOS A	0.4	11.1	0.57	0.44	0.57	29.6
Approach		53	2.4	90	2.4	0.116	2.9	LOS A	0.4	11.1	0.57	0.44	0.57	28.6
All Vehicles		970	10.5	1246	10.3	0.525	4.2	LOS A	3.7	103.5	0.50	0.45	0.50	31.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	195	216	17	37	10
Future Vol, veh/h	1	195	216	17	37	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	80	80	62	62
Heavy Vehicles, %	0	4	9	0	0	0
Mvmt Flow	1	235	270	21	60	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	518	281
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	237	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1282	-	-	-	521	763
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1282	-	-	-	520	763
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	807	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1282	-	-	-	558
HCM Lane V/C Ratio	0.001	-	-	-	0.136
HCM Control Delay (s)	7.8	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	499	22	5	136	0	11	0	1	0	0	0
Future Vol, veh/h	0	499	22	5	136	0	11	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	78	78	78	25	25	25	90	90	90
Heavy Vehicles, %	0	3	0	14	6	0	0	0	0	0	0	0
Mvmt Flow	0	554	24	6	174	0	44	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	578	0	0	752	752	566	754	764	174
Stage 1	-	-	-	-	-	-	566	566	-	186	186	-
Stage 2	-	-	-	-	-	-	186	186	-	568	578	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	939	-	-	329	342	528	328	336	875
Stage 1	-	-	-	-	-	-	513	511	-	820	750	-
Stage 2	-	-	-	-	-	-	820	750	-	511	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1415	-	-	939	-	-	327	340	528	324	334	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	327	340	-	324	334	-
Stage 1	-	-	-	-	-	-	513	511	-	820	745	-
Stage 2	-	-	-	-	-	-	814	745	-	507	504	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	17.4	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	1415	-	-	939	-	-	-
HCM Lane V/C Ratio	0.142	-	-	-	0.007	-	-	-
HCM Control Delay (s)	17.4	0	-	-	8.9	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	60	0	34	5	175	20	24	581	5
Future Vol, veh/h	5	0	5	60	0	34	5	175	20	24	581	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	62	62	62	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	7	2	2	6	2
Mvmt Flow	6	0	6	67	0	38	8	282	32	28	684	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1073	1070	684	1044	1044	282	690	0	0	314	0	0
Stage 1	740	740	-	298	298	-	-	-	-	-	-	-
Stage 2	333	330	-	746	746	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	198	221	449	207	229	757	905	-	-	1246	-	-
Stage 1	409	423	-	711	667	-	-	-	-	-	-	-
Stage 2	681	646	-	405	421	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	183	214	449	199	221	757	905	-	-	1246	-	-
Mov Cap-2 Maneuver	183	214	-	199	221	-	-	-	-	-	-	-
Stage 1	405	414	-	703	660	-	-	-	-	-	-	-
Stage 2	640	639	-	391	412	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	24	0.2	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	905	-	-	260	199	757	1246	-	-
HCM Lane V/C Ratio	0.009	-	-	0.043	0.335	0.05	0.023	-	-
HCM Control Delay (s)	9	0	-	19.5	31.9	10	8	-	-
HCM Lane LOS	A	A	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.4	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	18	177	15	10	637
Future Vol, veh/h	0	18	177	15	10	637
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	61	61	85	85
Heavy Vehicles, %	0	2	7	2	2	6
Mvmt Flow	0	20	290	25	12	749

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	290	0	0	315	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	749	-	-	1245	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	749	-	-	1245	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	749	1245	-
HCM Lane V/C Ratio	-	-	0.027	0.009	-
HCM Control Delay (s)	-	-	9.9	7.9	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	24	31	0	13	8	131	13	5	349	11
Future Vol, veh/h	37	0	24	31	0	13	8	131	13	5	349	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	80	80	84	84	92
Heavy Vehicles, %	2	2	2	2	2	2	2	9	2	2	6	2
Mvmt Flow	40	0	26	34	0	14	9	164	16	6	415	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	624	625	415	628	621	164	427	0	0	180	0	0
Stage 1	427	427	-	182	182	-	-	-	-	-	-	-
Stage 2	197	198	-	446	439	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	398	401	637	395	403	881	1132	-	-	1396	-	-
Stage 1	606	585	-	820	749	-	-	-	-	-	-	-
Stage 2	805	737	-	591	578	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	396	637	375	398	881	1132	-	-	1396	-	-
Mov Cap-2 Maneuver	388	396	-	375	398	-	-	-	-	-	-	-
Stage 1	601	583	-	813	743	-	-	-	-	-	-	-
Stage 2	786	731	-	564	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	13.7	0.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	388	637	375	881	1396	-	-
HCM Lane V/C Ratio	0.008	-	-	0.104	0.041	0.092	0.016	0.004	-	-
HCM Control Delay (s)	8.2	-	-	15.3	10.9	15.6	9.2	7.6	-	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	402	5	12	115	22	24	0	35	64	0	43
Future Vol, veh/h	11	402	5	12	115	22	24	0	35	64	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	100	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	79	79	79	90	90	90	90	90	90
Heavy Vehicles, %	2	7	2	2	2	6	2	2	2	2	2	2
Mvmt Flow	13	473	6	15	146	28	27	0	39	71	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	479	0	0	713	703	473	698	681	146
Stage 1	-	-	-	-	-	-	499	499	-	176	176	-
Stage 2	-	-	-	-	-	-	214	204	-	522	505	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1403	-	-	1083	-	-	347	362	591	355	373	901
Stage 1	-	-	-	-	-	-	554	544	-	826	753	-
Stage 2	-	-	-	-	-	-	788	733	-	538	540	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1403	-	-	1083	-	-	323	354	591	326	364	901
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	354	-	326	364	-
Stage 1	-	-	-	-	-	-	549	539	-	819	742	-
Stage 2	-	-	-	-	-	-	736	723	-	498	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.7	13.8	15.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	323	591	1403	-	-	1083	-	-	326	901
HCM Lane V/C Ratio	0.083	0.066	0.009	-	-	0.014	-	-	0.218	0.053
HCM Control Delay (s)	17.1	11.5	7.6	-	-	8.4	-	-	19.1	9.2
HCM Lane LOS	C	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.3	0.2	0	-	-	0	-	-	0.8	0.2

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	61	53	67
Average Queue (ft)	21	10	19
95th Queue (ft)	55	38	53
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	420	22	152
Average Queue (ft)	147	2	59
95th Queue (ft)	331	11	119
Link Distance (ft)	799	738	331
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	45	78	90	136
Average Queue (ft)	12	23	21	38
95th Queue (ft)	38	64	64	99
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	SB
Directions Served	LR
Maximum Queue (ft)	39
Average Queue (ft)	22
95th Queue (ft)	40
Link Distance (ft)	5281
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: James Road & 206th Street

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	11	27
Average Queue (ft)	1	8
95th Queue (ft)	7	26
Link Distance (ft)	830	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	WB	WB	NB	NB	SB
Directions Served	LTR	LT	R	LT	R	L
Maximum Queue (ft)	27	68	57	36	4	30
Average Queue (ft)	6	29	18	2	0	5
95th Queue (ft)	23	56	40	19	3	22
Link Distance (ft)	184	783		353		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			100		100	100
Storage Blk Time (%)		0	0			
Queuing Penalty (veh)		0	0			

Intersection: 7: Hague Rd & Proposed Access B

Movement	WB	SB
Directions Served	R	L
Maximum Queue (ft)	32	22
Average Queue (ft)	10	1
95th Queue (ft)	29	10
Link Distance (ft)	345	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Hague Rd & Proposed Access A

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	L
Maximum Queue (ft)	48	23	47	23	30	17
Average Queue (ft)	19	14	20	9	2	1
95th Queue (ft)	43	31	41	27	14	10
Link Distance (ft)		277		684		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		100		100	100
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Proposed Access D & 206th Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	17	30	33	45	60	41
Average Queue (ft)	1	4	15	17	25	18
95th Queue (ft)	8	20	35	37	49	37
Link Distance (ft)				344		600
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	100	100		100	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

PM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 2 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	480	0.0	539	0.0	0.622	11.9	LOS B	5.0	124.9	0.56	0.66	0.56	35.9
8	T1	180	1.0	202	1.0	0.622	5.8	LOS A	5.0	124.9	0.56	0.66	0.56	32.1
Approach		660	0.3	742	0.3	0.622	10.3	LOS B	5.0	124.9	0.56	0.66	0.56	34.8
North: Hague Road - SB														
4	T1	129	0.0	155	0.0	0.279	3.0	LOS A	1.2	30.2	0.56	0.46	0.56	33.5
14	R2	88	0.0	106	0.0	0.279	3.6	LOS A	1.2	30.2	0.56	0.46	0.56	31.6
Approach		217	0.0	261	0.0	0.279	3.3	LOS A	1.2	30.2	0.56	0.46	0.56	32.7
West: Carrigan Road - EB														
5	L2	140	0.0	165	0.0	0.163	11.0	LOS B	1.0	24.2	0.43	0.64	0.43	31.1
12	R2	386	2.0	454	2.0	0.338	4.8	LOS A	2.5	64.2	0.47	0.52	0.47	36.8
Approach		526	1.5	619	1.5	0.338	6.4	LOS A	2.5	64.2	0.46	0.56	0.46	35.0
All Vehicles		1403	0.7	1622	0.7	0.622	7.7	LOS A	5.0	124.9	0.52	0.59	0.52	34.5

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 2 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	469	0.0	533	0.0	0.663	7.0	LOS A	4.8	120.0	0.66	0.70	0.75	38.7
18	R2	162	3.0	184	3.0	0.663	7.0	LOS A	4.8	120.0	0.66	0.70	0.75	36.1
Approach		631	0.8	717	0.8	0.663	7.0	LOS A	4.8	120.0	0.66	0.70	0.75	38.0
East: 206th Street - WB														
1	L2	99	3.0	122	3.0	0.596	12.1	LOS B	3.6	90.3	0.68	0.81	0.78	36.5
16	R2	370	0.0	457	0.0	0.596	6.1	LOS A	3.6	90.3	0.68	0.81	0.78	35.9
Approach		469	0.6	579	0.6	0.596	7.4	LOS A	3.6	90.3	0.68	0.81	0.78	36.0
North: Hague Road - SB														
7	L2	307	1.0	361	1.0	0.577	11.4	LOS B	4.2	105.3	0.44	0.60	0.44	36.7
4	T1	290	0.0	341	0.0	0.577	5.3	LOS A	4.2	105.3	0.44	0.60	0.44	38.0
Approach		597	0.5	702	0.5	0.577	8.5	LOS A	4.2	105.3	0.44	0.60	0.44	37.3
All Vehicles		1697	0.6	1998	0.6	0.663	7.6	LOS A	4.8	120.0	0.59	0.70	0.65	37.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 2 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	31	0.0	37	0.0	0.980	24.3	LOS E	33.8	884.7	1.00	1.28	1.74	23.6
8	T1	711	7.0	846	7.0	0.980	19.2	LOS E	33.8	884.7	1.00	1.28	1.74	25.9
18	R2	135	1.0	161	1.0	0.980	19.3	LOS E	33.8	884.7	1.00	1.28	1.74	25.3
Approach		877	5.8	1044	5.8	0.980	19.4	LOS B	33.8	884.7	1.00	1.28	1.74	25.7
East: 196th Street - WB														
1	L2	135	4.0	161	4.0	0.628	14.6	LOS B	3.8	95.9	0.88	1.01	1.08	32.5
6	T1	39	0.0	46	0.0	0.628	8.3	LOS A	3.8	95.9	0.88	1.01	1.08	25.6
16	R2	103	2.0	123	2.0	0.628	8.8	LOS A	3.8	95.9	0.88	1.01	1.08	28.2
Approach		277	2.7	330	2.7	0.628	11.6	LOS B	3.8	95.9	0.88	1.01	1.08	29.7
North: Hague Road - SB														
7	L2	131	3.0	151	3.0	0.541	8.7	LOS A	3.9	98.8	0.63	0.48	0.64	30.7
4	T1	360	1.0	414	1.0	0.541	2.9	LOS A	3.9	98.8	0.63	0.48	0.64	32.6
14	R2	11	0.0	13	0.0	0.541	3.5	LOS A	3.9	98.8	0.63	0.48	0.64	25.9
Approach		502	1.5	577	1.5	0.541	4.4	LOS A	3.9	98.8	0.63	0.48	0.64	31.9
West: 196th Street - EB														
5	L2	12	0.0	16	0.0	0.098	7.3	LOS A	0.4	9.4	0.57	0.48	0.57	27.2
2	T1	30	0.0	39	0.0	0.098	2.0	LOS A	0.4	9.4	0.57	0.48	0.57	28.2
12	R2	18	0.0	23	0.0	0.098	3.0	LOS A	0.4	9.4	0.57	0.48	0.57	29.5
Approach		60	0.0	78	0.0	0.098	3.3	LOS A	0.4	9.4	0.57	0.48	0.57	28.4
All Vehicles		1716	3.9	2029	3.9	0.980	13.2	LOS B	33.8	884.7	0.86	0.98	1.27	28.0

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	322	319	31	29	17
Future Vol, veh/h	17	322	319	31	29	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	78	78
Heavy Vehicles, %	0	2	20	0	0	0
Mvmt Flow	20	388	371	36	37	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	407	0	-	0	817	389
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	428	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1163	-	-	-	349	664
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1163	-	-	-	341	664
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	662	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1163	-	-	-	416
HCM Lane V/C Ratio	0.018	-	-	-	0.142
HCM Control Delay (s)	8.2	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	472	21	8	502	1	30	0	4	1	0	0
Future Vol, veh/h	0	472	21	8	502	1	30	0	4	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	83	83	83	67	67	67	25	25	25
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	524	23	10	605	1	45	0	6	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	606	0	0	547	0	0	1162	1162	536	1165	1173	606
Stage 1	-	-	-	-	-	-	536	536	-	626	626	-
Stage 2	-	-	-	-	-	-	626	626	-	539	547	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	982	-	-	1033	-	-	174	197	549	173	194	501
Stage 1	-	-	-	-	-	-	532	527	-	475	480	-
Stage 2	-	-	-	-	-	-	475	480	-	530	521	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	1033	-	-	172	194	549	169	191	501
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	194	-	169	191	-
Stage 1	-	-	-	-	-	-	532	527	-	475	473	-
Stage 2	-	-	-	-	-	-	468	473	-	524	521	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	31.3	26.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	982	-	-	1033	-	-	169
HCM Lane V/C Ratio	0.271	-	-	-	0.009	-	-	0.024
HCM Control Delay (s)	31.3	0	-	-	8.5	0	-	26.8
HCM Lane LOS	D	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	40	0	25	5	635	41	47	468	5
Future Vol, veh/h	5	0	5	40	0	25	5	635	41	47	468	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	88	88	88	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	1	2	2	1	2
Mvmt Flow	6	0	6	44	0	28	6	722	47	57	571	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1457	1466	571	1425	1425	722	577	0	0	769	0	0
Stage 1	685	685	-	734	734	-	-	-	-	-	-	-
Stage 2	772	781	-	691	691	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	108	128	520	113	136	427	996	-	-	845	-	-
Stage 1	438	448	-	412	426	-	-	-	-	-	-	-
Stage 2	392	405	-	435	446	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	95	118	520	105	126	427	996	-	-	845	-	-
Mov Cap-2 Maneuver	95	118	-	105	126	-	-	-	-	-	-	-
Stage 1	433	418	-	407	421	-	-	-	-	-	-	-
Stage 2	362	401	-	401	416	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29	43.8	0.1	0.9
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	996	-	-	161	105	427	845	-	-
HCM Lane V/C Ratio	0.006	-	-	0.069	0.423	0.065	0.068	-	-
HCM Control Delay (s)	8.6	0	-	29	62.4	14	9.6	-	-
HCM Lane LOS	A	A	-	D	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.8	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	12	665	35	17	494
Future Vol, veh/h	0	12	665	35	17	494
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	82	82
Heavy Vehicles, %	0	2	1	2	2	1
Mvmt Flow	0	13	756	40	21	602

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	756	0	0	796	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	408	-	-	826	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	408	-	-	826	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	826	-
HCM Lane V/C Ratio	-	-	0.033	0.025	-
HCM Control Delay (s)	-	-	14.1	9.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	0	13	20	0	9	22	600	47	15	341	31
Future Vol, veh/h	22	0	13	20	0	9	22	600	47	15	341	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	89	89	80	80	92
Heavy Vehicles, %	2	2	2	0	2	2	2	1	0	3	0	2
Mvmt Flow	24	0	14	22	0	10	24	674	53	19	426	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1218	1239	426	1210	1220	674	460	0	0	727	0	0
Stage 1	464	464	-	722	722	-	-	-	-	-	-	-
Stage 2	754	775	-	488	498	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	157	175	628	161	180	455	1101	-	-	872	-	-
Stage 1	578	564	-	421	431	-	-	-	-	-	-	-
Stage 2	401	408	-	565	544	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	149	167	628	152	172	455	1101	-	-	872	-	-
Mov Cap-2 Maneuver	149	167	-	152	172	-	-	-	-	-	-	-
Stage 1	565	552	-	412	422	-	-	-	-	-	-	-
Stage 2	384	399	-	540	532	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.2	26.6	0.3	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1101	-	-	149	628	152	455	872	-	-
HCM Lane V/C Ratio	0.022	-	-	0.16	0.023	0.146	0.022	0.022	-	-
HCM Control Delay (s)	8.3	-	-	33.7	10.9	32.7	13.1	9.2	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0.5	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	424	15	41	424	67	16	0	25	42	0	24
Future Vol, veh/h	30	424	15	41	424	67	16	0	25	42	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	100	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	82	82	82	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	482	17	50	517	82	18	0	28	47	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	599	0	0	499	0	0	1222	1249	482	1190	1184	517
Stage 1	-	-	-	-	-	-	550	550	-	617	617	-
Stage 2	-	-	-	-	-	-	672	699	-	573	567	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	978	-	-	1065	-	-	156	173	584	165	189	558
Stage 1	-	-	-	-	-	-	519	516	-	477	481	-
Stage 2	-	-	-	-	-	-	445	442	-	505	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	978	-	-	1065	-	-	139	159	584	148	174	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	159	-	148	174	-
Stage 1	-	-	-	-	-	-	501	498	-	460	458	-
Stage 2	-	-	-	-	-	-	404	421	-	464	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.7	20.6	29.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	139	584	978	-	-	1065	-	-	148	558
HCM Lane V/C Ratio	0.128	0.048	0.035	-	-	0.047	-	-	0.315	0.048
HCM Control Delay (s)	34.7	11.5	8.8	-	-	8.5	-	-	40.1	11.8
HCM Lane LOS	D	B	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.4	0.1	0.1	-	-	0.1	-	-	1.3	0.1

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	84	94	70
Average Queue (ft)	29	35	30
95th Queue (ft)	69	77	61
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	813	48	305
Average Queue (ft)	801	12	147
95th Queue (ft)	846	34	269
Link Distance (ft)	799	738	331
Upstream Blk Time (%)	70		0
Queuing Penalty (veh)	323		1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	49	136	686	128
Average Queue (ft)	14	54	538	40
95th Queue (ft)	42	97	883	93
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)			55	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	70	54
Average Queue (ft)	7	21
95th Queue (ft)	36	45
Link Distance (ft)	2572	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: James Road & 206th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	845	483	25
Average Queue (ft)	575	200	1
95th Queue (ft)	1190	526	10
Link Distance (ft)	830	5281	634
Upstream Blk Time (%)	59		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	R	LT	L
Maximum Queue (ft)	31	59	47	26	47
Average Queue (ft)	6	22	14	2	14
95th Queue (ft)	23	49	35	16	37
Link Distance (ft)	184	783		353	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Hague Rd & Proposed Access B

Movement	WB	NB	SB	SB
Directions Served	R	R	L	T
Maximum Queue (ft)	22	16	29	26
Average Queue (ft)	7	1	6	2
95th Queue (ft)	23	9	24	19
Link Distance (ft)	345			347
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100	100	
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 8: Hague Rd & Proposed Access A

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	L
Maximum Queue (ft)	38	23	30	23	35	34
Average Queue (ft)	13	8	11	6	5	4
95th Queue (ft)	36	25	32	22	23	22
Link Distance (ft)		277		684		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		100		100	100
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Proposed Access D & 206th Street

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	TR	L	TR
Maximum Queue (ft)	30	125	1725	125	117	285	109	573
Average Queue (ft)	2	45	1517	52	70	75	16	264
95th Queue (ft)	15	142	2209	153	146	268	66	646
Link Distance (ft)			1713			344		600
Upstream Blk Time (%)			49			8		19
Queuing Penalty (veh)			260			0		0
Storage Bay Dist (ft)	100	100		100	100		100	
Storage Blk Time (%)		0	96	0	46		0	58
Queuing Penalty (veh)		0	103	0	12		0	24

Network Summary

Network wide Queuing Penalty: 724

Scenario 3

AM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 3 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	96	7.0	128	7.0	0.121	11.2	LOS B	0.5	13.6	0.20	0.62	0.20	36.3
8	T1	23	7.0	31	7.0	0.121	5.1	LOS A	0.5	13.6	0.20	0.62	0.20	32.6
Approach		119	7.0	159	7.0	0.121	10.0	LOS B	0.5	13.6	0.20	0.62	0.20	35.6
North: Hague Road - SB														
4	T1	104	3.0	132	3.0	0.199	1.8	LOS A	0.9	21.7	0.26	0.30	0.26	34.0
14	R2	107	1.0	135	1.0	0.199	2.4	LOS A	0.9	21.7	0.26	0.30	0.26	32.3
Approach		211	2.0	267	2.0	0.199	2.1	LOS A	0.9	21.7	0.26	0.30	0.26	33.1
West: Carrigan Road - EB														
5	L2	71	3.0	84	3.0	0.079	10.7	LOS B	0.4	10.7	0.35	0.62	0.35	31.3
12	R2	436	2.0	513	2.0	0.330	4.5	LOS A	2.4	60.4	0.39	0.49	0.39	37.0
Approach		507	2.1	596	2.1	0.330	5.4	LOS A	2.4	60.4	0.39	0.51	0.39	36.0
All Vehicles		837	2.8	1022	2.9	0.330	5.3	LOS A	2.4	60.4	0.33	0.47	0.33	35.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 3 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	69	8.0	86	8.0	0.111	5.7	LOS A	0.3	8.7	0.34	0.54	0.34	38.7
18	R2	30	11.0	38	11.0	0.111	5.7	LOS A	0.3	8.7	0.34	0.54	0.34	36.9
Approach		99	8.9	124	8.9	0.111	5.7	LOS A	0.3	8.7	0.34	0.54	0.34	38.2
East: 206th Street - WB														
1	L2	30	6.0	36	6.0	0.105	10.0	LOS B	0.4	9.7	0.18	0.52	0.18	37.1
16	R2	85	6.0	102	6.0	0.105	4.2	LOS A	0.4	9.7	0.18	0.52	0.18	36.1
Approach		115	6.0	139	6.0	0.105	5.7	LOS A	0.4	9.7	0.18	0.52	0.18	36.3
North: Hague Road -SB														
7	L2	353	6.0	415	6.0	0.518	11.0	LOS B	3.2	83.0	0.18	0.58	0.18	37.0
4	T1	246	6.0	289	6.0	0.518	5.0	LOS A	3.2	83.0	0.18	0.58	0.18	37.6
Approach		599	6.0	705	6.0	0.518	8.5	LOS A	3.2	83.0	0.18	0.58	0.18	37.2
All Vehicles		813	6.4	967	6.4	0.518	7.8	LOS A	3.2	83.0	0.20	0.56	0.20	37.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 3 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	6	0.0	8	0.0	0.273	7.7	LOS A	1.4	36.1	0.35	0.31	0.35	28.1
8	T1	198	9.0	254	9.0	0.273	2.2	LOS A	1.4	36.1	0.35	0.31	0.35	31.5
18	R2	56	4.0	72	4.0	0.273	2.7	LOS A	1.4	36.1	0.35	0.31	0.35	30.6
Approach		260	7.7	333	7.7	0.273	2.4	LOS A	1.4	36.1	0.35	0.31	0.35	31.2
East: 196th Street - WB														
1	L2	123	4.0	154	4.0	0.219	9.6	LOS A	1.0	26.4	0.43	0.64	0.43	34.0
6	T1	2	8.0	3	8.0	0.219	3.8	LOS A	1.0	26.4	0.43	0.64	0.43	26.6
16	R2	70	16.0	88	16.0	0.219	4.3	LOS A	1.0	26.4	0.43	0.64	0.43	29.2
Approach		195	8.3	244	8.3	0.219	7.6	LOS A	1.0	26.4	0.43	0.64	0.43	32.0
North: Hague Road - SB														
7	L2	65	23.0	81	23.0	0.331	8.3	LOS A	1.8	50.7	0.40	0.37	0.40	31.0
4	T1	233	12.0	291	12.0	0.331	2.3	LOS A	1.8	50.7	0.40	0.37	0.40	32.1
14	R2	1	18.0	1	18.0	0.331	3.0	LOS A	1.8	50.7	0.40	0.37	0.40	26.3
Approach		299	14.4	374	14.4	0.331	3.6	LOS A	1.8	50.7	0.40	0.37	0.40	31.9
West: 196th Street - EB														
5	L2	4	6.0	7	6.0	0.092	6.8	LOS A	0.3	8.8	0.48	0.32	0.48	27.5
2	T1	36	3.0	61	3.0	0.092	1.4	LOS A	0.3	8.8	0.48	0.32	0.48	28.6
12	R2	16	0.0	27	0.0	0.092	2.3	LOS A	0.3	8.8	0.48	0.32	0.48	29.9
Approach		56	2.4	95	2.4	0.092	2.1	LOS A	0.3	8.8	0.48	0.32	0.48	28.8
All Vehicles		810	10.0	1046	9.8	0.331	4.0	LOS A	1.8	50.7	0.40	0.41	0.40	31.4

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	185	215	6	16	11
Future Vol, veh/h	1	185	215	6	16	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	80	80	62	62
Heavy Vehicles, %	0	4	9	0	0	0
Mvmt Flow	1	223	269	8	26	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	277	0	-	0	498	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	225	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1298	-	-	-	535	771
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1298	-	-	-	534	771
Mov Cap-2 Maneuver	-	-	-	-	534	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	817	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1298	-	-	-	610
HCM Lane V/C Ratio	0.001	-	-	-	0.071
HCM Control Delay (s)	7.8	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	404	0	5	103	0	0	0	1	0	0	0
Future Vol, veh/h	0	404	0	5	103	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	78	78	78	25	25	25	90	90	90
Heavy Vehicles, %	0	3	0	14	6	0	0	0	0	0	0	0
Mvmt Flow	0	449	0	6	132	0	0	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	132	0	0	449	0	0	593	593	449	595	593	132
Stage 1	-	-	-	-	-	-	449	449	-	144	144	-
Stage 2	-	-	-	-	-	-	144	144	-	451	449	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1466	-	-	1051	-	-	420	421	614	419	421	923
Stage 1	-	-	-	-	-	-	593	576	-	864	782	-
Stage 2	-	-	-	-	-	-	864	782	-	592	576	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1466	-	-	1051	-	-	418	418	614	414	418	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	418	-	414	418	-
Stage 1	-	-	-	-	-	-	593	576	-	864	777	-
Stage 2	-	-	-	-	-	-	859	777	-	588	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	10.9	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	614	1466	-	-	1051	-	-	-
HCM Lane V/C Ratio	0.007	-	-	-	0.006	-	-	-
HCM Control Delay (s)	10.9	0	-	-	8.4	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	76	40	53
Average Queue (ft)	18	5	12
95th Queue (ft)	55	24	41
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	166	8	114
Average Queue (ft)	50	0	38
95th Queue (ft)	107	4	90
Link Distance (ft)	799	738	331
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	64	88	72	119
Average Queue (ft)	11	26	15	30
95th Queue (ft)	40	69	49	82
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	6	31
Average Queue (ft)	0	15
95th Queue (ft)	4	36
Link Distance (ft)	2572	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: James Road & 206th Street

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	11	19
Average Queue (ft)	0	1
95th Queue (ft)	6	8
Link Distance (ft)	830	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	23	46
Average Queue (ft)	6	3
95th Queue (ft)	21	20
Link Distance (ft)	184	353
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hague Rd & Proposed Access B

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Hague Rd & Proposed Access A

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 9: Proposed Access D & 206th Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

PM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 3 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	464	0.0	521	0.0	0.530	11.7	LOS B	3.6	89.9	0.47	0.65	0.47	36.1
8	T1	163	1.0	183	1.0	0.530	5.5	LOS A	3.6	89.9	0.47	0.65	0.47	32.2
Approach		627	0.3	704	0.3	0.530	10.1	LOS B	3.6	89.9	0.47	0.65	0.47	35.0
North: Hague Road - SB														
4	T1	92	0.0	111	0.0	0.203	2.6	LOS A	0.8	20.9	0.49	0.41	0.49	33.8
14	R2	95	0.0	114	0.0	0.203	3.2	LOS A	0.8	20.9	0.49	0.41	0.49	31.7
Approach		187	0.0	225	0.0	0.203	2.9	LOS A	0.8	20.9	0.49	0.41	0.49	32.7
West: Carrigan Road- EB														
5	L2	150	0.0	176	0.0	0.141	10.4	LOS B	0.9	21.6	0.33	0.61	0.33	31.3
12	R2	343	2.0	404	2.0	0.258	4.4	LOS A	1.8	46.9	0.35	0.47	0.35	37.1
Approach		493	1.4	580	1.4	0.258	6.2	LOS A	1.8	46.9	0.34	0.52	0.34	35.1
All Vehicles		1307	0.6	1510	0.7	0.530	7.5	LOS A	3.6	89.9	0.42	0.56	0.42	34.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 3 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	408	0.0	464	0.0	0.489	5.7	LOS A	2.3	58.9	0.47	0.55	0.48	39.5
18	R2	130	3.0	148	3.0	0.489	5.8	LOS A	2.3	58.9	0.47	0.55	0.48	36.7
Approach		538	0.7	611	0.7	0.489	5.7	LOS A	2.3	58.9	0.47	0.55	0.48	38.8
East: 206th Street - WB														
1	L2	58	3.0	72	3.0	0.439	10.9	LOS B	2.0	50.8	0.52	0.64	0.53	37.1
16	R2	362	0.0	447	0.0	0.439	5.0	LOS A	2.0	50.8	0.52	0.64	0.53	36.6
Approach		420	0.4	519	0.4	0.439	5.8	LOS A	2.0	50.8	0.52	0.64	0.53	36.6
North: Hague Road - SB														
7	L2	296	1.0	348	1.0	0.457	11.0	LOS B	2.8	70.3	0.26	0.58	0.26	37.1
4	T1	247	0.0	291	0.0	0.457	5.0	LOS A	2.8	70.3	0.26	0.58	0.26	38.4
Approach		543	0.5	639	0.5	0.457	8.3	LOS A	2.8	70.3	0.26	0.58	0.26	37.7
All Vehicles		1501	0.6	1769	0.6	0.489	6.7	LOS A	2.8	70.3	0.41	0.59	0.41	37.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 3 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	33	0.0	39	0.0	0.768	9.8	LOS A	9.9	258.2	0.83	0.64	0.91	27.1
8	T1	605	7.0	720	7.0	0.768	4.4	LOS A	9.9	258.2	0.83	0.64	0.91	30.3
18	R2	142	1.0	169	1.0	0.768	4.8	LOS A	9.9	258.2	0.83	0.64	0.91	29.4
Approach		780	5.6	929	5.6	0.768	4.7	LOS A	9.9	258.2	0.83	0.64	0.91	30.0
East: 196th Street - WB														
1	L2	142	4.0	169	4.0	0.419	11.2	LOS B	2.2	57.2	0.76	0.82	0.82	33.6
6	T1	41	0.0	49	0.0	0.419	5.1	LOS A	2.2	57.2	0.76	0.82	0.82	26.3
16	R2	85	2.0	101	2.0	0.419	5.5	LOS A	2.2	57.2	0.76	0.82	0.82	29.0
Approach		268	2.8	319	2.8	0.419	8.5	LOS A	2.2	57.2	0.76	0.82	0.82	30.7
North: Hague Road - SB														
7	L2	124	3.0	143	3.0	0.420	8.2	LOS A	2.6	65.3	0.53	0.44	0.53	30.9
4	T1	302	1.0	347	1.0	0.420	2.5	LOS A	2.6	65.3	0.53	0.44	0.53	32.9
14	R2	12	0.0	14	0.0	0.420	3.1	LOS A	2.6	65.3	0.53	0.44	0.53	26.0
Approach		438	1.5	503	1.5	0.420	4.1	LOS A	2.6	65.3	0.53	0.44	0.53	32.0
West: 196th Street - EB														
5	L2	13	0.0	17	0.0	0.084	6.7	LOS A	0.3	7.9	0.51	0.40	0.51	27.3
2	T1	32	0.0	42	0.0	0.084	1.5	LOS A	0.3	7.9	0.51	0.40	0.51	28.3
12	R2	19	0.0	25	0.0	0.084	2.4	LOS A	0.3	7.9	0.51	0.40	0.51	29.6
Approach		64	0.0	83	0.0	0.084	2.8	LOS A	0.3	7.9	0.51	0.40	0.51	28.5
All Vehicles		1550	3.7	1834	3.7	0.768	5.1	LOS A	9.9	258.2	0.72	0.60	0.77	30.6

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	324	312	9	15	18
Future Vol, veh/h	18	324	312	9	15	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	78	78
Heavy Vehicles, %	0	2	20	0	0	0
Mvmt Flow	22	390	363	10	19	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	373	0	-	0	802	368
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1197	-	-	-	356	682
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	658	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1197	-	-	-	348	682
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	658	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1197	-	-	-	475
HCM Lane V/C Ratio	0.018	-	-	-	0.089
HCM Control Delay (s)	8.1	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	421	6	8	406	1	8	0	4	1	0	0
Future Vol, veh/h	0	421	6	8	406	1	8	0	4	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	83	83	83	67	67	67	25	25	25
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	468	7	10	489	1	12	0	6	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	490	0	0	475	0	0	982	982	472	985	985	490
Stage 1	-	-	-	-	-	-	472	472	-	510	510	-
Stage 2	-	-	-	-	-	-	510	510	-	475	475	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1084	-	-	1098	-	-	230	251	596	229	250	582
Stage 1	-	-	-	-	-	-	576	562	-	550	541	-
Stage 2	-	-	-	-	-	-	550	541	-	574	561	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1084	-	-	1098	-	-	228	248	596	224	247	582
Mov Cap-2 Maneuver	-	-	-	-	-	-	228	248	-	224	247	-
Stage 1	-	-	-	-	-	-	576	562	-	550	534	-
Stage 2	-	-	-	-	-	-	543	534	-	568	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	18.4	21.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	287	1084	-	-	1098	-	-	224
HCM Lane V/C Ratio	0.062	-	-	-	0.009	-	-	0.018
HCM Control Delay (s)	18.4	0	-	-	8.3	0	-	21.4
HCM Lane LOS	C	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	75	130	66
Average Queue (ft)	21	43	30
95th Queue (ft)	60	93	60
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	813	54	218
Average Queue (ft)	763	11	106
95th Queue (ft)	961	37	191
Link Distance (ft)	799	738	331
Upstream Blk Time (%)	43		
Queuing Penalty (veh)	177		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	36	106	551	120
Average Queue (ft)	13	48	237	40
95th Queue (ft)	38	90	564	92
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)			4	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	54	42
Average Queue (ft)	7	18
95th Queue (ft)	33	40
Link Distance (ft)	2572	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: James Road & 206th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	392	50	15
Average Queue (ft)	56	12	1
95th Queue (ft)	311	36	8
Link Distance (ft)	830	5281	634
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	27	42
Average Queue (ft)	6	2
95th Queue (ft)	23	18
Link Distance (ft)	184	353
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Hague Rd & Proposed Access B

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 8: Hague Rd & Proposed Access A

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 9: Proposed Access D & 206th Street

Movement	WB
Directions Served	T
Maximum Queue (ft)	1459
Average Queue (ft)	772
95th Queue (ft)	1712
Link Distance (ft)	1713
Upstream Blk Time (%)	6
Queuing Penalty (veh)	26
Storage Bay Dist (ft)	
Storage Blk Time (%)	78
Queuing Penalty (veh)	0

Network Summary

Network wide Queuing Penalty: 203

Scenario 4

AM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 4 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	154	7.0	205	7.0	0.218	11.3	LOS B	1.0	27.7	0.23	0.61	0.23	36.6
8	T1	61	7.0	81	7.0	0.218	5.1	LOS A	1.0	27.7	0.23	0.61	0.23	32.8
Approach		215	7.0	287	7.0	0.218	9.5	LOS A	1.0	27.7	0.23	0.61	0.23	35.4
North: Hague Road - SB														
4	T1	120	3.0	152	3.0	0.223	2.1	LOS A	0.9	24.1	0.33	0.33	0.33	33.8
14	R2	106	1.0	134	1.0	0.223	2.7	LOS A	0.9	24.1	0.33	0.33	0.33	32.1
Approach		226	2.1	286	2.1	0.223	2.4	LOS A	0.9	24.1	0.33	0.33	0.33	33.0
West: Carrigan Road - EB														
5	L2	70	3.0	82	3.0	0.079	10.9	LOS B	0.4	10.8	0.38	0.63	0.38	31.2
12	R2	456	2.0	536	2.0	0.351	4.7	LOS A	2.6	66.0	0.44	0.51	0.44	36.9
Approach		526	2.1	619	2.1	0.351	5.5	LOS A	2.6	66.0	0.43	0.53	0.43	36.0
All Vehicles		967	3.2	1192	3.3	0.351	5.7	LOS A	2.6	66.0	0.36	0.50	0.36	35.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 4 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	123	8.0	154	8.0	0.214	5.8	LOS A	0.7	19.6	0.41	0.55	0.41	38.5
18	R2	61	11.0	76	11.0	0.214	5.8	LOS A	0.7	19.6	0.41	0.55	0.41	36.7
Approach		184	9.0	230	9.0	0.214	5.8	LOS A	0.7	19.6	0.41	0.55	0.41	37.9
East: 206th Street - WB														
1	L2	84	6.0	101	6.0	0.190	10.2	LOS B	0.7	18.9	0.26	0.58	0.26	36.3
16	R2	115	6.0	139	6.0	0.190	4.4	LOS A	0.7	18.9	0.26	0.58	0.26	35.4
Approach		199	6.0	240	6.0	0.190	6.8	LOS A	0.7	18.9	0.26	0.58	0.26	35.8
North: Hague Road - SB														
7	L2	375	6.0	441	6.0	0.603	11.4	LOS B	4.2	109.7	0.38	0.60	0.38	36.6
4	T1	295	6.0	347	6.0	0.603	5.3	LOS A	4.2	109.7	0.38	0.60	0.38	37.1
Approach		670	6.0	788	6.0	0.603	8.7	LOS A	4.2	109.7	0.38	0.60	0.38	36.8
All Vehicles		1053	6.5	1258	6.5	0.603	7.8	LOS A	4.2	109.7	0.36	0.58	0.36	36.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 4 AM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	6	0.0	8	0.0	0.330	7.8	LOS A	1.8	46.6	0.41	0.33	0.41	28.0
8	T1	244	9.0	313	9.0	0.330	2.3	LOS A	1.8	46.6	0.41	0.33	0.41	31.3
18	R2	56	4.0	72	4.0	0.330	2.8	LOS A	1.8	46.6	0.41	0.33	0.41	30.5
Approach		306	7.9	392	7.9	0.330	2.5	LOS A	1.8	46.6	0.41	0.33	0.41	31.1
East: 196th Street - WB														
1	L2	123	4.0	154	4.0	0.244	9.8	LOS A	1.1	29.6	0.48	0.67	0.48	34.0
6	T1	2	8.0	3	8.0	0.244	4.0	LOS A	1.1	29.6	0.48	0.67	0.48	26.5
16	R2	81	16.0	101	16.0	0.244	4.5	LOS A	1.1	29.6	0.48	0.67	0.48	29.2
Approach		206	8.8	258	8.8	0.244	7.7	LOS A	1.1	29.6	0.48	0.67	0.48	31.8
North: Hague Road - SB														
7	L2	84	23.0	105	23.0	0.487	8.5	LOS A	3.3	91.9	0.49	0.39	0.49	30.9
4	T1	355	12.0	444	12.0	0.487	2.5	LOS A	3.3	91.9	0.49	0.39	0.49	31.9
14	R2	1	18.0	1	18.0	0.487	3.2	LOS A	3.3	91.9	0.49	0.39	0.49	26.2
Approach		440	14.1	550	14.1	0.487	3.6	LOS A	3.3	91.9	0.49	0.39	0.49	31.7
West: 196th Street - EB														
5	L2	4	6.0	7	6.0	0.104	7.2	LOS A	0.4	10.1	0.55	0.37	0.55	27.3
2	T1	36	3.0	61	3.0	0.104	1.8	LOS A	0.4	10.1	0.55	0.37	0.55	28.4
12	R2	16	0.0	27	0.0	0.104	2.6	LOS A	0.4	10.1	0.55	0.37	0.55	29.7
Approach		56	2.4	95	2.4	0.104	2.4	LOS A	0.4	10.1	0.55	0.37	0.55	28.7
All Vehicles		1008	10.5	1295	10.3	0.487	4.0	LOS A	3.3	91.9	0.47	0.42	0.47	31.3

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	204	226	17	38	11
Future Vol, veh/h	1	204	226	17	38	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	80	80	62	62
Heavy Vehicles, %	0	4	9	0	0	0
Mvmt Flow	1	246	283	21	61	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	304	0	-	0	542	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	248	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1268	-	-	-	505	750
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	798	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1268	-	-	-	504	750
Mov Cap-2 Maneuver	-	-	-	-	504	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	798	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1268	-	-	-	544
HCM Lane V/C Ratio	0.001	-	-	-	0.145
HCM Control Delay (s)	7.8	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	518	22	5	141	0	11	0	1	0	0	0
Future Vol, veh/h	0	518	22	5	141	0	11	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	78	78	78	25	25	25	90	90	90
Heavy Vehicles, %	0	3	0	14	6	0	0	0	0	0	0	0
Mvmt Flow	0	576	24	6	181	0	44	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	181	0	0	600	0	0	781	781	588	783	793	181
Stage 1	-	-	-	-	-	-	588	588	-	193	193	-
Stage 2	-	-	-	-	-	-	193	193	-	590	600	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1407	-	-	921	-	-	315	329	513	314	323	867
Stage 1	-	-	-	-	-	-	499	499	-	813	745	-
Stage 2	-	-	-	-	-	-	813	745	-	497	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	921	-	-	313	327	513	310	321	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	327	-	310	321	-
Stage 1	-	-	-	-	-	-	499	499	-	813	740	-
Stage 2	-	-	-	-	-	-	807	740	-	493	493	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	18	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	324	1407	-	-	921	-	-	-
HCM Lane V/C Ratio	0.148	-	-	-	0.007	-	-	-
HCM Control Delay (s)	18	0	-	-	8.9	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	60	0	34	5	181	20	24	610	5
Future Vol, veh/h	5	0	5	60	0	34	5	181	20	24	610	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	62	62	62	85	85	85
Heavy Vehicles, %	2	2	2	2	0	2	2	7	2	2	6	2
Mvmt Flow	6	0	6	67	0	38	8	292	32	28	718	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1117	1114	718	1088	1088	292	724	0	0	324	0	0
Stage 1	774	774	-	308	308	-	-	-	-	-	-	-
Stage 2	343	340	-	780	780	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.5	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	185	208	429	193	218	747	879	-	-	1236	-	-
Stage 1	391	408	-	702	664	-	-	-	-	-	-	-
Stage 2	672	639	-	388	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	171	201	429	186	211	747	879	-	-	1236	-	-
Mov Cap-2 Maneuver	171	201	-	186	211	-	-	-	-	-	-	-
Stage 1	387	399	-	694	657	-	-	-	-	-	-	-
Stage 2	631	632	-	374	400	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.4	25.9	0.2	0.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	879	-	-	245	186	747	1236	-	-
HCM Lane V/C Ratio	0.009	-	-	0.045	0.358	0.051	0.023	-	-
HCM Control Delay (s)	9.1	0	-	20.4	34.8	10.1	8	-	-
HCM Lane LOS	A	A	-	C	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.5	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	18	183	15	10	666
Future Vol, veh/h	0	18	183	15	10	666
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	61	61	85	85
Heavy Vehicles, %	0	2	7	2	2	6
Mvmt Flow	0	20	300	25	12	784

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	300	0	0	325	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	740	-	-	1235	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	740	-	-	1235	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	740	1235	-
HCM Lane V/C Ratio	-	-	0.027	0.01	-
HCM Control Delay (s)	-	-	10	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	24	31	0	13	8	136	13	5	362	11
Future Vol, veh/h	37	0	24	31	0	13	8	136	13	5	362	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	80	80	84	84	92
Heavy Vehicles, %	2	2	2	2	2	2	2	9	2	2	6	2
Mvmt Flow	40	0	26	34	0	14	9	170	16	6	431	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	646	647	431	650	643	170	443	0	0	186	0	0
Stage 1	443	443	-	188	188	-	-	-	-	-	-	-
Stage 2	203	204	-	462	455	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	385	390	624	382	392	874	1117	-	-	1388	-	-
Stage 1	594	576	-	814	745	-	-	-	-	-	-	-
Stage 2	799	733	-	580	569	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	375	385	624	363	387	874	1117	-	-	1388	-	-
Mov Cap-2 Maneuver	375	385	-	363	387	-	-	-	-	-	-	-
Stage 1	589	574	-	807	739	-	-	-	-	-	-	-
Stage 2	779	727	-	553	567	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	14	0.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1117	-	-	375	624	363	874	1388	-	-
HCM Lane V/C Ratio	0.008	-	-	0.107	0.042	0.095	0.017	0.004	-	-
HCM Control Delay (s)	8.2	-	-	15.8	11	16	9.2	7.6	-	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	420	5	12	120	22	24	0	35	64	0	43
Future Vol, veh/h	11	420	5	12	120	22	24	0	35	64	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	100	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	79	79	79	90	90	90	90	90	90
Heavy Vehicles, %	2	7	2	2	6	2	2	2	2	2	2	2
Mvmt Flow	13	494	6	15	152	28	27	0	39	71	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	180	0	0	500	0	0	740	730	494	725	708	152
Stage 1	-	-	-	-	-	-	520	520	-	182	182	-
Stage 2	-	-	-	-	-	-	220	210	-	543	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1396	-	-	1064	-	-	333	349	575	340	360	894
Stage 1	-	-	-	-	-	-	539	532	-	820	749	-
Stage 2	-	-	-	-	-	-	782	728	-	524	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1064	-	-	310	341	575	311	352	894
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	341	-	311	352	-
Stage 1	-	-	-	-	-	-	534	527	-	813	739	-
Stage 2	-	-	-	-	-	-	730	718	-	484	524	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.7	14.1	15.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	310	575	1396	-	-	1064	-	-	311	894
HCM Lane V/C Ratio	0.086	0.068	0.009	-	-	0.014	-	-	0.229	0.053
HCM Control Delay (s)	17.7	11.7	7.6	-	-	8.4	-	-	20	9.3
HCM Lane LOS	C	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.3	0.2	0	-	-	0	-	-	0.9	0.2

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	97	46	72
Average Queue (ft)	27	12	20
95th Queue (ft)	75	39	58
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	450	30	198
Average Queue (ft)	174	2	69
95th Queue (ft)	390	15	148
Link Distance (ft)	799	738	331
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	48	101	80	116
Average Queue (ft)	11	31	22	38
95th Queue (ft)	38	76	62	94
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	SB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	23
95th Queue (ft)	43
Link Distance (ft)	5281
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: James Road & 206th Street

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	44	27
Average Queue (ft)	3	8
95th Queue (ft)	23	27
Link Distance (ft)	830	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	R	LT	L
Maximum Queue (ft)	28	69	45	17	26
Average Queue (ft)	7	27	16	1	4
95th Queue (ft)	24	55	37	10	20
Link Distance (ft)	184	783		353	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 7: Hague Rd & Proposed Access B

Movement	WB	SB
Directions Served	R	L
Maximum Queue (ft)	27	11
Average Queue (ft)	10	1
95th Queue (ft)	27	9
Link Distance (ft)	345	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Hague Rd & Proposed Access A

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	L
Maximum Queue (ft)	48	33	64	23	30	18
Average Queue (ft)	20	12	19	7	2	1
95th Queue (ft)	42	31	46	23	14	9
Link Distance (ft)		277		684		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		100		100	100
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 9: Proposed Access D & 206th Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	18	31	37	44	77	46
Average Queue (ft)	1	5	13	17	27	18
95th Queue (ft)	7	24	35	36	54	36
Link Distance (ft)				344		600
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	100	100		100	
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 0

PM Peak

MOVEMENT SUMMARY

Site: 101 [Hague Road & Carrigan Scenario 4 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	502	0.0	564	0.0	0.585	11.7	LOS B	4.4	111.1	0.52	0.65	0.52	36.0
8	T1	188	1.0	211	1.0	0.585	5.6	LOS A	4.4	111.1	0.52	0.65	0.52	32.2
Approach		690	0.3	775	0.3	0.585	10.1	LOS B	4.4	111.1	0.52	0.65	0.52	34.9
North: Hague Road - SB														
4	T1	133	0.0	160	0.0	0.254	2.7	LOS A	1.1	27.2	0.53	0.41	0.53	33.6
14	R2	93	0.0	112	0.0	0.254	3.3	LOS A	1.1	27.2	0.53	0.41	0.53	31.6
Approach		226	0.0	272	0.0	0.254	3.0	LOS A	1.1	27.2	0.53	0.41	0.53	32.8
West: Carrigan Road - EB														
5	L2	147	0.0	173	0.0	0.151	10.7	LOS B	0.9	22.4	0.41	0.63	0.41	31.2
12	R2	402	2.0	473	2.0	0.315	4.6	LOS A	2.3	59.1	0.44	0.51	0.44	36.9
Approach		549	1.5	646	1.5	0.315	6.3	LOS A	2.3	59.1	0.43	0.55	0.43	35.1
All Vehicles		1465	0.7	1693	0.7	0.585	7.5	LOS A	4.4	111.1	0.49	0.57	0.49	34.6

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague & 206th Scenario 4 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
8	T1	488	0.0	555	0.0	0.612	6.3	LOS A	3.9	99.3	0.60	0.63	0.66	39.0
18	R2	168	3.0	191	3.0	0.612	6.4	LOS A	3.9	99.3	0.60	0.63	0.66	36.3
Approach		656	0.8	745	0.8	0.612	6.3	LOS A	3.9	99.3	0.60	0.63	0.66	38.2
East: 206th Street - WB														
1	L2	102	3.0	126	3.0	0.544	11.5	LOS B	3.0	76.6	0.64	0.73	0.70	36.6
16	R2	387	0.0	478	0.0	0.544	5.5	LOS A	3.0	76.6	0.64	0.73	0.70	36.1
Approach		489	0.6	604	0.6	0.544	6.8	LOS A	3.0	76.6	0.64	0.73	0.70	36.2
North: Hague Road - SB														
7	L2	321	1.0	378	1.0	0.543	11.3	LOS B	3.7	93.8	0.40	0.59	0.40	36.8
4	T1	302	0.0	355	0.0	0.543	5.2	LOS A	3.7	93.8	0.40	0.59	0.40	38.1
Approach		623	0.5	733	0.5	0.543	8.3	LOS A	3.7	93.8	0.40	0.59	0.40	37.4
All Vehicles		1768	0.6	2082	0.6	0.612	7.2	LOS A	3.9	99.3	0.54	0.65	0.58	37.3

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Hague Road & 196th Scenario 4 PM Peak (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Hague Road - NB														
3	L2	33	0.0	39	0.0	0.916	14.9	LOS D	22.0	575.3	1.00	1.01	1.35	26.1
8	T1	740	7.0	881	7.0	0.916	9.6	LOS D	22.0	575.3	1.00	1.01	1.35	29.1
18	R2	142	1.0	169	1.0	0.916	9.9	LOS D	22.0	575.3	1.00	1.01	1.35	28.3
Approach		915	5.8	1089	5.8	0.916	9.8	LOS A	22.0	575.3	1.00	1.01	1.35	28.8
East: 196th Street - WB														
1	L2	142	4.0	169	4.0	0.571	13.4	LOS B	3.4	86.8	0.87	0.98	1.02	33.0
6	T1	41	0.0	49	0.0	0.571	7.2	LOS A	3.4	86.8	0.87	0.98	1.02	25.9
16	R2	107	2.0	127	2.0	0.571	7.6	LOS A	3.4	86.8	0.87	0.98	1.02	28.5
Approach		290	2.7	345	2.7	0.571	10.4	LOS B	3.4	86.8	0.87	0.98	1.02	30.1
North: Hague Road - SB														
7	L2	137	3.0	157	3.0	0.505	8.4	LOS A	3.5	88.7	0.60	0.45	0.60	30.8
4	T1	374	1.0	430	1.0	0.505	2.6	LOS A	3.5	88.7	0.60	0.45	0.60	32.7
14	R2	12	0.0	14	0.0	0.505	3.2	LOS A	3.5	88.7	0.60	0.45	0.60	25.9
Approach		523	1.5	601	1.5	0.505	4.1	LOS A	3.5	88.7	0.60	0.45	0.60	32.0
West: 196th Street - EB														
5	L2	13	0.0	17	0.0	0.090	6.9	LOS A	0.3	8.7	0.56	0.43	0.56	27.2
2	T1	32	0.0	42	0.0	0.090	1.6	LOS A	0.3	8.7	0.56	0.43	0.56	28.3
12	R2	19	0.0	25	0.0	0.090	2.6	LOS A	0.3	8.7	0.56	0.43	0.56	29.5
Approach		64	0.0	83	0.0	0.090	3.0	LOS A	0.3	8.7	0.56	0.43	0.56	28.4
All Vehicles		1792	3.8	2119	3.9	0.916	8.0	LOS A	22.0	575.3	0.85	0.82	1.05	29.9

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	337	334	31	30	18
Future Vol, veh/h	18	337	334	31	30	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	86	86	78	78
Heavy Vehicles, %	0	2	20	0	0	0
Mvmt Flow	22	406	388	36	38	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	424	0	-	0	856	406
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	450	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1146	-	-	-	331	649
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1146	-	-	-	323	649
Mov Cap-2 Maneuver	-	-	-	-	323	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	647	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1146	-	-	-	398
HCM Lane V/C Ratio	0.019	-	-	-	0.155
HCM Control Delay (s)	8.2	0	-	-	15.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	492	21	8	521	1	30	0	4	1	0	0
Future Vol, veh/h	0	492	21	8	521	1	30	0	4	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	83	83	83	67	67	67	25	25	25
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	547	23	10	628	1	45	0	6	4	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	629	0	0	570	0	0	1208	1208	559	1211	1219	629
Stage 1	-	-	-	-	-	-	559	559	-	649	649	-
Stage 2	-	-	-	-	-	-	649	649	-	562	570	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	963	-	-	1013	-	-	161	185	532	161	182	486
Stage 1	-	-	-	-	-	-	517	514	-	462	469	-
Stage 2	-	-	-	-	-	-	462	469	-	515	509	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	963	-	-	1013	-	-	159	182	532	157	179	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	182	-	157	179	-
Stage 1	-	-	-	-	-	-	517	514	-	462	462	-
Stage 2	-	-	-	-	-	-	455	462	-	509	509	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	34.2	28.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	173	963	-	-	1013	-	-	157
HCM Lane V/C Ratio	0.293	-	-	-	0.01	-	-	0.025
HCM Control Delay (s)	34.2	0	-	-	8.6	0	-	28.5
HCM Lane LOS	D	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	40	0	25	5	665	41	47	489	5
Future Vol, veh/h	5	0	5	40	0	25	5	665	41	47	489	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	100	-	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	88	88	88	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	1	2	2	1	2
Mvmt Flow	6	0	6	44	0	28	6	756	47	57	596	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1516	1525	596	1484	1484	756	602	0	0	803	0	0
Stage 1	710	710	-	768	768	-	-	-	-	-	-	-
Stage 2	806	815	-	716	716	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	98	118	504	103	125	408	975	-	-	821	-	-
Stage 1	424	437	-	394	411	-	-	-	-	-	-	-
Stage 2	376	391	-	421	434	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	109	504	96	115	408	975	-	-	821	-	-
Mov Cap-2 Maneuver	86	109	-	96	115	-	-	-	-	-	-	-
Stage 1	419	407	-	390	406	-	-	-	-	-	-	-
Stage 2	347	387	-	387	404	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.5	49.5	0.1	0.8
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	975	-	-	147	96	408	821	-	-
HCM Lane V/C Ratio	0.006	-	-	0.076	0.463	0.068	0.07	-	-
HCM Control Delay (s)	8.7	0	-	31.5	71.4	14.5	9.7	-	-
HCM Lane LOS	A	A	-	D	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	2	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	12	695	35	17	515
Future Vol, veh/h	0	12	695	35	17	515
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	88	88	82	82
Heavy Vehicles, %	0	2	1	2	2	1
Mvmt Flow	0	13	790	40	21	628

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	790	0	0	830	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	390	-	-	802	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	390	-	-	802	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	390	802	-
HCM Lane V/C Ratio	-	-	0.034	0.026	-
HCM Control Delay (s)	-	-	14.6	9.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	0	13	20	0	9	22	626	47	15	356	31
Future Vol, veh/h	22	0	13	20	0	9	22	626	47	15	356	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	90	92	90	92	89	89	80	80	92
Heavy Vehicles, %	2	2	2	0	2	2	2	1	0	3	0	2
Mvmt Flow	24	0	14	22	0	10	24	703	53	19	445	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1266	1287	445	1258	1268	703	479	0	0	756	0	0
Stage 1	483	483	-	751	751	-	-	-	-	-	-	-
Stage 2	783	804	-	507	517	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	146	164	613	149	168	438	1083	-	-	850	-	-
Stage 1	565	553	-	406	418	-	-	-	-	-	-	-
Stage 2	387	396	-	552	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	138	157	613	141	161	438	1083	-	-	850	-	-
Mov Cap-2 Maneuver	138	157	-	141	161	-	-	-	-	-	-	-
Stage 1	553	541	-	397	409	-	-	-	-	-	-	-
Stage 2	370	387	-	527	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27	28.5	0.3	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1083	-	-	138	613	141	438	850	-	-
HCM Lane V/C Ratio	0.022	-	-	0.173	0.023	0.158	0.023	0.022	-	-
HCM Control Delay (s)	8.4	-	-	36.5	11	35.3	13.4	9.3	-	-
HCM Lane LOS	A	-	-	E	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0.5	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	444	15	41	444	67	16	0	25	42	0	24
Future Vol, veh/h	30	444	15	41	444	67	16	0	25	42	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	100	100	-	100	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	82	82	82	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	505	17	50	541	82	18	0	28	47	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	623	0	0	522	0	0	1269	1296	505	1237	1231	541
Stage 1	-	-	-	-	-	-	573	573	-	641	641	-
Stage 2	-	-	-	-	-	-	696	723	-	596	590	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	958	-	-	1044	-	-	145	162	567	153	177	541
Stage 1	-	-	-	-	-	-	505	504	-	463	469	-
Stage 2	-	-	-	-	-	-	432	431	-	490	495	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	958	-	-	1044	-	-	129	149	567	136	163	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	149	-	136	163	-
Stage 1	-	-	-	-	-	-	487	486	-	447	446	-
Stage 2	-	-	-	-	-	-	391	410	-	449	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.6	21.7	32.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	129	567	958	-	-	1044	-	-	136	541
HCM Lane V/C Ratio	0.138	0.049	0.036	-	-	0.048	-	-	0.343	0.049
HCM Control Delay (s)	37.3	11.7	8.9	-	-	8.6	-	-	44.7	12
HCM Lane LOS	E	B	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.5	0.2	0.1	-	-	0.2	-	-	1.4	0.2

Intersection: 1: Hague Rd & Carrigan Rd

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	85	111	102
Average Queue (ft)	30	35	32
95th Queue (ft)	71	81	67
Link Distance (ft)	1639	436	340
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Hague Rd & 206th Street

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	812	57	334
Average Queue (ft)	803	15	173
95th Queue (ft)	812	42	306
Link Distance (ft)	799	738	331
Upstream Blk Time (%)	81		1
Queuing Penalty (veh)	393		4
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hague Rd & 196th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	49	132	690	129
Average Queue (ft)	15	61	579	37
95th Queue (ft)	42	105	892	89
Link Distance (ft)	416	2572	627	4420
Upstream Blk Time (%)			73	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: 196th St & James Road

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	53	44
Average Queue (ft)	7	21
95th Queue (ft)	32	42
Link Distance (ft)	2572	5281
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: James Road & 206th Street

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	845	606	20
Average Queue (ft)	697	263	1
95th Queue (ft)	1182	580	10
Link Distance (ft)	830	5281	634
Upstream Blk Time (%)	75		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Hague Rd & Proposed Access C

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	R	LT	L
Maximum Queue (ft)	27	64	52	56	39
Average Queue (ft)	6	25	15	3	13
95th Queue (ft)	23	52	39	25	34
Link Distance (ft)	184	783		353	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)		0		0	
Queuing Penalty (veh)		0		0	

Intersection: 7: Hague Rd & Proposed Access B

Movement	WB	SB	SB
Directions Served	R	L	T
Maximum Queue (ft)	30	29	87
Average Queue (ft)	8	4	5
95th Queue (ft)	25	20	40
Link Distance (ft)	345		347
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 8: Hague Rd & Proposed Access A

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	L	L
Maximum Queue (ft)	43	31	30	22	30	38
Average Queue (ft)	15	9	12	4	5	6
95th Queue (ft)	38	27	33	18	22	27
Link Distance (ft)		277		684		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100		100		100	100
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Proposed Access D & 206th Street

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	TR	L	TR
Maximum Queue (ft)	30	125	1724	125	120	350	89	607
Average Queue (ft)	2	35	1613	42	84	140	10	335
95th Queue (ft)	13	127	2136	139	151	386	48	729
Link Distance (ft)			1713			344		600
Upstream Blk Time (%)			67			26		32
Queuing Penalty (veh)			371			0		0
Storage Bay Dist (ft)	100	100		100	100		100	
Storage Blk Time (%)		0	99	0	58		0	70
Queuing Penalty (veh)		0	107	0	14		0	29

Network Summary

Network wide Queuing Penalty: 919