Appendix 7
2020 Background Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	216	143	70	167	82	152	377	98	317	642	121
Future Volume (veh/h)	61	216	143	70	167	82	152	377	98	317	642	121
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	66	235	155	76	182	89	165	410	107	345	698	132
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	422	465	285	426	558	413	1174	303	586	1418	268
Arrive On Green	0.05	0.23	0.23	0.05	0.23	0.23	0.07	0.42	0.42	0.13	0.48	0.48
Sat Flow, veh/h	1774	1863	1548	1774	1863	1548	1774	2783	719	1774	2970	561
Grp Volume(v), veh/h	66	235	155	76	182	89	165	259	258	345	416	414
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	1863	1548	1774	1770	1733	1774	1770	1762
Q Serve(g_s), s	2.6	10.6	7.4	3.1	7.9	3.7	4.9	9.4	9.6	9.8	15.2	15.2
Cycle Q Clear(g_c), s	2.6	10.6	7.4	3.1	7.9	3.7	4.9	9.4	9.6	9.8	15.2	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.32
Lane Grp Cap(c), veh/h	327	422	465	285	426	558	413	746	731	586	845	841
V/C Ratio(X)	0.20	0.56	0.33	0.27	0.43	0.16	0.40	0.35	0.35	0.59	0.49	0.49
Avail Cap(c_a), veh/h	440	746	735	300	648	742	471	914	895	751	1119	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	32.5	25.9	26.3	31.3	20.8	14.1	18.6	18.6	12.0	16.9	16.9
Incr Delay (d2), s/veh	0.1	1.6	0.6	0.2	1.0	0.2	0.2	0.1	0.1	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	9.5	5.8	2.7	7.6	2.9	4.3	8.2	8.1	8.3	11.9	11.9
LnGrp Delay(d),s/veh	26.1	34.1	26.5	26.4	32.2	21.0	14.3	18.7	18.7	12.3	17.1	17.1
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		456			347			682			1175	
Approach Delay, s/veh		30.4			28.1			17.6			15.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	44.0	9.2	25.5	10.9	49.3	8.9	25.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	11.8	11.6	5.1	12.6	6.9	17.2	4.6	9.9
Green Ext Time (p_c), s	0.4	0.5	0.0	2.8	0.1	0.8	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	7	2	7	7	50	616	19	16	881	49
Future Vol, veh/h	3	1	7	2	7	7	50	616	19	16	881	49
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	8	2	8	8	54	670	21	17	958	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1466	1818	506	1303	1834	346	1011	0	0	691	0	0
Stage 1	1019	1019	-	789	789	-	-	-	-	-	-	-
Stage 2	447	799	-	514	1045	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	89	77	512	118	75	650	681	-	-	900	-	-
Stage 1	254	313	-	350	400	-	-	-	-	-	-	-
Stage 2	560	396	-	511	304	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	70	512	106	68	650	681	-	-	900	-	-
Mov Cap-2 Maneuver	75	70	-	106	68	-	-	-	-	-	-	-
Stage 1	234	307	-	322	368	-	-	-	-	-	-	-
Stage 2	499	365	-	492	298	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29	38.9	0.8	0.2
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	681	-	-	162	74	650	900	-	-
HCM Lane V/C Ratio	0.08	-	-	0.074	0.132	0.012	0.019	-	-
HCM Control Delay (s)	10.7	-	-	29	60.9	10.6	9.1	-	-
HCM Lane LOS	B	-	-	D	F	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.4	0	0.1	-	-

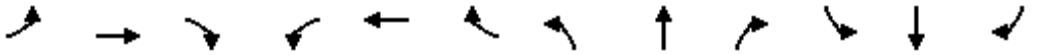
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	11	7	687	877	4
Future Vol, veh/h	4	11	7	687	877	4
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	12	8	747	953	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1345	479	957	0	-	0
Stage 1	955	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	143	533	714	-	-	-
Stage 1	334	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	533	714	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	330	-	-	-	-	-
Stage 2	653	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	714	-	306	-	-
HCM Lane V/C Ratio	0.011	-	0.053	-	-
HCM Control Delay (s)	10.1	-	17.4	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	2	19	0	3	8	708	24	14	863	11
Future Volume (veh/h)	2	0	2	19	0	3	8	708	24	14	863	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	2	0	2	21	0	3	9	770	26	15	938	12
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	0	61	207	0	107	361	1950	66	426	2031	26
Arrive On Green	0.00	0.00	0.04	0.03	0.00	0.07	0.02	0.56	0.56	0.03	0.57	0.57
Sat Flow, veh/h	1774	0	1577	1703	0	1577	1703	3494	118	1703	3578	46
Grp Volume(v), veh/h	2	0	2	21	0	3	9	390	406	15	464	486
Grp Sat Flow(s),veh/h/ln	1774	0	1577	1703	0	1577	1703	1770	1842	1703	1770	1855
Q Serve(g_s), s	0.1	0.0	0.1	0.8	0.0	0.1	0.2	8.9	9.0	0.3	11.0	11.0
Cycle Q Clear(g_c), s	0.1	0.0	0.1	0.8	0.0	0.1	0.2	8.9	9.0	0.3	11.0	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.06	1.00		0.02
Lane Grp Cap(c), veh/h	161	0	61	207	0	107	361	988	1028	426	1004	1052
V/C Ratio(X)	0.01	0.00	0.03	0.10	0.00	0.03	0.02	0.39	0.39	0.04	0.46	0.46
Avail Cap(c_a), veh/h	352	0	565	412	0	631	508	1489	1550	580	1514	1587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	33.2	31.1	0.0	31.2	7.3	9.0	9.0	6.8	9.1	9.1
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.1	0.7	0.0	0.1	0.1	7.8	8.0	0.2	9.1	9.4
LnGrp Delay(d),s/veh	33.0	0.0	33.6	31.2	0.0	31.2	7.3	9.1	9.1	6.9	9.2	9.2
LnGrp LOS	C		C	C		C	A	A	A	A	A	A
Approach Vol, veh/h		4			24			805			965	
Approach Delay, s/veh		33.3			31.2			9.0			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	46.7	6.4	10.1	7.8	47.4	4.3	12.2
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 8.3	* 60	11.0	25.7	* 7.3	* 61	8.0	28.7
Max Q Clear Time (g_c+I1), s	2.3	11.0	2.8	2.1	2.2	13.0	2.1	2.1
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	2.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	75	24	765	844	10
Future Volume (veh/h)	16	75	24	765	844	10
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.94	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	82	26	832	917	11
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	33	158	496	2839	2881	35
Arrive On Green	0.13	0.12	1.00	1.00	0.80	0.80
Sat Flow, veh/h	261	1261	600	3632	3675	43
Grp Volume(v), veh/h	100	0	26	832	453	475
Grp Sat Flow(s),veh/h/ln	1537	0	600	1770	1770	1855
Q Serve(g_s), s	7.9	0.0	0.5	0.0	8.7	8.8
Cycle Q Clear(g_c), s	7.9	0.0	9.3	0.0	8.7	8.8
Prop In Lane	0.17	0.82	1.00			0.02
Lane Grp Cap(c), veh/h	193	0	496	2839	1424	1492
V/C Ratio(X)	0.52	0.00	0.05	0.29	0.32	0.32
Avail Cap(c_a), veh/h	388	0	496	2839	1424	1492
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.85	0.85	0.96	0.96
Uniform Delay (d), s/veh	53.7	0.0	0.4	0.0	3.3	3.3
Incr Delay (d2), s/veh	2.1	0.0	0.2	0.2	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	0.0	0.2	0.2	7.7	8.0
LnGrp Delay(d),s/veh	55.8	0.0	0.6	0.2	3.9	3.9
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	100			858	928	
Approach Delay, s/veh	55.8			0.2	3.9	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		109.5		20.5		109.5		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		87.0		31.5		87.0		
Max Q Clear Time (g_c+I1), s		11.3		9.9		10.8		
Green Ext Time (p_c), s		4.8		0.4		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	5.0
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	413	64	126	312	107	125	569	200	118	628	179
Future Volume (veh/h)	134	413	64	126	312	107	125	569	200	118	628	179
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	146	449	70	137	339	116	136	618	217	128	683	195
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	598	93	279	683	400	351	1302	457	389	1376	393
Arrive On Green	0.10	0.19	0.18	0.10	0.19	0.19	0.07	0.51	0.49	0.02	0.17	0.16
Sat Flow, veh/h	1774	3069	476	1774	3539	1573	1774	2567	900	1703	2715	775
Grp Volume(v), veh/h	146	258	261	137	339	116	136	426	409	128	445	433
Grp Sat Flow(s),veh/h/ln	1774	1770	1775	1774	1770	1573	1774	1770	1697	1703	1770	1720
Q Serve(g_s), s	8.3	17.8	18.1	7.7	11.1	7.7	4.6	20.3	20.6	4.5	29.7	29.8
Cycle Q Clear(g_c), s	8.3	17.8	18.1	7.7	11.1	7.7	4.6	20.3	20.6	4.5	29.7	29.8
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.53	1.00		0.45
Lane Grp Cap(c), veh/h	328	345	346	279	683	400	351	897	861	389	897	872
V/C Ratio(X)	0.44	0.75	0.75	0.49	0.50	0.29	0.39	0.47	0.48	0.33	0.50	0.50
Avail Cap(c_a), veh/h	490	490	492	410	912	502	378	897	861	465	897	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	36.4	49.3	49.7	36.9	46.8	39.1	17.0	20.8	21.2	15.5	39.1	39.2
Incr Delay (d2), s/veh	0.9	3.8	4.1	1.3	0.6	0.4	0.7	1.8	1.9	0.5	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	14.1	14.3	7.0	9.4	6.1	4.1	15.7	15.3	3.9	21.2	20.8
LnGrp Delay(d),s/veh	37.3	53.1	53.8	38.2	47.4	39.5	17.7	22.6	23.1	16.0	40.9	41.1
LnGrp LOS	D	D	D	D	D	D	B	C	C	B	D	D
Approach Vol, veh/h		665			592			971			1006	
Approach Delay, s/veh		49.9			43.7			22.1			37.8	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	29.5	13.4	70.6	17.1	28.9	13.5	70.5
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	10.5	33.7	8.9	41.9	22.4	30.8	12.8	38.0
Max Q Clear Time (g_c+I1), s	9.7	20.1	6.6	31.8	10.3	13.1	6.5	22.6
Green Ext Time (p_c), s	0.3	1.7	0.1	2.9	0.3	1.8	0.2	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	18	15	2	3	2
Future Vol, veh/h	2	18	15	2	3	2
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	20	16	2	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	41	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	970	1062
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	969	1062
Mov Cap-2 Maneuver	-	-	-	-	969	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1599	-	-	-	1004
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	222	233	89	178	163	205	499	125	177	449	87
Future Volume (veh/h)	76	222	233	89	178	163	205	499	125	177	449	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	83	241	253	97	193	177	223	542	136	192	488	95
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	456	523	302	460	513	503	1236	309	455	1278	247
Arrive On Green	0.06	0.24	0.24	0.06	0.25	0.25	0.09	0.44	0.44	0.08	0.43	0.43
Sat Flow, veh/h	1774	1863	1550	1774	1863	1551	1774	2805	701	1774	2957	572
Grp Volume(v), veh/h	83	241	253	97	193	177	223	341	337	192	291	292
Grp Sat Flow(s),veh/h/ln	1774	1863	1550	1774	1863	1551	1774	1770	1736	1774	1770	1759
Q Serve(g_s), s	3.2	10.4	12.0	3.7	8.1	8.0	6.3	12.4	12.5	5.5	10.3	10.5
Cycle Q Clear(g_c), s	3.2	10.4	12.0	3.7	8.1	8.0	6.3	12.4	12.5	5.5	10.3	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		0.33
Lane Grp Cap(c), veh/h	339	456	523	302	460	513	503	780	765	455	765	761
V/C Ratio(X)	0.24	0.53	0.48	0.32	0.42	0.34	0.44	0.44	0.44	0.42	0.38	0.38
Avail Cap(c_a), veh/h	448	765	780	311	664	683	534	937	919	712	1147	1141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	30.3	24.4	24.3	29.3	23.5	12.9	17.9	18.0	13.2	17.8	17.9
Incr Delay (d2), s/veh	0.1	1.4	1.0	0.2	0.9	0.6	0.2	0.1	0.1	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	9.4	9.0	3.3	7.6	6.3	5.5	10.0	10.0	4.8	8.7	8.7
LnGrp Delay(d),s/veh	24.2	31.7	25.4	24.6	30.1	24.1	13.1	18.1	18.1	13.5	18.0	18.0
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		577			467			901			775	
Approach Delay, s/veh		27.8			26.7			16.9			16.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	44.8	9.5	26.7	12.4	44.0	9.3	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	7.5	14.5	5.7	14.0	8.3	12.5	5.2	10.1
Green Ext Time (p_c), s	0.2	0.6	0.0	3.4	0.1	0.5	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1	12	24	0	107	28	724	20	67	725	19
Future Vol, veh/h	4	1	12	24	0	107	28	724	20	67	725	19
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1	13	26	0	116	30	787	22	73	788	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1399	1814	405	1399	1813	405	809	0	0	809	0	0
Stage 1	945	945	-	858	858	-	-	-	-	-	-	-
Stage 2	454	869	-	541	955	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	100	77	595	100	78	595	812	-	-	812	-	-
Stage 1	282	339	-	318	372	-	-	-	-	-	-	-
Stage 2	555	367	-	493	335	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	73	67	595	88	68	595	812	-	-	812	-	-
Mov Cap-2 Maneuver	73	67	-	88	68	-	-	-	-	-	-	-
Stage 1	272	308	-	306	358	-	-	-	-	-	-	-
Stage 2	430	353	-	437	305	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.1	21.6	0.3	0.8
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	812	-	-	189	88	595	812	-	-
HCM Lane V/C Ratio	0.037	-	-	0.098	0.296	0.195	0.09	-	-
HCM Control Delay (s)	9.6	-	-	26.1	62.3	12.5	9.9	-	-
HCM Lane LOS	A	-	-	D	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	1.1	0.7	0.3	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	13	5	671	861	15
Future Vol, veh/h	7	13	5	671	861	15
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	14	5	729	936	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1319	476	952	0	-	0
Stage 1	944	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	149	535	717	-	-	-
Stage 1	339	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	148	535	717	-	-	-
Mov Cap-2 Maneuver	148	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	717	-	279	-	-
HCM Lane V/C Ratio	0.008	-	0.078	-	-
HCM Control Delay (s)	10.1	-	19	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	10	23	169	4	41	24	716	159	47	673	39
Future Volume (veh/h)	28	10	23	169	4	41	24	716	159	47	673	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	30	11	25	184	4	45	26	778	173	51	732	42
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	57	130	394	24	271	353	1278	284	310	1575	90
Arrive On Green	0.04	0.11	0.11	0.11	0.18	0.18	0.04	0.44	0.44	0.06	0.46	0.46
Sat Flow, veh/h	1774	505	1148	1703	130	1468	1703	2879	640	1703	3403	195
Grp Volume(v), veh/h	30	0	36	184	0	49	26	478	473	51	381	393
Grp Sat Flow(s),veh/h/ln	1774	0	1653	1703	0	1598	1703	1770	1749	1703	1770	1828
Q Serve(g_s), s	1.3	0.0	1.8	8.2	0.0	2.3	0.7	18.6	18.6	1.4	13.3	13.3
Cycle Q Clear(g_c), s	1.3	0.0	1.8	8.2	0.0	2.3	0.7	18.6	18.6	1.4	13.3	13.3
Prop In Lane	1.00		0.69	1.00		0.92	1.00		0.37	1.00		0.11
Lane Grp Cap(c), veh/h	305	0	187	394	0	295	353	786	777	310	819	846
V/C Ratio(X)	0.10	0.00	0.19	0.47	0.00	0.17	0.07	0.61	0.61	0.16	0.46	0.47
Avail Cap(c_a), veh/h	390	0	472	410	0	509	428	1184	1171	371	1204	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	36.2	28.6	0.0	30.9	13.1	19.1	19.1	13.7	16.6	16.6
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.3	0.0	0.1	0.0	0.3	0.3	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	0.0	1.6	7.0	0.0	1.9	0.6	14.0	13.9	1.2	10.7	10.9
LnGrp Delay(d),s/veh	33.1	0.0	37.3	29.0	0.0	31.0	13.1	19.4	19.4	13.8	16.7	16.7
LnGrp LOS	C		D	C		C	B	B	B	B	B	B
Approach Vol, veh/h		66			233			977			825	
Approach Delay, s/veh		35.4			29.4			19.2			16.5	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	46.7	14.1	17.5	10.0	48.4	7.7	24.0
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 8.3	* 60	11.0	25.7	* 7.3	* 61	8.0	28.7
Max Q Clear Time (g_c+I1), s	3.4	20.6	10.2	3.8	2.7	15.3	3.3	4.3
Green Ext Time (p_c), s	0.0	2.3	0.0	0.2	0.0	1.7	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	36	69	76	999	853	33
Future Volume (veh/h)	36	69	76	999	853	33
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	75	83	1086	927	36
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	70	135	475	2819	2775	108
Arrive On Green	0.13	0.12	1.00	1.00	0.80	0.79
Sat Flow, veh/h	537	1033	581	3632	3567	135
Grp Volume(v), veh/h	115	0	83	1086	472	491
Grp Sat Flow(s),veh/h/ln	1584	0	581	1770	1770	1839
Q Serve(g_s), s	8.9	0.0	2.1	0.0	9.5	9.5
Cycle Q Clear(g_c), s	8.9	0.0	11.6	0.0	9.5	9.5
Prop In Lane	0.34	0.65	1.00			0.07
Lane Grp Cap(c), veh/h	208	0	475	2819	1414	1469
V/C Ratio(X)	0.55	0.00	0.17	0.39	0.33	0.33
Avail Cap(c_a), veh/h	400	0	475	2819	1414	1469
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.55	0.55	0.88	0.88
Uniform Delay (d), s/veh	53.3	0.0	0.5	0.0	3.6	3.6
Incr Delay (d2), s/veh	2.3	0.0	0.4	0.2	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	0.0	0.7	0.2	8.2	8.4
LnGrp Delay(d),s/veh	55.6	0.0	1.0	0.2	4.1	4.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	115			1169	963	
Approach Delay, s/veh	55.6			0.3	4.1	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		108.8		21.2		108.8		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		87.0		31.5		87.0		
Max Q Clear Time (g_c+I1), s		13.6		10.9		11.5		
Green Ext Time (p_c), s		7.9		0.4		4.5		

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	530	181	275	507	288	231	578	308	220	508	176
Future Volume (veh/h)	225	530	181	275	507	288	231	578	308	220	508	176
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	245	576	197	299	551	313	251	628	335	239	552	191
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	665	227	364	984	605	323	761	406	292	957	330
Arrive On Green	0.13	0.26	0.24	0.16	0.28	0.27	0.08	0.34	0.33	0.04	0.12	0.12
Sat Flow, veh/h	1774	2588	883	1774	3539	1576	1774	2224	1186	1703	2578	889
Grp Volume(v), veh/h	245	393	380	299	551	313	251	500	463	239	378	365
Grp Sat Flow(s),veh/h/ln	1774	1770	1702	1774	1770	1576	1774	1770	1640	1703	1770	1697
Q Serve(g_s), s	12.7	27.6	27.8	15.3	17.3	19.9	10.8	33.7	33.8	11.1	26.2	26.4
Cycle Q Clear(g_c), s	12.7	27.6	27.8	15.3	17.3	19.9	10.8	33.7	33.8	11.1	26.2	26.4
Prop In Lane	1.00		0.52	1.00		1.00	1.00		0.72	1.00		0.52
Lane Grp Cap(c), veh/h	385	455	437	364	984	605	323	605	561	292	657	630
V/C Ratio(X)	0.64	0.87	0.87	0.82	0.56	0.52	0.78	0.83	0.83	0.82	0.58	0.58
Avail Cap(c_a), veh/h	483	490	471	390	984	605	323	605	561	292	657	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	29.3	46.2	46.8	30.5	40.1	30.8	30.6	39.2	39.9	31.3	47.4	47.6
Incr Delay (d2), s/veh	1.9	14.2	15.1	12.5	0.7	0.8	11.3	12.2	13.0	15.8	3.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.4	21.8	21.3	13.5	13.4	13.6	7.8	25.5	24.2	10.6	19.4	18.9
LnGrp Delay(d),s/veh	31.2	60.4	61.9	43.1	40.9	31.6	41.9	51.4	52.9	47.0	50.8	51.2
LnGrp LOS	C	E	E	D	D	C	D	D	D	D	D	D
Approach Vol, veh/h		1018			1163			1214			982	
Approach Delay, s/veh		53.9			38.9			50.0			50.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	37.6	15.4	53.0	21.7	39.9	19.3	49.1
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	19.5	33.7	8.9	41.9	22.4	30.8	12.8	38.0
Max Q Clear Time (g_c+I1), s	17.3	29.8	12.8	28.4	14.7	21.9	13.1	35.8
Green Ext Time (p_c), s	0.3	1.3	0.0	2.7	0.5	2.7	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	11	19	5	5	1
Future Vol, veh/h	3	11	19	5	5	1
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	12	21	5	5	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	26	0	-	0	42	24
Stage 1	-	-	-	-	24	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1588	-	-	-	969	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1588	-	-	-	967	1052
Mov Cap-2 Maneuver	-	-	-	-	967	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1588	-	-	-	980
HCM Lane V/C Ratio	0.002	-	-	-	0.007
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	271	196	86	233	259	139	618	71	212	649	66
Future Volume (veh/h)	139	271	196	86	233	259	139	618	71	212	649	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	151	295	213	93	253	282	151	672	77	230	705	72
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	488	515	286	441	517	397	1338	153	431	1443	147
Arrive On Green	0.08	0.26	0.26	0.06	0.24	0.24	0.07	0.42	0.42	0.09	0.45	0.45
Sat Flow, veh/h	1774	1863	1553	1774	1863	1549	1774	3200	366	1774	3242	331
Grp Volume(v), veh/h	151	295	213	93	253	282	151	371	378	230	385	392
Grp Sat Flow(s),veh/h/ln	1774	1863	1553	1774	1863	1549	1774	1770	1797	1774	1770	1803
Q Serve(g_s), s	6.0	13.3	10.2	3.7	11.5	14.2	4.6	14.8	14.8	6.9	14.7	14.8
Cycle Q Clear(g_c), s	6.0	13.3	10.2	3.7	11.5	14.2	4.6	14.8	14.8	6.9	14.7	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.18
Lane Grp Cap(c), veh/h	323	488	515	286	441	517	397	740	751	431	788	802
V/C Ratio(X)	0.47	0.60	0.41	0.33	0.57	0.55	0.38	0.50	0.50	0.53	0.49	0.49
Avail Cap(c_a), veh/h	380	740	725	295	643	685	462	907	920	652	1110	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	30.9	24.9	25.8	32.2	26.1	14.8	20.5	20.5	14.5	18.8	18.8
Incr Delay (d2), s/veh	0.4	1.7	0.8	0.2	1.7	1.3	0.2	0.2	0.2	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	11.4	8.0	3.3	10.2	10.4	4.0	11.7	11.8	6.1	11.6	11.8
LnGrp Delay(d),s/veh	25.2	32.7	25.6	26.1	33.9	27.4	15.0	20.7	20.7	14.9	19.0	19.0
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		659			628			900			1007	
Approach Delay, s/veh		28.7			29.8			19.7			18.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	44.0	9.5	29.1	10.5	46.6	11.9	26.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	8.9	16.8	5.7	15.3	6.6	16.8	8.0	16.2
Green Ext Time (p_c), s	0.3	0.7	0.0	3.6	0.1	0.7	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	21	37	0	100	11	814	31	68	913	4
Future Vol, veh/h	5	1	21	37	0	100	11	814	31	68	913	4
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1	23	40	0	109	12	885	34	74	992	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1609	2085	498	1571	2070	460	996	0	0	919	0	0
Stage 1	1142	1142	-	926	926	-	-	-	-	-	-	-
Stage 2	467	943	-	645	1144	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	70	52	518	75	53	548	690	-	-	738	-	-
Stage 1	213	273	-	289	346	-	-	-	-	-	-	-
Stage 2	545	339	-	427	273	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	51	46	518	64	47	548	690	-	-	738	-	-
Mov Cap-2 Maneuver	51	46	-	64	47	-	-	-	-	-	-	-
Stage 1	209	246	-	284	340	-	-	-	-	-	-	-
Stage 2	429	333	-	366	246	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.9	44.5	0.1	0.7
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	690	-	-	168	64	548	738	-	-
HCM Lane V/C Ratio	0.017	-	-	0.175	0.628	0.198	0.1	-	-
HCM Control Delay (s)	10.3	-	-	30.9	129	13.2	10.4	-	-
HCM Lane LOS	B	-	-	D	F	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	2.7	0.7	0.3	-	-

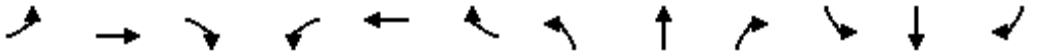
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	14	16	847	943	25
Future Vol, veh/h	7	14	16	847	943	25
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	15	17	921	1025	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1534	526	1052	0	-	0
Stage 1	1039	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	107	496	657	-	-	-
Stage 1	302	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	104	496	657	-	-	-
Mov Cap-2 Maneuver	104	-	-	-	-	-
Stage 1	294	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.2	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	657	-	220	-	-
HCM Lane V/C Ratio	0.026	-	0.104	-	-
HCM Control Delay (s)	10.6	-	23.2	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	3	30	163	1	34	21	807	145	57	852	33
Future Volume (veh/h)	40	3	30	163	1	34	21	807	145	57	852	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	43	3	33	177	1	37	23	877	158	62	926	36
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	15	166	387	7	264	292	1327	239	295	1633	63
Arrive On Green	0.05	0.11	0.11	0.11	0.17	0.17	0.03	0.44	0.44	0.06	0.47	0.47
Sat Flow, veh/h	1774	133	1463	1703	42	1542	1703	2997	540	1703	3473	135
Grp Volume(v), veh/h	43	0	36	177	0	38	23	518	517	62	472	490
Grp Sat Flow(s),veh/h/ln	1774	0	1595	1703	0	1584	1703	1770	1767	1703	1770	1839
Q Serve(g_s), s	1.9	0.0	1.8	7.9	0.0	1.8	0.6	20.8	20.8	1.7	17.4	17.4
Cycle Q Clear(g_c), s	1.9	0.0	1.8	7.9	0.0	1.8	0.6	20.8	20.8	1.7	17.4	17.4
Prop In Lane	1.00		0.92	1.00		0.97	1.00		0.31	1.00		0.07
Lane Grp Cap(c), veh/h	324	0	181	387	0	271	292	784	783	295	832	864
V/C Ratio(X)	0.13	0.00	0.20	0.46	0.00	0.14	0.08	0.66	0.66	0.21	0.57	0.57
Avail Cap(c_a), veh/h	391	0	454	409	0	503	372	1182	1180	347	1201	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	36.3	28.9	0.0	31.8	13.8	19.8	19.8	14.2	17.3	17.3
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.3	0.0	0.1	0.0	0.4	0.4	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	1.6	6.7	0.0	1.5	0.5	15.4	15.4	1.4	13.2	13.6
LnGrp Delay(d),s/veh	32.7	0.0	37.4	29.2	0.0	31.9	13.9	20.2	20.2	14.4	17.5	17.5
LnGrp LOS	C		D	C		C	B	C	C	B	B	B
Approach Vol, veh/h		79			215			1058			1024	
Approach Delay, s/veh		34.9			29.6			20.0			17.3	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	46.7	13.8	17.5	9.8	49.2	8.6	22.8
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 8.3	* 60	11.0	25.7	* 7.3	* 61	8.0	28.7
Max Q Clear Time (g_c+I1), s	3.7	22.8	9.9	3.8	2.6	19.4	3.9	3.8
Green Ext Time (p_c), s	0.0	2.5	0.0	0.2	0.0	2.2	0.1	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	36	51	91	973	1000	46
Future Volume (veh/h)	36	51	91	973	1000	46
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.94	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	55	99	1058	1087	50
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	81	115	407	2845	2778	128
Arrive On Green	0.12	0.11	1.00	1.00	0.81	0.80
Sat Flow, veh/h	657	926	493	3632	3539	158
Grp Volume(v), veh/h	95	0	99	1058	558	579
Grp Sat Flow(s),veh/h/ln	1599	0	493	1770	1770	1835
Q Serve(g_s), s	7.2	0.0	3.9	0.0	11.6	11.6
Cycle Q Clear(g_c), s	7.2	0.0	15.5	0.0	11.6	11.6
Prop In Lane	0.41	0.58	1.00			0.09
Lane Grp Cap(c), veh/h	198	0	407	2845	1427	1479
V/C Ratio(X)	0.48	0.00	0.24	0.37	0.39	0.39
Avail Cap(c_a), veh/h	404	0	407	2845	1427	1479
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.55	0.55	0.83	0.83
Uniform Delay (d), s/veh	53.4	0.0	0.9	0.0	3.6	3.6
Incr Delay (d2), s/veh	1.8	0.0	0.8	0.2	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	0.0	1.1	0.1	9.5	9.7
LnGrp Delay(d),s/veh	55.2	0.0	1.6	0.2	4.2	4.2
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	95			1157	1137	
Approach Delay, s/veh	55.2			0.3	4.2	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		109.7		20.3		109.7		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		87.0		31.5		87.0		
Max Q Clear Time (g_c+I1), s		17.5		9.2		13.6		
Green Ext Time (p_c), s		8.4		0.3		5.8		

Intersection Summary	
HCM 2010 Ctrl Delay	4.4
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	654	184	292	497	202	156	591	257	186	718	157
Future Volume (veh/h)	295	654	184	292	497	202	156	591	257	186	718	157
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	321	711	200	317	540	220	170	642	279	202	780	171
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	448	755	212	370	1008	607	247	753	327	273	974	214
Arrive On Green	0.16	0.28	0.26	0.17	0.28	0.28	0.08	0.31	0.30	0.04	0.11	0.11
Sat Flow, veh/h	1774	2726	767	1774	3539	1576	1774	2396	1041	1703	2882	632
Grp Volume(v), veh/h	321	461	450	317	540	220	170	474	447	202	479	472
Grp Sat Flow(s),veh/h/ln	1774	1770	1723	1774	1770	1576	1774	1770	1667	1703	1770	1744
Q Serve(g_s), s	16.1	33.2	33.2	17.2	16.7	13.0	8.3	32.6	32.7	10.0	34.3	34.3
Cycle Q Clear(g_c), s	16.1	33.2	33.2	17.2	16.7	13.0	8.3	32.6	32.7	10.0	34.3	34.3
Prop In Lane	1.00		0.44	1.00		1.00	1.00		0.62	1.00		0.36
Lane Grp Cap(c), veh/h	448	490	477	370	1008	607	247	557	524	273	598	590
V/C Ratio(X)	0.72	0.94	0.94	0.86	0.54	0.36	0.69	0.85	0.85	0.74	0.80	0.80
Avail Cap(c_a), veh/h	500	490	477	373	1008	607	247	557	524	283	598	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	26.9	46.0	46.5	34.2	39.2	28.6	31.3	41.7	42.3	32.8	53.5	53.6
Incr Delay (d2), s/veh	4.3	26.7	27.2	17.4	0.6	0.4	7.9	15.2	16.0	8.8	9.9	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.0	27.1	26.6	18.7	13.0	9.6	8.1	25.3	24.2	9.0	25.3	25.0
LnGrp Delay(d),s/veh	31.2	72.7	73.7	51.6	39.8	29.0	39.1	56.9	58.3	41.6	63.4	63.7
LnGrp LOS	C	E	E	D	D	C	D	E	E	D	E	E
Approach Vol, veh/h		1232			1077			1091			1153	
Approach Delay, s/veh		62.3			41.1			54.7			59.7	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.8	40.2	15.4	48.6	25.1	40.8	18.5	45.5
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	19.5	33.7	8.9	41.9	22.4	30.8	12.8	38.0
Max Q Clear Time (g_c+I1), s	19.2	35.2	10.3	36.3	18.1	18.7	12.0	34.7
Green Ext Time (p_c), s	0.0	0.0	0.0	2.1	0.5	2.8	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

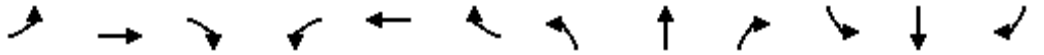
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	37	0	11	0
Future Vol, veh/h	0	10	37	0	11	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	40	0	12	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	51	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	11	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1570	-	-	-	958	1031
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1570	-	-	-	958	1031
Mov Cap-2 Maneuver	-	-	-	-	958	-
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	1012	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1570	-	-	-	958
HCM Lane V/C Ratio	-	-	-	-	0.012
HCM Control Delay (s)	0	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	125	106	61	106	130	107	439	85	138	384	47
Future Volume (veh/h)	45	125	106	61	106	130	107	439	85	138	384	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	49	136	115	66	115	141	116	477	92	150	417	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	385	425	345	399	441	573	1413	271	524	1524	185
Arrive On Green	0.05	0.21	0.21	0.06	0.21	0.21	0.07	0.48	0.48	0.07	0.48	0.48
Sat Flow, veh/h	1774	1863	1544	1774	1863	1546	1774	2962	568	1774	3176	386
Grp Volume(v), veh/h	49	136	115	66	115	141	116	284	285	150	231	237
Grp Sat Flow(s),veh/h/ln	1774	1863	1544	1774	1863	1546	1774	1770	1760	1774	1770	1793
Q Serve(g_s), s	1.8	5.2	4.9	2.4	4.3	6.0	2.7	8.4	8.5	3.5	6.6	6.6
Cycle Q Clear(g_c), s	1.8	5.2	4.9	2.4	4.3	6.0	2.7	8.4	8.5	3.5	6.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		0.22
Lane Grp Cap(c), veh/h	351	385	425	345	399	441	573	844	840	524	849	860
V/C Ratio(X)	0.14	0.35	0.27	0.19	0.29	0.32	0.20	0.34	0.34	0.29	0.27	0.28
Avail Cap(c_a), veh/h	497	844	806	372	733	718	666	1034	1029	846	1266	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	28.5	23.9	23.8	27.6	23.7	9.6	13.7	13.7	9.9	13.1	13.1
Incr Delay (d2), s/veh	0.1	0.8	0.5	0.1	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	5.0	3.8	2.1	4.1	4.7	2.3	7.4	7.4	3.0	5.8	5.9
LnGrp Delay(d),s/veh	24.1	29.3	24.4	23.9	28.2	24.3	9.7	13.7	13.8	10.0	13.1	13.1
LnGrp LOS	C	C	C	C	C	C	A	B	B	B	B	B
Approach Vol, veh/h		300			322			685			618	
Approach Delay, s/veh		26.6			25.6			13.1			12.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	44.0	8.7	21.3	9.6	44.2	8.1	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	5.5	10.5	4.4	7.2	4.7	8.6	3.8	8.0
Green Ext Time (p_c), s	0.2	0.5	0.0	1.7	0.1	0.4	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	14	65	1	149	11	477	39	69	481	10
Future Vol, veh/h	5	0	14	65	1	149	11	477	39	69	481	10
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	15	71	1	162	12	518	42	75	523	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	963	1263	267	975	1247	280	534	0	0	560	0	0
Stage 1	679	679	-	563	563	-	-	-	-	-	-	-
Stage 2	284	584	-	412	684	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	210	168	731	206	172	717	1030	-	-	1007	-	-
Stage 1	408	449	-	478	507	-	-	-	-	-	-	-
Stage 2	699	496	-	588	447	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	151	154	731	188	157	717	1030	-	-	1007	-	-
Mov Cap-2 Maneuver	151	154	-	188	157	-	-	-	-	-	-	-
Stage 1	403	416	-	472	501	-	-	-	-	-	-	-
Stage 2	534	490	-	533	414	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	19	0.2	1.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1030	-	-	364	187	717	1007	-	-
HCM Lane V/C Ratio	0.012	-	-	0.057	0.384	0.226	0.074	-	-
HCM Control Delay (s)	8.5	-	-	15.5	35.8	11.5	8.9	-	-
HCM Lane LOS	A	-	-	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.7	0.9	0.2	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	10	14	553	517	7
Future Vol, veh/h	2	10	14	553	517	7
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	15	601	562	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	897	285	570	0	-	0
Stage 1	566	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	279	712	999	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	275	712	999	-	-	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	524	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	999	-	563	-	-
HCM Lane V/C Ratio	0.015	-	0.023	-	-
HCM Control Delay (s)	8.7	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	29	240	5	55	16	431	202	65	437	45
Future Volume (veh/h)	30	5	29	240	5	55	16	431	202	65	437	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	33	5	32	261	5	60	17	468	220	71	475	49
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	25	158	403	23	280	443	1019	476	398	1528	157
Arrive On Green	0.04	0.11	0.11	0.12	0.19	0.19	0.03	0.43	0.43	0.06	0.47	0.47
Sat Flow, veh/h	1774	217	1391	1703	123	1474	1703	2344	1094	1703	3240	333
Grp Volume(v), veh/h	33	0	37	261	0	65	17	353	335	71	259	265
Grp Sat Flow(s),veh/h/ln	1774	0	1609	1703	0	1597	1703	1770	1669	1703	1770	1804
Q Serve(g_s), s	1.5	0.0	1.9	11.0	0.0	3.2	0.5	12.9	13.1	2.0	8.3	8.4
Cycle Q Clear(g_c), s	1.5	0.0	1.9	11.0	0.0	3.2	0.5	12.9	13.1	2.0	8.3	8.4
Prop In Lane	1.00		0.86	1.00		0.92	1.00		0.66	1.00		0.18
Lane Grp Cap(c), veh/h	306	0	183	403	0	303	443	769	725	398	834	850
V/C Ratio(X)	0.11	0.00	0.20	0.65	0.00	0.21	0.04	0.46	0.46	0.18	0.31	0.31
Avail Cap(c_a), veh/h	383	0	449	403	0	498	533	1160	1093	443	1179	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	0.0	37.0	30.7	0.0	31.5	13.6	18.4	18.4	13.1	15.0	15.1
Incr Delay (d2), s/veh	0.3	0.0	1.2	2.8	0.0	0.1	0.0	0.2	0.2	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	1.6	2.4	0.0	2.5	0.4	10.4	10.0	1.7	7.3	7.5
LnGrp Delay(d),s/veh	33.6	0.0	38.1	33.5	0.0	31.6	13.6	18.5	18.6	13.2	15.1	15.1
LnGrp LOS	C		D	C		C	B	B	B	B	B	B
Approach Vol, veh/h		70			326			705			595	
Approach Delay, s/veh		36.0			33.2			18.4			14.9	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	46.7	15.0	17.8	9.2	50.1	8.0	24.8
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 8.3	* 60	11.0	25.7	* 7.3	* 61	8.0	28.7
Max Q Clear Time (g_c+I1), s	4.0	15.1	13.0	3.9	2.5	10.4	3.5	5.2
Green Ext Time (p_c), s	0.0	1.6	0.0	0.2	0.0	1.1	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	56	53	877	631	24
Future Volume (veh/h)	42	56	53	877	631	24
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.94	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	46	61	58	953	686	26
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	87	115	608	2833	2791	106
Arrive On Green	0.13	0.12	1.00	1.00	0.80	0.79
Sat Flow, veh/h	684	907	735	3632	3570	132
Grp Volume(v), veh/h	108	0	58	953	349	363
Grp Sat Flow(s),veh/h/ln	1605	0	735	1770	1770	1839
Q Serve(g_s), s	8.2	0.0	0.7	0.0	6.3	6.3
Cycle Q Clear(g_c), s	8.2	0.0	7.0	0.0	6.3	6.3
Prop In Lane	0.43	0.56	1.00			0.07
Lane Grp Cap(c), veh/h	204	0	608	2833	1420	1476
V/C Ratio(X)	0.53	0.00	0.10	0.34	0.25	0.25
Avail Cap(c_a), veh/h	405	0	608	2833	1420	1476
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.76	0.76	0.88	0.88
Uniform Delay (d), s/veh	53.4	0.0	0.2	0.0	3.2	3.2
Incr Delay (d2), s/veh	2.1	0.0	0.2	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.8	0.0	0.3	0.2	5.7	5.9
LnGrp Delay(d),s/veh	55.5	0.0	0.5	0.2	3.5	3.5
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	108			1011	712	
Approach Delay, s/veh	55.5			0.3	3.5	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		109.2		20.8		109.2		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		87.0		31.5		87.0		
Max Q Clear Time (g_c+I1), s		9.0		10.2		8.3		
Green Ext Time (p_c), s		6.0		0.4		3.0		

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	417	119	209	357	233	162	516	266	198	392	116
Future Volume (veh/h)	191	417	119	209	357	233	162	516	266	198	392	116
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	208	453	129	227	388	253	176	561	289	215	426	126
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	579	164	341	787	495	452	951	489	364	1178	345
Arrive On Green	0.12	0.21	0.20	0.13	0.22	0.22	0.08	0.42	0.41	0.03	0.14	0.14
Sat Flow, veh/h	1774	2722	769	1774	3539	1575	1774	2257	1161	1703	2696	790
Grp Volume(v), veh/h	208	293	289	227	388	253	176	440	410	215	278	274
Grp Sat Flow(s),veh/h/ln	1774	1770	1721	1774	1770	1575	1774	1770	1648	1703	1770	1717
Q Serve(g_s), s	11.4	20.3	20.7	12.4	12.4	17.1	7.1	24.9	25.2	8.8	18.4	18.8
Cycle Q Clear(g_c), s	11.4	20.3	20.7	12.4	12.4	17.1	7.1	24.9	25.2	8.8	18.4	18.8
Prop In Lane	1.00		0.45	1.00		1.00	1.00		0.70	1.00		0.46
Lane Grp Cap(c), veh/h	373	377	366	341	787	495	452	746	695	364	773	750
V/C Ratio(X)	0.56	0.78	0.79	0.67	0.49	0.51	0.39	0.59	0.59	0.59	0.36	0.37
Avail Cap(c_a), veh/h	489	490	477	405	912	551	452	746	695	387	773	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	33.0	48.3	48.9	33.7	44.1	36.5	19.1	28.9	29.5	22.6	39.2	39.5
Incr Delay (d2), s/veh	1.3	5.9	6.5	3.2	0.5	0.8	0.5	3.4	3.7	2.1	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.7	15.9	15.8	10.4	10.2	12.0	6.4	18.7	17.9	7.8	14.3	14.2
LnGrp Delay(d),s/veh	34.3	54.1	55.4	37.0	44.6	37.3	19.6	32.3	33.2	24.7	40.5	40.8
LnGrp LOS	C	D	E	D	D	D	B	C	C	C	D	D
Approach Vol, veh/h		790			868			1026			767	
Approach Delay, s/veh		49.4			40.5			30.5			36.2	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	31.9	15.4	61.5	20.4	32.7	17.5	59.4
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	19.5	33.7	8.9	41.9	22.4	30.8	12.8	38.0
Max Q Clear Time (g_c+I1), s	14.4	22.7	9.1	20.8	13.4	19.1	10.8	27.2
Green Ext Time (p_c), s	0.4	1.8	0.0	2.2	0.5	2.3	0.1	2.9

Intersection Summary		
HCM 2010 Ctrl Delay		38.6
HCM 2010 LOS		D

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	8	17	0	0	0
Future Vol, veh/h	1	8	17	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	9	18	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	29	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	11	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	986	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	985	1061
Mov Cap-2 Maneuver	-	-	-	-	985	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1012	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1599	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	7.3	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	350	231	113	270	131	245	610	158	511	1037	195
Future Volume (veh/h)	100	350	231	113	270	131	245	610	158	511	1037	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	380	251	123	293	142	266	663	172	555	1127	212
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	485	545	215	471	688	271	991	257	498	1352	253
Arrive On Green	0.06	0.26	0.26	0.05	0.25	0.25	0.09	0.36	0.36	0.19	0.45	0.45
Sat Flow, veh/h	1774	1863	1552	1774	1863	1551	1774	2781	721	1774	2975	557
Grp Volume(v), veh/h	109	380	251	123	293	142	266	422	413	555	668	671
Grp Sat Flow(s),veh/h/ln	1774	1863	1552	1774	1863	1551	1774	1770	1732	1774	1770	1762
Q Serve(g_s), s	5.0	21.3	14.1	5.8	15.6	6.3	10.0	22.6	22.6	21.0	37.1	37.6
Cycle Q Clear(g_c), s	5.0	21.3	14.1	5.8	15.6	6.3	10.0	22.6	22.6	21.0	37.1	37.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.32
Lane Grp Cap(c), veh/h	279	485	545	215	471	688	271	631	617	498	804	801
V/C Ratio(X)	0.39	0.78	0.46	0.57	0.62	0.21	0.98	0.67	0.67	1.12	0.83	0.84
Avail Cap(c_a), veh/h	345	631	667	215	548	753	271	773	756	498	946	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	38.6	28.3	31.2	37.2	19.4	28.1	30.5	30.5	24.0	26.8	27.0
Incr Delay (d2), s/veh	0.3	5.7	0.9	2.4	2.2	0.2	49.5	0.9	1.0	75.9	4.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	17.4	10.2	5.3	13.1	5.0	11.5	16.7	16.4	46.5	26.2	26.6
LnGrp Delay(d),s/veh	29.7	44.3	29.2	33.6	39.4	19.6	77.6	31.4	31.5	99.9	31.6	32.0
LnGrp LOS	C	D	C	C	D	B	E	C	C	F	C	C
Approach Vol, veh/h		740			558			1101			1894	
Approach Delay, s/veh		37.0			33.1			42.6			51.7	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	44.0	10.0	33.2	14.0	55.0	10.8	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	23.0	24.6	7.8	23.3	12.0	39.6	7.0	17.6
Green Ext Time (p_c), s	0.0	0.8	0.0	3.9	0.0	1.4	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	12	4	12	12	81	993	31	27	1423	78
Future Vol, veh/h	5	1	12	4	12	12	81	993	31	27	1423	78
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1	13	4	13	13	88	1079	34	29	1547	85

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2370	2937	816	2104	2962	557	1632	0	0	1113	0	0
Stage 1	1648	1648	-	1272	1272	-	-	-	-	-	-	-
Stage 2	722	1289	-	832	1690	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	18	15	320	29	14	474	394	-	-	623	-	-
Stage 1	103	155	-	177	237	-	-	-	-	-	-	-
Stage 2	384	232	-	330	148	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	11	320	21	~ 10	474	394	-	-	623	-	-
Mov Cap-2 Maneuver	-	11	-	21	~ 10	-	-	-	-	-	-	-
Stage 1	80	148	-	138	184	-	-	-	-	-	-	-
Stage 2	269	180	-	300	141	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		$ 496.8	1.2	0.2
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	394	-	-	-	12	474	623	-	-
HCM Lane V/C Ratio	0.223	-	-	-	1.449	0.028	0.047	-	-
HCM Control Delay (s)	16.7	-	-	-	$ 859.8	12.8	11.1	-	-
HCM Lane LOS	C	-	-	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-	2.9	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	17	12	1110	1415	6
Future Vol, veh/h	6	17	12	1110	1415	6
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	18	13	1207	1538	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2172	773	1545	0	-	0
Stage 1	1542	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	40	342	426	-	-	-
Stage 1	162	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	39	342	426	-	-	-
Mov Cap-2 Maneuver	39	-	-	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	493	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.7	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	426	-	113	-	-
HCM Lane V/C Ratio	0.031	-	0.221	-	-
HCM Control Delay (s)	13.7	-	45.7	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	10	43	336	45	117	35	748	442	153	891	108
Future Volume (veh/h)	46	10	43	336	45	117	35	748	442	153	891	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	50	11	47	365	49	127	38	813	480	166	968	117
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	35	148	332	64	165	279	912	533	255	1453	176
Arrive On Green	0.06	0.11	0.11	0.08	0.14	0.14	0.05	0.42	0.42	0.08	0.46	0.46
Sat Flow, veh/h	1774	308	1315	1703	459	1188	1703	2152	1257	1703	3180	384
Grp Volume(v), veh/h	50	0	58	365	0	176	38	667	626	166	539	546
Grp Sat Flow(s),veh/h/ln	1774	0	1622	1703	0	1647	1703	1770	1640	1703	1770	1794
Q Serve(g_s), s	2.0	0.0	2.7	7.0	0.0	8.6	1.0	29.0	29.6	4.4	19.8	19.8
Cycle Q Clear(g_c), s	2.0	0.0	2.7	7.0	0.0	8.6	1.0	29.0	29.6	4.4	19.8	19.8
Prop In Lane	1.00		0.81	1.00		0.72	1.00		0.77	1.00		0.21
Lane Grp Cap(c), veh/h	232	0	183	332	0	229	279	750	695	255	808	820
V/C Ratio(X)	0.22	0.00	0.32	1.10	0.00	0.77	0.14	0.89	0.90	0.65	0.67	0.67
Avail Cap(c_a), veh/h	450	0	658	332	0	509	366	1326	1229	366	1411	1431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	33.9	34.9	0.0	34.5	13.7	22.2	22.3	18.2	17.6	17.6
Incr Delay (d2), s/veh	0.5	0.0	2.1	78.6	0.0	2.0	0.1	1.6	2.2	1.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	2.4	20.8	0.0	7.3	0.8	20.6	19.9	3.8	14.8	14.9
LnGrp Delay(d),s/veh	30.2	0.0	36.0	113.5	0.0	36.5	13.8	23.8	24.5	19.3	18.0	18.0
LnGrp LOS	C		D	F		D	B	C	C	B	B	B
Approach Vol, veh/h		108			541			1331			1251	
Approach Delay, s/veh		33.3			88.5			23.8			18.2	
Approach LOS		C			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	41.9	11.0	16.7	10.8	44.7	8.8	18.9
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 12	* 62	7.0	33.7	* 8.3	* 66	15.0	25.7
Max Q Clear Time (g_c+I1), s	6.4	31.6	9.0	4.7	3.0	21.8	4.0	10.6
Green Ext Time (p_c), s	0.2	3.6	0.0	0.4	0.0	2.6	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	89	122	1477	1064	84
Future Volume (veh/h)	81	89	122	1477	1064	84
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	88	97	133	1605	1157	91
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	119	131	344	2753	2594	204
Arrive On Green	0.15	0.15	1.00	1.00	0.78	0.77
Sat Flow, veh/h	770	849	444	3632	3418	261
Grp Volume(v), veh/h	186	0	133	1605	615	633
Grp Sat Flow(s),veh/h/ln	1627	0	444	1770	1770	1816
Q Serve(g_s), s	15.3	0.0	10.4	0.0	16.4	16.5
Cycle Q Clear(g_c), s	15.3	0.0	26.9	0.0	16.4	16.5
Prop In Lane	0.47	0.52	1.00			0.14
Lane Grp Cap(c), veh/h	252	0	344	2753	1380	1417
V/C Ratio(X)	0.74	0.00	0.39	0.58	0.45	0.45
Avail Cap(c_a), veh/h	358	0	344	2753	1380	1417
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.21	0.21	0.55	0.55
Uniform Delay (d), s/veh	56.8	0.0	2.0	0.0	5.2	5.2
Incr Delay (d2), s/veh	4.8	0.0	0.7	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.6	0.0	2.2	0.1	11.6	11.9
LnGrp Delay(d),s/veh	61.6	0.0	2.7	0.2	5.8	5.8
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	186			1738	1248	
Approach Delay, s/veh	61.6			0.4	5.8	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		114.1		25.9		114.1		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		99.0		29.5		99.0		
Max Q Clear Time (g_c+I1), s		28.9		17.3		18.5		
Green Ext Time (p_c), s		17.5		0.6		6.7		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	552	220	268	410	485	220	776	296	261	626	241
Future Volume (veh/h)	316	552	220	268	410	485	220	776	296	261	626	241
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	343	600	239	291	446	527	239	843	322	284	680	262
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	632	251	333	915	627	311	811	309	298	877	338
Arrive On Green	0.15	0.26	0.24	0.15	0.26	0.25	0.12	0.32	0.31	0.05	0.12	0.11
Sat Flow, veh/h	1774	2470	983	1774	3539	1576	1774	2501	953	1703	2493	960
Grp Volume(v), veh/h	343	430	409	291	446	527	239	596	569	284	483	459
Grp Sat Flow(s),veh/h/ln	1774	1770	1683	1774	1770	1576	1774	1770	1684	1703	1770	1683
Q Serve(g_s), s	20.0	33.4	33.5	17.3	15.0	35.3	12.2	45.4	45.4	19.0	37.1	37.1
Cycle Q Clear(g_c), s	20.0	33.4	33.5	17.3	15.0	35.3	12.2	45.4	45.4	19.0	37.1	37.1
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.57	1.00		0.57
Lane Grp Cap(c), veh/h	401	453	430	333	915	627	311	574	546	298	623	593
V/C Ratio(X)	0.86	0.95	0.95	0.87	0.49	0.84	0.77	1.04	1.04	0.95	0.77	0.78
Avail Cap(c_a), veh/h	401	453	430	333	915	627	362	574	546	298	623	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	32.8	51.2	51.9	37.6	44.0	38.2	31.3	47.3	47.8	51.1	56.5	56.6
Incr Delay (d2), s/veh	16.5	29.8	31.1	21.9	0.4	10.0	8.3	47.9	50.0	36.0	8.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.1	27.4	26.5	18.8	11.8	27.4	10.8	53.6	51.6	19.7	26.4	25.3
LnGrp Delay(d),s/veh	49.3	81.0	83.0	59.5	44.4	48.2	39.6	95.2	97.8	87.1	64.5	65.1
LnGrp LOS	D	F	F	E	D	D	D	F	F	F	E	E
Approach Vol, veh/h		1182			1264			1404			1226	
Approach Delay, s/veh		72.5			49.5			86.8			70.0	
Approach LOS		E			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	40.0	21.0	54.0	25.0	40.0	25.0	50.0
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	18.5	33.5	18.5	43.5	18.5	33.5	18.5	43.5
Max Q Clear Time (g_c+I1), s	19.3	35.5	14.2	39.1	22.0	37.3	21.0	47.4
Green Ext Time (p_c), s	0.0	0.0	0.3	1.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.1
HCM 2010 LOS	E

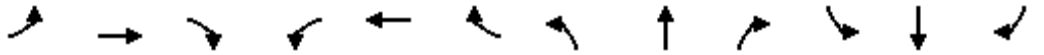
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	29	23	4	5	4
Future Vol, veh/h	4	29	23	4	5	4
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	32	25	4	5	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	29	0	-	0	67	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1584	-	-	-	938	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	935	1048
Mov Cap-2 Maneuver	-	-	-	-	935	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1584	-	-	-	982
HCM Lane V/C Ratio	0.003	-	-	-	0.01
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	438	317	138	376	418	225	997	114	341	1047	106
Future Volume (veh/h)	153	438	317	138	376	418	225	997	114	341	1047	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	166	476	345	150	409	454	245	1084	124	371	1138	115
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	548	587	180	486	676	267	1137	130	373	1444	146
Arrive On Green	0.08	0.29	0.29	0.05	0.26	0.26	0.08	0.36	0.36	0.17	0.44	0.44
Sat Flow, veh/h	1774	1863	1556	1774	1863	1552	1774	3200	366	1774	3246	328
Grp Volume(v), veh/h	166	476	345	150	409	454	245	599	609	371	620	633
Grp Sat Flow(s),veh/h/ln	1774	1863	1556	1774	1863	1552	1774	1770	1796	1774	1770	1804
Q Serve(g_s), s	8.1	29.7	21.8	6.0	25.5	28.8	10.0	40.5	40.6	20.8	36.7	36.9
Cycle Q Clear(g_c), s	8.1	29.7	21.8	6.0	25.5	28.8	10.0	40.5	40.6	20.8	36.7	36.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.18
Lane Grp Cap(c), veh/h	239	548	587	180	486	676	267	629	638	373	787	802
V/C Ratio(X)	0.70	0.87	0.59	0.83	0.84	0.67	0.92	0.95	0.95	0.99	0.79	0.79
Avail Cap(c_a), veh/h	252	577	611	180	501	688	267	707	717	373	865	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	41.0	30.7	40.4	42.9	28.0	30.4	38.6	38.6	38.2	29.1	29.1
Incr Delay (d2), s/veh	6.2	13.3	1.7	25.8	12.5	2.8	33.5	20.9	21.1	44.7	3.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.7	24.0	14.7	6.2	21.0	18.7	9.8	31.4	31.9	23.9	25.9	26.3
LnGrp Delay(d),s/veh	38.0	54.4	32.4	66.2	55.4	30.8	63.9	59.5	59.7	82.9	33.0	33.0
LnGrp LOS	D	D	C	E	E	C	E	E	E	F	C	C
Approach Vol, veh/h		987			1013			1453			1624	
Approach Delay, s/veh		44.0			46.0			60.3			44.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	47.6	10.0	40.1	14.0	58.6	14.1	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	22.8	42.6	8.0	31.7	12.0	38.9	10.1	30.8
Green Ext Time (p_c), s	0.0	1.0	0.0	3.0	0.0	1.3	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	93.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	34	60	0	160	17	1314	50	109	1473	6
Future Vol, veh/h	10	1	34	60	0	160	17	1314	50	109	1473	6
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1	37	65	0	174	18	1428	54	118	1601	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2591	3359	804	2528	3335	741	1608	0	0	1482	0	0
Stage 1	1841	1841	-	1491	1491	-	-	-	-	-	-	-
Stage 2	750	1518	-	1037	1844	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	12	8	326	~ 14	8	359	402	-	-	450	-	-
Stage 1	78	124	-	129	185	-	-	-	-	-	-	-
Stage 2	369	180	-	247	124	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 5	6	326	~ 8	6	359	402	-	-	450	-	-
Mov Cap-2 Maneuver	~ 5	6	-	~ 8	6	-	-	-	-	-	-	-
Stage 1	74	92	-	123	177	-	-	-	-	-	-	-
Stage 2	182	172	-	160	92	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1061.5	$ 1142.1	0.2	1.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	402	-	-	20	8	359	450	-	-
HCM Lane V/C Ratio	0.046	-	-	2.446	8.152	0.484	0.263	-	-
HCM Control Delay (s)	14.4	-	-	$ 1061.5	$ 4123.5	24.1	15.8	-	-
HCM Lane LOS	B	-	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	6.5	9.7	2.5	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	22	27	1367	1523	40
Future Vol, veh/h	12	22	27	1367	1523	40
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	24	29	1486	1655	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2478	849	1698	0	-	0
Stage 1	1677	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	25	304	371	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	304	371	-	-	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	126	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	146.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	371	-	57	-	-
HCM Lane V/C Ratio	0.079	-	0.648	-	-
HCM Control Delay (s)	15.5	-	146.2	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	2.7	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	15	51	410	7	96	32	806	275	142	909	84
Future Volume (veh/h)	70	15	51	410	7	96	32	806	275	142	909	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	76	16	55	446	8	104	35	876	299	154	988	91
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	42	146	373	19	250	265	1111	378	265	1499	138
Arrive On Green	0.06	0.12	0.12	0.12	0.17	0.17	0.04	0.43	0.43	0.07	0.46	0.46
Sat Flow, veh/h	1774	368	1264	1703	114	1481	1703	2593	883	1703	3277	302
Grp Volume(v), veh/h	76	0	71	446	0	112	35	597	578	154	533	546
Grp Sat Flow(s),veh/h/ln	1774	0	1632	1703	0	1595	1703	1770	1706	1703	1770	1809
Q Serve(g_s), s	3.4	0.0	3.8	11.0	0.0	5.9	1.0	27.2	27.3	4.6	21.9	21.9
Cycle Q Clear(g_c), s	3.4	0.0	3.8	11.0	0.0	5.9	1.0	27.2	27.3	4.6	21.9	21.9
Prop In Lane	1.00		0.77	1.00		0.93	1.00		0.52	1.00		0.17
Lane Grp Cap(c), veh/h	326	0	188	373	0	269	265	758	731	265	810	828
V/C Ratio(X)	0.23	0.00	0.38	1.20	0.00	0.42	0.13	0.79	0.79	0.58	0.66	0.66
Avail Cap(c_a), veh/h	611	0	624	373	0	439	340	1067	1029	364	1143	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	38.2	35.9	0.0	34.7	15.3	23.0	23.0	18.7	19.7	19.7
Incr Delay (d2), s/veh	0.8	0.0	2.7	111.4	0.0	0.4	0.1	1.6	1.8	0.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	0.0	3.3	28.7	0.0	4.7	0.9	19.7	19.2	4.0	16.1	16.4
LnGrp Delay(d),s/veh	33.6	0.0	40.8	147.4	0.0	35.1	15.4	24.6	24.8	19.5	20.0	20.0
LnGrp LOS	C		D	F		D	B	C	C	B	C	C
Approach Vol, veh/h		147			558			1210			1233	
Approach Delay, s/veh		37.1			124.8			24.4			19.9	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	46.7	15.0	18.1	10.9	49.4	10.0	23.0
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 12	* 56	11.0	35.7	* 8.3	* 60	21.0	25.7
Max Q Clear Time (g_c+I1), s	6.6	29.3	13.0	5.8	3.0	23.9	5.4	7.9
Green Ext Time (p_c), s	0.1	3.0	0.0	0.5	0.0	2.6	0.4	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	70	100	1196	1231	61
Future Volume (veh/h)	75	70	100	1196	1231	61
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	82	76	109	1300	1338	66
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	121	112	302	2793	2717	134
Arrive On Green	0.14	0.13	1.00	1.00	0.79	0.78
Sat Flow, veh/h	843	782	382	3632	3526	169
Grp Volume(v), veh/h	159	0	109	1300	689	715
Grp Sat Flow(s),veh/h/ln	1635	0	382	1770	1770	1833
Q Serve(g_s), s	12.9	0.0	10.6	0.0	18.6	18.8
Cycle Q Clear(g_c), s	12.9	0.0	29.4	0.0	18.6	18.8
Prop In Lane	0.52	0.48	1.00			0.09
Lane Grp Cap(c), veh/h	235	0	302	2793	1400	1450
V/C Ratio(X)	0.68	0.00	0.36	0.47	0.49	0.49
Avail Cap(c_a), veh/h	360	0	302	2793	1400	1450
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.45	0.45	0.40	0.40
Uniform Delay (d), s/veh	57.2	0.0	2.5	0.0	5.0	5.0
Incr Delay (d2), s/veh	3.4	0.0	1.5	0.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	2.2	0.2	12.3	12.7
LnGrp Delay(d),s/veh	60.6	0.0	4.0	0.3	5.5	5.5
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	159			1409	1404	
Approach Delay, s/veh	60.6			0.5	5.5	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		115.7		24.3		115.7		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		99.0		29.5		99.0		
Max Q Clear Time (g_c+I1), s		31.4		14.9		20.8		
Green Ext Time (p_c), s		12.3		0.5		8.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	267	563	195	302	443	346	215	697	279	324	794	182
Future Volume (veh/h)	267	563	195	302	443	346	215	697	279	324	794	182
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	290	612	212	328	482	376	234	758	303	352	863	198
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	622	215	325	865	616	293	816	326	327	1057	243
Arrive On Green	0.15	0.24	0.22	0.15	0.24	0.24	0.11	0.33	0.32	0.05	0.12	0.12
Sat Flow, veh/h	1774	2578	892	1774	3539	1575	1774	2463	984	1703	2855	655
Grp Volume(v), veh/h	290	420	404	328	482	376	234	544	517	352	535	526
Grp Sat Flow(s),veh/h/ln	1774	1770	1700	1774	1770	1575	1774	1770	1678	1703	1770	1741
Q Serve(g_s), s	16.7	33.0	33.1	21.2	16.7	26.8	11.8	41.6	41.7	21.3	41.2	41.3
Cycle Q Clear(g_c), s	16.7	33.0	33.1	21.2	16.7	26.8	11.8	41.6	41.7	21.3	41.2	41.3
Prop In Lane	1.00		0.52	1.00		1.00	1.00		0.59	1.00		0.38
Lane Grp Cap(c), veh/h	393	427	410	325	865	616	293	586	556	327	655	645
V/C Ratio(X)	0.74	0.98	0.98	1.01	0.56	0.61	0.80	0.93	0.93	1.08	0.82	0.82
Avail Cap(c_a), veh/h	393	427	410	325	865	616	312	586	556	327	655	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	33.0	52.8	53.4	42.9	46.3	34.2	31.6	45.2	45.8	49.5	56.8	56.9
Incr Delay (d2), s/veh	7.1	38.9	40.3	52.2	0.8	1.8	13.0	23.1	24.1	67.1	9.1	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.8	28.2	27.6	31.1	13.0	17.6	11.0	32.1	30.8	33.8	28.9	28.6
LnGrp Delay(d),s/veh	40.1	91.7	93.7	95.1	47.1	36.0	44.7	68.3	69.9	116.5	65.9	66.2
LnGrp LOS	D	F	F	F	D	D	D	E	E	F	E	E
Approach Vol, veh/h		1114			1186			1295			1413	
Approach Delay, s/veh		79.0			56.8			64.7			78.6	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	38.0	20.5	56.5	25.0	38.0	26.0	51.0
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	18.5	31.5	15.5	48.5	18.5	31.5	19.5	44.5
Max Q Clear Time (g_c+I1), s	23.2	35.1	13.8	43.3	18.7	28.8	23.3	43.7
Green Ext Time (p_c), s	0.0	0.0	0.1	2.3	0.0	1.1	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	69.9
HCM 2010 LOS	E

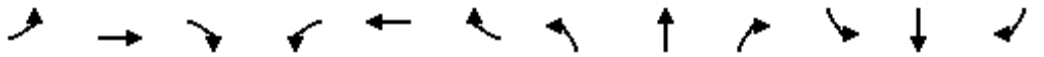
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	16	60	0	17	0
Future Vol, veh/h	0	16	60	0	17	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	17	65	0	18	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	82	65
Stage 1	-	-	-	-	65	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	920	999
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	920	999
Mov Cap-2 Maneuver	-	-	-	-	920	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1537	-	-	-	920
HCM Lane V/C Ratio	-	-	-	-	0.02
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	350	231	113	270	131	245	610	158	511	1037	195
Future Volume (veh/h)	100	350	231	113	270	131	245	610	158	511	1037	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	380	251	123	293	142	266	663	172	555	1127	212
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	485	545	215	471	688	271	991	257	498	1352	253
Arrive On Green	0.06	0.26	0.26	0.05	0.25	0.25	0.09	0.36	0.36	0.19	0.45	0.45
Sat Flow, veh/h	1774	1863	1552	1774	1863	1551	1774	2781	721	1774	2975	557
Grp Volume(v), veh/h	109	380	251	123	293	142	266	422	413	555	668	671
Grp Sat Flow(s),veh/h/ln	1774	1863	1552	1774	1863	1551	1774	1770	1732	1774	1770	1762
Q Serve(g_s), s	5.0	21.3	14.1	5.8	15.6	6.3	10.0	22.6	22.6	21.0	37.1	37.6
Cycle Q Clear(g_c), s	5.0	21.3	14.1	5.8	15.6	6.3	10.0	22.6	22.6	21.0	37.1	37.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.32
Lane Grp Cap(c), veh/h	279	485	545	215	471	688	271	631	617	498	804	801
V/C Ratio(X)	0.39	0.78	0.46	0.57	0.62	0.21	0.98	0.67	0.67	1.12	0.83	0.84
Avail Cap(c_a), veh/h	345	631	667	215	548	753	271	773	756	498	946	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	38.6	28.3	31.2	37.2	19.4	28.1	30.5	30.5	24.0	26.8	27.0
Incr Delay (d2), s/veh	0.3	5.7	0.9	2.4	2.2	0.2	49.5	0.9	1.0	75.9	4.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	17.4	10.2	5.3	13.1	5.0	11.5	16.7	16.4	46.5	26.2	26.6
LnGrp Delay(d),s/veh	29.7	44.3	29.2	33.6	39.4	19.6	77.6	31.4	31.5	99.9	31.6	32.0
LnGrp LOS	C	D	C	C	D	B	E	C	C	F	C	C
Approach Vol, veh/h		740			558			1101			1894	
Approach Delay, s/veh		37.0			33.1			42.6			51.7	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	44.0	10.0	33.2	14.0	55.0	10.8	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	23.0	24.6	7.8	23.3	12.0	39.6	7.0	17.6
Green Ext Time (p_c), s	0.0	0.8	0.0	3.9	0.0	1.4	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	12	4	12	12	81	993	31	27	1423	78
Future Vol, veh/h	5	1	12	4	12	12	81	993	31	27	1423	78
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1	13	4	13	13	88	1079	34	29	1547	85

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2370	2937	816	2104	2962	557	1632	0	0	1113	0	0
Stage 1	1648	1648	-	1272	1272	-	-	-	-	-	-	-
Stage 2	722	1289	-	832	1690	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	18	15	320	29	14	474	394	-	-	623	-	-
Stage 1	103	155	-	177	237	-	-	-	-	-	-	-
Stage 2	384	232	-	330	148	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	11	320	21	~ 10	474	394	-	-	623	-	-
Mov Cap-2 Maneuver	-	11	-	21	~ 10	-	-	-	-	-	-	-
Stage 1	80	148	-	138	184	-	-	-	-	-	-	-
Stage 2	269	180	-	300	141	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		$ 496.8	1.2	0.2
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	394	-	-	-	12	474	623	-	-
HCM Lane V/C Ratio	0.223	-	-	-	1.449	0.028	0.047	-	-
HCM Control Delay (s)	16.7	-	-	-	$ 859.8	12.8	11.1	-	-
HCM Lane LOS	C	-	-	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-	2.9	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	17	12	1110	1415	6
Future Vol, veh/h	6	17	12	1110	1415	6
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	18	13	1207	1538	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2172	773	1545	0	-	0
Stage 1	1542	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	40	342	426	-	-	-
Stage 1	162	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	39	342	426	-	-	-
Mov Cap-2 Maneuver	39	-	-	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	493	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.7	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	426	-	113	-	-
HCM Lane V/C Ratio	0.031	-	0.221	-	-
HCM Control Delay (s)	13.7	-	45.7	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	10	43	336	45	117	35	748	442	153	891	108
Future Volume (veh/h)	46	10	43	336	45	117	35	748	442	153	891	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	50	11	47	365	49	127	38	813	480	166	968	117
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	35	148	332	64	165	279	912	533	255	1453	176
Arrive On Green	0.06	0.11	0.11	0.08	0.14	0.14	0.05	0.42	0.42	0.08	0.46	0.46
Sat Flow, veh/h	1774	308	1315	1703	459	1188	1703	2152	1257	1703	3180	384
Grp Volume(v), veh/h	50	0	58	365	0	176	38	667	626	166	539	546
Grp Sat Flow(s),veh/h/ln	1774	0	1622	1703	0	1647	1703	1770	1640	1703	1770	1794
Q Serve(g_s), s	2.0	0.0	2.7	7.0	0.0	8.6	1.0	29.0	29.6	4.4	19.8	19.8
Cycle Q Clear(g_c), s	2.0	0.0	2.7	7.0	0.0	8.6	1.0	29.0	29.6	4.4	19.8	19.8
Prop In Lane	1.00		0.81	1.00		0.72	1.00		0.77	1.00		0.21
Lane Grp Cap(c), veh/h	232	0	183	332	0	229	279	750	695	255	808	820
V/C Ratio(X)	0.22	0.00	0.32	1.10	0.00	0.77	0.14	0.89	0.90	0.65	0.67	0.67
Avail Cap(c_a), veh/h	450	0	658	332	0	509	366	1326	1229	366	1411	1431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	33.9	34.9	0.0	34.5	13.7	22.2	22.3	18.2	17.6	17.6
Incr Delay (d2), s/veh	0.5	0.0	2.1	78.6	0.0	2.0	0.1	1.6	2.2	1.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	2.4	20.8	0.0	7.3	0.8	20.6	19.9	3.8	14.8	14.9
LnGrp Delay(d),s/veh	30.2	0.0	36.0	113.5	0.0	36.5	13.8	23.8	24.5	19.3	18.0	18.0
LnGrp LOS	C		D	F		D	B	C	C	B	B	B
Approach Vol, veh/h		108			541			1331			1251	
Approach Delay, s/veh		33.3			88.5			23.8			18.2	
Approach LOS		C			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	41.9	11.0	16.7	10.8	44.7	8.8	18.9
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 12	* 62	7.0	33.7	* 8.3	* 66	15.0	25.7
Max Q Clear Time (g_c+I1), s	6.4	31.6	9.0	4.7	3.0	21.8	4.0	10.6
Green Ext Time (p_c), s	0.2	3.6	0.0	0.4	0.0	2.6	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	89	122	1477	1064	84
Future Volume (veh/h)	81	89	122	1477	1064	84
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	88	97	133	1605	1157	91
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	119	131	344	2753	2594	204
Arrive On Green	0.15	0.15	1.00	1.00	0.78	0.77
Sat Flow, veh/h	770	849	444	3632	3418	261
Grp Volume(v), veh/h	186	0	133	1605	615	633
Grp Sat Flow(s),veh/h/ln	1627	0	444	1770	1770	1816
Q Serve(g_s), s	15.3	0.0	10.4	0.0	16.4	16.5
Cycle Q Clear(g_c), s	15.3	0.0	26.9	0.0	16.4	16.5
Prop In Lane	0.47	0.52	1.00			0.14
Lane Grp Cap(c), veh/h	252	0	344	2753	1380	1417
V/C Ratio(X)	0.74	0.00	0.39	0.58	0.45	0.45
Avail Cap(c_a), veh/h	358	0	344	2753	1380	1417
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.55	0.55	0.55	0.55
Uniform Delay (d), s/veh	56.8	0.0	2.0	0.0	5.2	5.2
Incr Delay (d2), s/veh	4.8	0.0	1.8	0.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	2.5	0.3	11.6	11.9
LnGrp Delay(d),s/veh	61.6	0.0	3.8	0.5	5.8	5.8
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	186			1738	1248	
Approach Delay, s/veh	61.6			0.8	5.8	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		114.1		25.9		114.1		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		99.0		29.5		99.0		
Max Q Clear Time (g_c+I1), s		28.9		17.3		18.5		
Green Ext Time (p_c), s		17.5		0.6		6.7		

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	552	220	268	410	485	220	776	296	261	626	241
Future Volume (veh/h)	316	552	220	268	410	485	220	776	296	261	626	241
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1788	1863	1900
Adj Flow Rate, veh/h	343	600	239	291	446	527	239	843	322	284	680	262
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	405	649	258	339	940	619	305	1166	705	332	862	332
Arrive On Green	0.15	0.26	0.25	0.15	0.27	0.26	0.12	0.33	0.32	0.04	0.11	0.11
Sat Flow, veh/h	1774	2470	983	1774	3539	1576	1774	3539	1568	1703	2492	960
Grp Volume(v), veh/h	343	430	409	291	446	527	239	843	322	284	483	459
Grp Sat Flow(s),veh/h/ln	1774	1770	1684	1774	1770	1576	1774	1770	1568	1703	1770	1683
Q Serve(g_s), s	19.8	33.1	33.2	16.7	14.8	36.3	12.1	29.3	20.0	14.7	37.2	37.2
Cycle Q Clear(g_c), s	19.8	33.1	33.2	16.7	14.8	36.3	12.1	29.3	20.0	14.7	37.2	37.2
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	405	465	443	339	940	619	305	1166	705	332	612	582
V/C Ratio(X)	0.85	0.92	0.93	0.86	0.47	0.85	0.78	0.72	0.46	0.86	0.79	0.79
Avail Cap(c_a), veh/h	405	465	443	339	940	619	345	1166	705	341	612	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	32.0	50.2	50.9	35.7	43.2	38.9	31.3	41.3	26.8	33.5	57.0	57.2
Incr Delay (d2), s/veh	15.2	24.2	25.3	19.4	0.4	11.0	10.0	3.9	2.1	16.4	8.7	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.9	26.4	25.7	18.6	11.7	27.9	10.9	21.3	14.0	12.8	26.5	25.5
LnGrp Delay(d),s/veh	47.2	74.4	76.3	55.1	43.6	49.9	41.3	45.2	29.0	49.9	65.8	66.4
LnGrp LOS	D	E	E	E	D	D	D	D	C	D	E	E
Approach Vol, veh/h		1182			1264			1404			1226	
Approach Delay, s/veh		67.2			48.9			40.8			62.3	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	41.0	20.9	53.1	25.0	41.0	23.3	50.7
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	18.5	34.5	17.5	43.5	18.5	34.5	17.5	43.5
Max Q Clear Time (g_c+I1), s	18.7	35.2	14.1	39.2	21.8	38.3	16.7	31.3
Green Ext Time (p_c), s	0.0	0.0	0.3	1.8	0.0	0.0	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	54.1
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	29	23	4	5	4
Future Vol, veh/h	4	29	23	4	5	4
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	32	25	4	5	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	29	0	-	0	67	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1584	-	-	-	938	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	935	1048
Mov Cap-2 Maneuver	-	-	-	-	935	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1584	-	-	-	982
HCM Lane V/C Ratio	0.003	-	-	-	0.01
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	438	317	138	376	418	225	997	114	341	1047	106
Future Volume (veh/h)	153	438	317	138	376	418	225	997	114	341	1047	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	166	476	345	150	409	454	245	1084	124	371	1138	115
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	548	587	180	486	676	267	1137	130	373	1444	146
Arrive On Green	0.08	0.29	0.29	0.05	0.26	0.26	0.08	0.36	0.36	0.17	0.44	0.44
Sat Flow, veh/h	1774	1863	1556	1774	1863	1552	1774	3200	366	1774	3246	328
Grp Volume(v), veh/h	166	476	345	150	409	454	245	599	609	371	620	633
Grp Sat Flow(s),veh/h/ln	1774	1863	1556	1774	1863	1552	1774	1770	1796	1774	1770	1804
Q Serve(g_s), s	8.1	29.7	21.8	6.0	25.5	28.8	10.0	40.5	40.6	20.8	36.7	36.9
Cycle Q Clear(g_c), s	8.1	29.7	21.8	6.0	25.5	28.8	10.0	40.5	40.6	20.8	36.7	36.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.18
Lane Grp Cap(c), veh/h	239	548	587	180	486	676	267	629	638	373	787	802
V/C Ratio(X)	0.70	0.87	0.59	0.83	0.84	0.67	0.92	0.95	0.95	0.99	0.79	0.79
Avail Cap(c_a), veh/h	252	577	611	180	501	688	267	707	717	373	865	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	41.0	30.7	40.4	42.9	28.0	30.4	38.6	38.6	38.2	29.1	29.1
Incr Delay (d2), s/veh	6.2	13.3	1.7	25.8	12.5	2.8	33.5	20.9	21.1	44.7	3.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.7	24.0	14.7	6.2	21.0	18.7	9.8	31.4	31.9	23.9	25.9	26.3
LnGrp Delay(d),s/veh	38.0	54.4	32.4	66.2	55.4	30.8	63.9	59.5	59.7	82.9	33.0	33.0
LnGrp LOS	D	D	C	E	E	C	E	E	E	F	C	C
Approach Vol, veh/h		987			1013			1453			1624	
Approach Delay, s/veh		44.0			46.0			60.3			44.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	47.6	10.0	40.1	14.0	58.6	14.1	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	6.0	38.0	10.0	60.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	22.8	42.6	8.0	31.7	12.0	38.9	10.1	30.8
Green Ext Time (p_c), s	0.0	1.0	0.0	3.0	0.0	1.3	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	93.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	34	60	0	160	17	1314	50	109	1473	6
Future Vol, veh/h	10	1	34	60	0	160	17	1314	50	109	1473	6
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	-	-	-	-	-	0	95	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1	37	65	0	174	18	1428	54	118	1601	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2591	3359	804	2528	3335	741	1608	0	0	1482	0	0
Stage 1	1841	1841	-	1491	1491	-	-	-	-	-	-	-
Stage 2	750	1518	-	1037	1844	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	12	8	326	~ 14	8	359	402	-	-	450	-	-
Stage 1	78	124	-	129	185	-	-	-	-	-	-	-
Stage 2	369	180	-	247	124	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 5	6	326	~ 8	6	359	402	-	-	450	-	-
Mov Cap-2 Maneuver	~ 5	6	-	~ 8	6	-	-	-	-	-	-	-
Stage 1	74	92	-	123	177	-	-	-	-	-	-	-
Stage 2	182	172	-	160	92	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1061.5	$ 1142.1	0.2	1.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	402	-	-	20	8	359	450	-	-
HCM Lane V/C Ratio	0.046	-	-	2.446	8.152	0.484	0.263	-	-
HCM Control Delay (s)	14.4	-	-	$ 1061.5	$ 4123.5	24.1	15.8	-	-
HCM Lane LOS	B	-	-	F	F	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	6.5	9.7	2.5	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

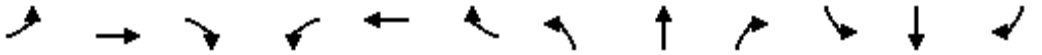
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	22	27	1367	1523	40
Future Vol, veh/h	12	22	27	1367	1523	40
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	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	24	29	1486	1655	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2478	849	1698	0	-	0
Stage 1	1677	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	25	304	371	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	304	371	-	-	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	126	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	146.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	371	-	57	-	-
HCM Lane V/C Ratio	0.079	-	0.648	-	-
HCM Control Delay (s)	15.5	-	146.2	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	2.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	15	51	410	7	96	32	806	275	142	909	84
Future Volume (veh/h)	70	15	51	410	7	96	32	806	275	142	909	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1788	1863	1900	1788	1863	1900	1788	1863	1900
Adj Flow Rate, veh/h	76	16	55	446	8	104	35	876	299	154	988	91
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	42	146	373	19	250	265	1111	378	265	1499	138
Arrive On Green	0.06	0.12	0.12	0.12	0.17	0.17	0.04	0.43	0.43	0.07	0.46	0.46
Sat Flow, veh/h	1774	368	1264	1703	114	1481	1703	2593	883	1703	3277	302
Grp Volume(v), veh/h	76	0	71	446	0	112	35	597	578	154	533	546
Grp Sat Flow(s),veh/h/ln	1774	0	1632	1703	0	1595	1703	1770	1706	1703	1770	1809
Q Serve(g_s), s	3.4	0.0	3.8	11.0	0.0	5.9	1.0	27.2	27.3	4.6	21.9	21.9
Cycle Q Clear(g_c), s	3.4	0.0	3.8	11.0	0.0	5.9	1.0	27.2	27.3	4.6	21.9	21.9
Prop In Lane	1.00		0.77	1.00		0.93	1.00		0.52	1.00		0.17
Lane Grp Cap(c), veh/h	326	0	188	373	0	269	265	758	731	265	810	828
V/C Ratio(X)	0.23	0.00	0.38	1.20	0.00	0.42	0.13	0.79	0.79	0.58	0.66	0.66
Avail Cap(c_a), veh/h	611	0	624	373	0	439	340	1067	1029	364	1143	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	38.2	35.9	0.0	34.7	15.3	23.0	23.0	18.7	19.7	19.7
Incr Delay (d2), s/veh	0.8	0.0	2.7	111.4	0.0	0.4	0.1	1.6	1.8	0.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	0.0	3.3	28.7	0.0	4.7	0.9	19.7	19.2	4.0	16.1	16.4
LnGrp Delay(d),s/veh	33.6	0.0	40.8	147.4	0.0	35.1	15.4	24.6	24.8	19.5	20.0	20.0
LnGrp LOS	C		D	F		D	B	C	C	B	C	C
Approach Vol, veh/h		147			558			1210			1233	
Approach Delay, s/veh		37.1			124.8			24.4			19.9	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	46.7	15.0	18.1	10.9	49.4	10.0	23.0
Change Period (Y+Rc), s	* 6.7	* 6.7	4.0	7.3	* 6.7	* 6.7	4.0	7.3
Max Green Setting (Gmax), s	* 12	* 56	11.0	35.7	* 8.3	* 60	21.0	25.7
Max Q Clear Time (g_c+I1), s	6.6	29.3	13.0	5.8	3.0	23.9	5.4	7.9
Green Ext Time (p_c), s	0.1	3.0	0.0	0.5	0.0	2.6	0.4	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	70	100	1196	1231	61
Future Volume (veh/h)	75	70	100	1196	1231	61
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	82	76	109	1300	1338	66
Adj No. of Lanes	0	0	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	121	112	302	2793	2717	134
Arrive On Green	0.14	0.13	1.00	1.00	0.79	0.78
Sat Flow, veh/h	843	782	382	3632	3526	169
Grp Volume(v), veh/h	159	0	109	1300	689	715
Grp Sat Flow(s),veh/h/ln	1635	0	382	1770	1770	1833
Q Serve(g_s), s	12.9	0.0	10.6	0.0	18.6	18.8
Cycle Q Clear(g_c), s	12.9	0.0	29.4	0.0	18.6	18.8
Prop In Lane	0.52	0.48	1.00			0.09
Lane Grp Cap(c), veh/h	235	0	302	2793	1400	1450
V/C Ratio(X)	0.68	0.00	0.36	0.47	0.49	0.49
Avail Cap(c_a), veh/h	360	0	302	2793	1400	1450
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.62	0.62	0.40	0.40
Uniform Delay (d), s/veh	57.2	0.0	2.5	0.0	5.0	5.0
Incr Delay (d2), s/veh	3.4	0.0	2.1	0.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	2.3	0.2	12.3	12.7
LnGrp Delay(d),s/veh	60.6	0.0	4.6	0.3	5.5	5.5
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	159			1409	1404	
Approach Delay, s/veh	60.6			0.7	5.5	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		115.7		24.3		115.7		
Change Period (Y+Rc), s		6.0		5.5		6.0		
Max Green Setting (Gmax), s		99.0		29.5		99.0		
Max Q Clear Time (g_c+I1), s		31.4		14.9		20.8		
Green Ext Time (p_c), s		12.3		0.5		8.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	267	563	195	302	443	346	215	697	279	324	794	182
Future Volume (veh/h)	267	563	195	302	443	346	215	697	279	324	794	182
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1788	1863	1900
Adj Flow Rate, veh/h	290	612	212	328	482	376	234	758	303	352	863	198
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	710	246	316	910	647	264	1103	643	385	1072	246
Arrive On Green	0.15	0.28	0.26	0.13	0.26	0.25	0.10	0.31	0.30	0.05	0.12	0.12
Sat Flow, veh/h	1774	2578	892	1774	3539	1576	1774	3539	1567	1703	2855	655
Grp Volume(v), veh/h	290	420	404	328	482	376	234	758	303	352	535	526
Grp Sat Flow(s),veh/h/ln	1774	1770	1700	1774	1770	1576	1774	1770	1567	1703	1770	1741
Q Serve(g_s), s	16.2	31.5	31.7	18.2	16.4	25.9	12.6	26.3	19.8	19.4	41.2	41.2
Cycle Q Clear(g_c), s	16.2	31.5	31.7	18.2	16.4	25.9	12.6	26.3	19.8	19.4	41.2	41.2
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	402	487	468	316	910	647	264	1103	643	385	664	653
V/C Ratio(X)	0.72	0.86	0.86	1.04	0.53	0.58	0.88	0.69	0.47	0.91	0.81	0.81
Avail Cap(c_a), veh/h	428	579	556	316	1042	706	264	1103	643	385	664	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	31.3	48.2	48.8	36.7	44.7	32.0	34.1	42.2	30.3	36.9	56.3	56.5
Incr Delay (d2), s/veh	5.5	11.1	11.6	60.4	0.5	1.0	27.9	3.5	2.5	22.5	8.5	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.3	23.6	23.0	15.6	12.8	17.0	12.9	19.4	13.9	22.0	28.8	28.4
LnGrp Delay(d),s/veh	36.7	59.3	60.4	97.2	45.2	33.0	62.0	45.7	32.8	59.4	64.9	65.1
LnGrp LOS	D	E	E	F	D	C	E	D	C	E	E	E
Approach Vol, veh/h		1114			1186			1295			1413	
Approach Delay, s/veh		53.8			55.7			45.6			63.6	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	42.8	18.0	57.2	25.0	39.8	27.0	48.2
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Max Green Setting (Gmax), s	15.5	43.5	11.5	43.5	20.5	38.5	20.5	34.5
Max Q Clear Time (g_c+I1), s	20.2	33.7	14.6	43.2	18.2	27.9	21.4	28.3
Green Ext Time (p_c), s	0.0	2.6	0.0	0.2	0.3	3.0	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	16	60	0	17	0
Future Vol, veh/h	0	16	60	0	17	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	17	65	0	18	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	82	65
Stage 1	-	-	-	-	65	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	920	999
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	920	999
Mov Cap-2 Maneuver	-	-	-	-	920	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1537	-	-	-	920
HCM Lane V/C Ratio	-	-	-	-	0.02
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1