




















Traffic Modeling Data

HCM 2010 Signalized Intersection Summary
 1: SR 28 & SR 267

Kings Beach EIS
 Existing Conditions - Friday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	508	0	0	517	264	2	0	1	418	0	306
Future Volume (veh/h)	250	508	0	0	517	264	2	0	1	418	0	306
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		0.98	1.00		1.00	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	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	275	558	0	0	539	208	3	0	1	445	0	109
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.75	0.75	0.75	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	1829	0	3	709	272	136	13	19	592	0	545
Arrive On Green	0.18	0.52	0.00	0.00	0.28	0.28	0.35	0.00	0.35	0.35	0.00	0.35
Sat Flow, veh/h	1774	3632	0	1774	2487	956	122	38	53	1399	0	1570
Grp Volume(v), veh/h	275	558	0	0	383	364	4	0	0	445	0	109
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1674	214	0	0	1399	0	1570
Q Serve(g_s), s	10.2	6.1	0.0	0.0	13.4	13.5	0.1	0.0	0.0	0.0	0.0	3.3
Cycle Q Clear(g_c), s	10.2	6.1	0.0	0.0	13.4	13.5	20.7	0.0	0.0	20.6	0.0	3.3
Prop In Lane	1.00		0.00	1.00		0.57	0.75		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	320	1829	0	3	504	477	167	0	0	592	0	545
V/C Ratio(X)	0.86	0.31	0.00	0.00	0.76	0.76	0.02	0.00	0.00	0.75	0.00	0.20
Avail Cap(c_a), veh/h	524	2092	0	262	1046	989	167	0	0	936	0	928
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	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	9.4	0.0	0.0	22.1	22.1	17.4	0.0	0.0	21.2	0.0	15.5
Incr Delay (d2), s/veh	4.1	0.0	0.0	0.0	0.9	1.0	0.0	0.0	0.0	0.7	0.0	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(50%),veh/ln	5.3	3.0	0.0	0.0	6.6	6.3	0.0	0.0	0.0	8.0	0.0	1.4
LnGrp Delay(d),s/veh	31.0	9.4	0.0	0.0	23.0	23.1	17.4	0.0	0.0	21.9	0.0	15.6
LnGrp LOS	C	A			C	C	B			C		B
Approach Vol, veh/h		833			747			4			554	
Approach Delay, s/veh		16.5			23.0			17.4			20.6	
Approach LOS		B			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	39.6		28.1	15.7	23.9		28.1				
Change Period (Y+Rc), s	3.5	4.6		4.6	3.5	4.6		* 4.6				
Max Green Setting (Gmax), s	10.0	40.0		40.0	20.0	40.0		* 12				
Max Q Clear Time (g_c+I1), s	0.0	8.1		22.6	12.2	15.5		22.7				
Green Ext Time (p_c), s	0.0	3.2		0.8	0.1	3.2		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				19.9								
HCM 2010 LOS				B								
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

DRAFT

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↕	↕		↕	↕	
Traffic Vol, veh/h	19	858	0	0	694	24	0	0	0	8	0	44
Future Vol, veh/h	19	858	0	0	694	24	0	0	0	8	0	44
Conflicting Peds, #/hr	0	0	0	0	0	20	0	0	0	20	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	94	94	92	92	92	76	92	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	913	0	0	738	26	0	0	0	11	0	58

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	784	0	0	913
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.12	-	-	4.12
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.218	-	-	2.218
Pot Cap-1 Maneuver	834	-	-	746
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	834	-	-	734
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	0	28.4
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	834	-	-	734	-	-	221
HCM Lane V/C Ratio	-	0.024	-	-	-	-	-	0.31
HCM Control Delay (s)	0	9.4	-	-	0	-	-	28.4
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	1.3

Intersection				
Intersection Delay, s/veh	14.9			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	714	766	56	113
Demand Flow Rate, veh/h	728	781	58	116
Vehicles Circulating, veh/h	46	79	732	793
Vehicles Exiting, veh/h	863	710	42	67
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	62	17	100	90
Ped Cap Adj	0.992	0.998	0.986	0.988
Approach Delay, s/veh	13.8	17.0	8.3	10.6
Approach LOS	B	C	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	728	781	58	116
Cap Entry Lane, veh/h	1079	1044	543	511
Entry HV Adj Factor	0.981	0.981	0.965	0.974
Flow Entry, veh/h	714	766	56	113
Cap Entry, veh/h	1050	1022	517	492
V/C Ratio	0.680	0.750	0.108	0.230
Control Delay, s/veh	13.8	17.0	8.3	10.6
LOS	B	C	A	B
95th %tile Queue, veh	6	7	0	1

Intersection				
Intersection Delay, s/veh 20.7				
Intersection LOS C				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	841	755	40	243
Demand Flow Rate, veh/h	858	770	40	248
Vehicles Circulating, veh/h	131	78	950	763
Vehicles Exiting, veh/h	880	912	39	85
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	1.000	0.997
Approach Delay, s/veh	26.7	16.5	9.6	15.5
Approach LOS	D	C	A	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	858	770	40	248
Cap Entry Lane, veh/h	991	1045	437	527
Entry HV Adj Factor	0.981	0.980	0.996	0.979
Flow Entry, veh/h	841	755	40	243
Cap Entry, veh/h	969	1022	435	514
V/C Ratio	0.868	0.739	0.092	0.472
Control Delay, s/veh	26.7	16.5	9.6	15.5
LOS	D	C	A	C
95th %tile Queue, veh	11	7	0	2

Intersection

Int Delay, s/veh 7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↕	↕		↕	↕	
Traffic Vol, veh/h	22	797	1	4	654	76	1	0	14	43	0	36
Future Vol, veh/h	22	797	1	4	654	76	1	0	14	43	0	36
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	10	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	330	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	94	94	94	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	830	1	4	711	83	1	0	15	54	0	46

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	793	0	0	841	0	0	1671	1689	851	1655	1648	752
Stage 1	-	-	-	-	-	-	887	887	-	761	761	-
Stage 2	-	-	-	-	-	-	784	802	-	894	887	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	828	-	-	794	-	-	76	93	360	78	99	410
Stage 1	-	-	-	-	-	-	339	362	-	398	414	-
Stage 2	-	-	-	-	-	-	386	396	-	336	362	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	828	-	-	787	-	-	65	89	354	72	95	410
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	89	-	72	95	-
Stage 1	-	-	-	-	-	-	327	349	-	387	412	-
Stage 2	-	-	-	-	-	-	341	394	-	310	349	-




















Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	19	121.5
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	273	828	-	-	787	-	-	115
HCM Lane V/C Ratio	0.058	0.028	-	-	0.006	-	-	0.87
HCM Control Delay (s)	19	9.5	-	-	9.6	-	-	121.5
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	5.3

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↖	
Traffic Vol, veh/h	19	828	703	28	26	14
Future Vol, veh/h	19	828	703	28	26	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	910	748	30	41	22
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	778	0	-	0	1715	763
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	952	-
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	839	-	-	-	99	404
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	375	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	839	-	-	-	97	404
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	366	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		55.3	
HCM LOS					F	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	839	-	-	-	132	
HCM Lane V/C Ratio	0.025	-	-	-	0.481	
HCM Control Delay (s)	9.4	-	-	-	55.3	
HCM Lane LOS	A	-	-	-	F	
HCM 95th %tile Q(veh)	0.1	-	-	-	2.2	

HCM 2010 Signalized Intersection Summary
1: SR 28 & SR 267

Kings Beach EIS
Existing Plus Project Conditions - Friday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	511	0	0	520	265	2	0	1	420	0	306
Future Volume (veh/h)	250	511	0	0	520	265	2	0	1	420	0	306
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		0.98	1.00		1.00	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	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	275	562	0	0	542	210	3	0	1	447	0	110
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.75	0.75	0.75	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1865	0	3	730	282	128	13	16	603	0	557
Arrive On Green	0.17	0.53	0.00	0.00	0.29	0.29	0.34	0.00	0.35	0.35	0.00	0.35
Sat Flow, veh/h	1774	3632	0	1774	2484	959	104	39	48	1399	0	1570
Grp Volume(v), veh/h	275	562	0	0	386	366	4	0	0	447	0	110
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1673	191	0	0	1399	0	1570
Q Serve(g_s), s	10.3	6.0	0.0	0.0	13.3	13.4	0.1	0.0	0.0	0.0	0.0	3.3
Cycle Q Clear(g_c), s	10.3	6.0	0.0	0.0	13.3	13.4	20.6	0.0	0.0	20.5	0.0	3.3
Prop In Lane	1.00		0.00	1.00		0.57	0.75		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	309	1865	0	3	520	492	158	0	0	603	0	557
V/C Ratio(X)	0.89	0.30	0.00	0.00	0.74	0.75	0.03	0.00	0.00	0.74	0.00	0.20
Avail Cap(c_a), veh/h	511	2124	0	249	1062	1004	158	0	0	949	0	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	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	9.0	0.0	0.0	21.6	21.8	17.7	0.0	0.0	20.7	0.0	15.1
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.7	0.0	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(50%),veh/ln	5.5	2.9	0.0	0.0	6.5	6.2	0.0	0.0	0.0	7.9	0.0	1.4
LnGrp Delay(d),s/veh	33.7	9.0	0.0	0.0	22.4	22.6	17.8	0.0	0.0	21.4	0.0	15.2
LnGrp LOS	C	A			C	C	B			C		B
Approach Vol, veh/h		837			752			4				557
Approach Delay, s/veh		17.1			22.5			17.8				20.2
Approach LOS		B			C			B				C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	39.6		28.0	15.8	23.9		28.0				
Change Period (Y+Rc), s	3.5	4.6		4.6	3.5	4.6		* 4.6				
Max Green Setting (Gmax), s	10.0	40.0		40.0	20.0	40.0		* 12				
Max Q Clear Time (g_c+I1), s	0.0	8.0		22.5	12.3	15.4		22.6				
Green Ext Time (p_c), s	0.0	3.2		0.8	0.1	3.2		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				19.8								
HCM 2010 LOS				B								
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

DRAFT

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↕			↕		
Traffic Vol, veh/h	19	863	0	0	698	24	0	0	0	8	0	44
Future Vol, veh/h	19	863	0	0	698	24	0	0	0	8	0	44
Conflicting Peds, #/hr	0	0	0	0	0	20	0	0	0	20	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	94	94	92	92	92	76	92	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	918	0	0	743	26	0	0	0	11	0	58
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	788	0	0	918	0	0	1743	1747	938	1754	1734	775
Stage 1	-	-	-	-	-	-	959	959	-	775	775	-
Stage 2	-	-	-	-	-	-	784	788	-	979	959	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	831	-	-	743	-	-	68	86	321	67	88	398
Stage 1	-	-	-	-	-	-	309	335	-	391	408	-
Stage 2	-	-	-	-	-	-	386	402	-	301	335	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	831	-	-	731	-	-	57	83	316	64	84	391
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	83	-	64	84	-
Stage 1	-	-	-	-	-	-	302	327	-	375	401	-
Stage 2	-	-	-	-	-	-	329	395	-	289	327	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0			0			28.7		
HCM LOS	A			A			A			D		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	831	-	-	731	-	-	219				
HCM Lane V/C Ratio	-	0.024	-	-	-	-	-	0.312				
HCM Control Delay (s)	0	9.4	-	-	0	-	-	28.7				
HCM Lane LOS	A	A	-	-	A	-	-	D				
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	1.3				

Intersection				
Intersection Delay, s/veh	15.2			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	720	770	63	114
Demand Flow Rate, veh/h	735	785	65	117
Vehicles Circulating, veh/h	50	83	734	801
Vehicles Exiting, veh/h	868	716	51	67
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	62	17	100	90
Ped Cap Adj	0.992	0.998	0.986	0.988
Approach Delay, s/veh	14.2	17.4	8.5	10.8
Approach LOS	B	C	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	735	785	65	117
Cap Entry Lane, veh/h	1075	1040	542	507
Entry HV Adj Factor	0.980	0.981	0.969	0.974
Flow Entry, veh/h	720	770	63	114
Cap Entry, veh/h	1044	1018	518	488
V/C Ratio	0.690	0.757	0.122	0.234
Control Delay, s/veh	14.2	17.4	8.5	10.8
LOS	B	C	A	B
95th %tile Queue, veh	6	8	0	1

Intersection				
Intersection Delay, s/veh20.0				
Intersection LOS C				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	839	749	43	243
Demand Flow Rate, veh/h	856	764	43	248
Vehicles Circulating, veh/h	123	73	937	752
Vehicles Exiting, veh/h	877	907	42	85
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	1.000	0.997
Approach Delay, s/veh	25.6	16.0	9.5	15.2
Approach LOS	D	C	A	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	856	764	43	248
Cap Entry Lane, veh/h	999	1050	443	533
Entry HV Adj Factor	0.981	0.980	0.996	0.979
Flow Entry, veh/h	839	749	43	243
Cap Entry, veh/h	977	1027	441	520
V/C Ratio	0.859	0.729	0.097	0.467
Control Delay, s/veh	25.6	16.0	9.5	15.2
LOS	D	C	A	C
95th %tile Queue, veh	11	7	0	2

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	801	1	4	657	76	1	0	14	43	0	36
Future Vol, veh/h	22	801	1	4	657	76	1	0	14	43	0	36
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	10	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	330	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	94	94	94	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	834	1	4	714	83	1	0	15	54	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	797	0	0	845	0	0	1678	1696	855	1662	1655	755
Stage 1	-	-	-	-	-	-	891	891	-	764	764	-
Stage 2	-	-	-	-	-	-	787	805	-	898	891	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	825	-	-	792	-	-	75	93	358	77	98	409
Stage 1	-	-	-	-	-	-	337	361	-	396	413	-
Stage 2	-	-	-	-	-	-	385	395	-	334	361	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	825	-	-	785	-	-	64	89	352	71	94	409
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	89	-	71	94	-
Stage 1	-	-	-	-	-	-	325	348	-	385	411	-
Stage 2	-	-	-	-	-	-	340	393	-	308	348	-




















Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	19.1	124
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	271	825	-	-	785	-	-	114
HCM Lane V/C Ratio	0.059	0.028	-	-	0.006	-	-	0.877
HCM Control Delay (s)	19.1	9.5	-	-	9.6	-	-	124
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	5.3

Intersection							
Int Delay, s/veh	2.1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	↖	↗	↖		↖		
Traffic Vol, veh/h	19	832	706	28	26	14	
Future Vol, veh/h	19	832	706	28	26	14	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	60	-	-	-	0	-	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	91	91	94	94	63	63	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	21	914	751	30	41	22	
Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	781	0	-	0	1722	766	
Stage 1	-	-	-	-	766	-	
Stage 2	-	-	-	-	956	-	
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	837	-	-	-	98	403	
Stage 1	-	-	-	-	459	-	
Stage 2	-	-	-	-	373	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	837	-	-	-	96	403	
Mov Cap-2 Maneuver	-	-	-	-	96	-	
Stage 1	-	-	-	-	459	-	
Stage 2	-	-	-	-	364	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.2		0		56		
HCM LOS					F		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	837	-	-	-	131		
HCM Lane V/C Ratio	0.025	-	-	-	0.485		
HCM Control Delay (s)	9.4	-	-	-	56		
HCM Lane LOS	A	-	-	-	F		
HCM 95th %tile Q(veh)	0.1	-	-	-	2.2		

HCM 2010 Signalized Intersection Summary
 1: SR 28 & SR 267

Kings Beach EIS
 Cumulative No Project Conditions - Friday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	666	1	0	562	323	1	1	0	367	2	386
Future Volume (veh/h)	279	666	1	0	562	323	1	1	0	367	2	386
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		0.98	1.00		1.00	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	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	307	732	1	0	585	255	1	1	0	390	2	127
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.75	0.75	0.75	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	1813	2	2	655	285	55	38	0	451	2	639
Arrive On Green	0.19	0.50	0.50	0.00	0.27	0.27	0.41	0.41	0.00	0.41	0.41	0.41
Sat Flow, veh/h	1774	3626	5	1774	2387	1039	0	93	0	929	5	1572
Grp Volume(v), veh/h	307	357	376	0	433	407	2	0	0	392	0	127
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1657	93	0	0	934	0	1572
Q Serve(g_s), s	16.7	12.4	12.4	0.0	23.2	23.2	0.0	0.0	0.0	0.0	0.0	5.1
Cycle Q Clear(g_c), s	16.7	12.4	12.4	0.0	23.2	23.2	40.0	0.0	0.0	40.0	0.0	5.1
Prop In Lane	1.00		0.00	1.00		0.63	0.50		0.00	0.99		1.00
Lane Grp Cap(c), veh/h	337	885	931	2	485	454	93	0	0	453	0	639
V/C Ratio(X)	0.91	0.40	0.40	0.00	0.89	0.89	0.02	0.00	0.00	0.87	0.00	0.20
Avail Cap(c_a), veh/h	361	885	931	180	719	674	93	0	0	453	0	639
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.0	15.4	15.4	0.0	34.3	34.3	24.7	0.0	0.0	29.8	0.0	18.8
Incr Delay (d2), s/veh	24.5	0.1	0.1	0.0	7.2	7.8	0.0	0.0	0.0	15.4	0.0	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(50%),veh/ln	10.5	6.1	6.4	0.0	12.3	11.6	0.0	0.0	0.0	12.5	0.0	2.2
LnGrp Delay(d),s/veh	63.5	15.5	15.5	0.0	41.5	42.2	24.7	0.0	0.0	45.2	0.0	18.9
LnGrp LOS	E	B	B		D	D	C			D		B
Approach Vol, veh/h		1040			840			2			519	
Approach Delay, s/veh		29.7			41.8			24.7			38.8	
Approach LOS		C			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	53.8		44.6	22.2	31.6		44.6				
Change Period (Y+Rc), s	3.5	4.6		4.6	3.5	4.6		* 4.6				
Max Green Setting (Gmax), s	10.0	40.0		40.0	20.0	40.0		* 12				
Max Q Clear Time (g_c+I1), s	0.0	14.4		42.0	18.7	25.2		42.0				
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	1.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			35.9									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

DRAFT

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↕				↕	
Traffic Vol, veh/h	40	880	10	0	785	0	0	0	5	15	1	40
Future Vol, veh/h	40	880	10	0	785	0	0	0	5	15	1	40
Conflicting Peds, #/hr	0	0	0	0	0	20	0	0	0	20	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	94	94	92	92	92	76	92	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	936	11	0	835	0	0	0	5	20	1	53
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	855	0	0	947	0	0	1889	1882	962	1904	1887	855
Stage 1	-	-	-	-	-	-	1027	1027	-	855	855	-
Stage 2	-	-	-	-	-	-	862	855	-	1049	1032	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	785	-	-	725	-	-	53	71	310	52	70	358
Stage 1	-	-	-	-	-	-	283	312	-	353	375	-
Stage 2	-	-	-	-	-	-	350	375	-	275	310	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	785	-	-	713	-	-	43	66	305	47	65	352
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	66	-	47	65	-
Stage 1	-	-	-	-	-	-	267	295	-	328	369	-
Stage 2	-	-	-	-	-	-	297	369	-	251	293	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0			17			68.4		
HCM LOS							C			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	305	785	-	-	713	-	-	125				
HCM Lane V/C Ratio	0.018	0.054	-	-	-	-	-	0.588				
HCM Control Delay (s)	17	9.8	-	-	0	-	-	68.4				
HCM Lane LOS	C	A	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	2.9				

Intersection				
Intersection Delay, s/veh	17.4			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	742	781	58	186
Demand Flow Rate, veh/h	757	797	60	190
Vehicles Circulating, veh/h	78	115	779	811
Vehicles Exiting, veh/h	923	723	56	101
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	62	17	100	90
Ped Cap Adj	0.992	0.998	0.986	0.988
Approach Delay, s/veh	16.1	20.0	8.8	13.9
Approach LOS	C	C	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	757	797	60	190
Cap Entry Lane, veh/h	1045	1007	518	502
Entry HV Adj Factor	0.980	0.980	0.966	0.979
Flow Entry, veh/h	742	781	58	186
Cap Entry, veh/h	1016	985	494	486
V/C Ratio	0.730	0.793	0.117	0.383
Control Delay, s/veh	16.1	20.0	8.8	13.9
LOS	C	C	A	B
95th %tile Queue, veh	7	9	0	2




















Intersection				
Intersection Delay, s/veh	31.5			
Intersection LOS	D			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	869	767	40	391
Demand Flow Rate, veh/h	887	783	40	398
Vehicles Circulating, veh/h	208	113	1013	764
Vehicles Exiting, veh/h	954	940	82	132
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	1.000	0.997
Approach Delay, s/veh	44.3	19.0	10.2	29.5
Approach LOS	E	C	B	D
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	887	783	40	398
Cap Entry Lane, veh/h	918	1009	410	526
Entry HV Adj Factor	0.980	0.980	0.996	0.982
Flow Entry, veh/h	869	767	40	391
Cap Entry, veh/h	897	986	409	515
V/C Ratio	0.969	0.778	0.097	0.758
Control Delay, s/veh	44.3	19.0	10.2	29.5
LOS	E	C	B	D
95th %tile Queue, veh	16	8	0	7

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↕	↕		↕	↕	
Traffic Vol, veh/h	30	796	1	10	633	60	10	4	10	15	1	40
Future Vol, veh/h	30	796	1	10	633	60	10	4	10	15	1	40
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	10	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	330	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	94	94	94	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	829	1	11	688	65	11	4	11	19	1	51
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	753	0	0	840	0	0	1670	1677	850	1652	1645	721
Stage 1	-	-	-	-	-	-	902	902	-	742	742	-
Stage 2	-	-	-	-	-	-	768	775	-	910	903	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	857	-	-	795	-	-	76	95	360	79	99	427
Stage 1	-	-	-	-	-	-	332	356	-	408	422	-
Stage 2	-	-	-	-	-	-	394	408	-	329	356	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	857	-	-	788	-	-	63	90	354	70	93	427
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	90	-	70	93	-
Stage 1	-	-	-	-	-	-	317	340	-	393	416	-
Stage 2	-	-	-	-	-	-	341	402	-	301	340	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			50.5			38.6		
HCM LOS							F			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	104	857	-	-	788	-	-	176				
HCM Lane V/C Ratio	0.245	0.036	-	-	0.014	-	-	0.403				
HCM Control Delay (s)	50.5	9.4	-	-	9.6	-	-	38.6				
HCM Lane LOS	F	A	-	-	A	-	-	E				
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0	-	-	1.8				

Intersection							
Int Delay, s/veh	3						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Vol, veh/h	18	813	664	35	35	15	
Future Vol, veh/h	18	813	664	35	35	15	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	60	-	-	-	0	-	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	91	91	94	94	63	63	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	20	893	706	37	56	24	
Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	744	0	-	0	1658	725	
Stage 1	-	-	-	-	725	-	
Stage 2	-	-	-	-	933	-	
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	864	-	-	-	107	425	
Stage 1	-	-	-	-	479	-	
Stage 2	-	-	-	-	383	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	864	-	-	-	105	425	
Mov Cap-2 Maneuver	-	-	-	-	105	-	
Stage 1	-	-	-	-	479	-	
Stage 2	-	-	-	-	374	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.2		0		63.2		
HCM LOS					F		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	864	-	-	-	136		
HCM Lane V/C Ratio	0.023	-	-	-	0.584		
HCM Control Delay (s)	9.3	-	-	-	63.2		
HCM Lane LOS	A	-	-	-	F		
HCM 95th %tile Q(veh)	0.1	-	-	-	3		

HCM 2010 Signalized Intersection Summary
 1: SR 28 & SR 267

Kings Beach EIS
 Cumulative Plus Project Conditions - Friday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	669	1	0	565	324	1	1	0	369	2	386
Future Volume (veh/h)	279	669	1	0	565	324	1	1	0	369	2	386
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		0.98	1.00		1.00	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	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	307	735	1	0	589	257	1	1	0	393	2	129
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.75	0.75	0.75	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	1818	2	2	658	287	55	38	0	450	2	637
Arrive On Green	0.19	0.50	0.50	0.00	0.28	0.28	0.41	0.41	0.00	0.41	0.41	0.41
Sat Flow, veh/h	1774	3626	5	1774	2386	1040	0	93	0	929	5	1572
Grp Volume(v), veh/h	307	359	377	0	437	409	2	0	0	395	0	129
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1657	93	0	0	934	0	1572
Q Serve(g_s), s	16.7	12.5	12.5	0.0	23.4	23.5	0.0	0.0	0.0	0.0	0.0	5.2
Cycle Q Clear(g_c), s	16.7	12.5	12.5	0.0	23.4	23.5	40.0	0.0	0.0	40.0	0.0	5.2
Prop In Lane	1.00		0.00	1.00		0.63	0.50		0.00	0.99		1.00
Lane Grp Cap(c), veh/h	337	887	934	2	488	457	92	0	0	451	0	637
V/C Ratio(X)	0.91	0.40	0.40	0.00	0.89	0.90	0.02	0.00	0.00	0.87	0.00	0.20
Avail Cap(c_a), veh/h	360	887	934	180	717	672	92	0	0	451	0	637
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.1	15.4	15.4	0.0	34.3	34.4	24.8	0.0	0.0	30.2	0.0	19.0
Incr Delay (d2), s/veh	24.7	0.1	0.1	0.0	7.5	8.1	0.0	0.0	0.0	16.6	0.0	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(50%),veh/ln	10.5	6.1	6.4	0.0	12.4	11.7	0.0	0.0	0.0	12.7	0.0	2.3
LnGrp Delay(d),s/veh	63.8	15.5	15.5	0.0	41.9	42.5	24.8	0.0	0.0	46.8	0.0	19.1
LnGrp LOS	E	B	B		D	D	C			D		B
Approach Vol, veh/h		1043			846			2			524	
Approach Delay, s/veh		29.7			42.2			24.8			39.9	
Approach LOS		C			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	54.1		44.6	22.2	31.8		44.6				
Change Period (Y+Rc), s	3.5	4.6		4.6	3.5	4.6		* 4.6				
Max Green Setting (Gmax), s	10.0	40.0		40.0	20.0	40.0		* 12				
Max Q Clear Time (g_c+I1), s	0.0	14.5		42.0	18.7	25.5		42.0				
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	1.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				36.3								
HCM 2010 LOS				D								
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

DRAFT

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	885	10	0	789	0	0	0	5	15	1	40
Future Vol, veh/h	40	885	10	0	789	0	0	0	5	15	1	40
Conflicting Peds, #/hr	0	0	0	0	0	20	0	0	0	20	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	94	94	92	92	92	76	92	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	941	11	0	839	0	0	0	5	20	1	53
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	859	0	0	952	0	0	1898	1891	967	1914	1896	859
Stage 1	-	-	-	-	-	-	1032	1032	-	859	859	-
Stage 2	-	-	-	-	-	-	866	859	-	1055	1037	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	782	-	-	722	-	-	53	70	308	51	70	356
Stage 1	-	-	-	-	-	-	281	310	-	351	373	-
Stage 2	-	-	-	-	-	-	348	373	-	273	308	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	782	-	-	710	-	-	43	65	303	46	65	350
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	65	-	46	65	-
Stage 1	-	-	-	-	-	-	266	293	-	326	367	-
Stage 2	-	-	-	-	-	-	295	367	-	249	291	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0			17.1			70.4		
HCM LOS							C			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	303	782	-	-	710	-	-	123				
HCM Lane V/C Ratio	0.018	0.054	-	-	-	-	-	0.597				
HCM Control Delay (s)	17.1	9.9	-	-	0	-	-	70.4				
HCM Lane LOS	C	A	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	3				

Intersection				
Intersection Delay, s/veh	17.7			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	748	784	64	187
Demand Flow Rate, veh/h	764	800	66	191
Vehicles Circulating, veh/h	81	118	781	817
Vehicles Exiting, veh/h	927	729	64	101
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	62	17	100	90
Ped Cap Adj	0.992	0.998	0.986	0.988
Approach Delay, s/veh	16.6	20.4	9.0	14.0
Approach LOS	C	C	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	764	800	66	191
Cap Entry Lane, veh/h	1042	1004	517	499
Entry HV Adj Factor	0.979	0.980	0.969	0.979
Flow Entry, veh/h	748	784	64	187
Cap Entry, veh/h	1012	982	495	483
V/C Ratio	0.739	0.799	0.129	0.387
Control Delay, s/veh	16.6	20.4	9.0	14.0
LOS	C	C	A	B
95th %tile Queue, veh	7	9	0	2

Intersection				
Intersection Delay, s/veh	32.3			
Intersection LOS	D			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	874	770	43	391
Demand Flow Rate, veh/h	892	786	43	398
Vehicles Circulating, veh/h	209	115	1016	769
Vehicles Exiting, veh/h	958	944	85	132
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	1.000	0.997
Approach Delay, s/veh	45.8	19.3	10.4	29.9
Approach LOS	E	C	B	D
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	892	786	43	398
Cap Entry Lane, veh/h	917	1007	409	524
Entry HV Adj Factor	0.980	0.980	0.996	0.982
Flow Entry, veh/h	874	770	43	391
Cap Entry, veh/h	896	984	408	513
V/C Ratio	0.976	0.783	0.105	0.762
Control Delay, s/veh	45.8	19.3	10.4	29.9
LOS	E	C	B	D
95th %tile Queue, veh	17	8	0	7

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↕			↕		
Traffic Vol, veh/h	30	800	1	10	636	60	10	4	10	15	1	40
Future Vol, veh/h	30	800	1	10	636	60	10	4	10	15	1	40
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	10	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	110	-	-	330	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	94	94	94	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	833	1	11	691	65	11	4	11	19	1	51
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	757	0	0	844	0	0	1678	1684	854	1660	1653	724
Stage 1	-	-	-	-	-	-	906	906	-	746	746	-
Stage 2	-	-	-	-	-	-	772	778	-	914	907	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	854	-	-	792	-	-	75	94	358	78	98	426
Stage 1	-	-	-	-	-	-	331	355	-	405	421	-
Stage 2	-	-	-	-	-	-	392	407	-	327	355	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	854	-	-	785	-	-	62	89	352	70	92	426
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	89	-	70	92	-
Stage 1	-	-	-	-	-	-	316	339	-	390	415	-
Stage 2	-	-	-	-	-	-	340	401	-	299	339	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			51.7			38.6		
HCM LOS							F			E		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	102	854	-	-	785	-	-	176				
HCM Lane V/C Ratio	0.25	0.037	-	-	0.014	-	-	0.403				
HCM Control Delay (s)	51.7	9.4	-	-	9.7	-	-	38.6				
HCM Lane LOS	F	A	-	-	A	-	-	E				
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0	-	-	1.8				

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↗	
Traffic Vol, veh/h	18	817	667	35	35	15
Future Vol, veh/h	18	817	667	35	35	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	898	710	37	56	24
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	747	0	-	0	1665	728
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	937	-
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	861	-	-	-	106	423
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	381	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	861	-	-	-	104	423
Mov Cap-2 Maneuver	-	-	-	-	104	-
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	372	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		64.9	
HCM LOS					F	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	861	-	-	-	134	
HCM Lane V/C Ratio	0.023	-	-	-	0.592	
HCM Control Delay (s)	9.3	-	-	-	64.9	
HCM Lane LOS	A	-	-	-	F	
HCM 95th %tile Q(veh)	0.1	-	-	-	3	