Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	61	78	97	59	332	160	2284	96	123	955	34
Future Volume (vph)	50	61	78	97	59	332	160	2284	96	123	955	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	800		150
Storage Lanes	0		1	1		1	1		1	2		1
Taper Length (ft)	25			25			145			225		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.978		0.950			0.950			0.950		
Satd. Flow (prot)	0	1822	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted		0.825		0.559			0.950			0.950		
Satd. Flow (perm)	0	1537	1583	1041	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			193			80			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			1032	
Travel Time (s)		22.9			2.9			6.7			12.8	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	120	85	105	64	361	174	2483	104	134	1038	37
Turn Type	D.Pm	NA	custom	D.Pm	NA	Free	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		Free			2			6
Detector Phase	4	8	4	8	4		1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0		4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5		12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0		20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%		11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5	7.0	6.5		8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		20.6	21.1	20.6	21.1	170.0	13.9	114.8	112.0	11.1	112.0	114.8
Actuated g/C Ratio		0.12	0.12	0.12	0.12	1.00	0.08	0.68	0.66	0.07	0.66	0.68
v/c Ratio		0.65	0.31	0.84	0.28	0.23	1.20	1.04	0.10	0.60	0.45	0.03
Control Delay		87.2	14.0	117.7	69.8	0.3	199.3	57.1	3.3	88.6	14.7	0.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		87.2	14.0	117.7	69.8	0.3	199.3	57.1	3.3	88.6	14.7	0.1
LOS		F	B	F	E	A	F	E	A	F	B	A
Approach Delay		56.9			32.0			64.0			22.5	
Approach LOS		E			C			E			C	
Queue Length 50th (ft)		127	0	114	65	0	~263	~1598	9	76	278	0
Queue Length 95th (ft)		203	54	#218	117	0	#432	#1709	32	115	325	0
Internal Link Dist (ft)		926			70			460			952	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	800		150
Base Capacity (vph)		207	293	140	257	1583	145	2389	1070	232	2331	1095
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.58	0.29	0.75	0.25	0.23	1.20	1.04	0.10	0.58	0.45	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 49.4		Intersection LOS: D	
Intersection Capacity Utilization 98.9%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	133	124	5	351	2	102	2	12	1	2	22
Future Volume (vph)	16	133	124	5	351	2	102	2	12	1	2	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	105		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.932			0.999			0.969			0.880	
Flt Protected		0.997			0.999		0.950	0.963			0.998	
Satd. Flow (prot)	0	3289	0	0	3532	0	1681	1651	0	0	1636	0
Flt Permitted		0.997			0.999		0.950	0.963			0.998	
Satd. Flow (perm)	0	3289	0	0	3532	0	1681	1651	0	0	1636	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			340			1037			952	
Travel Time (s)		2.9			6.6			28.3			26.0	
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
Shared Lane Traffic (%)							43%					
Lane Group Flow (vph)	0	297	0	0	389	0	63	63	0	0	27	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	133	124	5	351	2	102	2	12	1	2	22
Future Vol, veh/h	16	133	124	5	351	2	102	2	12	1	2	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	-	-	-	-
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	17	145	135	5	382	2	111	2	13	1	2	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	384	0	0	280	0	0	449	641	140	501	707	192
Stage 1	-	-	-	-	-	-	247	247	-	393	393	-
Stage 2	-	-	-	-	-	-	202	394	-	108	314	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1171	-	-	1280	-	-	493	391	882	453	359	817
Stage 1	-	-	-	-	-	-	735	701	-	603	604	-
Stage 2	-	-	-	-	-	-	781	604	-	886	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1280	-	-	468	382	882	437	351	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	382	-	437	351	-
Stage 1	-	-	-	-	-	-	723	689	-	593	601	-
Stage 2	-	-	-	-	-	-	752	601	-	855	644	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	13.5	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	468	525	1171	-	-	1280	-	-	716
HCM Lane V/C Ratio	0.158	0.099	0.015	-	-	0.004	-	-	0.038
HCM Control Delay (s)	14.1	12.6	8.1	0.1	-	7.8	0	-	10.2
HCM Lane LOS	B	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.3	0	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	36	2	95	43	4	77
Future Volume (vph)	36	2	95	43	4	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.850		
Flt Protected	0.955					0.998
Satd. Flow (prot)	1766	0	1863	1583	0	1859
Flt Permitted	0.955					0.998
Satd. Flow (perm)	1766	0	1863	1583	0	1859
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	0	103	47	0	88
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	2	95	43	4	77
Future Vol, veh/h	36	2	95	43	4	77
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	-	-	115	-	-
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	39	2	103	47	4	84

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	195	103	0	0	150	0
Stage 1	103	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	794	952	-	-	1431	-
Stage 1	921	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	792	952	-	-	1431	-
Mov Cap-2 Maneuver	792	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	799	1431	-
HCM Lane V/C Ratio	-	-	0.052	0.003	-
HCM Control Delay (s)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	65	22	5	33	16	4
Future Volume (vph)	65	22	5	33	16	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966				0.974	
Flt Protected				0.994	0.961	
Satd. Flow (prot)	1799	0	0	1852	1744	0
Flt Permitted				0.994	0.961	
Satd. Flow (perm)	1799	0	0	1852	1744	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	0	41	21	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	65	22	5	33	16	4
Future Vol, veh/h	65	22	5	33	16	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	71	24	5	36	17	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	129	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	46	-
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	-	-	1499	-	865	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1499	-	862	976
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	976	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	883	-	-	1499	-
HCM Lane V/C Ratio	0.025	-	-	0.004	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	0	0	25	5	1271	5	10	1078	0
Future Volume (vph)	1	0	0	0	0	25	5	1271	5	10	1078	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt					0.850			0.999				
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1770	0	1863	1583	0	1770	3536	0	1770	3539	0
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1770	0	1863	1583	0	1770	3536	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	0	27	0	5	1387	0	11	1172	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

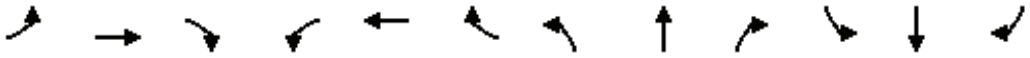
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	25	5	1271	5	10	1078	0
Future Vol, veh/h	1	0	0	0	0	25	5	1271	5	10	1078	0
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	-	-	-	25	-	-	100	-	-	175	-	-
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	1	0	0	0	0	27	5	1382	5	11	1172	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1895	2591	586	2003	2589	694	1172	0	0	1387	0	0
Stage 1	1194	1194	-	1395	1395	-	-	-	-	-	-	-
Stage 2	701	1397	-	608	1194	-	-	-	-	-	-	-
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	42	25	454	35	25	385	592	-	-	490	-	-
Stage 1	198	258	-	149	207	-	-	-	-	-	-	-
Stage 2	395	206	-	450	258	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	24	454	34	24	385	592	-	-	490	-	-
Mov Cap-2 Maneuver	38	24	-	34	24	-	-	-	-	-	-	-
Stage 1	196	252	-	148	205	-	-	-	-	-	-	-
Stage 2	364	204	-	440	252	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	102.5	15.1	0	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	592	-	-	38	-	385	490	-	-
HCM Lane V/C Ratio	0.009	-	-	0.029	-	0.071	0.022	-	-
HCM Control Delay (s)	11.1	-	-	102.5	0	15.1	12.5	-	-
HCM Lane LOS	B	-	-	F	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.2	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	13	0	0	17	0	0	0	0	0	0	0
Future Volume (vph)	0	13	0	0	17	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	14	0	0	18	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 6.7%		ICU Level of Service A	
Analysis Period (min) 15			

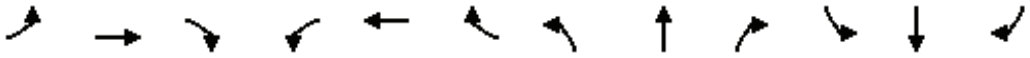
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	13	0	0	17	0	0	0	0	0	0	0
Future Vol, veh/h	0	13	0	0	17	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	0	14	0	0	18	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	14	0	0	32	32	14	32	32	18
Stage 1	-	-	-	-	-	-	14	14	-	18	18	-
Stage 2	-	-	-	-	-	-	18	18	-	14	14	-
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	1599	-	-	1604	-	-	976	861	1066	976	861	1061
Stage 1	-	-	-	-	-	-	1006	884	-	1001	880	-
Stage 2	-	-	-	-	-	-	1001	880	-	1006	884	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1604	-	-	976	861	1066	976	861	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	976	861	-	976	861	-
Stage 1	-	-	-	-	-	-	1006	884	-	1001	880	-
Stage 2	-	-	-	-	-	-	1001	880	-	1006	884	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1599	-	-	1604	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	13	0	0	17	0	0	0	0	0	0	0
Future Volume (vph)	0	13	0	0	17	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1863	0	0	1863	0	0	1863	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	14	0	0	18	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 6.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	13	0	0	17	0	0	0	0	0	0	0
Future Vol, veh/h	0	13	0	0	17	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	0	14	0	0	18	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	14	0	0	32	32	14	32	32	18
Stage 1	-	-	-	-	-	-	14	14	-	18	18	-
Stage 2	-	-	-	-	-	-	18	18	-	14	14	-
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	1599	-	-	1604	-	-	976	861	1066	976	861	1061
Stage 1	-	-	-	-	-	-	1006	884	-	1001	880	-
Stage 2	-	-	-	-	-	-	1001	880	-	1006	884	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1604	-	-	976	861	1066	976	861	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	976	861	-	976	861	-
Stage 1	-	-	-	-	-	-	1006	884	-	1001	880	-
Stage 2	-	-	-	-	-	-	1001	880	-	1006	884	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1599	-	-	1604	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	20	67	78	29	221	76	939	89	167	906	33
Future Volume (vph)	28	20	67	78	29	221	76	939	89	167	906	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	800		150
Storage Lanes	0		1	1		1	1		1	2		1
Taper Length (ft)	25			25			145			225		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.972		0.950			0.950			0.950		
Satd. Flow (prot)	0	1811	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted		0.804		0.723			0.950			0.950		
Satd. Flow (perm)	0	1498	1583	1347	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			240			97			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			1032	
Travel Time (s)		22.9			2.9			6.7			12.8	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	52	73	85	32	240	83	1021	97	182	985	36
Turn Type	D.Pm	NA	custom	D.Pm	NA	Free	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		Free			2			6
Detector Phase	4	8	4	8	4		1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0		4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5		12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0		20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%		11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5	7.0	6.5		8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		17.2	17.7	17.2	17.7	170.0	12.6	115.8	116.7	13.5	116.7	115.8
Actuated g/C Ratio		0.10	0.10	0.10	0.10	1.00	0.07	0.68	0.69	0.08	0.69	0.68
v/c Ratio		0.34	0.30	0.62	0.17	0.15	0.63	0.42	0.09	0.67	0.41	0.03
Control Delay		76.1	10.8	92.4	69.4	0.2	96.7	13.2	1.9	87.8	12.6	0.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		76.1	10.8	92.4	69.4	0.2	96.7	13.2	1.9	87.8	12.6	0.1
LOS		E	B	F	E	A	F	B	A	F	B	A
Approach Delay		38.0			28.4			18.0			23.6	
Approach LOS		D			C			B			C	
Queue Length 50th (ft)		55	0	93	33	0	90	263	0	102	245	0
Queue Length 95th (ft)		100	37	153	69	0	#178	318	22	#166	303	0
Internal Link Dist (ft)		926			70			460			952	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	800		150
Base Capacity (vph)		202	293	182	257	1583	135	2410	1117	273	2428	1103
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.26	0.25	0.47	0.12	0.15	0.61	0.42	0.09	0.67	0.41	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	179	88	1	267	1	39	1	5	0	0	5
Future Volume (vph)	4	179	88	1	267	1	39	1	5	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	105		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.951			0.999			0.969			0.865	
Flt Protected		0.999					0.950	0.964				
Satd. Flow (prot)	0	3362	0	0	3536	0	1681	1653	0	0	1611	0
Flt Permitted		0.999					0.950	0.964				
Satd. Flow (perm)	0	3362	0	0	3536	0	1681	1653	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			340			1037			952	
Travel Time (s)		2.9			6.6			28.3			26.0	
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
Shared Lane Traffic (%)							42%					
Lane Group Flow (vph)	0	295	0	0	292	0	24	24	0	0	5	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.3%		ICU Level of Service A	
Analysis Period (min) 15			

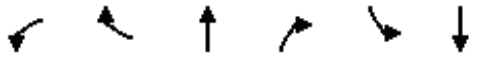
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	179	88	1	267	1	39	1	5	0	0	5
Future Vol, veh/h	4	179	88	1	267	1	39	1	5	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	-	-	-	-
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	195	96	1	290	1	42	1	5	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	291	0	0	291	0	0	398	544	146	399	592	146
Stage 1	-	-	-	-	-	-	251	251	-	293	293	-
Stage 2	-	-	-	-	-	-	147	293	-	106	299	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1268	-	-	1268	-	-	536	445	875	536	418	875
Stage 1	-	-	-	-	-	-	731	698	-	691	669	-
Stage 2	-	-	-	-	-	-	841	669	-	888	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1268	-	-	1268	-	-	531	443	875	530	416	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	531	443	-	530	416	-
Stage 1	-	-	-	-	-	-	728	695	-	688	668	-
Stage 2	-	-	-	-	-	-	835	668	-	878	662	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.9	9.1
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	531	585	1268	-	-	1268	-	-	875
HCM Lane V/C Ratio	0.053	0.035	0.003	-	-	0.001	-	-	0.006
HCM Control Delay (s)	12.2	11.4	7.8	0	-	7.8	0	-	9.1
HCM Lane LOS	B	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-	0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	18	126	35	6	161
Future Volume (vph)	41	18	126	35	6	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958			0.850		
Flt Protected	0.967					0.998
Satd. Flow (prot)	1726	0	1863	1583	0	1859
Flt Permitted	0.967					0.998
Satd. Flow (perm)	1726	0	1863	1583	0	1859
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	137	38	0	182
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	41	18	126	35	6	161
Future Vol, veh/h	41	18	126	35	6	161
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	-	-	115	-	-
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	45	20	137	38	7	175

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	326	137	0	0	175	0
Stage 1	137	-	-	-	-	-
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	668	911	-	-	1401	-
Stage 1	890	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	664	911	-	-	1401	-
Mov Cap-2 Maneuver	664	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	843	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	724	1401	-
HCM Lane V/C Ratio	-	-	0.089	0.005	-
HCM Control Delay (s)	-	-	10.5	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	37	17	0	39	22	0
Future Volume (vph)	37	17	0	39	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958					
Flt Protected					0.950	
Satd. Flow (prot)	1785	0	0	1863	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	1785	0	0	1863	1770	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	0	42	24	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

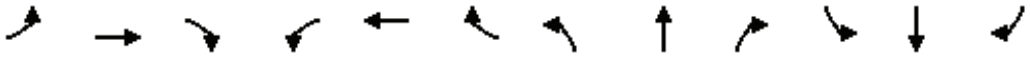
Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	37	17	0	39	22	0
Future Vol, veh/h	37	17	0	39	22	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	40	18	0	42	24	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	58	0	91	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	42	-
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	-	-	1546	-	909	1020
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1546	-	909	1020
Mov Cap-2 Maneuver	-	-	-	-	909	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	909	-	-	1546	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	9.1	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	2	18	0	44	4	1072	16	50	2009	0
Future Volume (vph)	0	0	2	18	0	44	4	1072	16	50	2009	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.865			0.850			0.998				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	1611	0	1770	1583	0	1770	3532	0	1770	3539	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	1611	0	1770	1583	0	1770	3532	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	20	48	0	4	1182	0	54	2184	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.9%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4

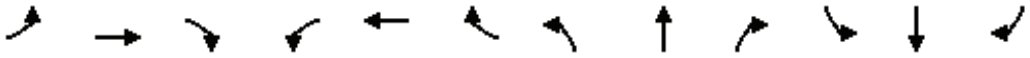
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	18	0	44	4	1072	16	50	2009	0
Future Vol, veh/h	0	0	2	18	0	44	4	1072	16	50	2009	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	100	-	-	175	-	-
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	0	0	2	20	0	48	4	1165	17	54	2184	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2883	3482	1092	2382	3474	591	2184	0	0	1182	0	0
Stage 1	2292	2292	-	1182	1182	-	-	-	-	-	-	-
Stage 2	591	1190	-	1200	2292	-	-	-	-	-	-	-
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	7	6	210	~ 18	6	450	239	-	-	587	-	-
Stage 1	40	73	-	201	262	-	-	-	-	-	-	-
Stage 2	460	259	-	196	73	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	6	5	210	~ 16	5	450	239	-	-	587	-	-
Mov Cap-2 Maneuver	6	5	-	~ 16	5	-	-	-	-	-	-	-
Stage 1	39	66	-	198	258	-	-	-	-	-	-	-
Stage 2	404	255	-	176	66	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.3	194.4	0.1	0.3
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	239	-	-	210	16	450	587	-	-
HCM Lane V/C Ratio	0.018	-	-	0.01	1.223	0.106	0.093	-	-
HCM Control Delay (s)	20.3	-	-	22.3	$ 635.6	13.9	11.8	-	-
HCM Lane LOS	C	-	-	C	F	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	2.9	0.4	0.3	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	14	0	0	8	43	0	0	0	84	0	17
Future Volume (vph)	9	14	0	0	8	43	0	0	0	84	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.887						0.978	
Flt Protected		0.980									0.960	
Satd. Flow (prot)	0	1825	0	0	1652	0	0	1863	0	0	1749	0
Flt Permitted		0.980									0.960	
Satd. Flow (perm)	0	1825	0	0	1652	0	0	1863	0	0	1749	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	56	0	0	0	0	0	109	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.3%		ICU Level of Service A	
Analysis Period (min) 15			

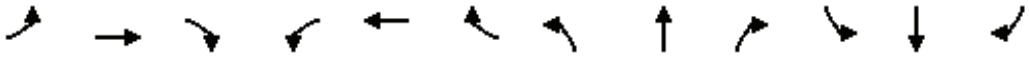
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	9	14	0	0	8	43	0	0	0	84	0	17
Future Vol, veh/h	9	14	0	0	8	43	0	0	0	84	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	10	15	0	0	9	47	0	0	0	91	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	56	0	0	15	0	0	77	91	15	68	68	33
Stage 1	-	-	-	-	-	-	35	35	-	33	33	-
Stage 2	-	-	-	-	-	-	42	56	-	35	35	-
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	1549	-	-	1603	-	-	912	799	1065	925	823	1041
Stage 1	-	-	-	-	-	-	981	866	-	983	868	-
Stage 2	-	-	-	-	-	-	972	848	-	981	866	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1549	-	-	1603	-	-	891	793	1065	920	817	1041
Mov Cap-2 Maneuver	-	-	-	-	-	-	891	793	-	920	817	-
Stage 1	-	-	-	-	-	-	974	860	-	976	868	-
Stage 2	-	-	-	-	-	-	955	848	-	974	860	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0	0	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1549	-	-	1603	-	-	938
HCM Lane V/C Ratio	-	0.006	-	-	-	-	-	0.117
HCM Control Delay (s)	0	7.3	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	14	0	0	8	0	0	0	0	0	0	235
Future Volume (vph)	119	14	0	0	8	0	0	0	0	0	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.957										
Satd. Flow (prot)	0	1783	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.957										
Satd. Flow (perm)	0	1783	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	144	0	0	9	0	0	0	0	0	255	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	119	14	0	0	8	0	0	0	0	0	0	235
Future Vol, veh/h	119	14	0	0	8	0	0	0	0	0	0	235
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	129	15	0	0	9	0	0	0	0	0	0	255

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	9	0	0	15	0	0	410	282	15	282	282	9
Stage 1	-	-	-	-	-	-	273	273	-	9	9	-
Stage 2	-	-	-	-	-	-	137	9	-	273	273	-
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	1611	-	-	1603	-	-	552	627	1065	670	627	1073
Stage 1	-	-	-	-	-	-	733	684	-	1012	888	-
Stage 2	-	-	-	-	-	-	866	888	-	733	684	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1611	-	-	1603	-	-	395	576	1065	628	576	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	395	576	-	628	576	-
Stage 1	-	-	-	-	-	-	674	629	-	930	888	-
Stage 2	-	-	-	-	-	-	660	888	-	674	629	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.6	0	0	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1611	-	-	1603	-	-	1073
HCM Lane V/C Ratio	-	0.08	-	-	-	-	-	0.238
HCM Control Delay (s)	0	7.4	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.3	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	43	185	186	58	302	58	627	86	304	1657	52
Future Volume (vph)	20	43	185	186	58	302	58	627	86	304	1657	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	60		150
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			145			130		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.984			0.963		0.950			0.950		
Satd. Flow (prot)	0	1833	1583	0	1794	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.255			0.732		0.950			0.950		
Satd. Flow (perm)	0	475	1583	0	1364	1583	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			328			93			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			265	
Travel Time (s)		22.9			2.9			6.7			3.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	201	0	265	328	63	682	93	330	1801	57
Turn Type	D.Pm	NA	custom	D.Pm	NA	custom	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	8	4	8	4	8	1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5	36.0	12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0	3.5	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5		6.5	7.0	8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5		23.5	23.0	10.6	112.0	112.9	11.5	112.9	112.0
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.06	0.66	0.66	0.07	0.66	0.66
v/c Ratio		1.08	0.61		1.41	0.66	0.57	0.29	0.09	2.77	0.77	0.05
Control Delay		200.0	34.6		261.8	13.0	97.5	12.7	1.9	845.0	22.5	0.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		200.0	34.6		261.8	13.0	97.5	12.7	1.9	845.0	22.5	0.9
LOS		F	C		F	B	F	B	A	F	C	A
Approach Delay		76.9			124.2			17.8			146.0	
Approach LOS		E			F			B			F	
Queue Length 50th (ft)		~85	78		~394	0	69	160	0	~623	697	0
Queue Length 95th (ft)		#200	172		#587	103	125	194	21	#833	789	8
Internal Link Dist (ft)		926			70			460			185	

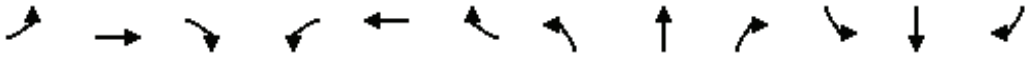
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	60		150
Base Capacity (vph)		64	327		188	497	119	2331	1082	119	2349	1070
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		1.08	0.61		1.41	0.66	0.53	0.29	0.09	2.77	0.77	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.77			
Intersection Signal Delay: 110.3		Intersection LOS: F	
Intersection Capacity Utilization 88.3%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: SH 82 & CR 154 /CR 114



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	306	117	8	499	2	40	0	5	0	2	8
Future Volume (vph)	11	306	117	8	499	2	40	0	5	0	2	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		505	105		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.964			0.999			0.967			0.890	
Flt Protected		0.999			0.999		0.950	0.962				
Satd. Flow (prot)	0	1794	0	0	3532	0	1681	1646	0	0	1658	0
Flt Permitted		0.999			0.999		0.950	0.962				
Satd. Flow (perm)	0	1794	0	0	3532	0	1681	1646	0	0	1658	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			1837			1037			952	
Travel Time (s)		2.9			35.8			28.3			26.0	
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
Shared Lane Traffic (%)							43%					
Lane Group Flow (vph)	0	472	0	0	553	0	25	23	0	0	11	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

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	11	306	117	8	499	2	40	0	5	0	2	8
Future Vol, veh/h	11	306	117	8	499	2	40	0	5	0	2	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	505	105	-	-	-	-	-
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	12	333	127	9	542	2	43	0	5	0	2	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	460	0	0	711	983	397	984	1045	272
Stage 1	-	-	-	-	-	-	421	421	-	561	561	-
Stage 2	-	-	-	-	-	-	290	562	-	423	484	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1023	-	-	1099	-	-	334	248	652	215	228	726
Stage 1	-	-	-	-	-	-	609	588	-	480	509	-
Stage 2	-	-	-	-	-	-	694	509	-	608	551	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1023	-	-	1099	-	-	321	241	652	209	222	726
Mov Cap-2 Maneuver	-	-	-	-	-	-	321	241	-	209	222	-
Stage 1	-	-	-	-	-	-	599	579	-	472	503	-
Stage 2	-	-	-	-	-	-	675	503	-	593	542	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	16.4	12.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	321	373	1023	-	-	1099	-	-	499
HCM Lane V/C Ratio	0.09	0.053	0.012	-	-	0.008	-	-	0.022
HCM Control Delay (s)	17.3	15.2	8.6	0	-	8.3	0	-	12.4
HCM Lane LOS	C	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.2	0	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	3	202	53	1	364
Future Volume (vph)	18	3	202	53	1	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982			0.850		
Flt Protected	0.958					
Satd. Flow (prot)	1752	0	1863	1583	0	1863
Flt Permitted	0.958					
Satd. Flow (perm)	1752	0	1863	1583	0	1863
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	220	58	0	397
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	3	202	53	1	364
Future Vol, veh/h	18	3	202	53	1	364
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	-	-	115	-	-
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	20	3	220	58	1	396

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	618	220	0	0	278	0
Stage 1	220	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	453	820	-	-	1285	-
Stage 1	817	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	453	820	-	-	1285	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	484	1285	-
HCM Lane V/C Ratio	-	-	0.047	0.001	-
HCM Control Delay (s)	-	-	12.8	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	174	5	0	388	1	1
Future Volume (vph)	174	5	0	388	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	1857	0	0	1863	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	1857	0	0	1863	1694	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	0	0	422	2	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	5	0	388	1	1
Future Vol, veh/h	174	5	0	388	1	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	189	5	0	422	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	194	0	614	192
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	422	-
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	-	-	1379	-	455	850
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1379	-	455	850
Mov Cap-2 Maneuver	-	-	-	-	455	-
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	662	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	593	-	-	1379	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	11.1	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	3	6	0	57	2	2256	12	33	1032	0
Future Volume (vph)	0	0	3	6	0	57	2	2256	12	33	1032	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.865			0.850			0.999				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	1611	0	1770	1583	0	1770	3536	0	1770	3539	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	1611	0	1770	1583	0	1770	3536	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	7	62	0	2	2465	0	36	1122	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 74.4%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.2

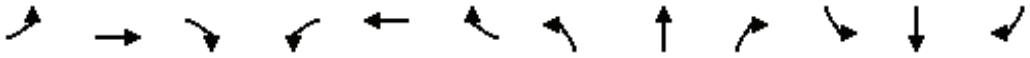
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	6	0	57	2	2256	12	33	1032	0
Future Vol, veh/h	0	0	3	6	0	57	2	2256	12	33	1032	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	100	-	-	175	-	-
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	0	0	3	7	0	62	2	2452	13	36	1122	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2424	3663	561	3096	3657	1233	1122	0	0	2465	0	0
Stage 1	1194	1194	-	2463	2463	-	-	-	-	-	-	-
Stage 2	1230	2469	-	633	1194	-	-	-	-	-	-	-
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	17	5	471	~ 5	5	169	618	-	-	185	-	-
Stage 1	198	258	-	31	59	-	-	-	-	-	-	-
Stage 2	188	59	-	434	258	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	9	4	471	~ 4	4	169	618	-	-	185	-	-
Mov Cap-2 Maneuver	9	4	-	~ 4	4	-	-	-	-	-	-	-
Stage 1	197	208	-	31	59	-	-	-	-	-	-	-
Stage 2	119	59	-	347	208	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	212.7	0	0.9
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	618	-	-	471	4	169	185	-	-
HCM Lane V/C Ratio	0.004	-	-	0.007	1.63	0.367	0.194	-	-
HCM Control Delay (s)	10.8	-	-	12.8	$ 1871.7	38.1	29.1	-	-
HCM Lane LOS	B	-	-	B	F	E	D	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1.7	1.6	0.7	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	12	0	0	13	92	0	0	0	64	0	13
Future Volume (vph)	18	12	0	0	13	92	0	0	0	64	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.882						0.977	
Flt Protected		0.971									0.960	
Satd. Flow (prot)	0	1809	0	0	1643	0	0	1863	0	0	1747	0
Flt Permitted		0.971									0.960	
Satd. Flow (perm)	0	1809	0	0	1643	0	0	1863	0	0	1747	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	114	0	0	0	0	0	84	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.3%		ICU Level of Service A	
Analysis Period (min) 15			

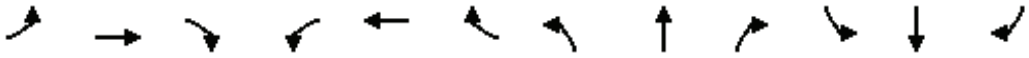
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	12	0	0	13	92	0	0	0	64	0	13
Future Vol, veh/h	18	12	0	0	13	92	0	0	0	64	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	20	13	0	0	14	100	0	0	0	70	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	114	0	0	13	0	0	124	167	13	117	117	64
Stage 1	-	-	-	-	-	-	53	53	-	64	64	-
Stage 2	-	-	-	-	-	-	71	114	-	53	53	-
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	1475	-	-	1606	-	-	850	726	1067	859	773	1000
Stage 1	-	-	-	-	-	-	960	851	-	947	842	-
Stage 2	-	-	-	-	-	-	939	801	-	960	851	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1475	-	-	1606	-	-	829	716	1067	850	762	1000
Mov Cap-2 Maneuver	-	-	-	-	-	-	829	716	-	850	762	-
Stage 1	-	-	-	-	-	-	947	839	-	934	842	-
Stage 2	-	-	-	-	-	-	926	801	-	947	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	0	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1475	-	-	1606	-	-	872
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-	0.096
HCM Control Delay (s)	0	7.5	0	-	0	-	-	9.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	12	0	0	13	0	0	0	0	0	0	179
Future Volume (vph)	258	12	0	0	13	0	0	0	0	0	0	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.954										
Satd. Flow (prot)	0	1777	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.954										
Satd. Flow (perm)	0	1777	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	293	0	0	14	0	0	0	0	0	195	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	258	12	0	0	13	0	0	0	0	0	0	179
Future Vol, veh/h	258	12	0	0	13	0	0	0	0	0	0	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	280	13	0	0	14	0	0	0	0	0	0	195

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	14	0	0	13	0	0	685	587	13	587	587	14
Stage 1	-	-	-	-	-	-	573	573	-	14	14	-
Stage 2	-	-	-	-	-	-	112	14	-	573	573	-
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	1604	-	-	1606	-	-	362	422	1067	421	422	1066
Stage 1	-	-	-	-	-	-	505	504	-	1006	884	-
Stage 2	-	-	-	-	-	-	893	884	-	505	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1606	-	-	256	348	1067	364	348	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-	256	348	-	364	348	-
Stage 1	-	-	-	-	-	-	416	415	-	829	884	-
Stage 2	-	-	-	-	-	-	730	884	-	416	415	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.4	0	0	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1604	-	-	1606	-	-	1066
HCM Lane V/C Ratio	-	0.175	-	-	-	-	-	0.183
HCM Control Delay (s)	0	7.7	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.6	-	-	0	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	50	63	155	48	433	123	1788	188	338	747	27
Future Volume (vph)	40	50	63	155	48	433	123	1788	188	338	747	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	60		150
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			145			130		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.978			0.963		0.950			0.950		
Satd. Flow (prot)	0	1822	1583	0	1794	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.299			0.672		0.950			0.950		
Satd. Flow (perm)	0	557	1583	0	1252	1583	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			119			114			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			265	
Travel Time (s)		22.9			2.9			6.7			3.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	68	0	220	471	134	1943	204	367	812	29
Turn Type	D.Pm	NA	custom	D.Pm	NA	custom	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	8	4	8	4	8	1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5	36.0	12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0	3.5	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5		6.5	7.0	8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5		23.5	23.0	11.5	112.0	112.0	11.5	112.0	112.0
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.07	0.66	0.66	0.07	0.66	0.66
v/c Ratio		1.29	0.23		1.27	1.49	1.13	0.83	0.19	3.08	0.35	0.03
Control Delay		254.6	7.7		214.3	268.8	186.8	26.1	5.2	981.2	13.3	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		254.6	7.7		214.3	268.8	186.8	26.1	5.2	981.2	13.3	0.0
LOS		F	A		F	F	F	C	A	F	B	A
Approach Delay		152.9			251.4			33.7			307.1	
Approach LOS		F			F			C			F	
Queue Length 50th (ft)		~137	0		~308	~603	~171	820	34	~708	200	0
Queue Length 95th (ft)		#271	30		#490	#839	#323	925	68	#925	238	0
Internal Link Dist (ft)		926			70			460			185	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	60		150
Base Capacity (vph)		75	293		173	317	119	2331	1081	119	2331	1070
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		1.29	0.23		1.27	1.49	1.13	0.83	0.19	3.08	0.35	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.08			
Intersection Signal Delay: 148.8		Intersection LOS: F	
Intersection Capacity Utilization 105.1%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	461	102	4	532	2	84	2	10	1	2	18
Future Volume (vph)	13	461	102	4	532	2	84	2	10	1	2	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		505	105		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.976			0.999			0.968			0.883	
Flt Protected		0.999					0.950	0.964			0.998	
Satd. Flow (prot)	0	1816	0	0	3536	0	1681	1651	0	0	1642	0
Flt Permitted		0.999					0.950	0.964			0.998	
Satd. Flow (perm)	0	1816	0	0	3536	0	1681	1651	0	0	1642	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			1837			1037			952	
Travel Time (s)		2.9			35.8			28.3			26.0	
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
Shared Lane Traffic (%)							42%					
Lane Group Flow (vph)	0	626	0	0	584	0	53	51	0	0	23	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	461	102	4	532	2	84	2	10	1	2	18
Future Vol, veh/h	13	461	102	4	532	2	84	2	10	1	2	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	505	105	-	-	-	-	-
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	14	501	111	4	578	2	91	2	11	1	2	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	580	0	0	612	0	0	883	1173	557	1178	1227	290
Stage 1	-	-	-	-	-	-	585	585	-	587	587	-
Stage 2	-	-	-	-	-	-	298	588	-	591	640	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	992	-	-	965	-	-	253	191	529	157	178	707
Stage 1	-	-	-	-	-	-	496	497	-	464	496	-
Stage 2	-	-	-	-	-	-	687	495	-	492	469	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	992	-	-	965	-	-	239	186	529	149	173	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	186	-	149	173	-
Stage 1	-	-	-	-	-	-	485	486	-	454	493	-
Stage 2	-	-	-	-	-	-	661	492	-	469	459	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	23.3	12.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	239	272	992	-	-	965	-	-	480
HCM Lane V/C Ratio	0.255	0.16	0.014	-	-	0.005	-	-	0.048
HCM Control Delay (s)	25.1	20.7	8.7	0	-	8.7	0	-	12.9
HCM Lane LOS	D	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1	0.6	0	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	36	2	430	43	4	306
Future Volume (vph)	36	2	430	43	4	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.850		
Flt Protected	0.955					0.999
Satd. Flow (prot)	1766	0	1863	1583	0	1861
Flt Permitted	0.955					0.999
Satd. Flow (perm)	1766	0	1863	1583	0	1861
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	0	467	47	0	337
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	2	430	43	4	306
Future Vol, veh/h	36	2	430	43	4	306
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	-	-	115	-	-
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	39	2	467	47	4	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	808	467	0	0	514	0
Stage 1	467	-	-	-	-	-
Stage 2	341	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	350	596	-	-	1052	-
Stage 1	631	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	348	596	-	-	1052	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	356	1052	-
HCM Lane V/C Ratio	-	-	0.116	0.004	-
HCM Control Delay (s)	-	-	16.4	8.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	404	22	5	269	16	4
Future Volume (vph)	404	22	5	269	16	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993				0.974	
Flt Protected				0.999	0.961	
Satd. Flow (prot)	1850	0	0	1861	1744	0
Flt Permitted				0.999	0.961	
Satd. Flow (perm)	1850	0	0	1861	1744	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	463	0	0	297	21	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

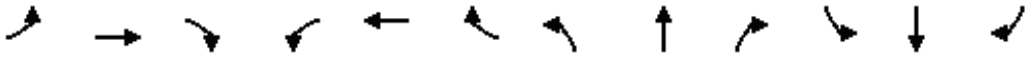
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	404	22	5	269	16	4
Future Vol, veh/h	404	22	5	269	16	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	439	24	5	292	17	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	463	0	753	451
Stage 1	-	-	-	-	451	-
Stage 2	-	-	-	-	302	-
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	-	-	1098	-	377	608
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1098	-	375	608
Mov Cap-2 Maneuver	-	-	-	-	375	-
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	406	-	-	1098	-
HCM Lane V/C Ratio	0.054	-	-	0.005	-
HCM Control Delay (s)	14.4	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	0	0	36	2	1202	4	21	1029	0
Future Volume (vph)	1	0	0	0	0	36	2	1202	4	21	1029	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt					0.850							
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1770	0	1863	1583	0	1770	3539	0	1770	3539	0
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1770	0	1863	1583	0	1770	3539	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	0	39	0	2	1311	0	23	1118	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

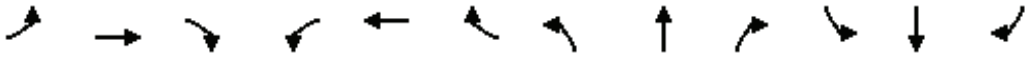
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	36	2	1202	4	21	1029	0
Future Vol, veh/h	1	0	0	0	0	36	2	1202	4	21	1029	0
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	-	-	-	25	-	-	100	-	-	175	-	-
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	1	0	0	0	0	39	2	1307	4	23	1118	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1822	2479	559	1918	2477	656	1118	0	0	1311	0	0
Stage 1	1164	1164	-	1313	1313	-	-	-	-	-	-	-
Stage 2	658	1315	-	605	1164	-	-	-	-	-	-	-
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	48	29	472	41	29	408	620	-	-	524	-	-
Stage 1	207	267	-	167	226	-	-	-	-	-	-	-
Stage 2	420	226	-	451	267	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	28	472	40	28	408	620	-	-	524	-	-
Mov Cap-2 Maneuver	42	28	-	40	28	-	-	-	-	-	-	-
Stage 1	206	255	-	166	225	-	-	-	-	-	-	-
Stage 2	378	225	-	431	255	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	93	14.8	0	0.2
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	620	-	-	42	-	408	524	-	-
HCM Lane V/C Ratio	0.004	-	-	0.026	-	0.096	0.044	-	-
HCM Control Delay (s)	10.8	-	-	93	0	14.8	12.2	-	-
HCM Lane LOS	B	-	-	F	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.3	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	11	0	0	14	72	0	0	0	80	0	16
Future Volume (vph)	14	11	0	0	14	72	0	0	0	80	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.887						0.978	
Flt Protected		0.973									0.960	
Satd. Flow (prot)	0	1812	0	0	1652	0	0	1863	0	0	1749	0
Flt Permitted		0.973									0.960	
Satd. Flow (perm)	0	1812	0	0	1652	0	0	1863	0	0	1749	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	0	93	0	0	0	0	0	104	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.1%		ICU Level of Service A	
Analysis Period (min) 15			

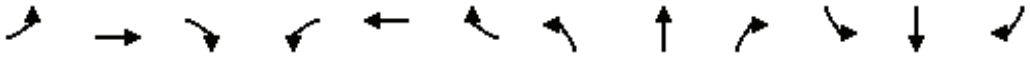
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	11	0	0	14	72	0	0	0	80	0	16
Future Vol, veh/h	14	11	0	0	14	72	0	0	0	80	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	15	12	0	0	15	78	0	0	0	87	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	12	0	0	105	135	12	96	96	54
Stage 1	-	-	-	-	-	-	42	42	-	54	54	-
Stage 2	-	-	-	-	-	-	63	93	-	42	42	-
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	1501	-	-	1607	-	-	875	756	1069	887	794	1013
Stage 1	-	-	-	-	-	-	972	860	-	958	850	-
Stage 2	-	-	-	-	-	-	948	818	-	972	860	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1607	-	-	853	748	1069	880	786	1013
Mov Cap-2 Maneuver	-	-	-	-	-	-	853	748	-	880	786	-
Stage 1	-	-	-	-	-	-	962	851	-	948	850	-
Stage 2	-	-	-	-	-	-	932	818	-	962	851	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0	0	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1501	-	-	1607	-	-	900
HCM Lane V/C Ratio	-	0.01	-	-	-	-	-	0.116
HCM Control Delay (s)	0	7.4	0	-	0	-	-	9.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	11	0	0	14	0	0	0	0	0	0	223
Future Volume (vph)	200	11	0	0	14	0	0	0	0	0	0	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.955										
Satd. Flow (prot)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.955										
Satd. Flow (perm)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	15	0	0	0	0	0	242	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	200	11	0	0	14	0	0	0	0	0	0	223
Future Vol, veh/h	200	11	0	0	14	0	0	0	0	0	0	223
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	217	12	0	0	15	0	0	0	0	0	0	242

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	15	0	0	12	0	0	582	461	12	461	461	15
Stage 1	-	-	-	-	-	-	446	446	-	15	15	-
Stage 2	-	-	-	-	-	-	136	15	-	446	446	-
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	1603	-	-	1607	-	-	424	497	1069	511	497	1065
Stage 1	-	-	-	-	-	-	591	574	-	1005	883	-
Stage 2	-	-	-	-	-	-	867	883	-	591	574	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1603	-	-	1607	-	-	293	429	1069	458	429	1065
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	429	-	458	429	-
Stage 1	-	-	-	-	-	-	511	496	-	868	883	-
Stage 2	-	-	-	-	-	-	670	883	-	511	496	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.2	0	0	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1603	-	-	1607	-	-	1065
HCM Lane V/C Ratio	-	0.136	-	-	-	-	-	0.228
HCM Control Delay (s)	0	7.6	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.5	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	16	54	159	24	385	40	735	158	320	709	26
Future Volume (vph)	22	16	54	159	24	385	40	735	158	320	709	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	60		150
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			145			130		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.972			0.958		0.950			0.950		
Satd. Flow (prot)	0	1811	1583	0	1785	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.439			0.725		0.950			0.950		
Satd. Flow (perm)	0	818	1583	0	1350	1583	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			305			172			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			265	
Travel Time (s)		22.9			2.9			6.7			3.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	59	0	199	418	43	799	172	348	771	28
Turn Type	D.Pm	NA	custom	D.Pm	NA	custom	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	8	4	8	4	8	1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5	36.0	12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0	3.5	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5		6.5	7.0	8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5		23.5	23.0	9.9	112.0	116.7	11.5	116.7	112.0
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.06	0.66	0.69	0.07	0.69	0.66
v/c Ratio		0.37	0.20		1.07	0.88	0.42	0.34	0.15	2.92	0.32	0.03
Control Delay		77.8	5.2		151.6	39.0	89.3	13.3	1.6	911.1	11.7	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		77.8	5.2		151.6	39.0	89.3	13.3	1.6	911.1	11.7	0.0
LOS		E	A		F	D	F	B	A	F	B	A
Approach Delay		35.0			75.3			14.5			284.3	
Approach LOS		C			E			B			F	
Queue Length 50th (ft)		42	0		~244	133	47	196	0	~665	183	0
Queue Length 95th (ft)		87	18		#419	#329	93	233	27	#877	223	0
Internal Link Dist (ft)		926			70			460			185	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	60		150
Base Capacity (vph)		110	293		186	477	119	2331	1140	119	2429	1070
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.37	0.20		1.07	0.88	0.36	0.34	0.15	2.92	0.32	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.92			
Intersection Signal Delay: 135.8		Intersection LOS: F	
Intersection Capacity Utilization 73.9%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	419	73	1	523	1	32	1	4	0	0	4
Future Volume (vph)	3	419	73	1	523	1	32	1	4	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		505	105		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.980						0.970			0.865	
Flt Protected							0.950	0.964				
Satd. Flow (prot)	0	1825	0	0	3539	0	1681	1655	0	0	1611	0
Flt Permitted							0.950	0.964				
Satd. Flow (perm)	0	1825	0	0	3539	0	1681	1655	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			1837			1037			952	
Travel Time (s)		2.9			35.8			28.3			26.0	
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
Shared Lane Traffic (%)							42%					
Lane Group Flow (vph)	0	537	0	0	570	0	20	20	0	0	4	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	419	73	1	523	1	32	1	4	0	0	4
Future Vol, veh/h	3	419	73	1	523	1	32	1	4	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	505	105	-	-	-	-	-
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	455	79	1	568	1	35	1	4	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	569	0	0	534	0	0	787	1072	495	1074	1111	285
Stage 1	-	-	-	-	-	-	501	501	-	571	571	-
Stage 2	-	-	-	-	-	-	286	571	-	503	540	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1001	-	-	1032	-	-	295	220	574	186	208	713
Stage 1	-	-	-	-	-	-	551	542	-	474	504	-
Stage 2	-	-	-	-	-	-	698	504	-	550	520	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1001	-	-	1032	-	-	292	219	574	183	207	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	292	219	-	183	207	-
Stage 1	-	-	-	-	-	-	549	540	-	472	503	-
Stage 2	-	-	-	-	-	-	693	503	-	543	518	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	17.7	10.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	292	326	1001	-	-	1032	-	-	713
HCM Lane V/C Ratio	0.079	0.052	0.003	-	-	0.001	-	-	0.006
HCM Control Delay (s)	18.4	16.7	8.6	0	-	8.5	0	-	10.1
HCM Lane LOS	C	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.2	0	-	-	0	-	-	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	18	376	35	6	436
Future Volume (vph)	41	18	376	35	6	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958			0.850		
Flt Protected	0.967					0.999
Satd. Flow (prot)	1726	0	1863	1583	0	1861
Flt Permitted	0.967					0.999
Satd. Flow (perm)	1726	0	1863	1583	0	1861
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	409	38	0	481
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	41	18	376	35	6	436
Future Vol, veh/h	41	18	376	35	6	436
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	-	-	115	-	-
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	45	20	409	38	7	474

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	897	409	0	0	447	0
Stage 1	409	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	310	642	-	-	1113	-
Stage 1	671	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	307	642	-	-	1113	-
Mov Cap-2 Maneuver	307	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	365	1113	-
HCM Lane V/C Ratio	-	-	0.176	0.006	-
HCM Control Delay (s)	-	-	17	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	302	17	0	335	22	0
Future Volume (vph)	302	17	0	335	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					
Flt Protected					0.950	
Satd. Flow (prot)	1850	0	0	1863	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	1850	0	0	1863	1770	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	346	0	0	364	24	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.6%		ICU Level of Service A	
Analysis Period (min) 15			

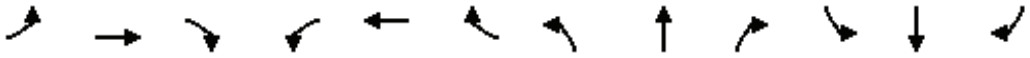
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	302	17	0	335	22	0
Future Vol, veh/h	302	17	0	335	22	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	328	18	0	364	24	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	346	0	701	337
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	364	-
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	-	-	1213	-	405	705
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	703	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1213	-	405	705
Mov Cap-2 Maneuver	-	-	-	-	405	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	405	-	-	1213	-
HCM Lane V/C Ratio	0.059	-	-	-	-
HCM Control Delay (s)	14.4	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	3	23	0	51	5	1310	20	61	2536	0
Future Volume (vph)	0	0	3	23	0	51	5	1310	20	61	2536	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.865			0.850			0.998				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	1611	0	1770	1583	0	1770	3532	0	1770	3539	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	1611	0	1770	1583	0	1770	3532	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	25	55	0	5	1446	0	66	2757	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	18.7

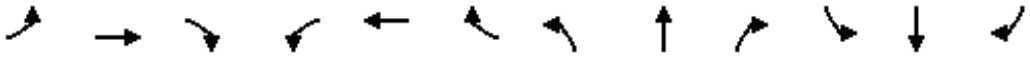
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	23	0	51	5	1310	20	61	2536	0
Future Vol, veh/h	0	0	3	23	0	51	5	1310	20	61	2536	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	100	-	-	175	-	-
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	0	0	3	25	0	55	5	1424	22	66	2757	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3611	4345	1379	2956	4334	723	2757	0	0	1446	0	0
Stage 1	2889	2889	-	1445	1445	-	-	-	-	-	-	-
Stage 2	722	1456	-	1511	2889	-	-	-	-	-	-	-
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	2	2	134	~ 6	2	369	142	-	-	465	-	-
Stage 1	16	35	-	138	195	-	-	-	-	-	-	-
Stage 2	384	193	-	126	35	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	2	134	~ 5	2	369	142	-	-	465	-	-
Mov Cap-2 Maneuver	1	2	-	~ 5	2	-	-	-	-	-	-	-
Stage 1	15	30	-	133	188	-	-	-	-	-	-	-
Stage 2	315	186	-	105	30	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	32.5	$ 1000.9	0.1	0.3
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	142	-	-	134	5	369	465	-	-
HCM Lane V/C Ratio	0.038	-	-	0.024	5	0.15	0.143	-	-
HCM Control Delay (s)	31.4	-	-	32.$	$ 3183.8	16.5	14	-	-
HCM Lane LOS	D	-	-	D	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	4.6	0.5	0.5	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	17	0	0	10	43	0	0	0	84	0	17
Future Volume (vph)	9	17	0	0	10	43	0	0	0	84	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.891						0.978	
Flt Protected		0.982									0.960	
Satd. Flow (prot)	0	1829	0	0	1660	0	0	1863	0	0	1749	0
Flt Permitted		0.982									0.960	
Satd. Flow (perm)	0	1829	0	0	1660	0	0	1863	0	0	1749	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	28	0	0	58	0	0	0	0	0	109	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.4%		ICU Level of Service A	
Analysis Period (min) 15			

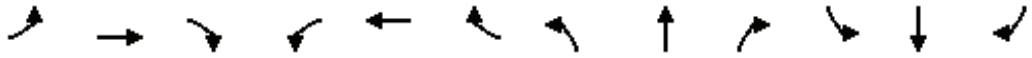
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	9	17	0	0	10	43	0	0	0	84	0	17
Future Vol, veh/h	9	17	0	0	10	43	0	0	0	84	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	10	18	0	0	11	47	0	0	0	91	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	58	0	0	18	0	0	82	96	18	73	73	35
Stage 1	-	-	-	-	-	-	38	38	-	35	35	-
Stage 2	-	-	-	-	-	-	44	58	-	38	38	-
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	1546	-	-	1599	-	-	905	794	1061	918	817	1038
Stage 1	-	-	-	-	-	-	977	863	-	981	866	-
Stage 2	-	-	-	-	-	-	970	847	-	977	863	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1546	-	-	1599	-	-	884	788	1061	913	811	1038
Mov Cap-2 Maneuver	-	-	-	-	-	-	884	788	-	913	811	-
Stage 1	-	-	-	-	-	-	970	857	-	974	866	-
Stage 2	-	-	-	-	-	-	953	847	-	970	857	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	0	0	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1546	-	-	1599	-	-	932
HCM Lane V/C Ratio	-	0.006	-	-	-	-	-	0.118
HCM Control Delay (s)	0	7.3	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	17	0	0	10	0	0	0	0	0	0	235
Future Volume (vph)	119	17	0	0	10	0	0	0	0	0	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.958										
Satd. Flow (prot)	0	1785	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.958										
Satd. Flow (perm)	0	1785	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	147	0	0	11	0	0	0	0	0	255	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	119	17	0	0	10	0	0	0	0	0	0	235
Future Vol, veh/h	119	17	0	0	10	0	0	0	0	0	0	235
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	129	18	0	0	11	0	0	0	0	0	0	255

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	18	0	0	415	287	18	287	287	11
Stage 1	-	-	-	-	-	-	276	276	-	11	11	-
Stage 2	-	-	-	-	-	-	139	11	-	276	276	-
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	1608	-	-	1599	-	-	548	623	1061	665	623	1070
Stage 1	-	-	-	-	-	-	730	682	-	1010	886	-
Stage 2	-	-	-	-	-	-	864	886	-	730	682	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1608	-	-	1599	-	-	391	573	1061	624	573	1070
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	573	-	624	573	-
Stage 1	-	-	-	-	-	-	671	627	-	928	886	-
Stage 2	-	-	-	-	-	-	658	886	-	671	627	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.5	0	0	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1608	-	-	1599	-	-	1070
HCM Lane V/C Ratio	-	0.08	-	-	-	-	-	0.239
HCM Control Delay (s)	0	7.4	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.3	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	53	230	207	70	322	72	801	95	351	2118	64
Future Volume (vph)	25	53	230	207	70	322	72	801	95	351	2118	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	800		150
Storage Lanes	0		1	1		1	1		1	2		1
Taper Length (ft)	25			25			145			225		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.984		0.950			0.950			0.950		
Satd. Flow (prot)	0	1833	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted		0.873		0.693			0.950			0.950		
Satd. Flow (perm)	0	1626	1583	1291	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110			350			103			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			1032	
Travel Time (s)		22.9			2.9			6.7			12.8	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	250	225	76	350	78	871	103	382	2302	70
Turn Type	D.Pm	NA	custom	D.Pm	NA	Free	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		Free			2			6
Detector Phase	4	8	4	8	4		1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0		4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5		12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0		20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%		11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5	7.0	6.5		8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5	23.0	23.5	170.0	11.0	112.0	112.5	11.5	112.5	112.0
Actuated g/C Ratio		0.14	0.14	0.14	0.14	1.00	0.06	0.66	0.66	0.07	0.66	0.66
v/c Ratio		0.39	0.80	1.29	0.30	0.22	0.68	0.37	0.10	1.65	0.98	0.07
Control Delay		72.9	58.2	221.6	69.3	0.3	105.8	13.7	1.9	353.0	42.9	1.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		72.9	58.2	221.6	69.3	0.3	105.8	13.7	1.9	353.0	42.9	1.5
LOS		E	E	F	E	A	F	B	A	F	D	A
Approach Delay		61.9			84.9			19.4			84.9	
Approach LOS		E			F			B			F	
Queue Length 50th (ft)		88	157	~318	77	0	86	220	0	~315	1252	0
Queue Length 95th (ft)		150	#295	#502	134	0	#164	259	22	#428	#1496	15
Internal Link Dist (ft)		926			70			460			952	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	800		150
Base Capacity (vph)		219	313	174	257	1583	119	2331	1082	232	2341	1070
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.39	0.80	1.29	0.30	0.22	0.66	0.37	0.10	1.65	0.98	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.65			
Intersection Signal Delay: 68.9		Intersection LOS: E	
Intersection Capacity Utilization 101.8%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	337	142	10	537	2	49	0	6	0	2	10
Future Volume (vph)	13	337	142	10	537	2	49	0	6	0	2	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	105		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.957			0.999			0.965			0.886	
Flt Protected		0.999			0.999		0.950	0.963				
Satd. Flow (prot)	0	3384	0	0	3532	0	1681	1644	0	0	1650	0
Flt Permitted		0.999			0.999		0.950	0.963				
Satd. Flow (perm)	0	3384	0	0	3532	0	1681	1644	0	0	1650	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			340			1037			952	
Travel Time (s)		2.9			6.6			28.3			26.0	
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
Shared Lane Traffic (%)							43%					
Lane Group Flow (vph)	0	534	0	0	597	0	30	30	0	0	13	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	337	142	10	537	2	49	0	6	0	2	10
Future Vol, veh/h	13	337	142	10	537	2	49	0	6	0	2	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	-	-	-	-
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	14	366	154	11	584	2	53	0	7	0	2	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	586	0	0	520	0	0	786	1079	260	818	1155	293
Stage 1	-	-	-	-	-	-	471	471	-	607	607	-
Stage 2	-	-	-	-	-	-	315	608	-	211	548	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	985	-	-	1042	-	-	283	217	739	268	196	703
Stage 1	-	-	-	-	-	-	542	558	-	450	485	-
Stage 2	-	-	-	-	-	-	671	484	-	771	515	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	1042	-	-	269	209	739	258	189	703
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	209	-	258	189	-
Stage 1	-	-	-	-	-	-	531	547	-	441	477	-
Stage 2	-	-	-	-	-	-	647	476	-	749	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	19	12.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	269	324	985	-	-	1042	-	-	484
HCM Lane V/C Ratio	0.132	0.075	0.014	-	-	0.01	-	-	0.027
HCM Control Delay (s)	20.4	17	8.7	0.1	-	8.5	0.1	-	12.6
HCM Lane LOS	C	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	0	-	-	0	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	3	211	53	1	374
Future Volume (vph)	18	3	211	53	1	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982			0.850		
Flt Protected	0.958					
Satd. Flow (prot)	1752	0	1863	1583	0	1863
Flt Permitted	0.958					
Satd. Flow (perm)	1752	0	1863	1583	0	1863
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	229	58	0	408
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	3	211	53	1	374
Future Vol, veh/h	18	3	211	53	1	374
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	-	-	115	-	-
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	20	3	229	58	1	407

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	638	229	0	0	287	0
Stage 1	229	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	441	810	-	-	1275	-
Stage 1	809	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	441	810	-	-	1275	-
Mov Cap-2 Maneuver	441	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	472	1275	-
HCM Lane V/C Ratio	-	-	0.048	0.001	-
HCM Control Delay (s)	-	-	13	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	177	5	0	402	1	1
Future Volume (vph)	177	5	0	402	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected					0.976	
Satd. Flow (prot)	1857	0	0	1863	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	1857	0	0	1863	1694	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	197	0	0	437	2	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			

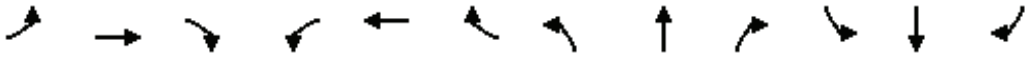
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	177	5	0	402	1	1
Future Vol, veh/h	177	5	0	402	1	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	192	5	0	437	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	197	0	632	195
Stage 1	-	-	-	-	195	-
Stage 2	-	-	-	-	437	-
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	-	-	1376	-	444	846
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	651	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1376	-	444	846
Mov Cap-2 Maneuver	-	-	-	-	444	-
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	651	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	582	-	-	1376	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	11.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	4	8	0	68	3	2837	15	37	1252	0
Future Volume (vph)	0	0	4	8	0	68	3	2837	15	37	1252	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.865			0.850			0.999				
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	1611	0	1770	1583	0	1770	3536	0	1770	3539	0
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	1611	0	1770	1583	0	1770	3536	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	9	74	0	3	3100	0	40	1361	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 92.2%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	20.1

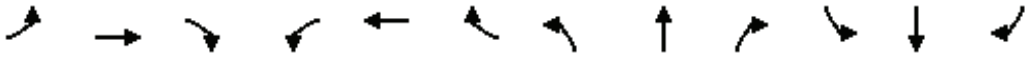
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	4	8	0	68	3	2837	15	37	1252	0
Future Vol, veh/h	0	0	4	8	0	68	3	2837	15	37	1252	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	100	-	-	175	-	-
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	0	0	4	9	0	74	3	3084	16	40	1361	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2989	4547	681	3859	4539	1550	1361	0	0	3100	0	0
Stage 1	1441	1441	-	3098	3098	-	-	-	-	-	-	-
Stage 2	1548	3106	-	761	1441	-	-	-	-	-	-	-
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	6	1	393	~ 1	1	103	501	-	-	103	-	-
Stage 1	139	196	-	12	27	-	-	-	-	-	-	-
Stage 2	119	27	-	364	196	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1	1	393	~ 1	1	103	501	-	-	103	-	-
Mov Cap-2 Maneuver	1	1	-	~ 1	1	-	-	-	-	-	-	-
Stage 1	138	120	-	12	27	-	-	-	-	-	-	-
Stage 2	33	27	-	220	120	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	$ 1086.5	0	1.7
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	501	-	-	393	1	103	103	-	-
HCM Lane V/C Ratio	0.007	-	-	0.011	8.696	0.718	0.39	-	-
HCM Control Delay (s)	12.2	-	-	14.3	$ 9469.9	100.2	60.8	-	-
HCM Lane LOS	B	-	-	B	F	F	F	-	-
HCM 95th %tile Q(veh)	0	-	-	0	2.4	3.8	1.6	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	15	0	0	16	92	0	0	0	64	0	13
Future Volume (vph)	18	15	0	0	16	92	0	0	0	64	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.885						0.977	
Flt Protected		0.973									0.960	
Satd. Flow (prot)	0	1812	0	0	1649	0	0	1863	0	0	1747	0
Flt Permitted		0.973									0.960	
Satd. Flow (perm)	0	1812	0	0	1649	0	0	1863	0	0	1747	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	0	0	117	0	0	0	0	0	84	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.5%		ICU Level of Service A	
Analysis Period (min) 15			

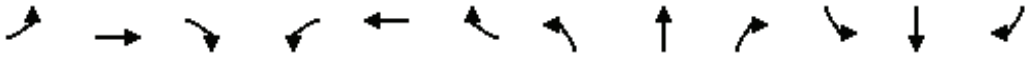
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	15	0	0	16	92	0	0	0	64	0	13
Future Vol, veh/h	18	15	0	0	16	92	0	0	0	64	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	20	16	0	0	17	100	0	0	0	70	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	117	0	0	16	0	0	130	173	16	123	123	67
Stage 1	-	-	-	-	-	-	56	56	-	67	67	-
Stage 2	-	-	-	-	-	-	74	117	-	56	56	-
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	1471	-	-	1602	-	-	843	720	1063	852	767	997
Stage 1	-	-	-	-	-	-	956	848	-	943	839	-
Stage 2	-	-	-	-	-	-	935	799	-	956	848	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1471	-	-	1602	-	-	822	710	1063	843	756	997
Mov Cap-2 Maneuver	-	-	-	-	-	-	822	710	-	843	756	-
Stage 1	-	-	-	-	-	-	943	836	-	930	839	-
Stage 2	-	-	-	-	-	-	922	799	-	943	836	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.1	0	0	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1471	-	-	1602	-	-	866
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-	0.097
HCM Control Delay (s)	0	7.5	0	-	0	-	-	9.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	15	0	0	16	0	0	0	0	0	0	179
Future Volume (vph)	258	15	0	0	16	0	0	0	0	0	0	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.955										
Satd. Flow (prot)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.955										
Satd. Flow (perm)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	296	0	0	17	0	0	0	0	0	195	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	258	15	0	0	16	0	0	0	0	0	0	179
Future Vol, veh/h	258	15	0	0	16	0	0	0	0	0	0	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	280	16	0	0	17	0	0	0	0	0	0	195

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	17	0	0	16	0	0	691	593	16	593	593	17
Stage 1	-	-	-	-	-	-	576	576	-	17	17	-
Stage 2	-	-	-	-	-	-	115	17	-	576	576	-
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	1600	-	-	1602	-	-	359	418	1063	417	418	1062
Stage 1	-	-	-	-	-	-	503	502	-	1002	881	-
Stage 2	-	-	-	-	-	-	890	881	-	503	502	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1600	-	-	1602	-	-	253	344	1063	360	344	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	253	344	-	360	344	-
Stage 1	-	-	-	-	-	-	414	413	-	825	881	-
Stage 2	-	-	-	-	-	-	727	881	-	414	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.3	0	0	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1600	-	-	1602	-	-	1062
HCM Lane V/C Ratio	-	0.175	-	-	-	-	-	0.183
HCM Control Delay (s)	0	7.7	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.6	-	-	0	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	61	78	174	59	498	153	2284	207	362	955	34
Future Volume (vph)	50	61	78	174	59	498	153	2284	207	362	955	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	800		150
Storage Lanes	0		1	1		1	1		1	2		1
Taper Length (ft)	25			25			145			225		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.978		0.950			0.950			0.950		
Satd. Flow (prot)	0	1822	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted		0.825		0.576			0.950			0.950		
Satd. Flow (perm)	0	1537	1583	1073	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			193			98			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			1032	
Travel Time (s)		22.9			2.9			6.7			12.8	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	120	85	189	64	541	166	2483	225	393	1038	37
Turn Type	D.Pm	NA	custom	D.Pm	NA	Free	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		Free			2			6
Detector Phase	4	8	4	8	4		1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0		4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5		12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0		20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%		11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5	7.0	6.5		8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5	23.0	23.5	170.0	11.5	112.0	112.0	11.5	112.0	112.0
Actuated g/C Ratio		0.14	0.14	0.14	0.14	1.00	0.07	0.66	0.66	0.07	0.66	0.66
v/c Ratio		0.58	0.29	1.30	0.25	0.34	1.39	1.07	0.21	1.69	0.45	0.03
Control Delay		81.1	13.5	230.9	68.3	0.6	273.0	67.7	6.7	372.3	14.7	0.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		81.1	13.5	230.9	68.3	0.6	273.0	67.7	6.7	372.3	14.7	0.1
LOS		F	B	F	E	A	F	E	A	F	B	A
Approach Delay		53.1			60.9			74.8			110.1	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)		127	0	~269	65	0	~245	~1598	50	~329	278	0
Queue Length 95th (ft)		203	54	#441	117	0	#411	#1709	88	#443	325	0
Internal Link Dist (ft)		926			70			460			952	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	800		150
Base Capacity (vph)		207	293	145	257	1583	119	2331	1076	232	2331	1070
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.58	0.29	1.30	0.25	0.34	1.39	1.07	0.21	1.69	0.45	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.69			
Intersection Signal Delay: 81.6		Intersection LOS: F	
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	484	124	5	593	2	102	2	12	1	2	22
Future Volume (vph)	16	484	124	5	593	2	102	2	12	1	2	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	105		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.970						0.969			0.880	
Flt Protected		0.999					0.950	0.963			0.998	
Satd. Flow (prot)	0	3430	0	0	3539	0	1681	1651	0	0	1636	0
Flt Permitted		0.999					0.950	0.963			0.998	
Satd. Flow (perm)	0	3430	0	0	3539	0	1681	1651	0	0	1636	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			340			1037			952	
Travel Time (s)		2.9			6.6			28.3			26.0	
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
Shared Lane Traffic (%)							43%					
Lane Group Flow (vph)	0	678	0	0	652	0	63	63	0	0	27	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.8%		ICU Level of Service A	
Analysis Period (min) 15			

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	16	484	124	5	593	2	102	2	12	1	2	22
Future Vol, veh/h	16	484	124	5	593	2	102	2	12	1	2	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	-	-	-	-
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	17	526	135	5	645	2	111	2	13	1	2	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	647	0	0	661	0	0	962	1285	331	954	1351	324
Stage 1	-	-	-	-	-	-	628	628	-	656	656	-
Stage 2	-	-	-	-	-	-	334	657	-	298	695	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	934	-	-	923	-	-	210	163	665	213	149	672
Stage 1	-	-	-	-	-	-	437	474	-	421	460	-
Stage 2	-	-	-	-	-	-	653	460	-	686	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	934	-	-	923	-	-	195	157	665	201	143	672
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	157	-	201	143	-
Stage 1	-	-	-	-	-	-	424	460	-	409	456	-
Stage 2	-	-	-	-	-	-	622	456	-	650	429	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	30.3	12.9
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	195	234	934	-	-	923	-	-	484
HCM Lane V/C Ratio	0.379	0.223	0.019	-	-	0.006	-	-	0.056
HCM Control Delay (s)	34.3	24.7	8.9	0.1	-	8.9	0	-	12.9
HCM Lane LOS	D	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.7	0.8	0.1	-	-	0	-	-	0.2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	36	2	446	43	4	319
Future Volume (vph)	36	2	446	43	4	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.850		
Flt Protected	0.955					0.999
Satd. Flow (prot)	1766	0	1863	1583	0	1861
Flt Permitted	0.955					0.999
Satd. Flow (perm)	1766	0	1863	1583	0	1861
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	0	485	47	0	351
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	2	446	43	4	319
Future Vol, veh/h	36	2	446	43	4	319
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	-	-	115	-	-
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	39	2	485	47	4	347

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	840	485	0	0	532	0
Stage 1	485	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	335	582	-	-	1036	-
Stage 1	619	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	333	582	-	-	1036	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	341	1036	-
HCM Lane V/C Ratio	-	-	0.121	0.004	-
HCM Control Delay (s)	-	-	17	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	416	22	5	275	16	4
Future Volume (vph)	416	22	5	275	16	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993				0.974	
Flt Protected				0.999	0.961	
Satd. Flow (prot)	1850	0	0	1861	1744	0
Flt Permitted				0.999	0.961	
Satd. Flow (perm)	1850	0	0	1861	1744	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	476	0	0	304	21	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	416	22	5	275	16	4
Future Vol, veh/h	416	22	5	275	16	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	452	24	5	299	17	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	476	0	773	464
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	309	-
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	-	-	1086	-	367	598
Stage 1	-	-	-	-	633	-
Stage 2	-	-	-	-	745	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	365	598
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	1086	-
HCM Lane V/C Ratio	0.055	-	-	0.005	-
HCM Control Delay (s)	14.6	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	0	0	41	3	1478	5	23	1264	0
Future Volume (vph)	1	0	0	0	0	41	3	1478	5	23	1264	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	100		0	175		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			85			120		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt					0.850							
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1770	0	1863	1583	0	1770	3539	0	1770	3539	0
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1770	0	1863	1583	0	1770	3539	0	1770	3539	0
Link Speed (mph)		20			35			55			55	
Link Distance (ft)		998			904			13384			2074	
Travel Time (s)		34.0			17.6			165.9			25.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	0	45	0	3	1612	0	25	1374	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

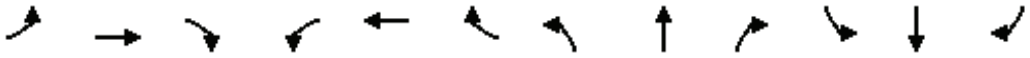
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	41	3	1478	5	23	1264	0
Future Vol, veh/h	1	0	0	0	0	41	3	1478	5	23	1264	0
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	-	-	-	25	-	-	100	-	-	175	-	-
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	1	0	0	0	0	45	3	1607	5	25	1374	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2234	3042	687	2353	3040	806	1374	0	0	1612	0	0
Stage 1	1424	1424	-	1616	1616	-	-	-	-	-	-	-
Stage 2	810	1618	-	737	1424	-	-	-	-	-	-	-
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	23	13	389	19	13	325	495	-	-	401	-	-
Stage 1	143	200	-	108	161	-	-	-	-	-	-	-
Stage 2	340	161	-	376	200	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	19	12	389	18	12	325	495	-	-	401	-	-
Mov Cap-2 Maneuver	19	12	-	18	12	-	-	-	-	-	-	-
Stage 1	142	188	-	107	160	-	-	-	-	-	-	-
Stage 2	292	160	-	353	188	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	205.7	17.8	0	0.3
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	495	-	-	19	-	325	401	-	-
HCM Lane V/C Ratio	0.007	-	-	0.057	-	0.137	0.062	-	-
HCM Control Delay (s)	12.3	-	-	205.7	0	17.8	14.6	-	-
HCM Lane LOS	B	-	-	F	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0.5	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	13	0	0	17	72	0	0	0	80	0	16
Future Volume (vph)	14	13	0	0	17	72	0	0	0	80	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.890						0.978	
Flt Protected		0.975									0.960	
Satd. Flow (prot)	0	1816	0	0	1658	0	0	1863	0	0	1749	0
Flt Permitted		0.975									0.960	
Satd. Flow (perm)	0	1816	0	0	1658	0	0	1863	0	0	1749	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2024			2044			1084			1110	
Travel Time (s)		55.2			55.7			29.6			30.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	96	0	0	0	0	0	104	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.2%		ICU Level of Service A	
Analysis Period (min) 15			

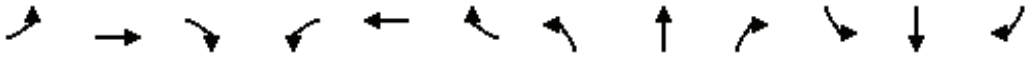
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	13	0	0	17	72	0	0	0	80	0	16
Future Vol, veh/h	14	13	0	0	17	72	0	0	0	80	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	15	14	0	0	18	78	0	0	0	87	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	96	0	0	14	0	0	110	140	14	101	101	57
Stage 1	-	-	-	-	-	-	44	44	-	57	57	-
Stage 2	-	-	-	-	-	-	66	96	-	44	44	-
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	1498	-	-	1604	-	-	868	751	1066	880	789	1009
Stage 1	-	-	-	-	-	-	970	858	-	955	847	-
Stage 2	-	-	-	-	-	-	945	815	-	970	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1498	-	-	1604	-	-	846	743	1066	873	781	1009
Mov Cap-2 Maneuver	-	-	-	-	-	-	846	743	-	873	781	-
Stage 1	-	-	-	-	-	-	960	849	-	945	847	-
Stage 2	-	-	-	-	-	-	929	815	-	960	849	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.9	0	0	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1498	-	-	1604	-	-	893
HCM Lane V/C Ratio	-	0.01	-	-	-	-	-	0.117
HCM Control Delay (s)	0	7.4	0	-	0	-	-	9.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	13	0	0	17	0	0	0	0	0	0	223
Future Volume (vph)	200	13	0	0	17	0	0	0	0	0	0	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.865	
Flt Protected		0.955										
Satd. Flow (prot)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Flt Permitted		0.955										
Satd. Flow (perm)	0	1779	0	0	1863	0	0	1863	0	0	1611	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2021			1989			1003			1004	
Travel Time (s)		55.1			54.2			27.4			27.4	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	231	0	0	18	0	0	0	0	0	242	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	200	13	0	0	17	0	0	0	0	0	0	223
Future Vol, veh/h	200	13	0	0	17	0	0	0	0	0	0	223
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	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	217	14	0	0	18	0	0	0	0	0	0	242

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	18	0	0	14	0	0	587	466	14	466	466	18
Stage 1	-	-	-	-	-	-	448	448	-	18	18	-
Stage 2	-	-	-	-	-	-	139	18	-	448	448	-
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	1599	-	-	1604	-	-	421	494	1066	507	494	1061
Stage 1	-	-	-	-	-	-	590	573	-	1001	880	-
Stage 2	-	-	-	-	-	-	864	880	-	590	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1599	-	-	1604	-	-	290	426	1066	454	426	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	290	426	-	454	426	-
Stage 1	-	-	-	-	-	-	509	494	-	864	880	-
Stage 2	-	-	-	-	-	-	667	880	-	509	494	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	7.1	0	0	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1599	-	-	1604	-	-	1061
HCM Lane V/C Ratio	-	0.136	-	-	-	-	-	0.228
HCM Control Delay (s)	0	7.6	0	-	0	-	-	9.4
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.5	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	20	67	174	29	428	50	939	175	353	906	33
Future Volume (vph)	28	20	67	174	29	428	50	939	175	353	906	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		40	0		0	380		205	800		150
Storage Lanes	0		1	1		1	1		1	2		1
Taper Length (ft)	25			25			145			225		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.972		0.950			0.950			0.950		
Satd. Flow (prot)	0	1811	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted		0.811		0.723			0.950			0.950		
Satd. Flow (perm)	0	1511	1583	1347	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87			323			190			80
Link Speed (mph)		30			35			55			55	
Link Distance (ft)		1006			150			540			1032	
Travel Time (s)		22.9			2.9			6.7			12.8	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	52	73	189	32	465	54	1021	190	384	985	36
Turn Type	D.Pm	NA	custom	D.Pm	NA	Free	Prot	NA	custom	Prot	NA	custom
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4		4	8		Free			2			6
Detector Phase	4	8	4	8	4		1	6	2	5	2	6
Switch Phase												
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0		4.0	20.0	20.0	4.0	20.0	20.0
Minimum Split (s)	39.5	36.0	39.5	36.0	39.5		12.5	28.0	35.0	12.5	35.0	28.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0		20.0	120.0	120.0	20.0	120.0	120.0
Total Split (%)	17.6%	17.6%	17.6%	17.6%	17.6%		11.8%	70.6%	70.6%	11.8%	70.6%	70.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		5.5	6.0	6.0	5.5	6.0	6.0
All-Red Time (s)	3.0	3.5	3.0	3.5	3.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		7.0	6.5	7.0	6.5		8.5	8.0	8.0	8.5	8.0	8.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)		23.0	23.5	23.0	23.5	170.0	10.4	112.0	116.3	11.5	116.3	112.0
Actuated g/C Ratio		0.14	0.14	0.14	0.14	1.00	0.06	0.66	0.68	0.07	0.68	0.66
v/c Ratio		0.25	0.25	1.04	0.12	0.29	0.50	0.44	0.17	1.66	0.41	0.03
Control Delay		69.6	9.6	145.3	65.8	0.5	93.1	14.6	1.6	356.5	13.0	0.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		69.6	9.6	145.3	65.8	0.5	93.1	14.6	1.6	356.5	13.0	0.1
LOS		E	A	F	E	A	F	B	A	F	B	A
Approach Delay		34.6			43.4			16.0			106.6	
Approach LOS		C			D			B			F	
Queue Length 50th (ft)		53	0	~226	32	0	59	273	0	~318	259	0
Queue Length 95th (ft)		100	37	#399	69	0	111	318	28	#431	303	0
Internal Link Dist (ft)		926			70			460			952	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)			40				380		205	800		150
Base Capacity (vph)		204	293	182	257	1583	119	2331	1143	232	2421	1070
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.25	0.25	1.04	0.12	0.29	0.45	0.44	0.17	1.66	0.41	0.03

Intersection Summary	
Area Type:	Other
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.66	
Intersection Signal Delay: 58.6	Intersection LOS: E
Intersection Capacity Utilization 71.5%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: SH 82 & CR 154 /CR 114

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	451	88	1	570	1	39	1	5	0	0	5
Future Volume (vph)	4	451	88	1	570	1	39	1	5	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	105		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			90			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.976						0.969			0.865	
Flt Protected							0.950	0.964				
Satd. Flow (prot)	0	3454	0	0	3539	0	1681	1653	0	0	1611	0
Flt Permitted							0.950	0.964				
Satd. Flow (perm)	0	3454	0	0	3539	0	1681	1653	0	0	1611	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		150			340			1037			952	
Travel Time (s)		2.9			6.6			28.3			26.0	
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
Shared Lane Traffic (%)							42%					
Lane Group Flow (vph)	0	590	0	0	622	0	24	24	0	0	5	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	451	88	1	570	1	39	1	5	0	0	5
Future Vol, veh/h	4	451	88	1	570	1	39	1	5	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	-	-	-	-
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	490	96	1	620	1	42	1	5	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	621	0	0	586	0	0	858	1169	293	877	1217	311
Stage 1	-	-	-	-	-	-	546	546	-	623	623	-
Stage 2	-	-	-	-	-	-	312	623	-	254	594	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
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	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	956	-	-	985	-	-	251	192	703	243	180	685
Stage 1	-	-	-	-	-	-	490	516	-	440	476	-
Stage 2	-	-	-	-	-	-	673	476	-	728	491	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	956	-	-	985	-	-	247	190	703	239	179	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	247	190	-	239	179	-
Stage 1	-	-	-	-	-	-	487	513	-	437	475	-
Stage 2	-	-	-	-	-	-	666	475	-	717	488	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	20.1	10.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	247	292	956	-	-	985	-	-	685
HCM Lane V/C Ratio	0.114	0.071	0.005	-	-	0.001	-	-	0.008
HCM Control Delay (s)	21.4	18.3	8.8	0	-	8.7	0	-	10.3
HCM Lane LOS	C	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	0	-	-	0	-	-	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	18	398	35	6	464
Future Volume (vph)	41	18	398	35	6	464
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		115	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958			0.850		
Flt Protected	0.967					0.999
Satd. Flow (prot)	1726	0	1863	1583	0	1861
Flt Permitted	0.967					0.999
Satd. Flow (perm)	1726	0	1863	1583	0	1861
Link Speed (mph)	20		25			25
Link Distance (ft)	765		701			502
Travel Time (s)	26.1		19.1			13.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	433	38	0	511
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	41	18	398	35	6	464
Future Vol, veh/h	41	18	398	35	6	464
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	-	-	115	-	-
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	45	20	433	38	7	504

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	951	433	0	0	471	0
Stage 1	433	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	288	623	-	-	1091	-
Stage 1	654	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	285	623	-	-	1091	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	598	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.9	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	1091	-
HCM Lane V/C Ratio	-	-	0.188	0.006	-
HCM Control Delay (s)	-	-	17.9	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	309	17	0	342	22	0
Future Volume (vph)	309	17	0	342	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					
Flt Protected					0.950	
Satd. Flow (prot)	1850	0	0	1863	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	1850	0	0	1863	1770	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	1492			797	669	
Travel Time (s)	40.7			21.7	22.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	354	0	0	372	24	0
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	309	17	0	342	22	0
Future Vol, veh/h	309	17	0	342	22	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	336	18	0	372	24	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	354	0	717	345
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	372	-
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	-	-	1205	-	396	698
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1205	-	396	698
Mov Cap-2 Maneuver	-	-	-	-	396	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	1205	-
HCM Lane V/C Ratio	0.06	-	-	-	-
HCM Control Delay (s)	14.7	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Summary of All Intervals

Run Number	20	21	22	23	24	25	26
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	5872	5748	5804	5832	5679	5897	5811
Vehs Exited	5364	5511	5288	5485	5445	5586	5465
Starting Vehs	440	473	413	446	472	461	460
Ending Vehs	948	710	929	793	706	772	806
Denied Entry Before	0	3	1	2	0	0	4
Denied Entry After	137	188	252	184	278	101	145
Travel Distance (mi)	14399	14426	14179	14382	14153	14579	14228
Travel Time (hr)	704.7	650.8	718.8	625.4	698.1	624.3	656.0
Total Delay (hr)	415.7	361.1	434.0	336.0	413.9	332.1	369.1
Total Stops	5027	4623	4803	4659	4706	6038	5438
Fuel Used (gal)	523.1	513.4	519.0	506.1	519.5	511.8	508.6

Summary of All Intervals

Run Number	27	28	29	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5779	5685	5865	5796
Vehs Exited	5340	5195	5305	5416
Starting Vehs	452	472	453	446	452
Ending Vehs	891	962	1013	635	834
Denied Entry Before	0	4	0	0	1
Denied Entry After	158	247	163	137	179
Travel Distance (mi)	14267	13909	14415	14281	14292
Travel Time (hr)	669.5	792.7	710.0	553.7	673.1
Total Delay (hr)	383.4	513.7	421.7	267.0	386.2
Total Stops	5122	5403	5236	3428	4953
Fuel Used (gal)	511.2	528.5	524.4	491.5	514.3

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	20	21	22	23	24	25	26
Vehs Entered	5872	5748	5804	5832	5679	5897	5811
Vehs Exited	5364	5511	5288	5485	5445	5586	5465
Starting Vehs	440	473	413	446	472	461	460
Ending Vehs	948	710	929	793	706	772	806
Denied Entry Before	0	3	1	2	0	0	4
Denied Entry After	137	188	252	184	278	101	145
Travel Distance (mi)	14399	14426	14179	14382	14153	14579	14228
Travel Time (hr)	704.7	650.8	718.8	625.4	698.1	624.3	656.0
Total Delay (hr)	415.7	361.1	434.0	336.0	413.9	332.1	369.1
Total Stops	5027	4623	4803	4659	4706	6038	5438
Fuel Used (gal)	523.1	513.4	519.0	506.1	519.5	511.8	508.6

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	27	28	29	Avg
Vehs Entered	5779	5685	5865	5793	5796
Vehs Exited	5340	5195	5305	5604	5416
Starting Vehs	452	472	453	446	452
Ending Vehs	891	962	1013	635	834
Denied Entry Before	0	4	0	0	1
Denied Entry After	158	247	163	137	179
Travel Distance (mi)	14267	13909	14415	14281	14292
Travel Time (hr)	669.5	792.7	710.0	553.7	673.1
Total Delay (hr)	383.4	513.7	421.7	267.0	386.2
Total Stops	5122	5403	5236	3428	4953
Fuel Used (gal)	511.2	528.5	524.4	491.5	514.3

1: SH 82 & Commercial Access /CR 115 Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.6	1.2	0.0	0.0	0.0	0.0	0.6	2.5
Denied Del/Veh (s)	0.1	105.0	85.5	0.0	0.0	0.0	1.8	0.9	2.3
Total Delay (hr)	0.1	7.9	13.6	0.1	5.0	0.1	0.2	2.7	29.6
Total Del/Veh (s)	74.5	1235.5	962.2	62.9	14.2	14.7	11.8	3.8	26.9
Stop Delay (hr)	0.1	7.9	13.7	0.1	0.0	0.0	0.1	0.0	21.8
Stop Del/Veh (s)	74.5	1236.5	963.7	52.3	0.0	0.0	8.1	0.0	19.8
Total Stops	3	17	50	4	0	0	38	0	112
Stop/Veh	1.00	0.74	0.98	0.80	0.00	0.00	0.64	0.00	0.03
Travel Dist (mi)	0.5	2.5	6.4	10.7	2789.4	41.0	22.4	975.9	3848.8
Travel Time (hr)	0.1	8.6	15.1	0.3	56.2	0.8	0.7	21.2	103.0
Avg Speed (mph)	6	0	0	37	50	49	33	47	38
Fuel Used (gal)	0.0	2.0	3.6	0.3	78.1	1.1	0.6	27.6	113.5
Fuel Eff. (mpg)	17.0	1.2	1.8	36.0	35.7	36.9	35.6	35.3	33.9
HC Emissions (g)	0	1	7	1	990	5	5	383	1393
CO Emissions (g)	2	131	333	62	29072	247	236	12336	42419
NOx Emissions (g)	0	3	13	13	5076	50	28	1738	6920
Vehicles Entered	3	19	47	5	1202	17	58	2522	3873
Vehicles Exited	3	11	31	4	1196	18	58	2522	3843
Hourly Exit Rate	3	11	31	4	1196	18	58	2522	3843
Input Volume	3	23	51	5	1310	20	61	2536	4009
% of Volume	100	48	61	80	91	90	95	99	96
Denied Entry Before	0	0	0	0	0	0	0	1	1
Denied Entry After	0	2	5	0	0	0	0	0	7
Density (ft/veh)									486
Occupancy (veh)	0	8	14	0	56	1	1	21	101

2: SVR West Access South Leg /SVR West Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	2.1	0.3	0.5	0.3	4.5	3.4	2.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.3	0.0	0.0	0.0	2.6	2.6	1.5
Total Stops	1	0	0	0	84	16	101
Stop/Veh	0.11	0.00	0.00	0.00	0.99	1.00	0.56
Travel Dist (mi)	3.4	6.0	4.2	16.3	17.2	3.3	50.4
Travel Time (hr)	0.1	0.2	0.2	0.7	0.8	0.2	2.2
Avg Speed (mph)	24	25	25	24	21	21	23
Fuel Used (gal)	0.1	0.2	0.1	0.5	0.5	0.1	1.4
Fuel Eff. (mpg)	33.7	34.9	34.2	35.3	34.9	34.7	34.8
HC Emissions (g)	0	0	0	3	4	0	8
CO Emissions (g)	9	13	11	64	87	9	194
NOx Emissions (g)	1	2	2	10	12	1	28
Vehicles Entered	9	16	11	43	84	16	179
Vehicles Exited	9	16	11	43	84	16	179
Hourly Exit Rate	9	16	11	43	84	16	179
Input Volume	9	17	10	43	84	17	180
% of Volume	100	94	110	100	100	94	99
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2778
Occupancy (veh)	0	0	0	1	1	0	2

3: SVR East Access South Leg/SVR East Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.1	0.2	0.2
Total Delay (hr)	0.1	0.0	0.0	0.3	0.3
Total Del/Veh (s)	2.3	1.0	0.2	4.0	3.2
Stop Delay (hr)	0.0	0.0	0.0	0.2	0.2
Stop Del/Veh (s)	0.0	0.0	0.0	2.7	1.7
Total Stops	2	0	0	231	233
Stop/Veh	0.02	0.00	0.00	0.99	0.62
Travel Dist (mi)	43.5	6.1	3.9	42.6	96.2
Travel Time (hr)	1.9	0.3	0.2	2.1	4.4
Avg Speed (mph)	23	24	24	20	22
Fuel Used (gal)	1.3	0.2	0.1	1.2	2.8
Fuel Eff. (mpg)	33.4	34.0	34.2	34.3	33.8
HC Emissions (g)	9	0	0	10	19
CO Emissions (g)	210	16	9	244	479
NOx Emissions (g)	31	2	1	32	66
Vehicles Entered	115	16	11	230	372
Vehicles Exited	116	16	11	231	374
Hourly Exit Rate	116	16	11	231	374
Input Volume	119	17	10	235	381
% of Volume	97	94	110	98	98
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					1349
Occupancy (veh)	2	0	0	2	4

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.8	0.7	3.7	1.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.1	2.6	5.1	2.2	1.1	0.1	1.6	2.6	0.1	61.9	22.2	0.3
Total Del/Veh (s)	138.7	150.2	78.9	71.4	84.9	1.5	80.2	11.8	2.1	660.9	40.6	19.9
Stop Delay (hr)	1.1	2.5	4.8	2.2	1.0	0.0	1.5	1.6	0.0	61.2	9.7	0.1
Stop Del/Veh (s)	132.5	142.8	74.5	69.4	82.1	0.1	77.7	7.3	1.7	653.6	17.8	6.4
Total Stops	32	74	244	75	34	1	67	239	24	470	1215	28
Stop/Veh	1.10	1.19	1.05	0.66	0.74	0.01	0.94	0.30	0.26	1.39	0.62	0.47
Travel Dist (mi)	5.0	10.6	40.5	2.6	1.1	3.9	6.9	79.9	9.1	53.9	371.9	11.1
Travel Time (hr)	1.3	3.0	6.8	2.4	1.1	0.3	1.8	4.1	0.3	63.2	29.0	0.6
Avg Speed (mph)	4	4	6	1	1	13	4	19	27	1	13	17
Fuel Used (gal)	0.4	0.9	2.4	0.7	0.3	0.1	0.5	2.3	0.2	15.6	16.1	0.4
Fuel Eff. (mpg)	12.5	11.8	16.9	3.9	3.7	37.6	13.8	34.1	55.2	3.5	23.1	25.7
HC Emissions (g)	2	3	16	3	1	1	1	25	2	44	149	5
CO Emissions (g)	60	123	518	76	38	18	77	838	92	1584	5499	210
NOx Emissions (g)	5	10	44	8	4	2	4	98	6	75	521	18
Vehicles Entered	28	60	229	111	44	194	69	805	92	313	1933	58
Vehicles Exited	27	59	223	110	44	194	69	804	92	253	1953	58
Hourly Exit Rate	27	59	223	110	44	194	69	804	92	253	1953	58
Input Volume	25	53	230	207	71	322	72	801	95	351	2147	64
% of Volume	108	111	97	53	62	60	96	100	97	72	91	91
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	3	7	2	1	0	2	4	0	63	29	1

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.3
Total Delay (hr)	100.9
Total Del/Veh (s)	90.5
Stop Delay (hr)	85.8
Stop Del/Veh (s)	77.0
Total Stops	2503
Stop/Veh	0.62
Travel Dist (mi)	596.5
Travel Time (hr)	114.1
Avg Speed (mph)	5
Fuel Used (gal)	39.8
Fuel Eff. (mpg)	15.0
HC Emissions (g)	253
CO Emissions (g)	9133
NOx Emissions (g)	796
Vehicles Entered	3936
Vehicles Exited	3886
Hourly Exit Rate	3886
Input Volume	4438
% of Volume	88
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	80
Occupancy (veh)	114

5: Frontage Road & CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	16.6	17.5	0.1	0.1	1.1
Total Delay (hr)	0.0	0.1	0.0	0.7	14.9	0.0	14.0	0.7	0.4	2.6	33.6
Total Del/Veh (s)	8.2	1.2	1.1	382.0	160.6	10.1	1070.9	447.1	771.5	860.1	148.7
Stop Delay (hr)	0.0	0.0	0.0	0.7	14.8	0.0	14.0	0.7	0.4	2.6	33.4
Stop Del/Veh (s)	7.4	0.4	0.2	385.6	159.1	8.8	1068.8	445.6	769.5	859.0	147.5
Total Stops	5	4	0	0	26	0	44	6	2	11	98
Stop/Veh	0.56	0.01	0.00	0.00	0.08	0.00	0.94	1.00	1.00	1.00	0.12
Travel Dist (mi)	0.2	7.0	2.9	0.4	20.1	0.1	6.4	0.9	0.3	1.8	40.1
Travel Time (hr)	0.0	0.5	0.2	0.8	15.5	0.0	14.5	0.8	0.4	2.7	35.5
Avg Speed (mph)	6	15	12	0	1	11	0	1	1	1	1
Fuel Used (gal)	0.0	0.5	0.1	0.2	3.9	0.0	3.4	0.2	0.1	0.7	9.1
Fuel Eff. (mpg)	14.6	12.9	23.1	2.0	5.2	29.9	1.9	4.2	2.7	2.7	4.4
HC Emissions (g)	0	6	1	0	14	0	12	0	0	0	34
CO Emissions (g)	2	247	27	10	465	1	324	12	7	39	1134
NOx Emissions (g)	0	25	4	0	25	0	14	0	0	1	70
Vehicles Entered	9	281	113	6	321	2	44	6	2	11	795
Vehicles Exited	9	281	113	6	318	2	20	4	1	6	760
Hourly Exit Rate	9	281	113	6	318	2	20	4	1	6	760
Input Volume	13	344	142	10	537	2	49	6	2	10	1115
% of Volume	69	82	80	60	59	100	41	67	50	60	68
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	2	0	0	0	2
Density (ft/veh)											109
Occupancy (veh)	0	0	0	1	16	0	14	1	0	3	35

6: CR 114 /CR 114 & CMC West Access Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.4	3.7	0.0	0.0	0.4
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	6.3	2.8	0.3	0.2	2.1	0.8	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	5.5	3.2	0.0	0.0	0.8	0.0	0.2
Total Stops	17	3	0	0	0	0	20
Stop/Veh	1.00	1.00	0.00	0.00	0.00	0.00	0.03
Travel Dist (mi)	2.3	0.5	26.8	7.2	0.1	36.5	73.3
Travel Time (hr)	0.1	0.0	1.1	0.4	0.0	1.6	3.2
Avg Speed (mph)	16	17	24	22	19	23	23
Fuel Used (gal)	0.1	0.0	0.8	0.2	0.0	1.1	2.2
Fuel Eff. (mpg)	30.4	29.5	32.7	34.9	36.6	33.6	33.2
HC Emissions (g)	0	0	5	2	0	7	14
CO Emissions (g)	6	1	138	41	0	157	343
NOx Emissions (g)	1	0	19	5	0	25	49
Vehicles Entered	16	3	211	57	1	393	681
Vehicles Exited	16	3	212	57	1	392	681
Hourly Exit Rate	16	3	212	57	1	392	681
Input Volume	18	3	211	53	1	402	688
% of Volume	89	100	100	108	100	98	99
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							811
Occupancy (veh)	0	0	1	0	0	2	3

7: CMC East Access & CR 114/CR 114 Performance by movement

Movement	EBT	EBR	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3		0.1	0.2
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	1.1	0.7	0.5		3.4	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.0		3.5	0.0
Total Stops	0	0	0	0	1	1
Stop/Veh	0.00	0.00	0.00		1.00	0.00
Travel Dist (mi)	54.8	1.5	57.3	0.1	0.1	113.7
Travel Time (hr)	2.3	0.1	2.4	0.0	0.0	4.8
Avg Speed (mph)	24	23	24	15	16	24
Fuel Used (gal)	1.6	0.0	1.7	0.0	0.0	3.4
Fuel Eff. (mpg)	34.0	37.3	33.0	30.6	32.1	33.5
HC Emissions (g)	10	0	13	0	0	22
CO Emissions (g)	214	3	308	0	0	525
NOx Emissions (g)	34	0	43	0	0	78
Vehicles Entered	210	5	393	0	1	609
Vehicles Exited	209	5	393	0	1	608
Hourly Exit Rate	209	5	393	0	1	608
Input Volume	209	5	402	1	1	618
% of Volume	100	100	98	0	100	98
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						612
Occupancy (veh)	2	0	2	0	0	5

Total Zone Performance

Denied Delay (hr)	3.2
Denied Del/Veh (s)	2.6
Total Delay (hr)	164.9
Total Del/Veh (s)	1487.5
Stop Delay (hr)	141.2
Stop Del/Veh (s)	1274.4
Total Stops	3068
Stop/Veh	7.69
Travel Dist (mi)	4819.0
Travel Time (hr)	267.2
Avg Speed (mph)	18
Fuel Used (gal)	172.3
Fuel Eff. (mpg)	28.0
HC Emissions (g)	1743
CO Emissions (g)	54227
NOx Emissions (g)	8008
Vehicles Entered	4456
Vehicles Exited	90
Hourly Exit Rate	90
Input Volume	11429
% of Volume	1
Denied Entry Before	1
Denied Entry After	9
Density (ft/veh)	301
Occupancy (veh)	264

Intersection: 1: SH 82 & Commercial Access /CR 115

Movement	EB	WB	WB	NB	NB	SB
Directions Served	LTR	L	TR	L	TR	L
Maximum Queue (ft)	32	49	758	24	2	68
Average Queue (ft)	4	39	499	5	0	24
95th Queue (ft)	19	53	957	19	2	52
Link Distance (ft)	951		858		13321	
Upstream Blk Time (%)			19			
Queuing Penalty (veh)			0			
Storage Bay Dist (ft)		25		100		175
Storage Blk Time (%)		96	6			
Queuing Penalty (veh)		49	1			

Intersection: 2: SVR West Access South Leg /SVR West Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	21	70
Average Queue (ft)	1	35
95th Queue (ft)	10	57
Link Distance (ft)	1996	1082
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SVR East Access South Leg/SVR East Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	30	82
Average Queue (ft)	2	49
95th Queue (ft)	15	74
Link Distance (ft)	1993	976
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	L	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	666	66	71	69	19	140	218	210	50	912	962	1063
Average Queue (ft)	311	60	58	38	1	69	123	105	15	736	779	808
95th Queue (ft)	724	82	71	76	13	129	208	193	40	1068	1123	1254
Link Distance (ft)	942		50	50	50		467	467				963
Upstream Blk Time (%)	0		89	34	0						19	30
Queuing Penalty (veh)	0		178	68	0						0	384
Storage Bay Dist (ft)		40				380			205	800	800	
Storage Blk Time (%)	59	14						0		45	49	12
Queuing Penalty (veh)	135	11						0		475	514	41

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	SB	SB	B15	B15	B10	B10
Directions Served	T	R	T	T	T	T
Maximum Queue (ft)	1037	345	1011	1006	2676	2729
Average Queue (ft)	695	42	387	387	511	519
95th Queue (ft)	1169	204	1179	1182	2301	2325
Link Distance (ft)	963		992	992	13321	13321
Upstream Blk Time (%)	6		21	23		
Queuing Penalty (veh)	72		265	294		
Storage Bay Dist (ft)		150				
Storage Blk Time (%)	25					
Queuing Penalty (veh)	16					

Intersection: 5: Frontage Road & CR 114

Movement	EB	EB	WB	WB	B20	B20	B33	NB	NB	SB
Directions Served	LT	TR	LT	TR	T	T	T	L	LTR	LTR
Maximum Queue (ft)	55	20	373	233	195	96	1332	184	625	170
Average Queue (ft)	9	1	349	26	174	6	1140	142	275	72
95th Queue (ft)	39	8	366	130	225	61	1767	233	819	200
Link Distance (ft)	50	50	278	278	122	122	1291		993	901
Upstream Blk Time (%)	1	0	98	1	88	0	74		3	
Queuing Penalty (veh)	3	0	0	0	0	0	0		0	
Storage Bay Dist (ft)								105		
Storage Blk Time (%)								79	0	
Queuing Penalty (veh)								24	0	

Intersection: 6: CR 114 /CR 114 & CMC West Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	31	8
Average Queue (ft)	12	0
95th Queue (ft)	31	5
Link Distance (ft)	723	452
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CMC East Access & CR 114/CR 114

Movement	NB
Directions Served	LR
Maximum Queue (ft)	25
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	634
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 2530

Intersection: 4: SH 82 & CR 154 /CR 114

Phase	1	2	4	5	6	8
Movement(s) Served	NBL	SBT	EBWB	SBL	NBT	EBWB
Maximum Green (s)	11.5	112.0	23.5	11.5	112.0	23.0
Minimum Green (s)	4.0	20.0	12.0	4.0	20.0	12.0
Recall	None	C-Max	None	None	C-Max	None
Avg. Green (s)	10.5	113.9	23.4	11.6	112.0	22.9
g/C Ratio	NA	NA	NA	NA	NA	NA
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	55	100	95	100	100	95
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary
Average Cycle Length (s): NA

Number of Complete Cycles : 0

SimTraffic Simulation Summary
2045 Total PM_Simtraffic.syn

Summary of All Intervals

Run Number	20	21	22	23	24	25	26
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	6155	6211	5953	5928	6094	6169	5861
Vehs Exited	5880	5979	5808	5794	5858	5905	5668
Starting Vehs	469	482	508	513	475	522	496
Ending Vehs	744	714	653	647	711	786	689
Denied Entry Before	1	0	1	2	1	1	2
Denied Entry After	541	456	550	702	491	515	691
Travel Distance (mi)	14794	15164	14361	14443	14642	14986	14052
Travel Time (hr)	872.5	801.6	769.5	887.3	830.2	877.6	826.0
Total Delay (hr)	570.2	493.6	475.8	593.3	532.0	573.6	538.4
Total Stops	6960	7041	6375	6593	6974	7392	5908
Fuel Used (gal)	576.6	570.3	543.8	573.5	564.1	585.9	544.3

Summary of All Intervals

Run Number	27	28	29	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6117	5930	6034	6054
Vehs Exited	5903	5742	5833	5844
Starting Vehs	535	529	475	494
Ending Vehs	749	717	676	702
Denied Entry Before	3	17	0	3
Denied Entry After	606	686	497	560
Travel Distance (mi)	14852	14359	14766	14651
Travel Time (hr)	878.9	957.5	816.3	846.0
Total Delay (hr)	576.7	664.5	515.0	547.3
Total Stops	7074	6632	7049	6796
Fuel Used (gal)	580.4	585.0	561.4	557.0	567.5

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	20	21	22	23	24	25	26
Vehs Entered	6155	6211	5953	5928	6094	6169	5861
Vehs Exited	5880	5979	5808	5794	5858	5905	5668
Starting Vehs	469	482	508	513	475	522	496
Ending Vehs	744	714	653	647	711	786	689
Denied Entry Before	1	0	1	2	1	1	2
Denied Entry After	541	456	550	702	491	515	691
Travel Distance (mi)	14794	15164	14361	14443	14642	14986	14052
Travel Time (hr)	872.5	801.6	769.5	887.3	830.2	877.6	826.0
Total Delay (hr)	570.2	493.6	475.8	593.3	532.0	573.6	538.4
Total Stops	6960	7041	6375	6593	6974	7392	5908
Fuel Used (gal)	576.6	570.3	543.8	573.5	564.1	585.9	544.3

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	27	28	29	Avg
	C:\Sim Traffic Runs\2045 Total PM_Simtraffic			
Vehs Entered	6117	5930	6034	6129	6054
Vehs Exited	5903	5742	5833	5893	5844
Starting Vehs	535	529	475	438	494
Ending Vehs	749	717	676	674	702
Denied Entry Before	3	17	0	3	3
Denied Entry After	606	686	497	438	560
Travel Distance (mi)	14852	14359	14766	14748	14651
Travel Time (hr)	878.9	957.5	816.3	788.6	846.0
Total Delay (hr)	576.7	664.5	515.0	487.5	547.3
Total Stops	7074	6632	7049	6762	6796
Fuel Used (gal)	580.4	585.0	561.4	557.0	567.5

1: SH 82 & Commercial Access /CR 115 Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Denied Del/Veh (s)	0.1	4.5	1.6	0.0	0.0	0.0	2.1	0.2	0.1
Total Delay (hr)	0.0	2.1	7.0	0.0	16.2	0.1	0.8	0.5	26.7
Total Del/Veh (s)	7.5	923.4	349.0	25.9	23.3	23.8	80.3	1.4	24.7
Stop Delay (hr)	0.0	2.0	7.0	0.0	0.0	0.0	0.8	0.0	9.9
Stop Del/Veh (s)	7.3	921.8	349.2	5.5	0.0	0.0	78.0	0.0	9.1
Total Stops	4	8	71	2	0	0	35	0	120
Stop/Veh	1.00	1.00	0.99	0.67	0.00	0.00	0.92	0.00	0.03
Travel Dist (mi)	0.8	1.2	11.0	7.0	5975.2	32.5	14.0	481.9	6523.5
Travel Time (hr)	0.0	2.1	7.4	0.2	125.7	0.7	1.2	9.4	146.7
Avg Speed (mph)	16	1	1	46	48	46	12	52	45
Fuel Used (gal)	0.0	0.5	2.0	0.2	173.1	0.9	0.6	14.3	191.6
Fuel Eff. (mpg)	30.2	2.4	5.5	34.4	34.5	35.6	24.9	33.7	34.0
HC Emissions (g)	0	0	9	1	2265	4	4	208	2493
CO Emissions (g)	2	49	363	66	72926	233	180	7171	80989
NOx Emissions (g)	0	2	20	9	10840	38	19	951	11879
Vehicles Entered	4	8	70	3	2363	13	36	1245	3742
Vehicles Exited	4	7	65	3	2375	13	37	1245	3749
Hourly Exit Rate	4	7	65	3	2375	13	37	1245	3749
Input Volume	4	8	68	3	2837	15	37	1252	4224
% of Volume	100	88	96	100	84	87	100	99	89
Denied Entry Before	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0
Density (ft/veh)									333
Occupancy (veh)	0	2	7	0	126	1	1	9	147

2: SVR West Access South Leg /SVR West Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	2.1	0.2	1.0	0.7	4.5	3.2	2.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	0.4	0.0	0.0	0.0	2.8	2.6	1.0
Total Stops	2	0	0	0	62	15	79
Stop/Veh	0.11	0.00	0.00	0.00	1.00	1.00	0.37
Travel Dist (mi)	7.1	4.9	5.6	34.4	12.7	3.1	67.8
Travel Time (hr)	0.3	0.2	0.2	1.5	0.6	0.1	2.9
Avg Speed (mph)	24	25	24	24	21	21	23
Fuel Used (gal)	0.2	0.1	0.2	1.0	0.4	0.1	1.9
Fuel Eff. (mpg)	34.1	34.5	34.4	35.2	34.8	34.3	34.8
HC Emissions (g)	1	0	0	8	2	0	11
CO Emissions (g)	18	11	15	166	53	9	271
NOx Emissions (g)	3	2	2	25	7	1	40
Vehicles Entered	19	13	15	90	62	15	214
Vehicles Exited	19	13	15	90	62	15	214
Hourly Exit Rate	19	13	15	90	62	15	214
Input Volume	18	15	16	92	64	13	218
% of Volume	106	87	94	98	97	115	98
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2096
Occupancy (veh)	0	0	0	1	1	0	3

3: SVR East Access South Leg/SVR East Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.1	0.2	0.2
Total Delay (hr)	0.2	0.0	0.0	0.2	0.4
Total Del/Veh (s)	3.0	2.3	0.3	3.7	3.1
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.0	0.0	2.7	1.0
Total Stops	4	0	0	176	180
Stop/Veh	0.02	0.00	0.00	0.99	0.39
Travel Dist (mi)	95.4	5.7	5.6	32.5	139.2
Travel Time (hr)	4.1	0.2	0.2	1.6	6.2
Avg Speed (mph)	23	24	24	20	23
Fuel Used (gal)	2.8	0.2	0.2	1.0	4.1
Fuel Eff. (mpg)	33.5	34.0	34.0	34.2	33.7
HC Emissions (g)	23	0	0	8	32
CO Emissions (g)	521	15	13	196	745
NOx Emissions (g)	78	2	2	26	108
Vehicles Entered	253	15	15	176	459
Vehicles Exited	253	15	15	176	459
Hourly Exit Rate	253	15	15	176	459
Input Volume	258	15	16	179	468
% of Volume	98	100	94	98	98
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					956
Occupancy (veh)	4	0	0	2	6

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9	0.6
Denied Del/Veh (s)	0.4	0.5	3.8	1.6	0.4	0.1	0.0	0.0	0.0	64.2	45.2	68.2
Total Delay (hr)	1.3	1.7	0.9	2.3	0.9	0.2	12.3	25.0	0.8	60.8	3.8	0.0
Total Del/Veh (s)	91.6	100.8	42.2	74.5	77.5	1.7	315.2	45.9	15.8	649.8	15.0	3.8
Stop Delay (hr)	1.2	1.6	0.8	2.2	0.9	0.0	12.0	13.8	0.4	60.3	2.1	0.0
Stop Del/Veh (s)	86.7	95.0	38.5	72.6	74.8	0.1	307.3	25.3	8.1	644.5	8.1	1.8
Total Stops	51	66	80	76	33	8	180	1348	87	450	301	9
Stop/Veh	1.00	1.08	1.01	0.69	0.77	0.02	1.29	0.69	0.48	1.34	0.33	0.30
Travel Dist (mi)	8.9	10.5	13.9	2.5	1.0	7.4	12.8	192.9	18.1	52.7	173.1	5.7
Travel Time (hr)	1.6	2.1	1.5	2.5	1.0	0.6	12.7	28.5	1.5	68.1	18.9	0.8
Avg Speed (mph)	6	5	10	1	1	12	1	7	12	1	25	32
Fuel Used (gal)	0.6	0.7	0.7	0.7	0.3	0.2	3.3	11.8	0.9	16.4	8.4	0.3
Fuel Eff. (mpg)	15.6	14.6	20.9	3.8	4.0	34.9	3.9	16.3	19.6	3.2	20.5	20.8
HC Emissions (g)	3	4	10	2	1	2	8	72	10	57	79	3
CO Emissions (g)	104	133	245	67	33	38	335	2066	399	1675	3394	93
NOx Emissions (g)	8	11	25	7	3	5	21	252	35	79	272	8
Vehicles Entered	50	59	78	108	42	368	135	1935	181	314	911	30
Vehicles Exited	50	59	78	108	41	369	122	1942	182	251	910	30
Hourly Exit Rate	50	59	78	108	41	369	122	1942	182	251	910	30
Input Volume	50	61	78	174	59	498	153	2284	207	362	955	34
% of Volume	100	97	100	62	69	74	80	85	88	69	95	88
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	16	35	1
Density (ft/veh)												
Occupancy (veh)	2	2	1	2	1	1	13	29	1	62	7	0

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	All
Denied Delay (hr)	18.5
Denied Del/Veh (s)	15.6
Total Delay (hr)	110.0
Total Del/Veh (s)	92.5
Stop Delay (hr)	95.4
Stop Del/Veh (s)	80.2
Total Stops	2689
Stop/Veh	0.63
Travel Dist (mi)	499.4
Travel Time (hr)	139.6
Avg Speed (mph)	4
Fuel Used (gal)	44.3
Fuel Eff. (mpg)	11.3
HC Emissions (g)	250
CO Emissions (g)	8582
NOx Emissions (g)	727
Vehicles Entered	4211
Vehicles Exited	4142
Hourly Exit Rate	4142
Input Volume	4915
% of Volume	84
Denied Entry Before	0
Denied Entry After	52
Density (ft/veh)	75
Occupancy (veh)	121

5: Frontage Road & CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.2	0.9	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	308.4	373.4	263.3		0.1	0.1
Total Delay (hr)	0.0	0.1	0.0	0.4	14.2	0.0	23.4	0.1	1.6	0.1	0.4	5.7
Total Del/Veh (s)	10.7	1.1	0.9	349.5	109.1	2.6	1079.9	495.9	588.9		770.8	973.5
Stop Delay (hr)	0.0	0.0	0.0	0.4	13.8	0.0	23.4	0.1	1.6	0.1	0.4	5.7
Stop Del/Veh (s)	9.8	0.4	0.2	352.7	106.5	1.5	1079.0	491.8	588.7		769.7	973.3
Total Stops	7	5	0	1	56	0	77	2	10	0	1	21
Stop/Veh	0.58	0.01	0.00	0.25	0.12	0.00	0.99	2.00	1.00		0.50	1.00
Travel Dist (mi)	0.3	8.9	2.4	0.2	28.6	0.1	11.1	0.2	1.5	0.1	0.2	3.2
Travel Time (hr)	0.1	0.7	0.2	0.4	15.0	0.0	32.8	0.4	2.6	0.1	0.4	5.8
Avg Speed (mph)	5	13	12	1	2	18	0	2	1	1	1	1
Fuel Used (gal)	0.0	0.7	0.1	0.1	3.7	0.0	7.7	0.1	0.6	0.0	0.1	1.4
Fuel Eff. (mpg)	12.3	12.5	20.8	2.2	7.7	48.0	1.4	2.9	2.4	2.3	2.2	2.3
HC Emissions (g)	0	8	1	0	13	0	29	0	0	0	0	0
CO Emissions (g)	3	292	32	5	420	1	744	5	35	2	6	85
NOx Emissions (g)	1	33	5	0	22	0	30	0	1	0	0	2
Vehicles Entered	12	381	99	4	459	2	73	1	9	0	1	20
Vehicles Exited	12	381	99	3	451	2	44	1	7	0	1	11
Hourly Exit Rate	12	381	99	3	451	2	44	1	7	0	1	11
Input Volume	16	490	124	5	593	2	102	2	12	1	2	22
% of Volume	75	78	80	60	76	100	43	50	58	0	50	50
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	32	1	3	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	1	0	0	15	0	24	0	2	0	0	6

5: Frontage Road & CR 114 Performance by movement

Movement	All
Denied Delay (hr)	10.1
Denied Del/Veh (s)	33.1
Total Delay (hr)	46.1
Total Del/Veh (s)	154.2
Stop Delay (hr)	45.6
Stop Del/Veh (s)	152.7
Total Stops	180
Stop/Veh	0.17
Travel Dist (mi)	56.9
Travel Time (hr)	58.4
Avg Speed (mph)	1
Fuel Used (gal)	14.6
Fuel Eff. (mpg)	3.9
HC Emissions (g)	52
CO Emissions (g)	1630
NOx Emissions (g)	94
Vehicles Entered	1061
Vehicles Exited	1012
Hourly Exit Rate	1012
Input Volume	1371
% of Volume	74
Denied Entry Before	0
Denied Entry After	36
Density (ft/veh)	79
Occupancy (veh)	48

6: CR 114 /CR 114 & CMC West Access Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.5	3.3	0.2	0.0	0.4
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.1	0.2
Total Del/Veh (s)	7.8	3.1	0.6	0.3	4.0	0.7	0.9
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	6.9	3.4	0.0	0.0	1.9	0.0	0.3
Total Stops	34	2	0	0	1	0	37
Stop/Veh	1.00	1.00	0.00	0.00	0.33	0.00	0.04
Travel Dist (mi)	4.6	0.2	56.9	5.4	0.3	29.5	97.0
Travel Time (hr)	0.3	0.0	2.4	0.3	0.0	1.3	4.3
Avg Speed (mph)	15	17	24	22	18	23	23
Fuel Used (gal)	0.2	0.0	1.8	0.2	0.0	0.9	3.0
Fuel Eff. (mpg)	29.2	29.9	32.4	33.8	32.3	33.7	32.7
HC Emissions (g)	1	0	14	2	0	5	23
CO Emissions (g)	33	1	347	47	1	115	543
NOx Emissions (g)	5	0	47	6	0	18	77
Vehicles Entered	33	2	449	43	3	326	856
Vehicles Exited	34	2	450	43	3	325	857
Hourly Exit Rate	34	2	450	43	3	325	857
Input Volume	36	2	446	43	4	319	850
% of Volume	94	100	101	100	75	102	101
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							609
Occupancy (veh)	0	0	2	0	0	1	4

7: CMC East Access & CR 114/CR 114 Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1	0.1	0.1
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	2.6	2.2	4.3	0.5	6.4	2.8	1.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	2.6	0.0	5.4	2.8	0.2
Total Stops	0	0	3	1	16	5	25
Stop/Veh	0.00	0.00	0.50	0.00	1.00	1.00	0.03
Travel Dist (mi)	119.5	6.0	0.8	40.8	1.9	0.6	169.6
Travel Time (hr)	5.1	0.3	0.0	1.7	0.1	0.0	7.3
Avg Speed (mph)	23	23	20	24	15	17	23
Fuel Used (gal)	3.5	0.2	0.0	1.2	0.1	0.0	5.0
Fuel Eff. (mpg)	33.9	35.1	33.9	33.0	29.2	30.4	33.6
HC Emissions (g)	25	0	0	8	0	0	33
CO Emissions (g)	552	12	3	208	5	1	781
NOx Emissions (g)	89	2	0	29	1	0	121
Vehicles Entered	430	21	6	280	15	5	757
Vehicles Exited	430	21	6	280	16	5	758
Hourly Exit Rate	430	21	6	280	16	5	758
Input Volume	426	22	5	275	16	4	748
% of Volume	101	95	120	102	100	125	101
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							397
Occupancy (veh)	5	0	0	2	0	0	7

Total Zone Performance

Denied Delay (hr)	28.9
Denied Del/Veh (s)	31.0
Total Delay (hr)	184.0
Total Del/Veh (s)	1766.0
Stop Delay (hr)	151.2
Stop Del/Veh (s)	1451.4
Total Stops	3310
Stop/Veh	8.83
Travel Dist (mi)	7553.3
Travel Time (hr)	365.5
Avg Speed (mph)	22
Fuel Used (gal)	264.6
Fuel Eff. (mpg)	28.5
HC Emissions (g)	2894
CO Emissions (g)	93541
NOx Emissions (g)	13045
Vehicles Entered	3262
Vehicles Exited	17
Hourly Exit Rate	17
Input Volume	12794
% of Volume	0
Denied Entry Before	0
Denied Entry After	88
Density (ft/veh)	236
Occupancy (veh)	337

Intersection: 1: SH 82 & Commercial Access /CR 115

Movement	EB	WB	WB	NB	NB	B15	B15	B15	SB	SB
Directions Served	LTR	L	TR	L	TR	T	T		L	T
Maximum Queue (ft)	33	49	470	19	6	1005	1008	721	112	18
Average Queue (ft)	4	27	225	1	0	243	238	33	39	1
95th Queue (ft)	22	57	558	11	5	935	926	324	91	15
Link Distance (ft)	951		858		13321	963	963	963		2040
Upstream Blk Time (%)			2			0	1	0		
Queuing Penalty (veh)			0			4	7	1		
Storage Bay Dist (ft)		25		100					175	
Storage Blk Time (%)		68	68							
Queuing Penalty (veh)		46	5							

Intersection: 2: SVR West Access South Leg /SVR West Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	28	60
Average Queue (ft)	2	32
95th Queue (ft)	14	52
Link Distance (ft)	1996	1082
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SVR East Access South Leg/SVR East Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	45	79
Average Queue (ft)	4	44
95th Queue (ft)	25	68
Link Distance (ft)	1993	976
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	B14	B14	SB
Directions Served	LT	R	L	T	R	L	T	T	R	T	T	L
Maximum Queue (ft)	342	68	71	68	74	466	574	563	390	1402	1401	912
Average Queue (ft)	169	46	59	35	7	378	540	501	182	1332	1335	719
95th Queue (ft)	316	89	72	74	41	579	562	651	476	1616	1583	1056
Link Distance (ft)	942		50	50	50		467	467		1349	1349	
Upstream Blk Time (%)			90	26	0	9	42	26		45	46	
Queuing Penalty (veh)			214	63	1	0	0	0		0	0	
Storage Bay Dist (ft)		40				380			205			800
Storage Blk Time (%)	63	2				36	25	34				39
Queuing Penalty (veh)	49	3				407	38	71				188

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	SB	SB	SB	SB	B15	B15	B10	B10
Directions Served	L	T	T	R	T	T	T	T
Maximum Queue (ft)	962	1046	954	43	675	600	83	78
Average Queue (ft)	745	596	298	8	163	113	17	16
95th Queue (ft)	1108	1278	783	30	663	555	160	157
Link Distance (ft)		963	963		992	992	13321	13321
Upstream Blk Time (%)	19	26	0		4	2		
Queuing Penalty (veh)	0	163	0		26	10		
Storage Bay Dist (ft)	800			150				
Storage Blk Time (%)	45	1	6					
Queuing Penalty (veh)	215	5	2					

Intersection: 5: Frontage Road & CR 114

Movement	EB	EB	WB	WB	B20	B20	B33	NB	NB	SB
Directions Served	LT	TR	LT	TR	T	T	T	L	LTR	LTR
Maximum Queue (ft)	58	24	373	240	196	88	1336	190	871	333
Average Queue (ft)	10	1	330	26	136	8	784	161	530	147
95th Queue (ft)	42	12	416	144	252	70	1723	232	1225	339
Link Distance (ft)	50	50	278	278	122	122	1291		993	901
Upstream Blk Time (%)	2	0	84	2	66	1	40		34	
Queuing Penalty (veh)	7	0	0	0	0	0	0		0	
Storage Bay Dist (ft)								105		
Storage Blk Time (%)								89	3	
Queuing Penalty (veh)								58	1	

Intersection: 6: CR 114 /CR 114 & CMC West Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	52	24
Average Queue (ft)	18	1
95th Queue (ft)	39	12
Link Distance (ft)	723	452
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CMC East Access & CR 114/CR 114

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	46	41
Average Queue (ft)	4	14
95th Queue (ft)	24	38
Link Distance (ft)	768	634
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1584

Intersection: 4: SH 82 & CR 154 /CR 114

Phase	1	2	4	5	6	8
Movement(s) Served	NBL	SBT	EBWB	SBL	NBT	EBWB
Maximum Green (s)	11.5	112.0	23.5	11.5	112.0	23.0
Minimum Green (s)	4.0	20.0	12.0	4.0	20.0	12.0
Recall	None	C-Max	None	None	C-Max	None
Avg. Green (s)	11.6	112.0	23.4	11.6	112.0	22.9
g/C Ratio	NA	NA	NA	NA	NA	NA
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	95	100	95	100	100	95
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary
Average Cycle Length (s): NA

Number of Complete Cycles : 0

SimTraffic Simulation Summary
2045 Total AM_Simtraffic_180s.syn

Summary of All Intervals

Run Number	20	21	22	23	24	25	26
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	5900	5944	5858	5960	6017	5869	5744
Vehs Exited	5688	5730	5737	5713	5808	5732	5627
Starting Vehs	449	387	437	402	431	449	457
Ending Vehs	661	601	558	649	640	586	574
Denied Entry Before	1	4	4	0	0	0	1
Denied Entry After	144	95	134	107	61	179	239
Travel Distance (mi)	14700	14846	14771	14876	14978	14938	14440
Travel Time (hr)	605.9	525.1	570.5	599.2	540.2	631.2	663.2
Total Delay (hr)	310.4	226.5	274.1	301.5	239.1	331.8	373.4
Total Stops	4635	4097	4579	6114	4407	5767	4165
Fuel Used (gal)	513.3	498.5	506.3	514.6	508.6	524.3	519.0

Summary of All Intervals

Run Number	22 Sim Traffic Runs\2045 Total AM_Simtraffic_180s				Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	5968	5777	5849	5938	5891
Vehs Exited	5792	5643	5716	5747	5722
Starting Vehs	423	427	413	395	421
Ending Vehs	599	561	546	586	595
Denied Entry Before	0	0	1	1	1
Denied Entry After	12	243	127	122	133
Travel Distance (mi)	15040	14486	14590	14878	14776
Travel Time (hr)	550.8	638.7	598.5	570.9	590.4
Total Delay (hr)	249.5	347.4	305.0	271.8	293.7
Total Stops	5612	4949	4358	5132	4889
Fuel Used (gal)	506.0	515.3	508.6	507.9	511.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	20	21	22	23	24	25	26
Vehs Entered	5900	5944	5858	5960	6017	5869	5744
Vehs Exited	5688	5730	5737	5713	5808	5732	5627
Starting Vehs	449	387	437	402	431	449	457
Ending Vehs	661	601	558	649	640	586	574
Denied Entry Before	1	4	4	0	0	0	1
Denied Entry After	144	95	134	107	61	179	239
Travel Distance (mi)	14700	14846	14771	14876	14978	14938	14440
Travel Time (hr)	605.9	525.1	570.5	599.2	540.2	631.2	663.2
Total Delay (hr)	310.4	226.5	274.1	301.5	239.1	331.8	373.4
Total Stops	4635	4097	4579	6114	4407	5767	4165
Fuel Used (gal)	513.3	498.5	506.3	514.6	508.6	524.3	519.0

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	22 Sim Traffic Runs\2045 Total AM_Simtraffic_180s				Avg
Vehs Entered	5968	5777	5849	5938	5891
Vehs Exited	5792	5643	5716	5747	5722
Starting Vehs	423	427	413	395	421
Ending Vehs	599	561	546	586	595
Denied Entry Before	0	0	1	1	1
Denied Entry After	12	243	127	122	133
Travel Distance (mi)	15040	14486	14590	14878	14776
Travel Time (hr)	550.8	638.7	598.5	570.9	590.4
Total Delay (hr)	249.5	347.4	305.0	271.8	293.7
Total Stops	5612	4949	4358	5132	4889
Fuel Used (gal)	506.0	515.3	508.6	507.9	511.1

1: SH 82 & Commercial Access /CR 115 Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.7	2.4	0.0	0.0	0.0	0.0	0.6	3.8
Denied Del/Veh (s)	0.1	122.1	166.1	0.1	0.0	0.1	1.7	0.9	3.5
Total Delay (hr)	0.1	9.2	13.9	0.1	5.1	0.1	0.2	2.8	31.5
Total Del/Veh (s)	61.6	1439.3	1066.0	80.3	14.5	13.2	12.6	3.9	28.2
Stop Delay (hr)	0.1	9.2	13.9	0.1	0.0	0.0	0.1	0.0	23.4
Stop Del/Veh (s)	61.6	1439.4	1066.9	68.2	0.0	0.0	8.5	0.0	21.0
Total Stops	3	17	45	5	0	0	37	0	107
Stop/Veh	1.00	0.74	0.96	1.00	0.00	0.00	0.63	0.00	0.03
Travel Dist (mi)	0.5	2.4	5.4	11.1	2866.2	44.1	22.5	991.1	3943.2
Travel Time (hr)	0.1	10.0	16.5	0.3	57.8	0.9	0.7	21.6	107.9
Avg Speed (mph)	6	0	0	35	50	48	32	47	38
Fuel Used (gal)	0.0	2.4	3.9	0.3	81.1	1.2	0.6	28.2	117.8
Fuel Eff. (mpg)	18.2	1.0	1.4	34.2	35.3	37.3	34.7	35.1	33.5
HC Emissions (g)	0	1	10	1	1097	5	5	376	1496
CO Emissions (g)	2	146	357	68	32159	260	243	12295	45531
NOx Emissions (g)	0	3	13	14	5390	52	26	1743	7242
Vehicles Entered	3	19	43	5	1218	19	58	2561	3926
Vehicles Exited	3	9	25	5	1227	19	58	2564	3910
Hourly Exit Rate	3	9	25	5	1227	19	58	2564	3910
Input Volume	3	23	51	5	1310	20	61	2536	4009
% of Volume	100	39	49	100	94	95	95	101	98
Denied Entry Before	0	0	0	0	0	0	0	1	1
Denied Entry After	0	3	9	0	0	0	0	1	13
Density (ft/veh)									469
Occupancy (veh)	0	9	14	0	58	1	1	21	104

2: SVR West Access South Leg /SVR West Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.2	0.1	0.2	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	2.4	0.2	0.2	0.3	4.6	2.9	2.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.6	0.0	0.0	0.0	2.7	2.3	1.4
Total Stops	1	0	0	0	81	18	100
Stop/Veh	0.12	0.00	0.00	0.00	0.99	0.95	0.54
Travel Dist (mi)	3.1	7.5	3.6	18.3	16.7	3.8	52.9
Travel Time (hr)	0.1	0.3	0.1	0.8	0.8	0.2	2.3
Avg Speed (mph)	24	25	24	24	21	21	23
Fuel Used (gal)	0.1	0.2	0.1	0.5	0.5	0.1	1.5
Fuel Eff. (mpg)	34.8	34.0	33.8	35.4	34.6	34.3	34.7
HC Emissions (g)	0	1	0	3	5	0	9
CO Emissions (g)	8	16	9	73	103	11	220
NOx Emissions (g)	1	3	1	11	14	1	32
Vehicles Entered	8	20	9	48	81	18	184
Vehicles Exited	8	20	9	48	81	18	184
Hourly Exit Rate	8	20	9	48	81	18	184
Input Volume	9	17	10	43	84	17	180
% of Volume	89	118	90	112	96	106	102
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2657
Occupancy (veh)	0	0	0	1	1	0	2

3: SVR East Access South Leg/SVR East Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.1	0.2	0.2
Total Delay (hr)	0.1	0.0	0.0	0.3	0.4
Total Del/Veh (s)	2.2	1.3	0.1	4.1	3.3
Stop Delay (hr)	0.0	0.0	0.0	0.2	0.2
Stop Del/Veh (s)	0.0	0.0	0.0	2.7	1.7
Total Stops	1	0	0	238	239
Stop/Veh	0.01	0.00	0.00	0.99	0.62
Travel Dist (mi)	45.1	6.6	3.2	44.0	98.9
Travel Time (hr)	1.9	0.3	0.1	2.2	4.5
Avg Speed (mph)	24	24	25	20	22
Fuel Used (gal)	1.3	0.2	0.1	1.3	2.9
Fuel Eff. (mpg)	33.7	33.8	36.0	34.1	34.0
HC Emissions (g)	10	0	0	10	20
CO Emissions (g)	226	17	7	245	495
NOx Emissions (g)	33	2	1	32	69
Vehicles Entered	119	17	9	238	383
Vehicles Exited	119	18	9	237	383
Hourly Exit Rate	119	18	9	237	383
Input Volume	119	17	10	235	381
% of Volume	100	106	90	101	101
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					1312
Occupancy (veh)	2	0	0	2	4

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.7	0.7	3.7	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.6	1.4	2.1	2.2	1.2	0.1	1.9	3.5	0.1	31.6	40.5	0.8
Total Del/Veh (s)	92.6	94.4	33.1	60.3	89.2	1.4	92.5	15.5	3.4	320.6	66.7	43.8
Stop Delay (hr)	0.6	1.3	1.9	2.2	1.2	0.0	1.8	2.4	0.1	30.2	20.8	0.4
Stop Del/Veh (s)	87.3	88.0	29.4	58.4	86.4	0.1	89.6	10.4	2.9	306.1	34.3	21.6
Total Stops	23	58	223	76	37	1	70	284	32	524	1893	53
Stop/Veh	0.96	1.07	0.97	0.57	0.76	0.00	0.97	0.35	0.32	1.48	0.87	0.80
Travel Dist (mi)	4.1	9.3	40.4	3.1	1.2	4.5	7.1	80.2	10.0	64.6	407.5	12.5
Travel Time (hr)	0.8	1.7	3.9	2.4	1.3	0.4	2.1	5.0	0.4	33.3	48.0	1.2
Avg Speed (mph)	5	5	11	1	1	13	3	16	24	2	8	11
Fuel Used (gal)	0.3	0.6	1.7	0.7	0.3	0.1	0.6	2.5	0.2	9.4	19.5	0.6
Fuel Eff. (mpg)	15.8	15.9	23.6	4.5	3.6	36.8	12.4	31.6	50.9	6.9	20.9	22.2
HC Emissions (g)	2	4	14	3	1	1	2	26	2	50	117	3
CO Emissions (g)	49	111	434	84	42	22	89	850	106	1964	3165	160
NOx Emissions (g)	5	10	41	10	4	3	4	96	7	111	391	13
Vehicles Entered	23	52	226	132	48	222	72	807	101	347	2138	65
Vehicles Exited	23	53	228	132	48	222	71	808	100	314	2123	65
Hourly Exit Rate	23	53	228	132	48	222	71	808	100	314	2123	65
Input Volume	25	53	230	207	71	322	72	801	95	351	2147	64
% of Volume	92	100	99	64	68	69	99	101	105	89	99	102
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	2	4	2	1	0	2	5	0	33	48	1

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.2
Total Delay (hr)	86.1
Total Del/Veh (s)	71.9
Stop Delay (hr)	62.8
Stop Del/Veh (s)	52.4
Total Stops	3274
Stop/Veh	0.76
Travel Dist (mi)	644.5
Travel Time (hr)	100.4
Avg Speed (mph)	6
Fuel Used (gal)	36.4
Fuel Eff. (mpg)	17.7
HC Emissions (g)	224
CO Emissions (g)	7075
NOx Emissions (g)	695
Vehicles Entered	4233
Vehicles Exited	4187
Hourly Exit Rate	4187
Input Volume	4438
% of Volume	94
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	91
Occupancy (veh)	100

5: Frontage Road & CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.3	0.1	0.1	0.1
Total Delay (hr)	0.0	0.1	0.0	0.6	14.6	0.0	10.5	0.5	0.3	1.8	28.4
Total Del/Veh (s)	9.8	1.3	1.3	368.9	139.1	20.3	698.9	236.7	529.8	630.7	109.9
Stop Delay (hr)	0.0	0.0	0.0	0.6	14.4	0.0	10.5	0.5	0.3	1.8	28.0
Stop Del/Veh (s)	9.0	0.4	0.2	370.3	137.0	18.3	697.2	235.5	527.8	630.2	108.4
Total Stops	6	6	0	1	38	0	54	7	2	10	124
Stop/Veh	0.55	0.02	0.00	0.17	0.10	0.00	1.00	1.00	1.00	1.00	0.13
Travel Dist (mi)	0.3	7.9	3.5	0.4	22.9	0.1	8.1	1.0	0.3	1.7	46.2
Travel Time (hr)	0.0	0.6	0.3	0.6	15.3	0.0	10.8	0.5	0.3	1.8	30.3
Avg Speed (mph)	6	14	12	1	2	6	1	2	1	1	2
Fuel Used (gal)	0.0	0.6	0.2	0.2	3.8	0.0	2.6	0.1	0.1	0.5	8.0
Fuel Eff. (mpg)	14.8	13.7	23.0	2.5	6.0	21.2	3.1	7.6	4.3	3.7	5.8
HC Emissions (g)	0	7	2	0	18	0	7	0	0	0	33
CO Emissions (g)	2	252	38	9	502	0	228	9	5	27	1074
NOx Emissions (g)	0	27	5	0	27	0	11	1	0	1	73
Vehicles Entered	11	323	133	6	366	2	51	6	2	10	910
Vehicles Exited	11	322	134	6	362	2	30	5	2	7	881
Hourly Exit Rate	11	322	134	6	362	2	30	5	2	7	881
Input Volume	13	344	142	10	537	2	49	6	2	10	1115
% of Volume	85	94	94	60	67	100	61	83	100	70	79
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)											126
Occupancy (veh)	0	1	0	1	15	0	11	1	0	2	30

6: CR 114 /CR 114 & CMC West Access Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.4	3.6	0.0	0.0	0.4
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	6.4	2.5	0.3	0.1	1.3	0.8	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	5.5	2.9	0.0	0.0	0.4	0.0	0.1
Total Stops	16	3	0	0	0	0	19
Stop/Veh	1.00	1.00	0.00	0.00	0.00	0.00	0.03
Travel Dist (mi)	2.3	0.4	26.0	6.8	0.1	36.7	72.3
Travel Time (hr)	0.1	0.0	1.1	0.4	0.0	1.6	3.2
Avg Speed (mph)	16	17	24	22	20	23	23
Fuel Used (gal)	0.1	0.0	0.8	0.2	0.0	1.1	2.2
Fuel Eff. (mpg)	29.7	30.7	32.9	34.9	33.9	33.7	33.3
HC Emissions (g)	0	0	4	2	0	8	15
CO Emissions (g)	6	1	120	48	0	184	359
NOx Emissions (g)	1	0	16	6	0	29	52
Vehicles Entered	16	3	206	54	1	394	674
Vehicles Exited	16	3	205	54	1	394	673
Hourly Exit Rate	16	3	205	54	1	394	673
Input Volume	18	3	211	53	1	402	688
% of Volume	89	100	97	102	100	98	98
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							822
Occupancy (veh)	0	0	1	0	0	2	3

7: CMC East Access & CR 114/CR 114 Performance by movement

Movement	EBT	EBR	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4		0.1	0.2
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	1.0	0.8	0.5		3.2	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.0		3.3	0.0
Total Stops	0	0	0	0	1	1
Stop/Veh	0.00	0.00	0.00		1.00	0.00
Travel Dist (mi)	52.5	1.5	57.6	0.0	0.1	111.8
Travel Time (hr)	2.2	0.1	2.4	0.0	0.0	4.7
Avg Speed (mph)	24	23	24	15	16	24
Fuel Used (gal)	1.5	0.0	1.7	0.0	0.0	3.3
Fuel Eff. (mpg)	34.3	35.7	33.1	30.8	32.0	33.7
HC Emissions (g)	8	0	15	0	0	23
CO Emissions (g)	183	3	339	0	0	526
NOx Emissions (g)	30	0	48	0	0	78
Vehicles Entered	203	5	395	0	1	604
Vehicles Exited	201	5	395	0	1	602
Hourly Exit Rate	201	5	395	0	1	602
Input Volume	209	5	402	1	1	618
% of Volume	96	100	98	0	100	97
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						622
Occupancy (veh)	2	0	2	0	0	5

Total Zone Performance

Denied Delay (hr)	4.3
Denied Del/Veh (s)	3.4
Total Delay (hr)	146.8
Total Del/Veh (s)	1334.2
Stop Delay (hr)	114.5
Stop Del/Veh (s)	1041.1
Total Stops	3864
Stop/Veh	9.76
Travel Dist (mi)	4969.9
Travel Time (hr)	253.3
Avg Speed (mph)	20
Fuel Used (gal)	172.1
Fuel Eff. (mpg)	28.9
HC Emissions (g)	1820
CO Emissions (g)	55281
NOx Emissions (g)	8241
Vehicles Entered	4489
Vehicles Exited	98
Hourly Exit Rate	98
Input Volume	11429
% of Volume	1
Denied Entry Before	1
Denied Entry After	13
Density (ft/veh)	319
Occupancy (veh)	249

Intersection: 1: SH 82 & Commercial Access /CR 115

Movement	EB	WB	WB	NB	NB	SB
Directions Served	LTR	L	TR	L	TR	L
Maximum Queue (ft)	32	49	807	34	2	70
Average Queue (ft)	3	38	533	5	0	24
95th Queue (ft)	18	53	1014	24	3	54
Link Distance (ft)	951		858		13321	
Upstream Blk Time (%)			25			
Queuing Penalty (veh)			0			
Storage Bay Dist (ft)		25		100		175
Storage Blk Time (%)		95	6			
Queuing Penalty (veh)		49	1			

Intersection: 2: SVR West Access South Leg /SVR West Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	30	70
Average Queue (ft)	1	36
95th Queue (ft)	12	57
Link Distance (ft)	1996	1082
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SVR East Access South Leg/SVR East Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	22	84
Average Queue (ft)	1	50
95th Queue (ft)	11	75
Link Distance (ft)	1993	976
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	L	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	494	70	69	69	19	165	258	242	71	714	937	1048
Average Queue (ft)	192	59	58	42	1	74	168	144	19	435	611	805
95th Queue (ft)	428	84	70	77	12	139	240	217	52	779	1077	1199
Link Distance (ft)	942		50	50	50		467	467				963
Upstream Blk Time (%)			87	39	0						0	9
Queuing Penalty (veh)			174	78	0						0	112
Storage Bay Dist (ft)		40				380			205	800	800	
Storage Blk Time (%)	49	12						1		3	4	15
Queuing Penalty (veh)	114	9						1		28	47	53

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	SB	SB	B15	B15	B10	B10
Directions Served	T	R	T	T	T	T
Maximum Queue (ft)	1045	375	464	469	15	18
Average Queue (ft)	816	98	121	130	0	1
95th Queue (ft)	1205	352	492	506	15	18
Link Distance (ft)	963		992	992	13321	13321
Upstream Blk Time (%)	13		0	0		
Queuing Penalty (veh)	171		2	2		
Storage Bay Dist (ft)		150				
Storage Blk Time (%)	35					
Queuing Penalty (veh)	22					

Intersection: 5: Frontage Road & CR 114

Movement	EB	EB	WB	WB	B20	B20	B33	NB	NB	SB
Directions Served	LT	TR	LT	TR	T	T	T	L	LTR	LTR
Maximum Queue (ft)	58	23	379	232	202	122	1334	186	581	131
Average Queue (ft)	11	1	342	34	165	8	1024	134	186	52
95th Queue (ft)	46	10	393	155	244	72	1809	219	600	155
Link Distance (ft)	50	50	278	278	122	122	1291		993	901
Upstream Blk Time (%)	2	0	93	1	82		59		0	
Queuing Penalty (veh)	5	0	0	0	0		0		0	
Storage Bay Dist (ft)								105		
Storage Blk Time (%)								71	0	
Queuing Penalty (veh)								21	0	

Intersection: 6: CR 114 /CR 114 & CMC West Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	33	5
Average Queue (ft)	11	0
95th Queue (ft)	31	6
Link Distance (ft)	723	452
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CMC East Access & CR 114/CR 114

Movement	NB
Directions Served	LR
Maximum Queue (ft)	20
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	634
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 889

Intersection: 4: SH 82 & CR 154 /CR 114

Phase	1	2	4	5	6	8
Movement(s) Served	NBL	SBT	EBWB	SBL	NBT	EBWB
Maximum Green (s)	11.5	117.0	28.5	16.5	112.0	28.0
Minimum Green (s)	4.0	20.0	12.0	4.0	20.0	12.0
Recall	None	C-Max	None	None	C-Max	None
Avg. Green (s)	11.0	118.5	28.1	16.9	112.0	27.6
g/C Ratio	NA	NA	NA	NA	NA	NA
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	58	100	95	100	100	95
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary
Average Cycle Length (s): NA

Number of Complete Cycles : 0

SimTraffic Simulation Summary
2045 Total PM_Simtraffic_180s.syn

Summary of All Intervals

Run Number	20	21	22	23	24	25	26
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	6058	6098	6115	6257	6003	6094	5901
Vehs Exited	5874	5897	5984	6074	5931	5983	5851
Starting Vehs	501	519	542	499	560	534	500
Ending Vehs	685	720	673	682	632	645	550
Denied Entry Before	28	2	33	1	1	76	1
Denied Entry After	666	681	603	490	633	665	484
Travel Distance (mi)	14786	14748	14593	15057	14550	14641	14338
Travel Time (hr)	933.2	956.2	926.4	798.2	864.6	931.9	737.6
Total Delay (hr)	630.7	654.3	627.2	490.1	566.3	631.7	445.1
Total Stops	6750	6779	6637	6778	6243	6617	6108
Fuel Used (gal)	590.8	596.0	582.5	567.0	567.5	586.6	533.9

Summary of All Intervals

Run Number	22 Sim Traffic Runs\2045 Total PM_Simtraffic_180s				Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	6073	6184	6046	5831	6058
Vehs Exited	5899	6039	5910	5728	5925
Starting Vehs	519	531	505	489	513
Ending Vehs	693	676	641	592	650
Denied Entry Before	3	2	0	1	13
Denied Entry After	545	576	542	573	586
Travel Distance (mi)	14618	14746	14737	14161	14634
Travel Time (hr)	832.2	904.6	821.7	774.9	862.0
Total Delay (hr)	532.7	602.2	519.5	484.8	562.2
Total Stops	6649	6799	6592	5703	6512
Fuel Used (gal)	562.3	583.1	562.6	536.5	569.9

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	20	21	22	23	24	25	26
Vehs Entered	6058	6098	6115	6257	6003	6094	5901
Vehs Exited	5874	5897	5984	6074	5931	5983	5851
Starting Vehs	501	519	542	499	560	534	500
Ending Vehs	685	720	673	682	632	645	550
Denied Entry Before	28	2	33	1	1	76	1
Denied Entry After	666	681	603	490	633	665	484
Travel Distance (mi)	14786	14748	14593	15057	14550	14641	14338
Travel Time (hr)	933.2	956.2	926.4	798.2	864.6	931.9	737.6
Total Delay (hr)	630.7	654.3	627.2	490.1	566.3	631.7	445.1
Total Stops	6750	6779	6637	6778	6243	6617	6108
Fuel Used (gal)	590.8	596.0	582.5	567.0	567.5	586.6	533.9

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	22 Sim Traffic Runs\2045 Total PM_Simtraffic_180s				Avg
Vehs Entered	6073	6184	6046	5831	6058
Vehs Exited	5899	6039	5910	5728	5925
Starting Vehs	519	531	505	489	513
Ending Vehs	693	676	641	592	650
Denied Entry Before	3	2	0	1	13
Denied Entry After	545	576	542	573	586
Travel Distance (mi)	14618	14746	14737	14161	14634
Travel Time (hr)	832.2	904.6	821.7	774.9	862.0
Total Delay (hr)	532.7	602.2	519.5	484.8	562.2
Total Stops	6649	6799	6592	5703	6512
Fuel Used (gal)	562.3	583.1	562.6	536.5	569.9

1: SH 82 & Commercial Access /CR 115 Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Denied Del/Veh (s)	0.1	3.9	0.2	0.0	0.0	0.0	1.9	0.2	0.1
Total Delay (hr)	0.0	1.3	3.4	0.0	15.6	0.1	0.9	0.5	21.7
Total Del/Veh (s)	6.0	658.2	167.9	23.9	22.9	25.0	82.5	1.4	20.3
Stop Delay (hr)	0.0	1.3	3.3	0.0	0.0	0.0	0.8	0.0	5.5
Stop Del/Veh (s)	6.1	655.3	166.8	4.9	0.0	0.1	80.1	0.0	5.1
Total Stops	3	7	72	2	0	1	35	1	121
Stop/Veh	0.75	1.00	1.00	0.67	0.00	0.08	0.92	0.00	0.03
Travel Dist (mi)	0.6	1.1	11.1	6.8	5883.3	29.0	14.4	487.2	6433.5
Travel Time (hr)	0.0	1.3	3.7	0.1	123.7	0.6	1.2	9.5	140.2
Avg Speed (mph)	15	1	3	46	48	46	12	52	46
Fuel Used (gal)	0.0	0.3	1.2	0.2	170.1	0.8	0.6	14.4	187.6
Fuel Eff. (mpg)	29.8	3.1	9.6	33.4	34.6	35.6	24.8	33.8	34.3
HC Emissions (g)	0	0	6	1	2371	4	3	224	2609
CO Emissions (g)	1	35	279	59	73472	179	167	7500	81692
NOx Emissions (g)	0	1	17	9	11037	34	17	991	12105
Vehicles Entered	3	7	70	3	2328	11	37	1258	3717
Vehicles Exited	3	5	66	3	2338	12	37	1259	3723
Hourly Exit Rate	3	5	66	3	2338	12	37	1259	3723
Input Volume	4	8	68	3	2837	15	37	1252	4224
% of Volume	75	62	97	100	82	80	100	101	88
Denied Entry Before	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0
Density (ft/veh)									349
Occupancy (veh)	0	1	4	0	124	1	1	9	140

2: SVR West Access South Leg /SVR West Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	2.3	0.5	1.2	0.7	4.6	3.3	2.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.6	0.0	0.0	0.0	2.8	2.6	1.0
Total Stops	3	0	0	0	65	12	80
Stop/Veh	0.17	0.00	0.00	0.00	0.98	1.00	0.36
Travel Dist (mi)	6.8	5.8	6.3	34.8	13.3	2.4	69.5
Travel Time (hr)	0.3	0.2	0.3	1.5	0.6	0.1	3.0
Avg Speed (mph)	24	24	24	24	21	21	23
Fuel Used (gal)	0.2	0.2	0.2	1.0	0.4	0.1	2.0
Fuel Eff. (mpg)	34.0	33.9	33.4	35.2	34.7	34.5	34.7
HC Emissions (g)	0	0	0	7	2	0	10
CO Emissions (g)	17	14	17	147	47	8	249
NOx Emissions (g)	3	2	2	22	6	1	36
Vehicles Entered	18	15	16	91	65	12	217
Vehicles Exited	18	15	17	92	65	12	219
Hourly Exit Rate	18	15	17	92	65	12	219
Input Volume	18	15	16	92	64	13	218
% of Volume	100	100	106	100	102	92	100
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2044
Occupancy (veh)	0	0	0	1	1	0	3

3: SVR East Access South Leg/SVR East Access North Leg & CR 115 Performance by movement

Movement	EBL	EBT	WBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.2	0.1	0.2	0.2
Total Delay (hr)	0.2	0.0	0.0	0.2	0.4
Total Del/Veh (s)	3.2	2.2	0.2	3.6	3.2
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.0	0.0	2.6	1.0
Total Stops	5	0	0	177	182
Stop/Veh	0.02	0.00	0.00	0.99	0.38
Travel Dist (mi)	100.8	6.8	5.9	32.6	146.2
Travel Time (hr)	4.4	0.3	0.2	1.6	6.5
Avg Speed (mph)	23	24	25	21	23
Fuel Used (gal)	3.0	0.2	0.2	1.0	4.3
Fuel Eff. (mpg)	33.5	34.4	34.3	34.3	33.7
HC Emissions (g)	24	0	0	8	32
CO Emissions (g)	543	18	13	185	760
NOx Emissions (g)	81	2	2	24	110
Vehicles Entered	268	18	16	176	478
Vehicles Exited	267	18	16	177	478
Hourly Exit Rate	267	18	16	177	478
Input Volume	258	15	16	179	468
% of Volume	103	120	100	99	102
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					909
Occupancy (veh)	4	0	0	2	6

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.9	4.5	0.2
Denied Del/Veh (s)	0.4	0.4	3.9	2.2	0.7	0.1	0.0	0.0	0.0	19.0	17.1	17.8
Total Delay (hr)	1.2	1.6	1.0	2.2	1.0	0.2	13.4	27.9	0.9	41.3	4.2	0.0
Total Del/Veh (s)	85.3	91.1	40.8	61.3	76.1	1.7	373.0	52.9	18.2	401.4	16.0	4.0
Stop Delay (hr)	1.1	1.5	0.9	2.1	1.0	0.0	13.1	17.0	0.5	40.2	2.4	0.0
Stop Del/Veh (s)	80.9	85.6	37.3	59.4	73.3	0.1	364.6	32.1	10.0	391.5	9.1	2.0
Total Stops	47	67	85	81	36	7	174	1331	83	514	316	10
Stop/Veh	0.96	1.03	0.99	0.62	0.75	0.02	1.35	0.70	0.48	1.39	0.33	0.29
Travel Dist (mi)	8.6	11.3	15.2	3.0	1.1	8.3	12.1	184.6	17.0	63.3	176.3	6.3
Travel Time (hr)	1.5	2.0	1.6	2.4	1.1	0.7	13.8	31.3	1.5	44.8	12.0	0.4
Avg Speed (mph)	6	6	10	1	1	12	1	6	11	1	24	31
Fuel Used (gal)	0.5	0.7	0.7	0.7	0.3	0.2	3.5	12.2	0.9	11.2	6.6	0.2
Fuel Eff. (mpg)	16.3	15.7	21.1	4.3	4.1	36.2	3.5	15.2	18.9	5.6	26.8	35.6
HC Emissions (g)	3	3	8	2	1	2	8	70	10	44	73	3
CO Emissions (g)	98	129	230	72	39	41	325	1888	389	1342	2837	88
NOx Emissions (g)	8	11	22	8	3	5	19	239	36	73	263	9
Vehicles Entered	48	63	85	128	47	416	125	1852	171	358	937	33
Vehicles Exited	48	63	84	127	47	415	118	1856	171	313	940	33
Hourly Exit Rate	48	63	84	127	47	415	118	1856	171	313	940	33
Input Volume	50	61	78	174	59	498	153	2284	207	362	955	34
% of Volume	96	103	108	73	80	83	77	81	83	86	98	97
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	6	15	0
Density (ft/veh)												
Occupancy (veh)	1	2	2	2	1	1	14	31	2	43	7	0

4: SH 82 & CR 154 /CR 114 Performance by movement

Movement	All
Denied Delay (hr)	6.8
Denied Del/Veh (s)	5.7
Total Delay (hr)	94.9
Total Del/Veh (s)	78.5
Stop Delay (hr)	79.8
Stop Del/Veh (s)	66.0
Total Stops	2751
Stop/Veh	0.63
Travel Dist (mi)	507.1
Travel Time (hr)	113.1
Avg Speed (mph)	5
Fuel Used (gal)	37.7
Fuel Eff. (mpg)	13.4
HC Emissions (g)	228
CO Emissions (g)	7479
NOx Emissions (g)	696
Vehicles Entered	4263
Vehicles Exited	4215
Hourly Exit Rate	4215
Input Volume	4915
% of Volume	86
Denied Entry Before	0
Denied Entry After	21
Density (ft/veh)	86
Occupancy (veh)	106

5: Frontage Road & CR 114 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.1	1.4	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	360.2	523.7	382.1		0.1	0.1
Total Delay (hr)	0.0	0.1	0.0	0.4	13.8	0.0	25.7	0.3	2.0	0.1	0.5	7.2
Total Del/Veh (s)	11.8	1.3	1.0	321.4	89.4	13.6	1302.3	1187.9	1020.4		912.1	1175.6
Stop Delay (hr)	0.0	0.0	0.0	0.4	13.4	0.0	25.6	0.3	2.0	0.1	0.5	7.2
Stop Del/Veh (s)	11.1	0.4	0.2	324.4	86.4	12.5	1300.3	1185.0	1018.6		910.4	1175.0
Total Stops	9	6	0	1	93	0	68	1	7	0	2	20
Stop/Veh	0.60	0.01	0.00	0.25	0.17	0.00	0.96	1.00	1.00		1.00	0.91
Travel Dist (mi)	0.3	10.1	2.7	0.2	34.2	0.2	8.9	0.2	0.9	0.1	0.3	3.1
Travel Time (hr)	0.1	0.8	0.2	0.4	14.8	0.0	36.6	0.5	3.4	0.1	0.5	7.3
Avg Speed (mph)	5	13	12	1	2	11	0	1	0	1	1	0
Fuel Used (gal)	0.0	0.8	0.1	0.1	3.8	0.0	8.5	0.1	0.8	0.0	0.1	1.7
Fuel Eff. (mpg)	12.5	13.2	21.4	2.6	9.1	34.4	1.1	1.6	1.1	3.1	2.3	1.8
HC Emissions (g)	0	9	1	0	11	0	30	0	0	0	0	0
CO Emissions (g)	4	316	31	5	394	1	790	6	42	1	7	98
NOx Emissions (g)	1	35	5	0	23	0	29	0	1	0	0	2
Vehicles Entered	15	424	108	4	550	2	66	1	7	0	2	20
Vehicles Exited	14	423	108	3	536	2	30	1	3	0	1	11
Hourly Exit Rate	14	423	108	3	536	2	30	1	3	0	1	11
Input Volume	16	490	124	5	593	2	102	2	12	1	2	22
% of Volume	88	86	87	60	90	100	29	50	25	0	50	50
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	39	0	6	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	1	0	0	15	0	26	0	2	0	1	7

5: Frontage Road & CR 114 Performance by movement

Movement	All
Denied Delay (hr)	12.0
Denied Del/Veh (s)	34.8
Total Delay (hr)	50.2
Total Del/Veh (s)	148.9
Stop Delay (hr)	49.5
Stop Del/Veh (s)	147.0
Total Stops	207
Stop/Veh	0.17
Travel Dist (mi)	61.1
Travel Time (hr)	64.6
Avg Speed (mph)	1
Fuel Used (gal)	16.1
Fuel Eff. (mpg)	3.8
HC Emissions (g)	52
CO Emissions (g)	1694
NOx Emissions (g)	96
Vehicles Entered	1199
Vehicles Exited	1132
Hourly Exit Rate	1132
Input Volume	1371
% of Volume	83
Denied Entry Before	0
Denied Entry After	45
Density (ft/veh)	73
Occupancy (veh)	53

6: CR 114 /CR 114 & CMC West Access Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.5	3.3	0.0	0.1	0.5
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.1	0.2
Total Del/Veh (s)	8.8	4.9	0.6	0.2	3.3	0.7	1.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	7.8	4.9	0.0	0.0	0.8	0.0	0.4
Total Stops	36	3	0	0	0	0	39
Stop/Veh	1.00	1.00	0.00	0.00	0.00	0.00	0.05
Travel Dist (mi)	5.0	0.4	57.2	5.7	0.2	28.5	97.0
Travel Time (hr)	0.3	0.0	2.4	0.3	0.0	1.2	4.3
Avg Speed (mph)	14	16	24	22	20	24	23
Fuel Used (gal)	0.2	0.0	1.8	0.2	0.0	0.8	3.0
Fuel Eff. (mpg)	28.5	31.5	32.5	34.2	35.8	33.8	32.7
HC Emissions (g)	1	0	13	1	0	5	21
CO Emissions (g)	33	1	327	35	1	122	519
NOx Emissions (g)	4	0	44	4	0	20	73
Vehicles Entered	36	3	451	45	2	314	851
Vehicles Exited	36	3	451	45	2	314	851
Hourly Exit Rate	36	3	451	45	2	314	851
Input Volume	36	2	446	43	4	319	850
% of Volume	100	150	101	105	50	98	100
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							606
Occupancy (veh)	0	0	2	0	0	1	4

7: CMC East Access & CR 114/CR 114 Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.2	0.1	0.1	0.1
Total Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	2.5	2.2	3.3	0.5	7.1	4.7	1.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	1.6	0.0	6.2	4.8	0.2
Total Stops	0	0	1	1	14	4	20
Stop/Veh	0.00	0.00	0.25	0.00	0.93	1.00	0.03
Travel Dist (mi)	120.0	6.7	0.6	39.3	1.8	0.5	168.8
Travel Time (hr)	5.1	0.3	0.0	1.6	0.1	0.0	7.3
Avg Speed (mph)	23	22	21	24	15	15	23
Fuel Used (gal)	3.5	0.2	0.0	1.2	0.1	0.0	5.0
Fuel Eff. (mpg)	34.0	35.8	32.8	33.2	29.5	30.6	33.8
HC Emissions (g)	21	0	0	9	0	0	30
CO Emissions (g)	496	13	2	213	5	1	731
NOx Emissions (g)	79	2	0	30	0	0	112
Vehicles Entered	431	24	4	269	15	4	747
Vehicles Exited	432	24	4	269	15	4	748
Hourly Exit Rate	432	24	4	269	15	4	748
Input Volume	426	22	5	275	16	4	748
% of Volume	101	109	80	98	94	100	100
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							399
Occupancy (veh)	5	0	0	2	0	0	7

Total Zone Performance

Denied Delay (hr)	19.1
Denied Del/Veh (s)	20.3
Total Delay (hr)	168.0
Total Del/Veh (s)	1531.1
Stop Delay (hr)	135.2
Stop Del/Veh (s)	1231.9
Total Stops	3400
Stop/Veh	8.61
Travel Dist (mi)	7483.2
Travel Time (hr)	339.1
Avg Speed (mph)	23
Fuel Used (gal)	255.7
Fuel Eff. (mpg)	29.3
HC Emissions (g)	2982
CO Emissions (g)	93123
NOx Emissions (g)	13227
Vehicles Entered	3319
Vehicles Exited	18
Hourly Exit Rate	18
Input Volume	12794
% of Volume	0
Denied Entry Before	0
Denied Entry After	66
Density (ft/veh)	248
Occupancy (veh)	320

Intersection: 1: SH 82 & Commercial Access /CR 115

Movement	EB	WB	WB	NB	NB	B15	B15	B15	SB	SB
Directions Served	LTR	L	TR	L	TR	T	T		L	T
Maximum Queue (ft)	31	49	299	27	18	999	1005	446	103	36
Average Queue (ft)	3	22	124	2	1	207	273	26	38	2
95th Queue (ft)	18	52	315	12	9	856	997	286	97	39
Link Distance (ft)	951		858		13321	963	963	963		2040
Upstream Blk Time (%)						0	1	0		
Queuing Penalty (veh)						3	10	1		
Storage Bay Dist (ft)		25		100					175	
Storage Blk Time (%)		61	62						1	0
Queuing Penalty (veh)		41	5						4	0

Intersection: 2: SVR West Access South Leg /SVR West Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	33	61
Average Queue (ft)	3	32
95th Queue (ft)	17	54
Link Distance (ft)	1996	1082
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SVR East Access South Leg/SVR East Access North Leg & CR 115

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	50	78
Average Queue (ft)	4	43
95th Queue (ft)	26	67
Link Distance (ft)	1993	976
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	B14	B14	SB
Directions Served	LT	R	L	T	R	L	T	T	R	T	T	L
Maximum Queue (ft)	375	67	74	68	80	466	570	564	390	1404	1403	800
Average Queue (ft)	171	47	58	41	6	398	540	530	209	1369	1368	539
95th Queue (ft)	320	89	72	77	39	569	553	597	510	1405	1419	913
Link Distance (ft)	942		50	50	50		467	467		1349	1349	
Upstream Blk Time (%)			88	29	0	4	42	35		48	50	
Queuing Penalty (veh)			210	70	1	0	0	0		0	0	
Storage Bay Dist (ft)		40				380			205			800
Storage Blk Time (%)	60	3				34	33	41				11
Queuing Penalty (veh)	47	3				389	50	85				51

Intersection: 4: SH 82 & CR 154 /CR 114

Movement	SB	SB	SB	SB	B15	B15
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	823	803	727	56	56	25
Average Queue (ft)	555	322	263	8	5	2
95th Queue (ft)	928	829	653	34	57	36
Link Distance (ft)		963	963		992	992
Upstream Blk Time (%)	1	2	0			
Queuing Penalty (veh)	0	13	0			
Storage Bay Dist (ft)	800			150		
Storage Blk Time (%)	13	1	8			
Queuing Penalty (veh)	62	3	3			

Intersection: 5: Frontage Road & CR 114

Movement	EB	EB	WB	WB	B20	B20	B33	NB	NB	SB
Directions Served	LT	TR	LT	TR	T	T	T	L	LTR	LTR
Maximum Queue (ft)	55	8	366	260	193	91	1016	187	1005	329
Average Queue (ft)	15	0	319	48	115	6	429	159	599	180
95th Queue (ft)	50	5	426	212	242	57	1285	241	1271	437
Link Distance (ft)	50	50	278	278	122	122	1291		993	901
Upstream Blk Time (%)	3		76	2	46	1	14		39	
Queuing Penalty (veh)	10		0	0	0	0	0		0	
Storage Bay Dist (ft)								105		
Storage Blk Time (%)								87	1	
Queuing Penalty (veh)								57	1	

Intersection: 6: CR 114 /CR 114 & CMC West Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	64	22
Average Queue (ft)	20	1
95th Queue (ft)	46	13
Link Distance (ft)	723	452
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CMC East Access & CR 114/CR 114

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	29	38
Average Queue (ft)	2	13
95th Queue (ft)	18	37
Link Distance (ft)	768	634
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1118

Intersection: 4: SH 82 & CR 154 /CR 114

Phase	1	2	4	5	6	8
Movement(s) Served	NBL	SBT	EBWB	SBL	NBT	EBWB
Maximum Green (s)	11.5	117.0	28.5	16.5	112.0	28.0
Minimum Green (s)	4.0	20.0	12.0	4.0	20.0	12.0
Recall	None	C-Max	None	None	C-Max	None
Avg. Green (s)	11.6	117.0	28.4	16.6	112.0	27.9
g/C Ratio	NA	NA	NA	NA	NA	NA
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	95	100	95	100	100	95
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary
Average Cycle Length (s): NA

Number of Complete Cycles : 0

Existing Drainage and Flood Hazard Report

SPRING VALLEY RANCH PUD

January 18, 2023

ROARING FORK ENGINEERING

Table of Contents

1.0 General

The Spring Valley P.U.D site is located approximately 5 miles east of the City of Glenwood Springs, with drainage basins covering roughly 6,245 acres. The major tributary of the property is the Roaring Fork River basin. A small portion of the property along the northern boundary is tributary to the Colorado River through Glenwood Canyon. The property is accessed via Garfield County Road 114. Much of the northern boundary of the property borders the White River National Forest, and a majority of the western boundary of the property borders Bureau of Land Management (BLM) property. The site is bordered by private lands along the southern and eastern boundaries. The majority of the site is currently vacant and undeveloped.

The purpose of this report is to quantify existing drainage flows of the 100-year storm event scenario for the Spring Valley Ranch P.U.D.

1.1 Preliminary Plan Drainage Report

Gamba & Associates, Inc. (G&A) previously prepared a drainage study for this property, dated December 21, 2000. The study was prepared for the PUD/Subdivision development plan currently approved for the property. An updated drainage study was done by G&A, dated March 9, 2007, to reflect proposed development plan revisions.

1.2 FEMA FIRMette

A search for Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was conducted. Tiles 0802051460B and 0802051500B dated 1977 had no data and cover most of our site. Tile 0802051470B dated 1986 shows the southern boundary of our site but defines the zone as undetermined but possible flood hazard.

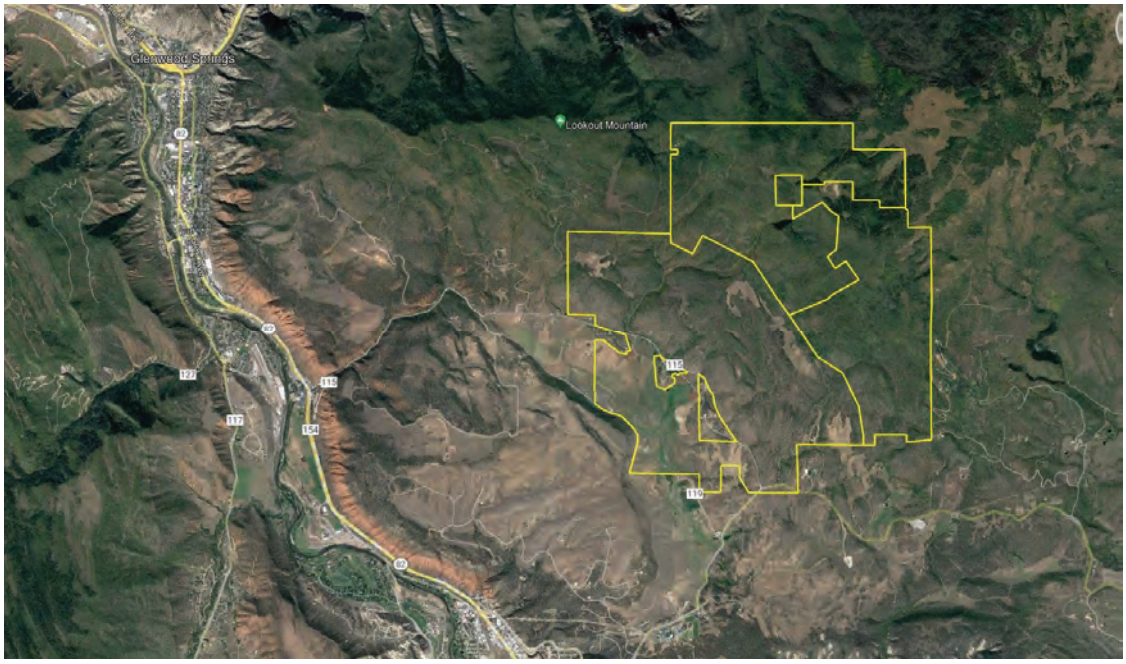


Figure 1: *Vicinity Map (Spring Valley P.U.D. in yellow)*

2.0 Hydrology

The drainage basin areas were analyzed for the 100-year storm events in the predeveloped conditions. Peak flows for all 18 predeveloped drainage basins were calculated for the 100-year storm event using the Soil Conservation Service (SCS) TR55 tool and the Autodesk Hydraflow Hydrographs program. Table 1 below summarizes the factors affecting peak flows for each individual basin.

2.1 Drainage Basin Areas

For our analysis, 18 separate primary tributary drainage basins were delineated using existing ground topography and AutoCAD flowline tools. The pre-development drainage basins developed and analyzed are shown on the Pre-Development Drainage Map (Appendix A).

2.2 Rainfall

Rainfall intensities were derived from the NOAA Atlas 14 Point Precipitation Frequency Estimates for the site location, included in Appendix B.

2.3 Hydrologic Curve Numbers

Curve Numbers (CN) are a measure of how easily water flows over the surface of a given material. The higher the CN, the more easily water flows over that surface. The previous predevelopment drainage report done for this site included detailed information on curve number calculations – detailing surface conditions, areas, and appropriated weighting used to calculate the CNs in their study. For the purposes of analyzing the pre-development conditions, the curve numbers derived in this previous study were utilized.

2.4 Times of Concentration

The time of concentration for each basin is calculated based on the type of flow, and the length, grade, roughness, and geometry of the flow path of the overland flow from the hydraulically most distant point in the basin to the outfall point. To determine time of concentration for each basin, first each basins' flowline path was defined using existing ground topography and categorizing each flow path into three types of flow – sheet flow, shallow concentrated flow, and channel flow. Once each basins' flowlines were defined, they were input into TR55 which calculates time of concentration. Time of concentration calculations for all basins are included in Appendix C.

2.5 Peak Discharges

Peak flows were calculated for the 100-year storm event in the undeveloped condition of the site by use of the SCS Runoff Curve Number method, the TR55 program and the Autodesk Hydraflow Hydrographs program. Once times of concentration were calculated by use of TR55, they are input to Hydraflow to calculate time to peak, and peak flow rate. Time to peak, peak flow rates, and hydrograph reports for all basins are included in Appendix C.

3.0 Pre-Development Hydrologic Results

The Auto CAD Civil 3D Hydraflow, Hydrograph and Hydrological tools were used along with the SCS method to determine the peak flows. Curve Numbers and TR55 tools were used to account for the effect on drainage from different landscaping and building materials.

Table 1 outlines the inputs and outputs of our analyses. Additionally, a comprehensive report of our analyses can be found in Appendix C.

Basin	Area (Acres)	SCS Curve Number	TR55 Time of Concentration (min)	Time to Peak (hours)	Peak Flow (cfs)
A	1616.75	64	62.7	12.67	214.18
B	167.09	63	36.4	12.33	27.82
C	65.22	68	23.3	12.13	28.86
D	104.8	69	33.8	12.30	37.18
E	198.4	61	38.2	12.40	22.44
F	80	57	20.3	12.30	5.05
G	302.5	59	23.8	12.23	29.28
H	209.12	69	26.6	12.17	93.15
I	117.17	69	33.9	12.30	41.57
J-1	1648	66	105.8	13.20	194.19
J-2	678.15	67	57.2	12.53	140.70
K	87	62	38	12.37	11.69
L	193.07	68	44.2	12.40	51.69
M	292	70	64.5	12.60	73.68
N	94.09	68	31.2	12.27	32.29
O	108.07	67	48.9	12.43	24.59
P-1	228.65	62	30.3	12.30	34.83
P-2	54.57	63	16.9	12.13	13.95

Table 3: *100-year Peak Flow Calculations for each drainage basin*

Existing basins peak flow were calculated for the 100-year event while all future infrastructure, including pipes, culverts, and detention structures, will be sized to safely convey the 25-year storm event away from the proposed homes and other structures.

4.0 Hopkins Dam Analysis

The property has a dam and reservoir that was recently improved in 2019-2020. The reservoir is called Hopkins Reservoir. In June 2021, the Division of Water Resources performed a Dam Safety Inspection on the Hopkins Reservoir Dam (Appendix D). They inspected a variety of components of the dam to determine the conditions and safe storage levels. All components

inspected were determined to be in good condition, and the overall determination of the dam's condition was found to be satisfactory. This reservoir overflows into Landis Creek that flow through the property.

Wright Water Engineers, Inc. (WWE) performed a Dam Break Analysis October of 2007 for the Hopkins Reservoir Dam (Appendix D). WWE assessed the effects of dam failure with respect to the proposed development and its effect on drainage on the site. The potential hazard area resulting from the failure of Hopkins Dam, WWE determined, is limited to three distinguishable reaches between Hopkins Reservoir and Spring Valley: 1) The existing natural channel, approximately 700 feet long between Hopkins Reservoir and its junction on the left bank of Landis Creek. This is a steep, relatively undefined intermittent drainage channel. 2) The approximately 3-mile-long reach of Landis Creek beginning at the terminus of Reach 1 and ending at County Road 115. A steep, incised channel characterizes this portion of Landis Creek. 3) The area between County Road 115 and the Spring Valley bottom. This reach represents the alluvial fan created by Landis Creek as it merges with Spring Valley.

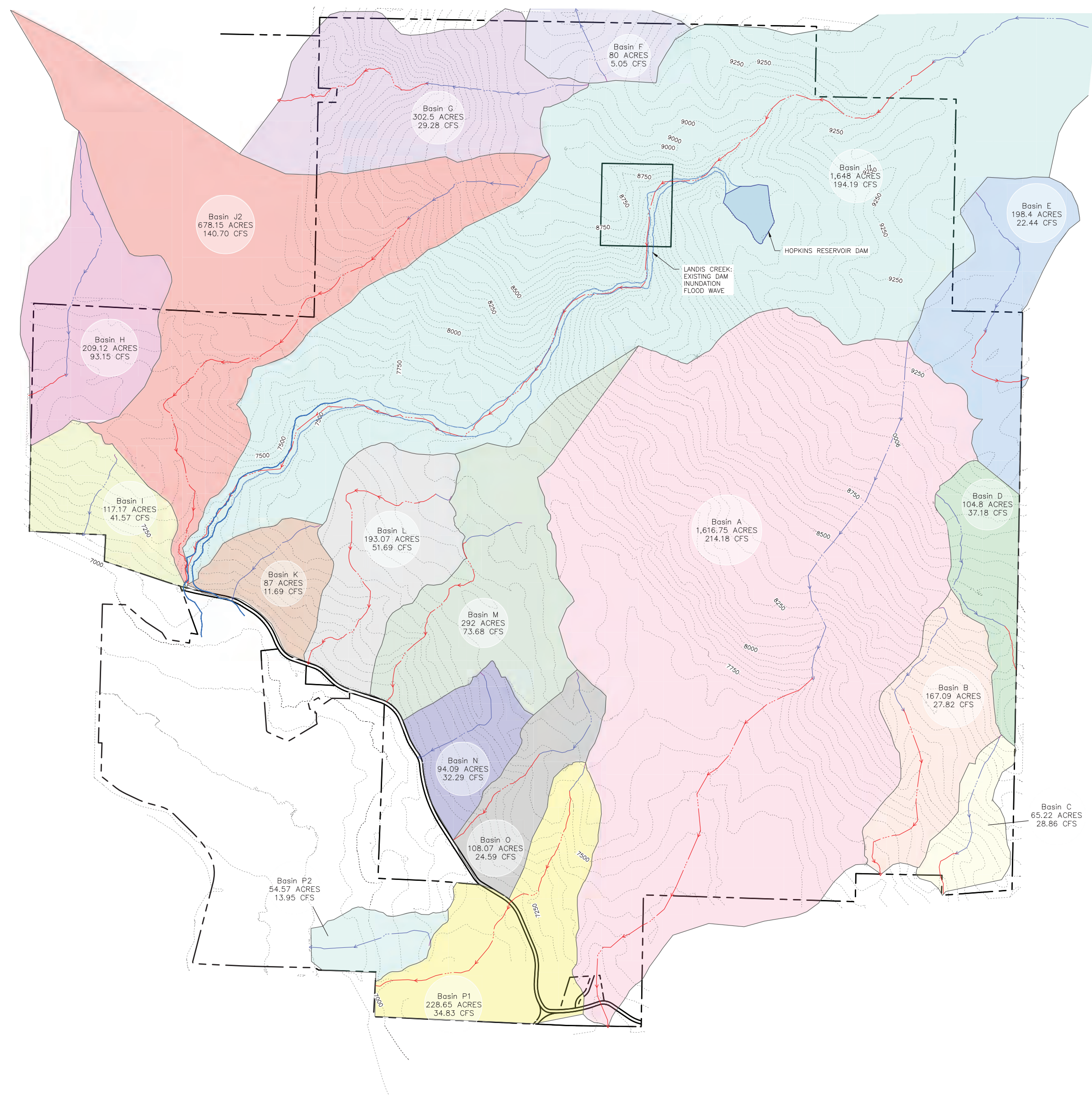
WWE evaluated a "sunny day" scenario as the failure event of the Hopkins Dam, which assumes a sudden breach of the dam embankment and does not add additional flows resulting from extreme precipitation events to the dam breach hydrograph. For the purposes of their study, WWE assumed "worst case" scenarios for the development of the dam breach hydrograph: 1) The failure mechanism is breaching of the dam embankment. 2) The final breach height extends downward from the crest to the toe of the dam embankment, effectively draining the entire reservoir storage volume. 3) The reservoir stage is at full capacity at the time the breach begins to form. The inundation areas from this report have been added to the drainage exhibit (Appendix A).

February of 2022, Zancanella & Associates prepared a Dam Inundation Inspection Impact Review of the previous study done by WWE (Appendix D). They found that the flood inundation wave is not anticipated to impact current structures significantly more than current conditions, nor get to the point of potential for loss of life with the improvements, but the emergency access road (High Grange Pass Rd) will be impacted to the point of possible failure. No structure that is habitable should be located within the inundation boundary unless additional review and analysis has taken place to ensure no loss of life or significant property damage will occur during a sunny day dam break. Additionally, the Hopkins Dam Certificate of Acceptance for the recent dam reconstruction project is included for reference in the report (Appendix D).

Appendix A – Pre-Development Drainage Map

100-YEAR PEAK FLOW CALCULATIONS

	Basin	Area (Acres)	SCS Curve Number	TR55 Time of Concentration (minutes)	Time to Peak (hours)	Peak Flow (cfs)
	A	1616.75	64	62.70	12.67	214.18
	B	167.09	63	36.40	12.33	27.82
	C	65.22	68	23.30	12.13	28.86
	D	104.80	69	33.80	12.30	37.18
	E	198.40	61	38.20	12.40	22.44
	F	80	57	20.30	12.30	5.05
	G	302.50	59	23.80	12.23	29.28
	H	209.12	69	26.60	12.17	93.15
	I	117.17	69	33.90	12.30	41.57
	J-1	1648	66	105.80	13.20	194.19
	J-2	678.15	67	57.20	12.53	140.70
	K	87	62	38	12.37	11.69
	L	193.07	68	44.20	12.40	51.69
	M	292	70	64.50	12.60	73.68
	N	94.09	68	31.20	12.27	32.29
	O	108.07	67	48.90	12.43	24.59
	P-1	228.65	62	30.30	12.30	34.83
	P-2	54.57	63	16.90	12.13	13.95



LEGEND

- SHEET FLOW
- SHALLOW CONCENTRATED FLOW
- CHANNEL FLOW
- PROPERTY BOUNDARY

P:\2022\22-SPRING VALLEY\04-DWG\04-SHEETSET\SS - DRAINAGE.DWG Plotted: 12/15/2022 9:04 AM By: Rachel Skyving

ROARING FORK ENGINEERING
592 HIGHWAY 133
CARBONDALE, CO 81623
PH: (970) 340-4130

GRAPHIC SCALE 0 500 1000
IN FEET: 1" = 1000'

CHECKED BY: DCS
DRAWN BY: RVS

DRAWN BY

DESCRIPTION

#

JOB # 2021-04
NOT FOR CONSTRUCTION

SPRING VALLEY RANCH
GARFIELD COUNTY, COLORADO

1

1

Appendix B – Precipitation Data

- NOAA Atlas 14 Data

NOAA Atlas 14, Volume 8, Version 2
Location name: Glenwood Springs, Colorado, USA*
Latitude: 39.5226°, Longitude: -107.232°
Elevation: 7654.73 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.121** (0.097-0.158)	**0.183** (0.145-0.237)	**0.278** (0.221-0.363)	**0.353** (0.278-0.462)	**0.449** (0.335-0.604)	**0.518** (0.379-0.710)	**0.582** (0.410-0.823)	**0.642** (0.433-0.939)	**0.715** (0.462-1.08)	**0.764** (0.484-1.19)
10-min	**0.178** (0.142-0.231)	**0.268** (0.213-0.348)	**0.407** (0.323-0.531)	**0.517** (0.407-0.677)	**0.658** (0.491-0.884)	**0.758** (0.555-1.04)	**0.852** (0.601-1.21)	**0.941** (0.634-1.38)	**1.05** (0.676-1.59)	**1.12** (0.708-1.74)
15-min	**0.217** (0.173-0.281)	**0.326** (0.260-0.424)	**0.497** (0.394-0.647)	**0.630** (0.496-0.826)	**0.802** (0.599-1.08)	**0.925** (0.676-1.27)	**1.04** (0.733-1.47)	**1.15** (0.773-1.68)	**1.28** (0.825-1.93)	**1.37** (0.864-2.13)
30-min	**0.294** (0.234-0.381)	**0.425** (0.338-0.552)	**0.628** (0.498-0.818)	**0.786** (0.619-1.03)	**0.986** (0.736-1.32)	**1.13** (0.825-1.55)	**1.26** (0.887-1.78)	**1.38** (0.929-2.02)	**1.52** (0.983-2.30)	**1.62** (1.02-2.52)
60-min	**0.391** (0.311-0.507)	**0.526** (0.418-0.683)	**0.735** (0.583-0.958)	**0.898** (0.707-1.18)	**1.11** (0.828-1.49)	**1.25** (0.919-1.72)	**1.39** (0.982-1.97)	**1.52** (1.02-2.22)	**1.67** (1.08-2.53)	**1.77** (1.12-2.76)
2-hr	**0.488** (0.393-0.623)	**0.627** (0.505-0.801)	**0.842** (0.676-1.08)	**1.01** (0.806-1.30)	**1.23** (0.930-1.62)	**1.38** (1.02-1.87)	**1.52** (1.09-2.12)	**1.66** (1.13-2.39)	**1.82** (1.19-2.71)	**1.93** (1.23-2.96)
3-hr	**0.572** (0.465-0.724)	**0.699** (0.568-0.887)	**0.900** (0.727-1.14)	**1.06** (0.850-1.35)	**1.26** (0.969-1.66)	**1.41** (1.06-1.90)	**1.56** (1.12-2.15)	**1.69** (1.16-2.42)	**1.86** (1.22-2.75)	**1.97** (1.27-3.00)
6-hr	**0.751** (0.618-0.936)	**0.859** (0.706-1.07)	**1.04** (0.849-1.30)	**1.19** (0.965-1.49)	**1.39** (1.09-1.82)	**1.56** (1.19-2.07)	**1.72** (1.26-2.36)	**1.89** (1.32-2.68)	**2.11** (1.41-3.10)	**2.28** (1.48-3.42)
12-hr	**0.943** (0.787-1.16)	**1.07** (0.892-1.32)	**1.29** (1.07-1.59)	**1.47** (1.22-1.83)	**1.74** (1.39-2.26)	**1.96** (1.52-2.58)	**2.19** (1.63-2.96)	**2.42** (1.72-3.39)	**2.75** (1.86-3.98)	**3.00** (1.97-4.42)
24-hr	**1.15** (0.973-1.39)	**1.32** (1.11-1.59)	**1.60** (1.34-1.94)	**1.85** (1.54-2.25)	**2.21** (1.78-2.81)	**2.50** (1.96-3.24)	**2.80** (2.11-3.74)	**3.12** (2.24-4.31)	**3.56** (2.44-5.08)	**3.92** (2.60-5.67)
2-day	**1.39** (1.19-1.66)	**1.59** (1.36-1.90)	**1.94** (1.65-2.31)	**2.24** (1.90-2.69)	**2.68** (2.19-3.36)	**3.04** (2.41-3.87)	**3.41** (2.60-4.48)	**3.80** (2.76-5.17)	**4.35** (3.02-6.11)	**4.78** (3.21-6.82)
3-day	**1.58** (1.36-1.86)	**1.80** (1.56-2.13)	**2.19** (1.88-2.59)	**2.53** (2.15-3.00)	**3.01** (2.47-3.73)	**3.40** (2.72-4.29)	**3.80** (2.92-4.94)	**4.22** (3.08-5.67)	**4.81** (3.35-6.67)	**5.27** (3.56-7.43)
4-day	**1.73** (1.50-2.03)	**1.98** (1.72-2.32)	**2.39** (2.07-2.81)	**2.75** (2.36-3.24)	**3.26** (2.69-4.01)	**3.66** (2.94-4.58)	**4.08** (3.15-5.26)	**4.52** (3.31-6.02)	**5.12** (3.58-7.04)	**5.58** (3.79-7.82)
7-day	**2.12** (1.86-2.45)	**2.39** (2.10-2.76)	**2.84** (2.48-3.29)	**3.23** (2.80-3.76)	**3.77** (3.14-4.56)	**4.20** (3.41-5.17)	**4.64** (3.61-5.89)	**5.09** (3.77-6.68)	**5.71** (4.04-7.75)	**6.19** (4.24-8.55)
10-day	**2.45** (2.17-2.80)	**2.74** (2.42-3.13)	**3.22** (2.83-3.70)	**3.63** (3.17-4.18)	**4.20** (3.53-5.03)	**4.65** (3.80-5.68)	**5.12** (4.01-6.43)	**5.59** (4.16-7.27)	**6.24** (4.43-8.38)	**6.74** (4.64-9.23)
20-day	**3.36** (3.01-3.77)	**3.72** (3.33-4.19)	**4.32** (3.85-4.88)	**4.83** (4.27-5.48)	**5.53** (4.70-6.51)	**6.08** (5.03-7.28)	**6.64** (5.27-8.19)	**7.22** (5.43-9.20)	**7.98** (5.74-10.5)	**8.57** (5.97-11.5)
30-day	**4.12** (3.72-4.59)	**4.57** (4.13-5.09)	**5.31** (4.77-5.93)	**5.92** (5.28-6.64)	**6.75** (5.78-7.84)	**7.40** (6.16-8.75)	**8.04** (6.42-9.80)	**8.69** (6.59-10.9)	**9.55** (6.90-12.4)	**10.2** (7.14-13.6)
45-day	**5.11** (4.65-5.63)	**5.69** (5.18-6.28)	**6.63** (6.01-7.33)	**7.39** (6.65-8.21)	**8.40** (7.23-9.63)	**9.16** (7.68-10.7)	**9.91** (7.96-11.9)	**10.6** (8.11-13.2)	**11.6** (8.42-14.9)	**12.3** (8.65-16.2)
60-day	**5.97** (5.47-6.52)	**6.68** (6.12-7.31)	**7.81** (7.12-8.57)	**8.71** (7.88-9.61)	**9.88** (8.54-11.2)	**10.7** (9.04-12.4)	**11.6** (9.32-13.8)	**12.4** (9.46-15.2)	**13.3** (9.73-17.0)	**14.0** (9.95-18.3)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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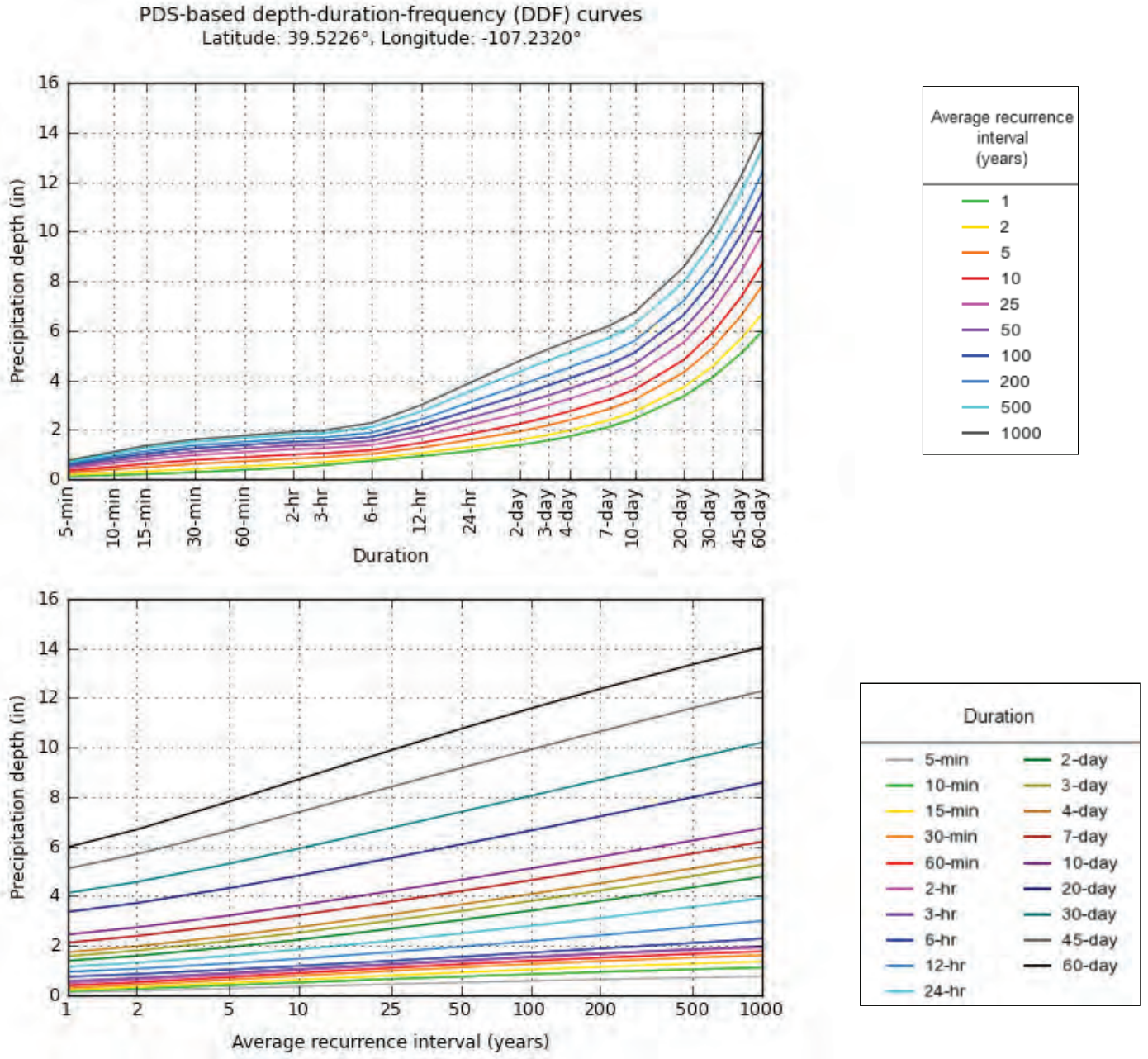
PF graphical



NOAA Atlas 14, Volume 8, Version 2

Created (GMT): Tue Dec 13 17:22:34 2022

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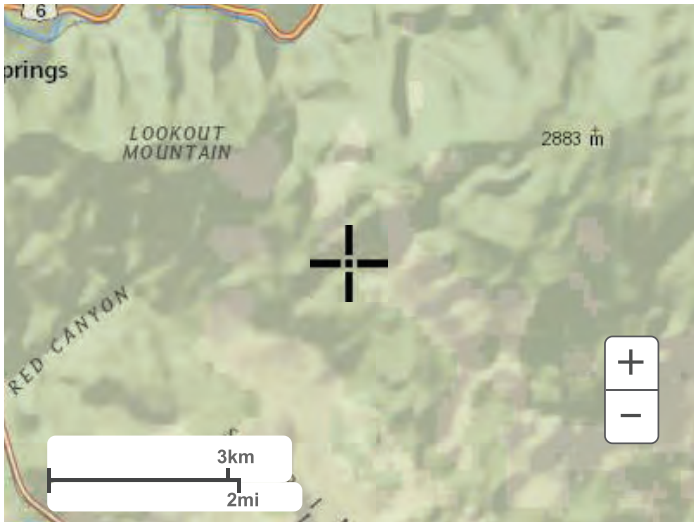
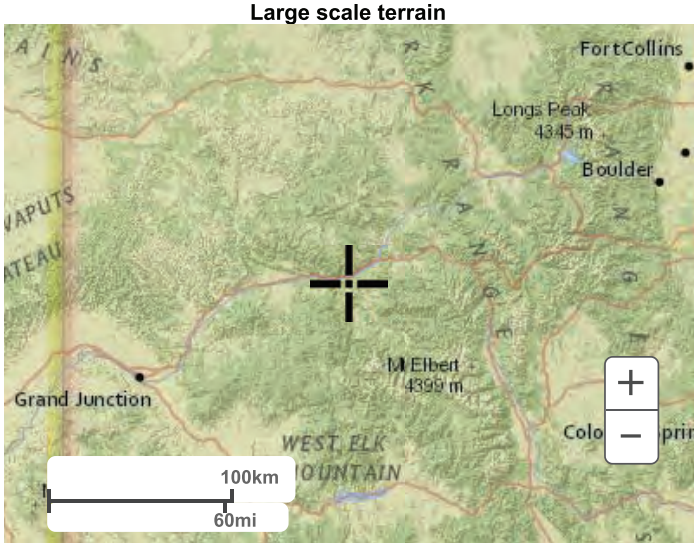
Maps & aerials

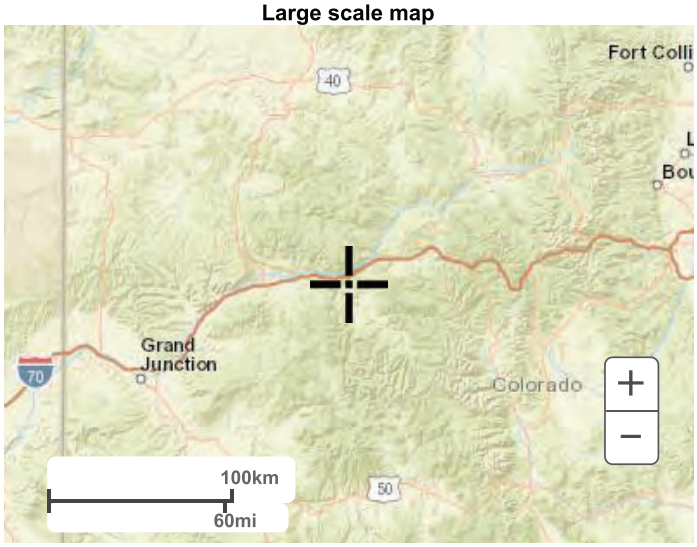
Small scale terrain



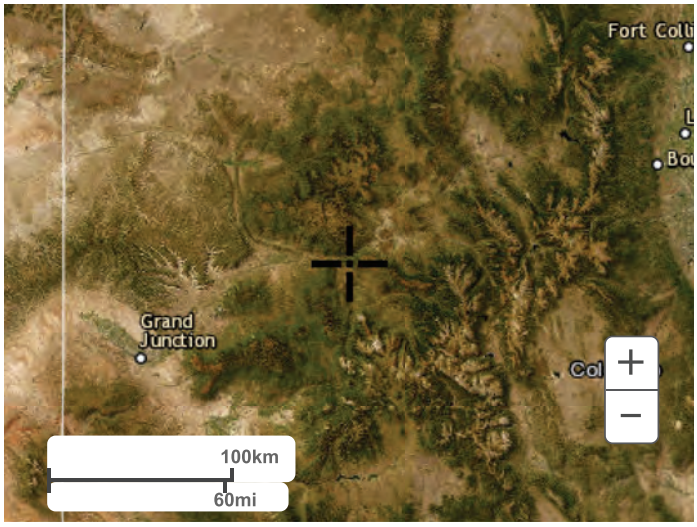
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix C –Pre-Development Drainage Results

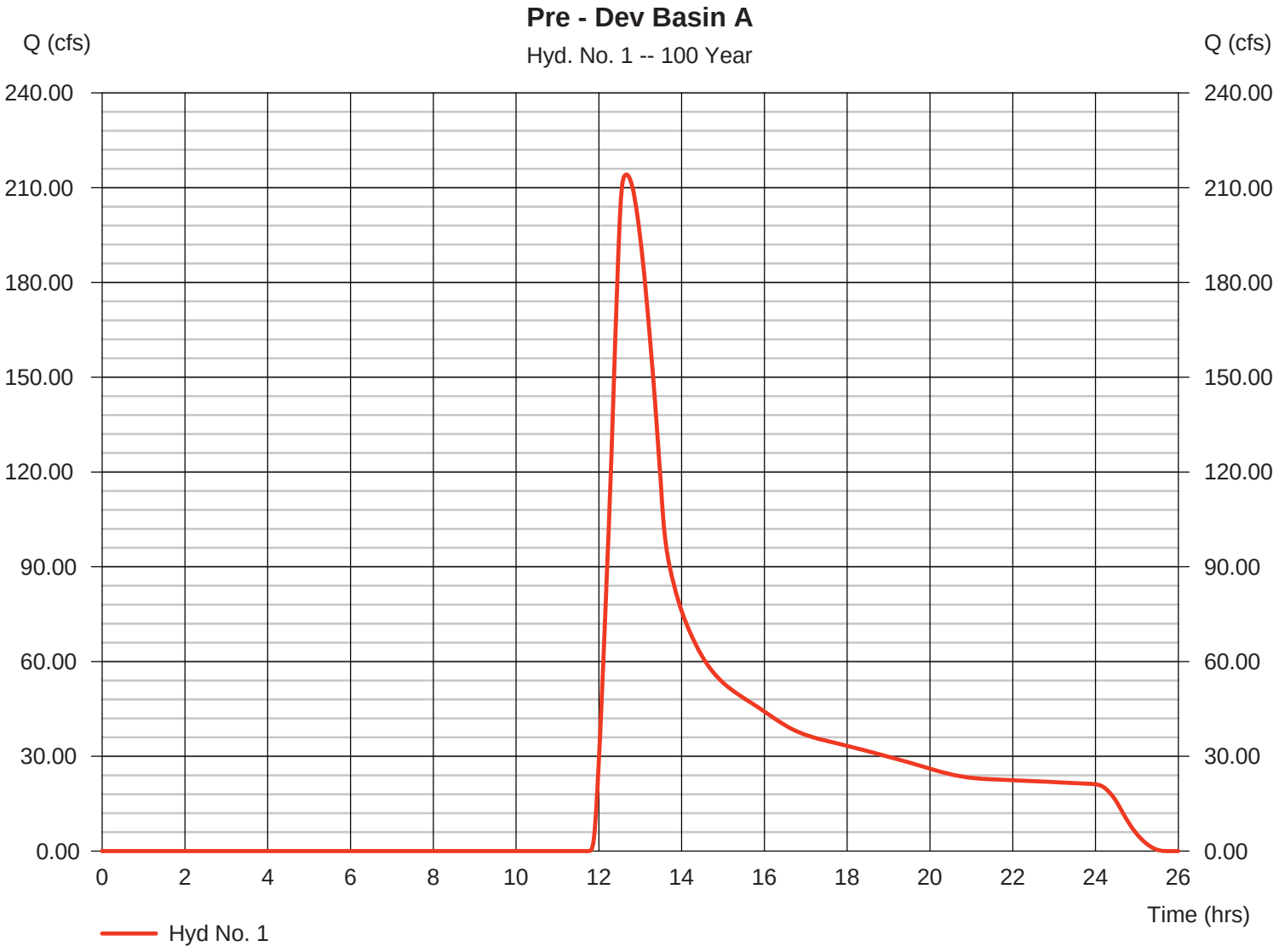
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021 Wednesday, 12 / 14 / 2022

Hyd. No. 1

Pre - Dev Basin A

Hydrograph type	=	SCS Runoff	Peak discharge	=	214.18 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.67 hrs
Time interval	=	2 min	Hyd. volume	=	2,294,455 cuft
Drainage area	=	1616.750 ac	Curve number	=	64
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	62.70 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 1

Pre - Dev Basin A

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 1.80		0.00		0.00		
Travel Time (min)	**= 34.87**	**+**	**0.00**	**+**	**0.00**	**=**	**34.87**
Shallow Concentrated Flow							
Flow length (ft)	= 6814.00		0.00		0.00		
Watercourse slope (%)	= 21.70		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.52		0.00		0.00		
Travel Time (min)	**= 15.11**	**+**	**0.00**	**+**	**0.00**	**=**	**15.11**
Channel Flow							
X sectional flow area (sqft)	= 4.00		0.00		0.00		
Wetted perimeter (ft)	= 5.66		0.00		0.00		
Channel slope (%)	= 7.80		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=10.99						
			0.00				
					0.00		
Flow length (ft)	({0})8400.0		0.0		0.0		
Travel Time (min)	**= 12.74**	**+**	**0.00**	**+**	**0.00**	**=**	**12.74**

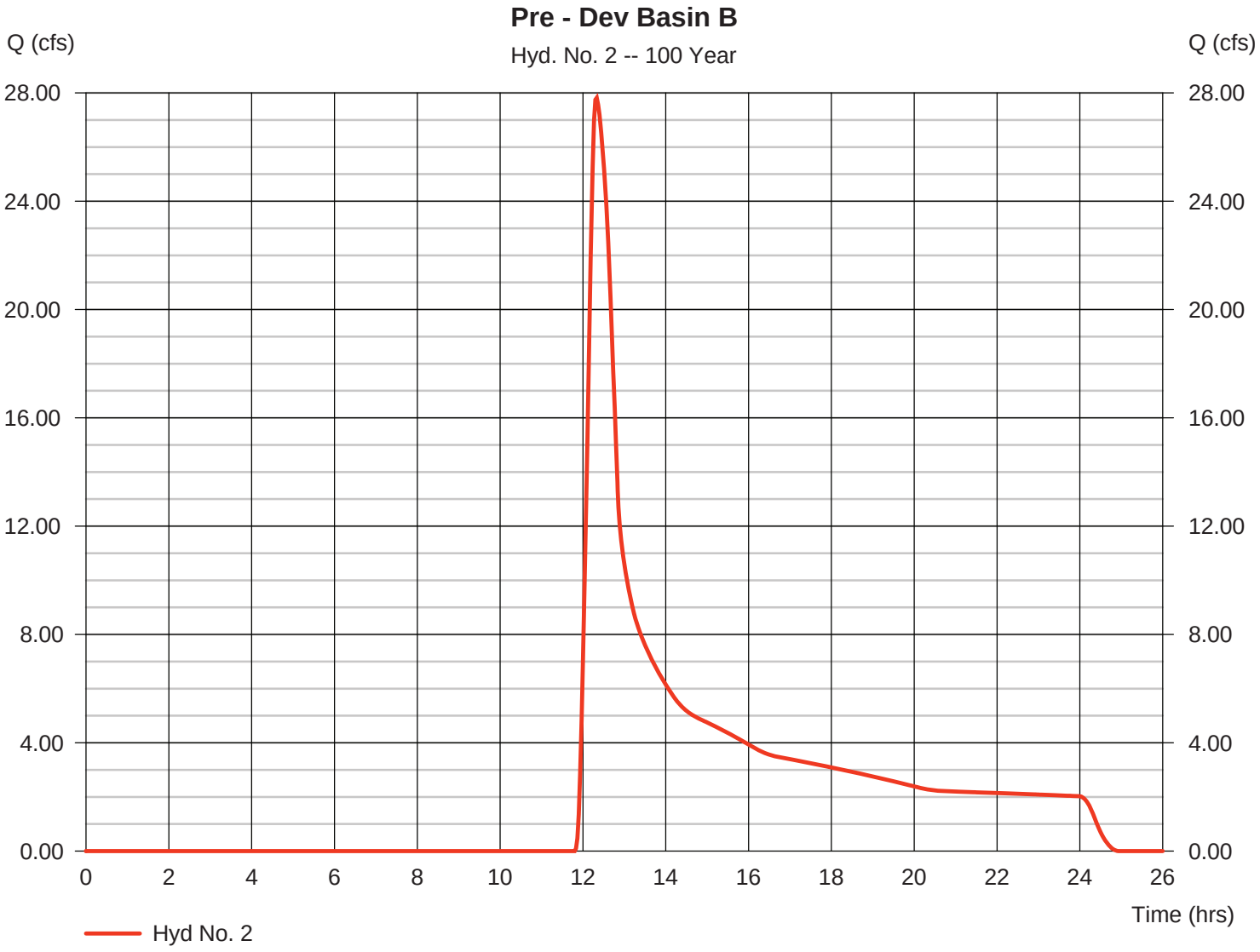
Total Travel Time, Tc ..... 62.70 min

Hydrograph Report

Hyd. No. 2

Pre - Dev Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 27.82 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.33 hrs
Time interval	= 2 min	Hyd. volume	= 213,465 cuft
Drainage area	= 167.090 ac	Curve number	= 63
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 36.40 min
Total precip.	= 2.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 2

Pre - Dev Basin B

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 6.20		0.00		0.00		
Travel Time (min)	**= 21.26**	**+**	**0.00**	**+**	**0.00**	**=**	**21.26**
Shallow Concentrated Flow							
Flow length (ft)	= 2405.00		0.00		0.00		
Watercourse slope (%)	= 22.30		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.62		0.00		0.00		
Travel Time (min)	**= 5.26**	**+**	**0.00**	**+**	**0.00**	**=**	**5.26**
Channel Flow							
X sectional flow area (sqft)	= 0.25		0.00		0.00		
Wetted perimeter (ft)	= 1.15		0.00		0.00		
Channel slope (%)	= 12.50		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=6.32						
			0.00				
					0.00		
Flow length (ft)	({0})3760.0		0.0		0.0		
Travel Time (min)	**= 9.92**	**+**	**0.00**	**+**	**0.00**	**=**	**9.92**

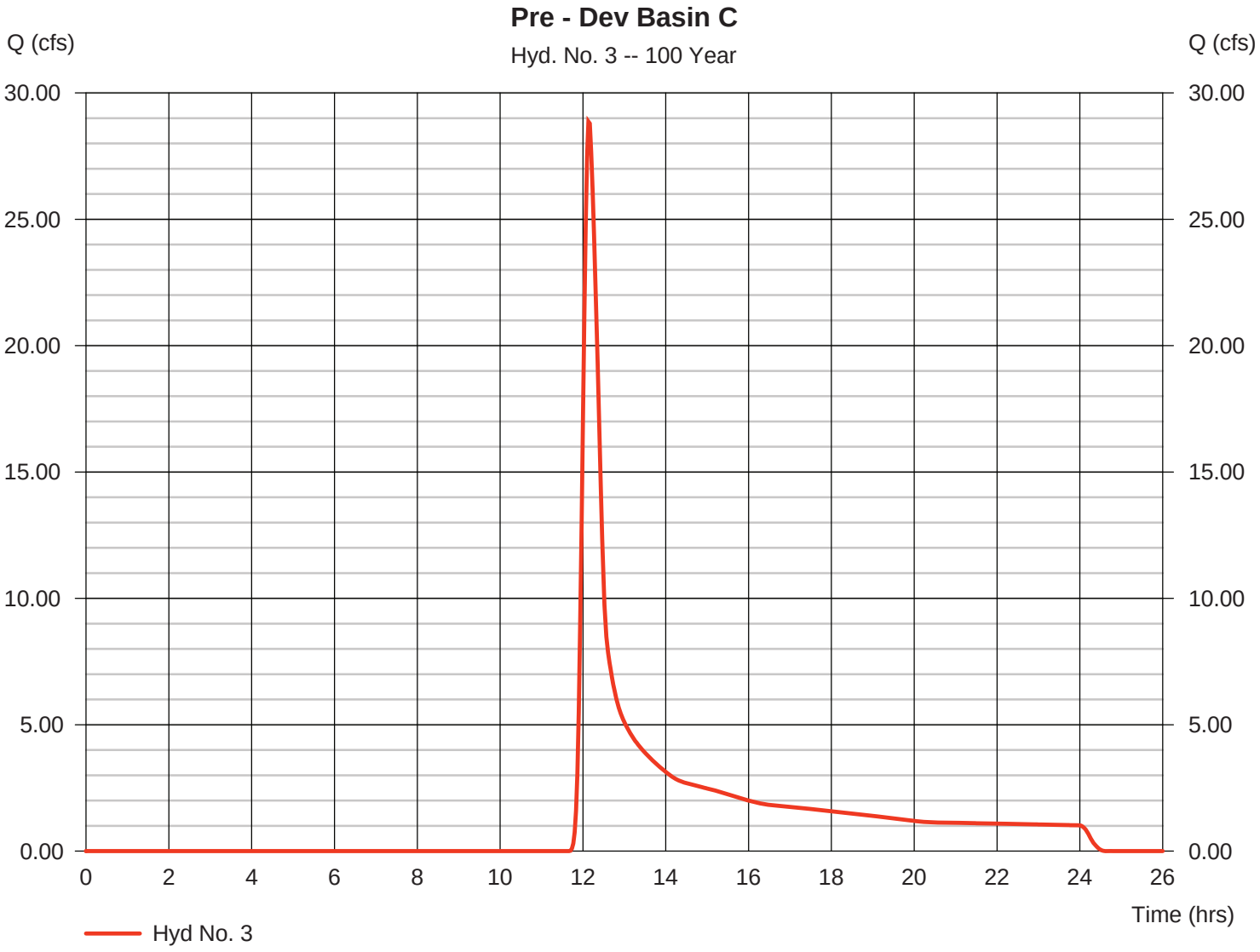
Total Travel Time, Tc ..... 36.40 min

Hydrograph Report

Hyd. No. 3

Pre - Dev Basin C

Hydrograph type	=	SCS Runoff	Peak discharge	=	28.86 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	128,007 cuft
Drainage area	=	65.220 ac	Curve number	=	68
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	23.30 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 3

Pre - Dev Basin C

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 16.00		0.00		0.00		
Travel Time (min)	**= 14.55**	**+**	**0.00**	**+**	**0.00**	**=**	**14.55**
Shallow Concentrated Flow							
Flow length (ft)	= 2385.00		0.00		0.00		
Watercourse slope (%)	= 22.20		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.60		0.00		0.00		
Travel Time (min)	**= 5.23**	**+**	**0.00**	**+**	**0.00**	**=**	**5.23**
Channel Flow							
X sectional flow area (sqft)	= 0.30		0.00		0.00		
Wetted perimeter (ft)	= 1.60		0.00		0.00		
Channel slope (%)	= 8.20		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=4.63						
			0.00				
					0.00		
Flow length (ft)	({0})977.0		0.0		0.0		
Travel Time (min)	**= 3.51**	**+**	**0.00**	**+**	**0.00**	**=**	**3.51**

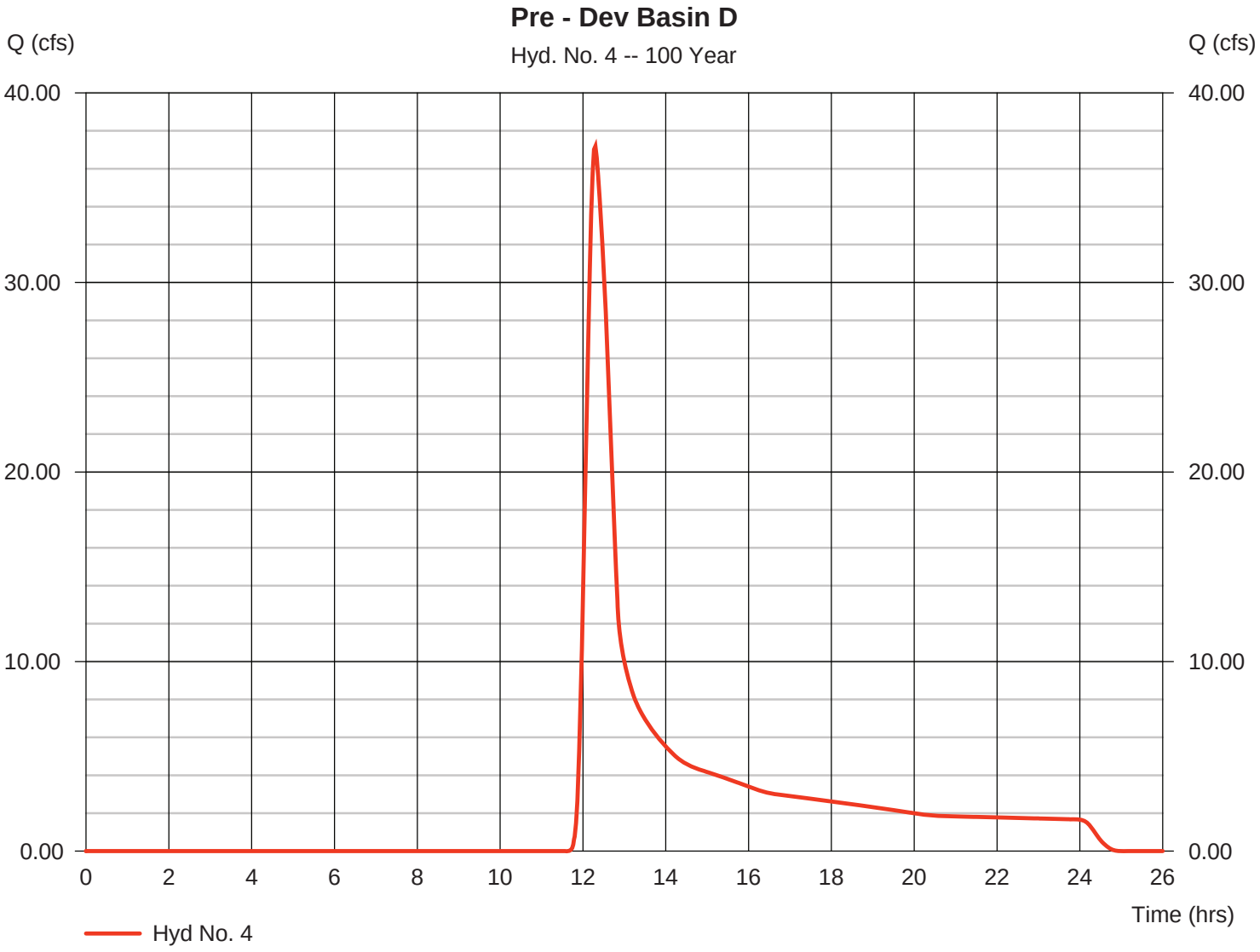
Total Travel Time, Tc ..... 23.30 min

Hydrograph Report

Hyd. No. 4

Pre - Dev Basin D

Hydrograph type	=	SCS Runoff	Peak discharge	=	37.18 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	214,568 cuft
Drainage area	=	104.800 ac	Curve number	=	69
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	33.80 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 4

Pre - Dev Basin D

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 5.10		0.00		0.00		
Travel Time (min)	**= 22.99**	**+**	**0.00**	**+**	**0.00**	**=**	**22.99**
Shallow Concentrated Flow							
Flow length (ft)	= 3181.00		0.00		0.00		
Watercourse slope (%)	= 13.10		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=5.84		0.00		0.00		
Travel Time (min)	**= 9.08**	**+**	**0.00**	**+**	**0.00**	**=**	**9.08**
Channel Flow							
X sectional flow area (sqft)	= 0.56		0.00		0.00		
Wetted perimeter (ft)	= 2.12		0.00		0.00		
Channel slope (%)	= 16.20		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=8.19						
			0.00				
					0.00		
Flow length (ft)	({0})866.0		0.0		0.0		
Travel Time (min)	**= 1.76**	**+**	**0.00**	**+**	**0.00**	**=**	**1.76**

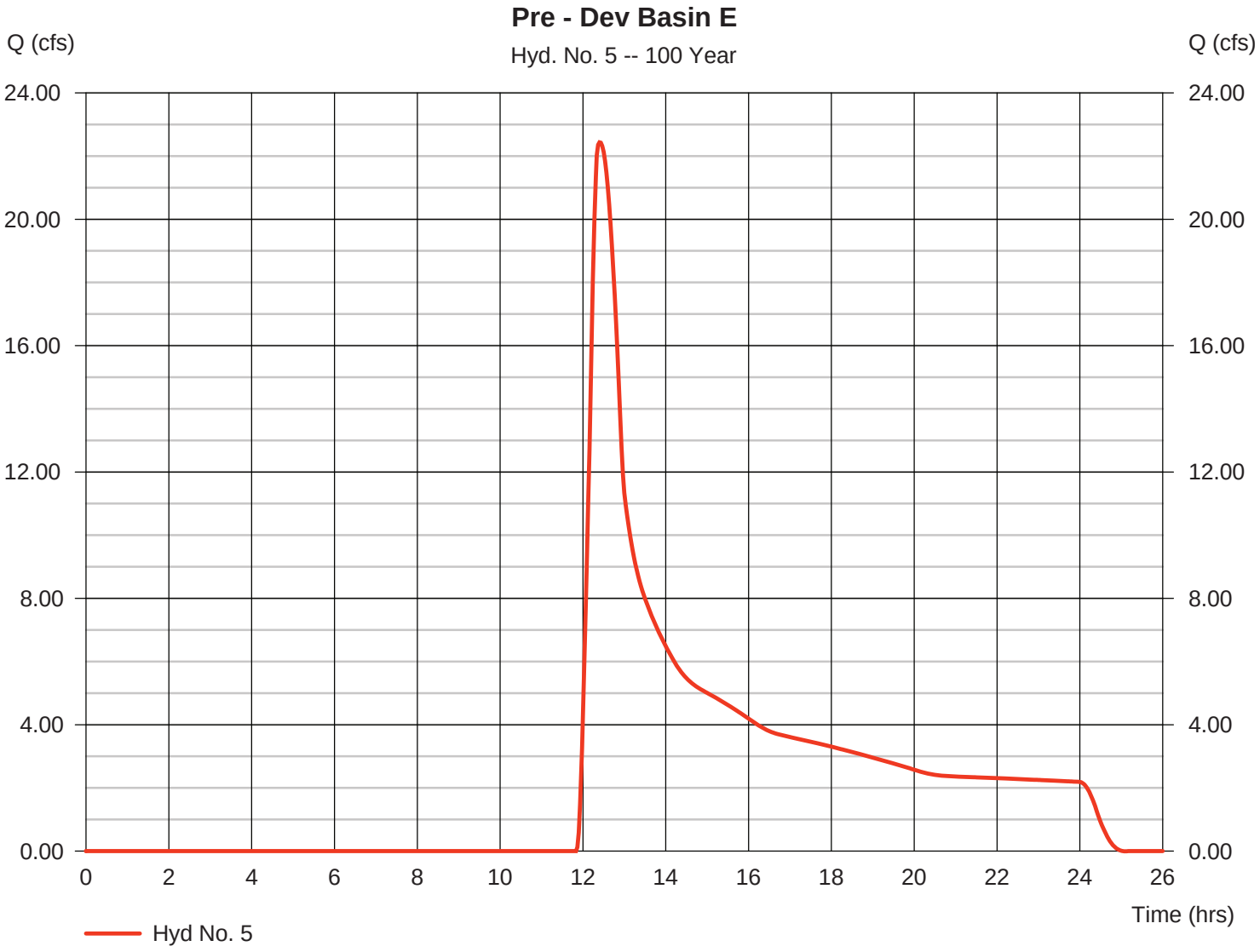
Total Travel Time, Tc ..... 33.80 min

Hydrograph Report

Hyd. No. 5

Pre - Dev Basin E

Hydrograph type	=	SCS Runoff	Peak discharge	=	22.44 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.40 hrs
Time interval	=	2 min	Hyd. volume	=	212,928 cuft
Drainage area	=	198.400 ac	Curve number	=	61
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	38.20 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 5

Pre - Dev Basin E

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.240		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 22.22**	**+**	**0.00**	**+**	**0.00**	**=**	**22.22**
Shallow Concentrated Flow							
Flow length (ft)	= 2982.00		0.00		0.00		
Watercourse slope (%)	= 6.00		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=3.95		0.00		0.00		
Travel Time (min)	**= 12.58**	**+**	**0.00**	**+**	**0.00**	**=**	**12.58**
Channel Flow							
X sectional flow area (sqft)	= 8.70		0.00		0.00		
Wetted perimeter (ft)	= 8.70		0.00		0.00		
Channel slope (%)	= 3.70		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=9.55						
			0.00				
					0.00		
Flow length (ft)	({0})1963.0		0.0		0.0		
Travel Time (min)	**= 3.42**	**+**	**0.00**	**+**	**0.00**	**=**	**3.42**

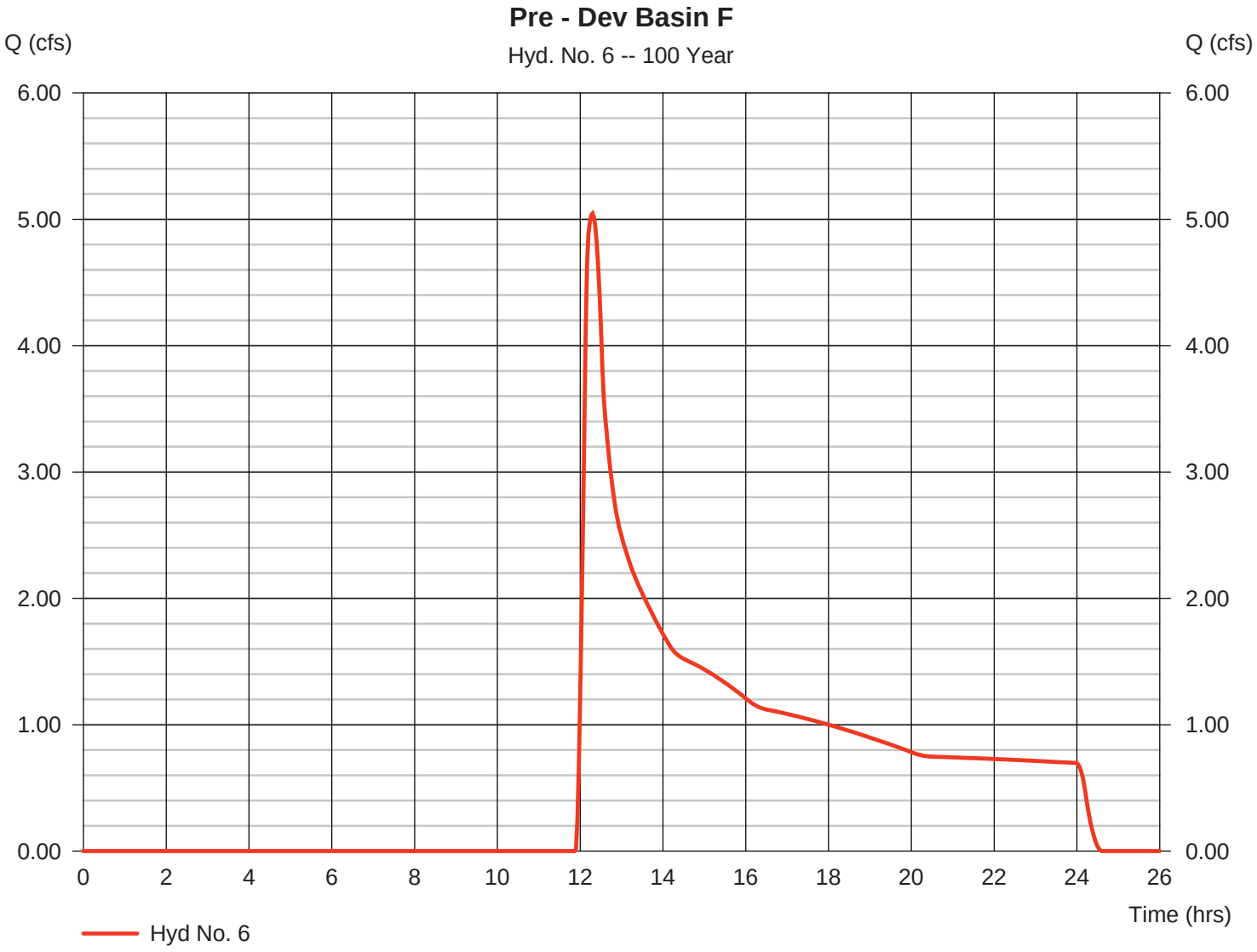
Total Travel Time, Tc ..... 38.20 min

Hydrograph Report

Hyd. No. 6

Pre - Dev Basin F

Hydrograph type	= SCS Runoff	Peak discharge	= 5.046 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 56,430 cuft
Drainage area	= 80.000 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 20.30 min
Total precip.	= 2.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hyd. No. 6

Pre - Dev Basin F

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 10.20		0.00		0.00		
Travel Time (min)	**= 17.42**	**+**	**0.00**	**+**	**0.00**	**=**	**17.42**
Shallow Concentrated Flow							
Flow length (ft)	= 1355.00		0.00		0.00		
Watercourse slope (%)	= 24.00		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.90		0.00		0.00		
Travel Time (min)	**= 2.86**	**+**	**0.00**	**+**	**0.00**	**=**	**2.86**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

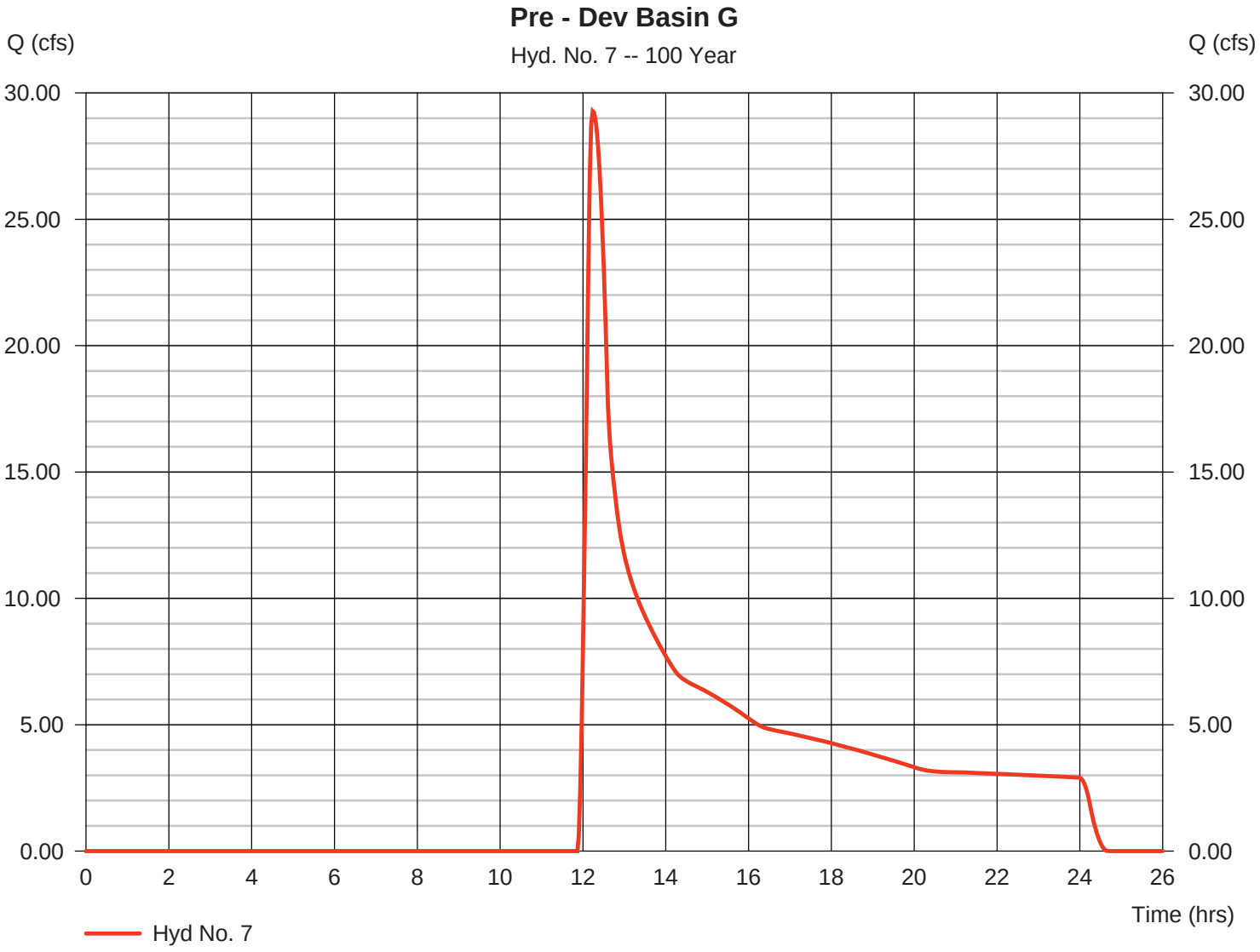
Total Travel Time, Tc ..... 20.30 min

Hydrograph Report

Hyd. No. 7

Pre - Dev Basin G

Hydrograph type	=	SCS Runoff	Peak discharge	=	29.28 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.23 hrs
Time interval	=	2 min	Hyd. volume	=	259,989 cuft
Drainage area	=	302.500 ac	Curve number	=	59
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	23.80 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 7

Pre - Dev Basin G

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 15.40		0.00		0.00		
Travel Time (min)	**= 14.78**	**+**	**0.00**	**+**	**0.00**	**=**	**14.78**
Shallow Concentrated Flow							
Flow length (ft)	= 2969.00		0.00		0.00		
Watercourse slope (%)	= 27.80		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=8.51		0.00		0.00		
Travel Time (min)	**= 5.82**	**+**	**0.00**	**+**	**0.00**	**=**	**5.82**
Channel Flow							
X sectional flow area (sqft)	= 11.40		0.00		0.00		
Wetted perimeter (ft)	= 11.70		0.00		0.00		
Channel slope (%)	= 12.10		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=16.98						
			0.00				
					0.00		
Flow length (ft)	({0})3298.0		0.0		0.0		
Travel Time (min)	**= 3.24**	**+**	**0.00**	**+**	**0.00**	**=**	**3.24**

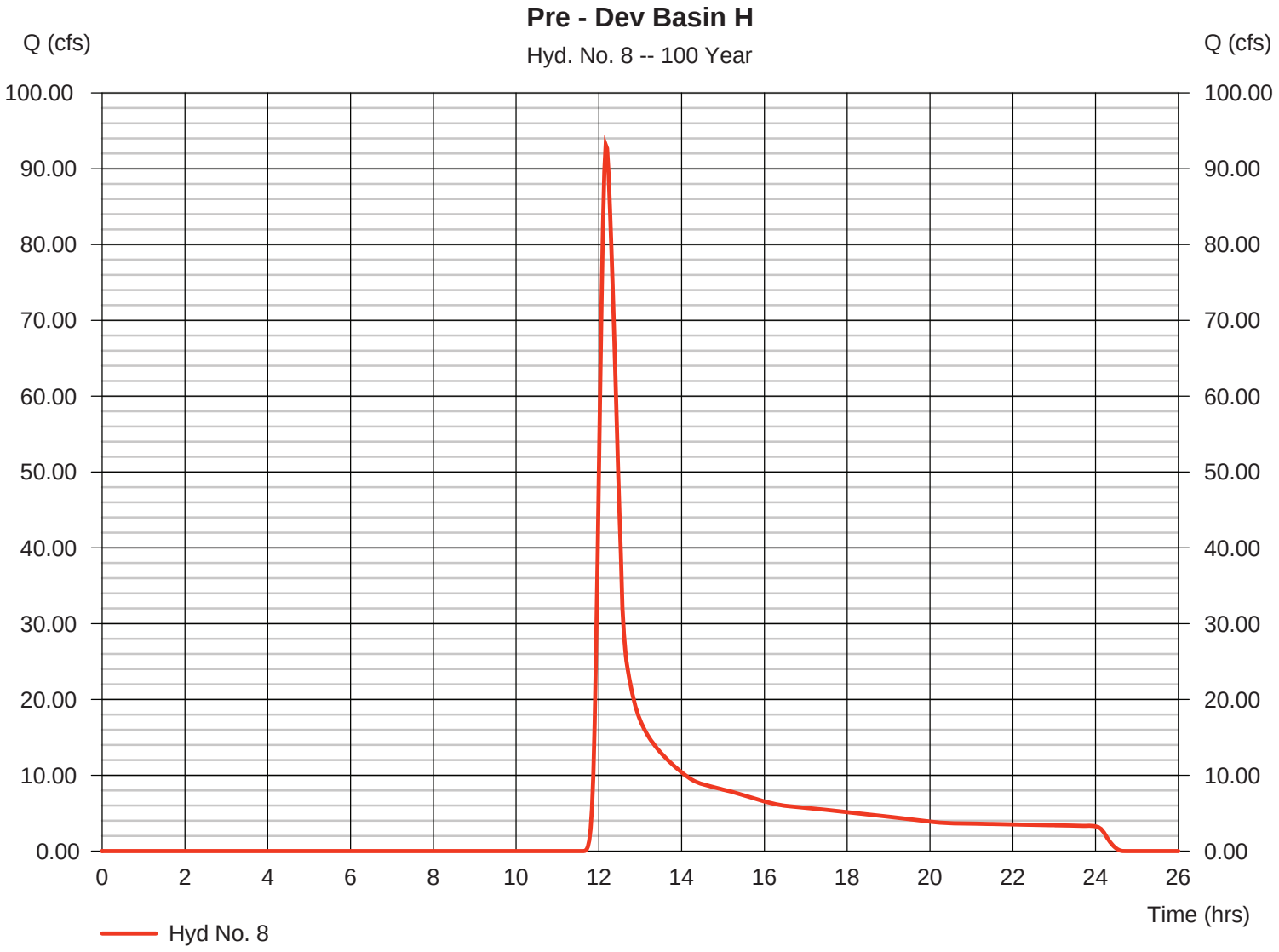
Total Travel Time, Tc ..... 23.80 min

Hydrograph Report

Hyd. No. 8

Pre - Dev Basin H

Hydrograph type	= SCS Runoff	Peak discharge	= 93.15 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 426,308 cuft
Drainage area	= 209.120 ac	Curve number	= 69
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 26.60 min
Total precip.	= 2.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hyd. No. 8

Pre - Dev Basin H

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 25.00		0.00		0.00		
Travel Time (min)	**= 12.17**	**+**	**0.00**	**+**	**0.00**	**=**	**12.17**
Shallow Concentrated Flow							
Flow length (ft)	= 4754.00		0.00		0.00		
Watercourse slope (%)	= 15.80		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=6.41		0.00		0.00		
Travel Time (min)	**= 12.35**	**+**	**0.00**	**+**	**0.00**	**=**	**12.35**
Channel Flow							
X sectional flow area (sqft)	= 0.56		0.00		0.00		
Wetted perimeter (ft)	= 2.12		0.00		0.00		
Channel slope (%)	= 10.80		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=6.69						
			0.00				
					0.00		
Flow length (ft)	({0})831.0		0.0		0.0		
Travel Time (min)	**= 2.07**	**+**	**0.00**	**+**	**0.00**	**=**	**2.07**

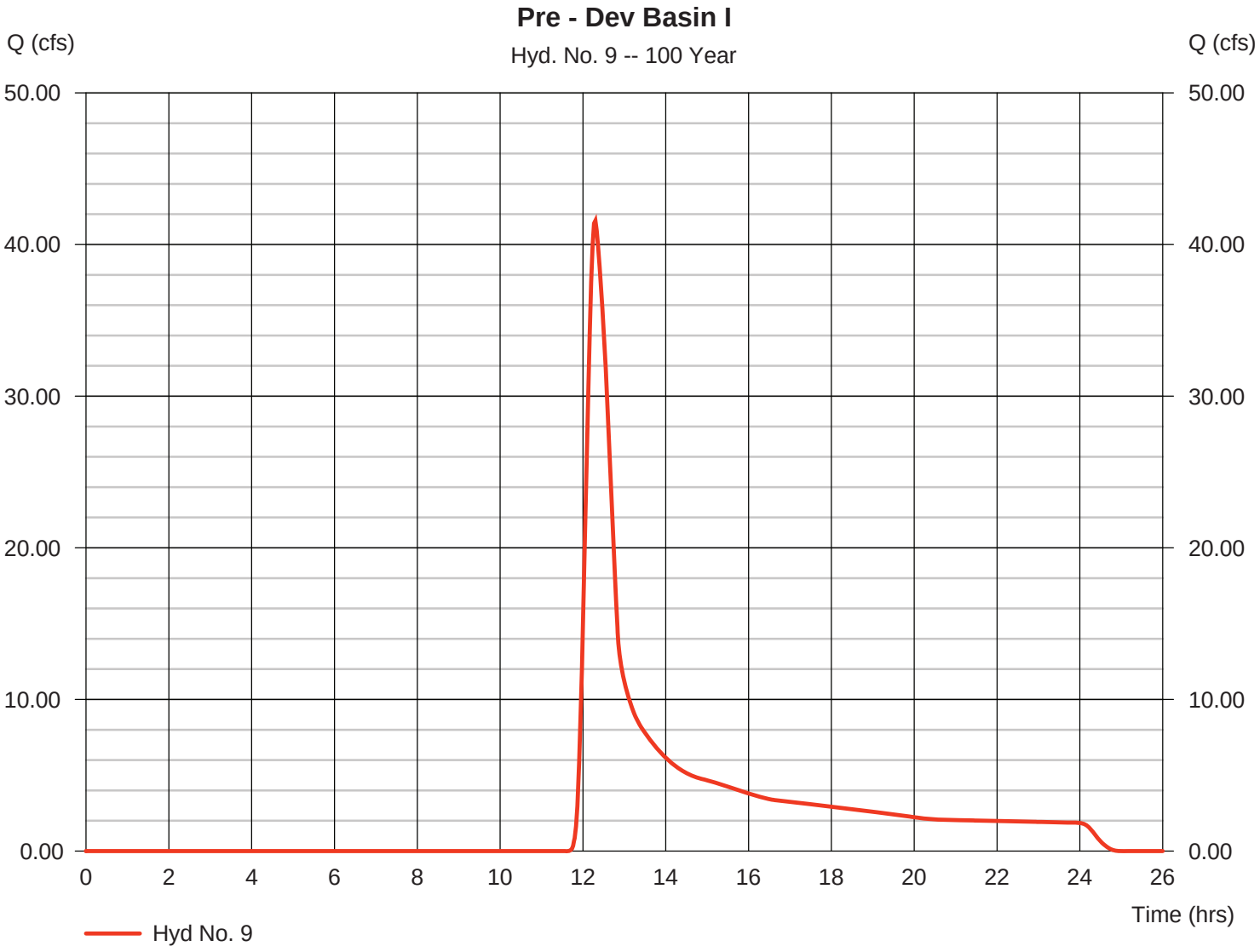
Total Travel Time, Tc ..... 26.60 min

Hydrograph Report

Hyd. No. 9

Pre - Dev Basin I

Hydrograph type	=	SCS Runoff	Peak discharge	=	41.57 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	239,894 cuft
Drainage area	=	117.170 ac	Curve number	=	69
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	33.90 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 9

Pre - Dev Basin I

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.240		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 0.91		0.00		0.00		
Travel Time (min)	**= 30.44**	**+**	**0.00**	**+**	**0.00**	**=**	**30.44**
Shallow Concentrated Flow							
Flow length (ft)	= 1567.00		0.00		0.00		
Watercourse slope (%)	= 22.50		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.65		0.00		0.00		
Travel Time (min)	**= 3.41**	**+**	**0.00**	**+**	**0.00**	**=**	**3.41**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

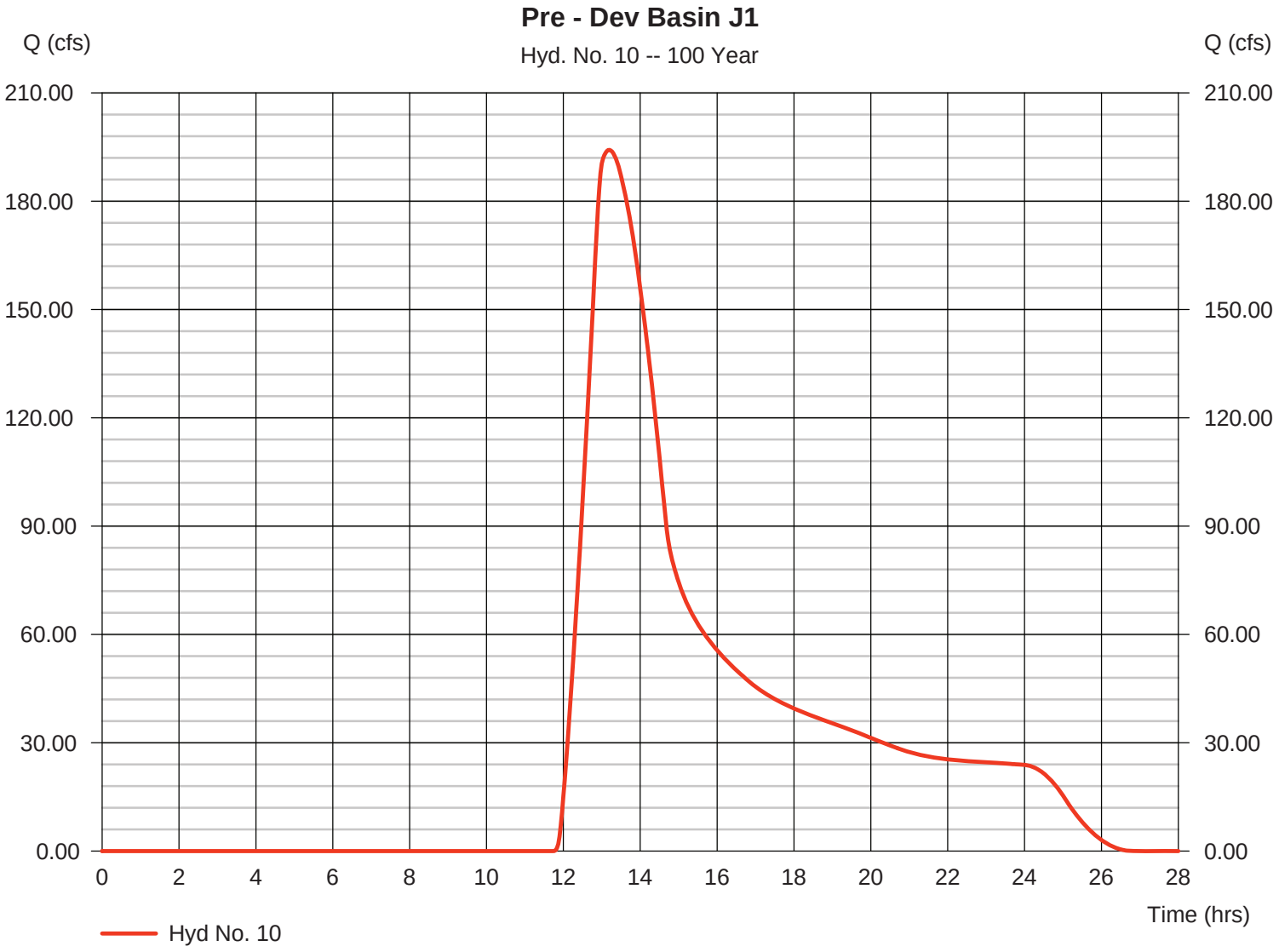
Total Travel Time, Tc ..... 33.90 min

Hydrograph Report

Hyd. No. 10

Pre - Dev Basin J1

Hydrograph type	=	SCS Runoff	Peak discharge	=	194.19 cfs
Storm frequency	=	100 yrs	Time to peak	=	13.20 hrs
Time interval	=	2 min	Hyd. volume	=	2,722,290 cuft
Drainage area	=	1648.000 ac	Curve number	=	66
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	105.80 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 10

Pre - Dev Basin J1

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 1.00		0.00		0.00		
Travel Time (min)	**= 44.12**	**+**	**0.00**	**+**	**0.00**	**=**	**44.12**
Shallow Concentrated Flow							
Flow length (ft)	= 3206.00		0.00		0.00		
Watercourse slope (%)	= 1.80		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=2.16		0.00		0.00		
Travel Time (min)	**= 24.68**	**+**	**0.00**	**+**	**0.00**	**=**	**24.68**
Channel Flow							
X sectional flow area (sqft)	= 4.30		0.00		0.00		
Wetted perimeter (ft)	= 10.00		0.00		0.00		
Channel slope (%)	= 10.70		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=9.23						
			0.00				
					0.00		
Flow length (ft)	({0})20476.0		0.0		0.0		
Travel Time (min)	**= 36.98**	**+**	**0.00**	**+**	**0.00**	**=**	**36.98**

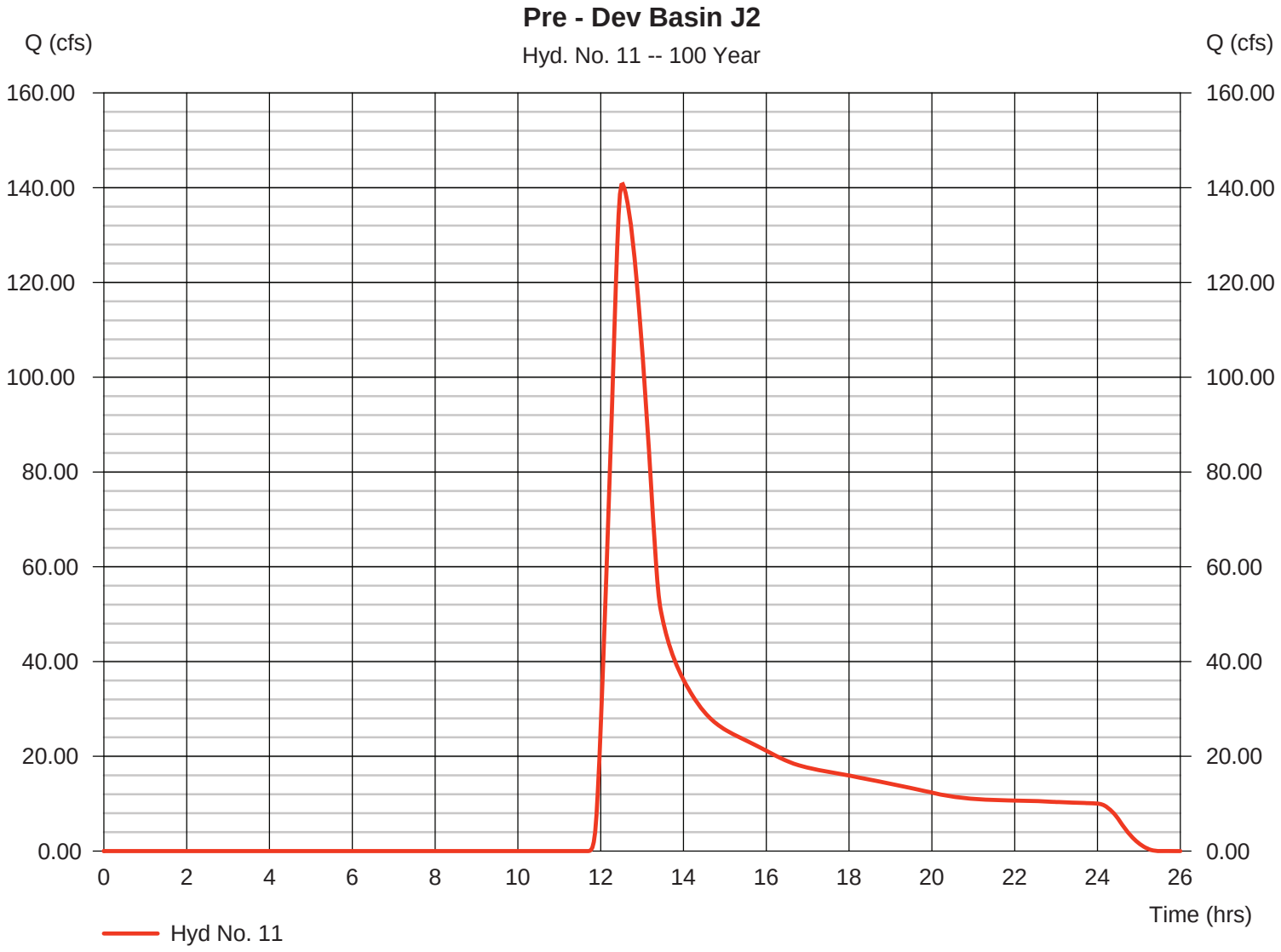
Total Travel Time, Tc ..... 105.80 min

Hydrograph Report

Hyd. No. 11

Pre - Dev Basin J2

Hydrograph type	=	SCS Runoff	Peak discharge	=	140.70 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.53 hrs
Time interval	=	2 min	Hyd. volume	=	1,205,520 cuft
Drainage area	=	678.150 ac	Curve number	=	67
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	57.20 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 11

Pre - Dev Basin J2

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 88.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 2.20		0.00		0.00		
Travel Time (min)	**= 29.06**	**+**	**0.00**	**+**	**0.00**	**=**	**29.06**
Shallow Concentrated Flow							
Flow length (ft)	= 3122.00		0.00		0.00		
Watercourse slope (%)	= 22.20		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.60		0.00		0.00		
Travel Time (min)	**= 6.84**	**+**	**0.00**	**+**	**0.00**	**=**	**6.84**
Channel Flow							
X sectional flow area (sqft)	= 2.00		0.00		0.00		
Wetted perimeter (ft)	= 6.30		0.00		0.00		
Channel slope (%)	= 11.20		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=7.71						
			0.00				
					0.00		
Flow length (ft)	({0})9863.0		0.0		0.0		
Travel Time (min)	**= 21.33**	**+**	**0.00**	**+**	**0.00**	**=**	**21.33**

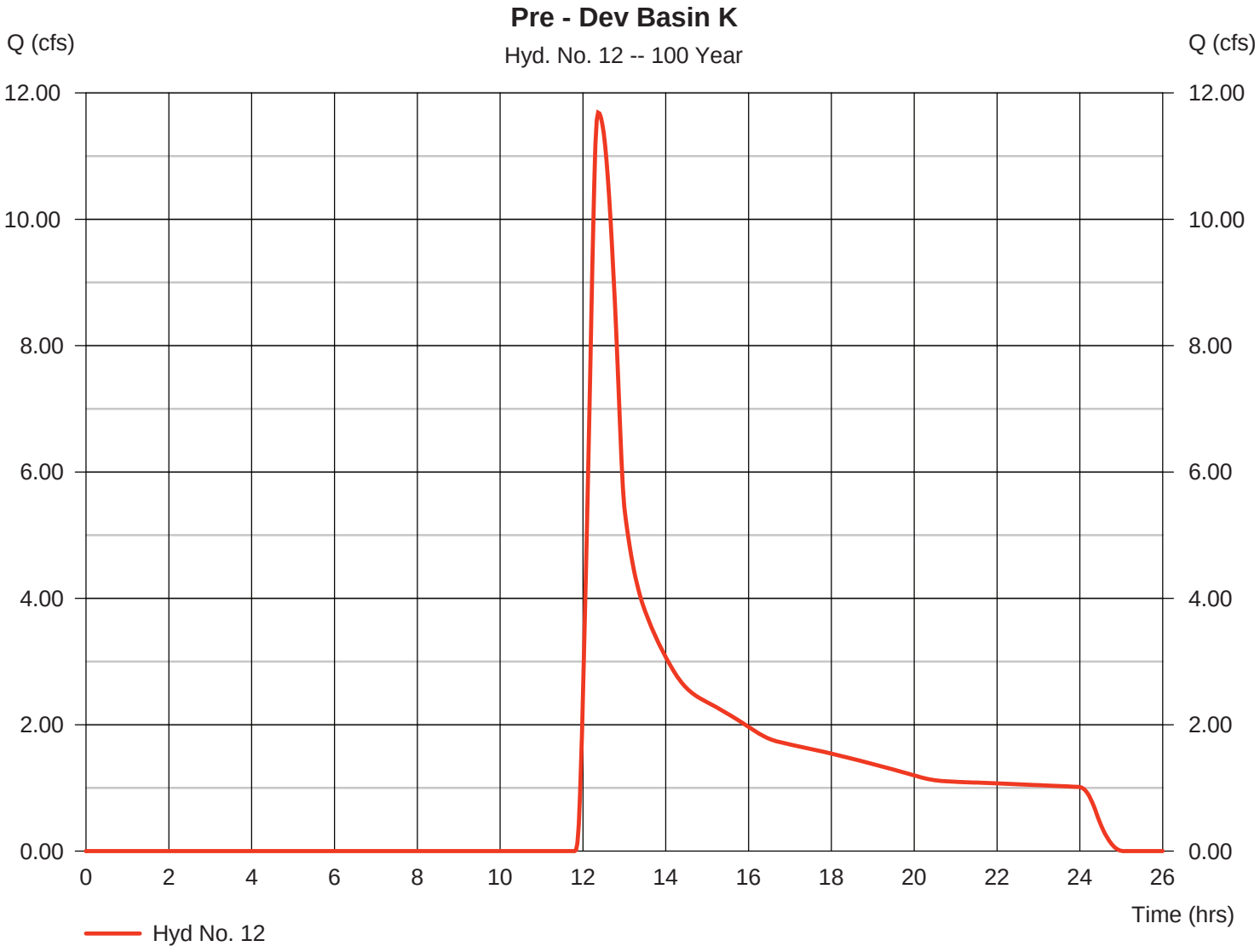
Total Travel Time, Tc ..... 57.20 min

Hydrograph Report

Hyd. No. 12

Pre - Dev Basin K

Hydrograph type	=	SCS Runoff	Peak discharge	=	11.69 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.37 hrs
Time interval	=	2 min	Hyd. volume	=	102,744 cuft
Drainage area	=	87.000 ac	Curve number	=	62
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	38.00 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 12

Pre - Dev Basin K

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 33.43**	**+**	**0.00**	**+**	**0.00**	**=**	**33.43**
Shallow Concentrated Flow							
Flow length (ft)	= 2139.00		0.00		0.00		
Watercourse slope (%)	= 23.50		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=7.82		0.00		0.00		
Travel Time (min)	**= 4.56**	**+**	**0.00**	**+**	**0.00**	**=**	**4.56**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

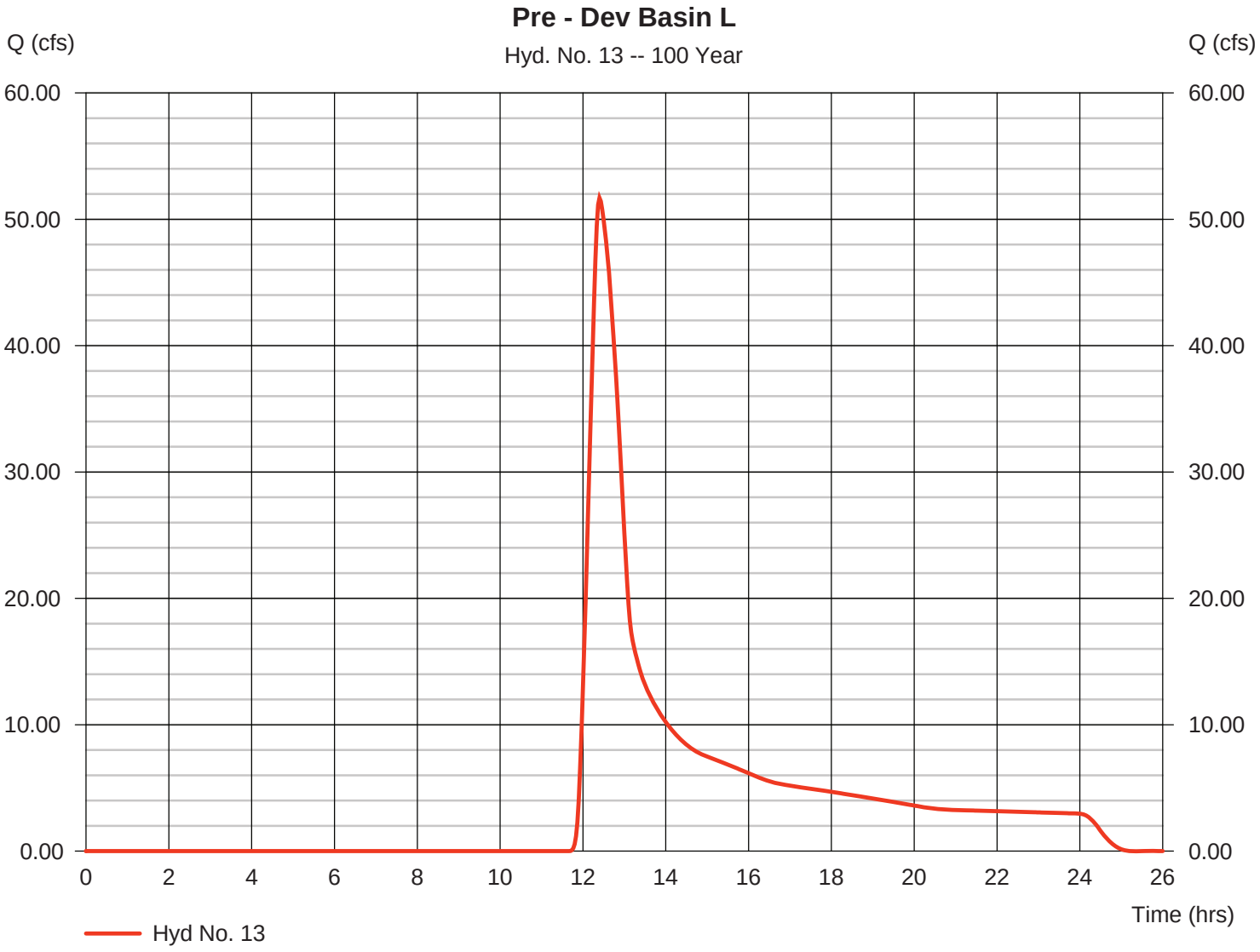
Total Travel Time, Tc ..... 38.00 min

Hydrograph Report

Hyd. No. 13

Pre - Dev Basin L

Hydrograph type	=	SCS Runoff	Peak discharge	=	51.69 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.40 hrs
Time interval	=	2 min	Hyd. volume	=	368,966 cuft
Drainage area	=	193.070 ac	Curve number	=	68
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	44.20 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 13

Pre - Dev Basin L

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 104.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 34.50**	**+**	**0.00**	**+**	**0.00**	**=**	**34.50**
Shallow Concentrated Flow							
Flow length (ft)	= 257.00		0.00		0.00		
Watercourse slope (%)	= 6.10		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=3.98		0.00		0.00		
Travel Time (min)	**= 1.07**	**+**	**0.00**	**+**	**0.00**	**=**	**1.07**
Channel Flow							
X sectional flow area (sqft)	= 9.00		6.50		0.00		
Wetted perimeter (ft)	= 12.50		13.00		0.00		
Channel slope (%)	= 12.34		11.14		0.00		
Manning's n-value	= 0.030		0.030		0.015		
Velocity (ft/s)	=14.00						
			10.42				
					0.00		
Flow length (ft)	({0})1620.0		4204.0		0.0		
Travel Time (min)	**= 1.93**	**+**	**6.73**	**+**	**0.00**	**=**	**8.65**

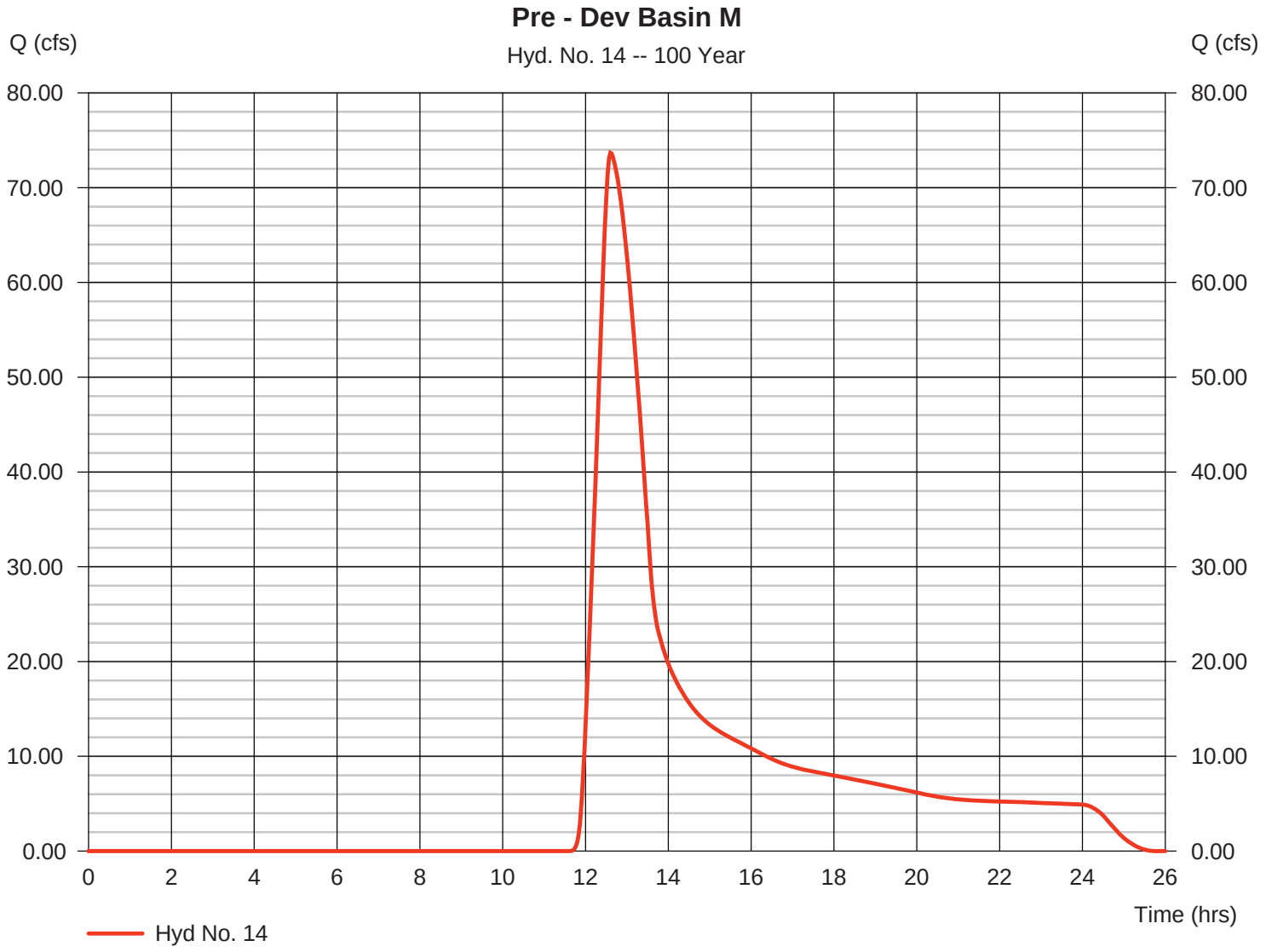
Total Travel Time, Tc ..... 44.20 min

Hydrograph Report

Hyd. No. 14

Pre - Dev Basin M

Hydrograph type	=	SCS Runoff	Peak discharge	=	73.68 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.60 hrs
Time interval	=	2 min	Hyd. volume	=	643,900 cuft
Drainage area	=	292.000 ac	Curve number	=	70
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	64.50 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 14

Pre - Dev Basin M

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 94.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 1.00		0.00		0.00		
Travel Time (min)	**= 41.99**	**+**	**0.00**	**+**	**0.00**	**=**	**41.99**
Shallow Concentrated Flow							
Flow length (ft)	= 1062.00		0.00		0.00		
Watercourse slope (%)	= 8.40		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=4.68		0.00		0.00		
Travel Time (min)	**= 3.79**	**+**	**0.00**	**+**	**0.00**	**=**	**3.79**
Channel Flow							
X sectional flow area (sqft)	= 1.60		0.00		0.00		
Wetted perimeter (ft)	= 20.70		0.00		0.00		
Channel slope (%)	= 14.90		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=3.45						
			0.00				
					0.00		
Flow length (ft)	({0})3885.0		0.0		0.0		
Travel Time (min)	**= 18.77**	**+**	**0.00**	**+**	**0.00**	**=**	**18.77**

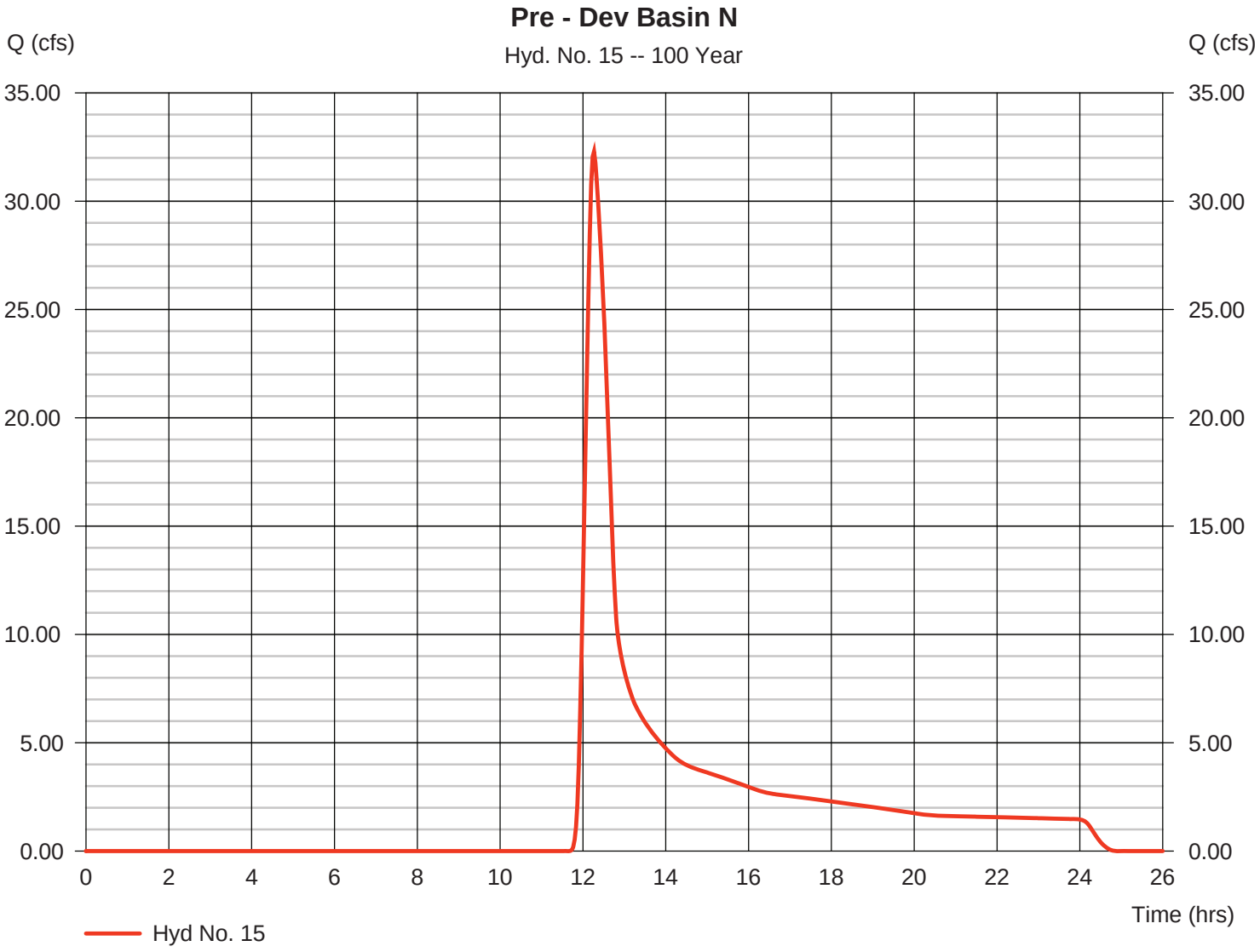
Total Travel Time, Tc ..... 64.50 min

Hydrograph Report

Hyd. No. 15

Pre - Dev Basin N

Hydrograph type	=	SCS Runoff	Peak discharge	=	32.29 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.27 hrs
Time interval	=	2 min	Hyd. volume	=	183,698 cuft
Drainage area	=	94.090 ac	Curve number	=	68
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	31.20 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 15

Pre - Dev Basin N

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 98.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 5.30		0.00		0.00		
Travel Time (min)	**= 22.28**	**+**	**0.00**	**+**	**0.00**	**=**	**22.28**
Shallow Concentrated Flow							
Flow length (ft)	= 1084.00		1290.00		0.00		
Watercourse slope (%)	= 3.00		30.00		0.00		
Surface description	= Unpaved		Unpaved		Paved		
Average velocity (ft/s)	=2.79		8.84		0.00		
Travel Time (min)	**= 6.46**	**+**	**2.43**	**+**	**0.00**	**=**	**8.90**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

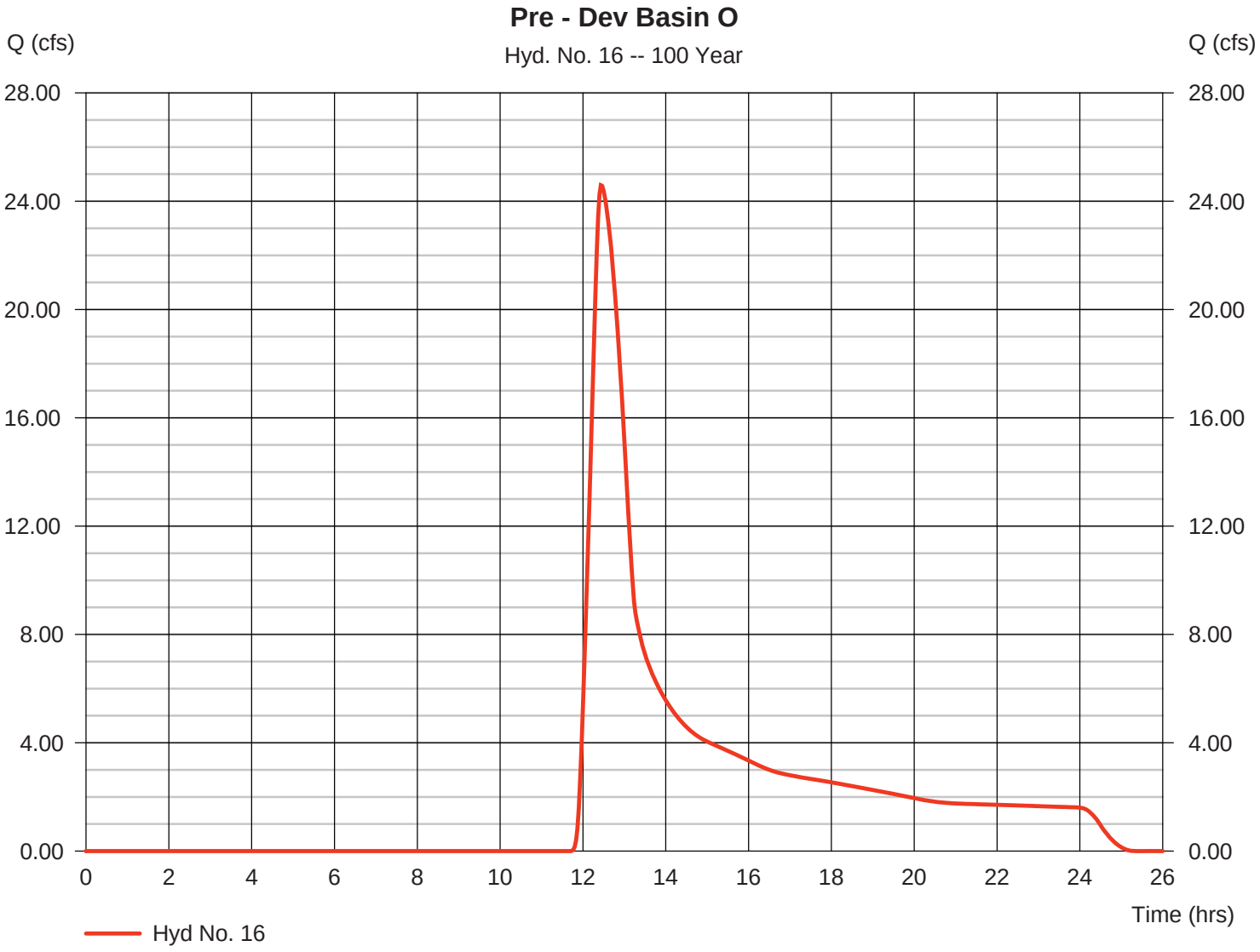
Total Travel Time, Tc ..... 31.20 min

Hydrograph Report

Hyd. No. 16

Pre - Dev Basin O

Hydrograph type	=	SCS Runoff	Peak discharge	=	24.59 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.43 hrs
Time interval	=	2 min	Hyd. volume	=	193,535 cuft
Drainage area	=	108.070 ac	Curve number	=	67
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	48.90 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 16

Pre - Dev Basin O

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 1.36		0.00		0.00		
Travel Time (min)	**= 39.01**	**+**	**0.00**	**+**	**0.00**	**=**	**39.01**
Shallow Concentrated Flow							
Flow length (ft)	= 2180.00		0.00		0.00		
Watercourse slope (%)	= 8.34		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=4.66		0.00		0.00		
Travel Time (min)	**= 7.80**	**+**	**0.00**	**+**	**0.00**	**=**	**7.80**
Channel Flow							
X sectional flow area (sqft)	= 1.00		0.00		0.00		
Wetted perimeter (ft)	= 3.00		0.00		0.00		
Channel slope (%)	= 16.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=19.03						
			0.00				
					0.00		
Flow length (ft)	({0})2340.0		0.0		0.0		
Travel Time (min)	**= 2.05**	**+**	**0.00**	**+**	**0.00**	**=**	**2.05**

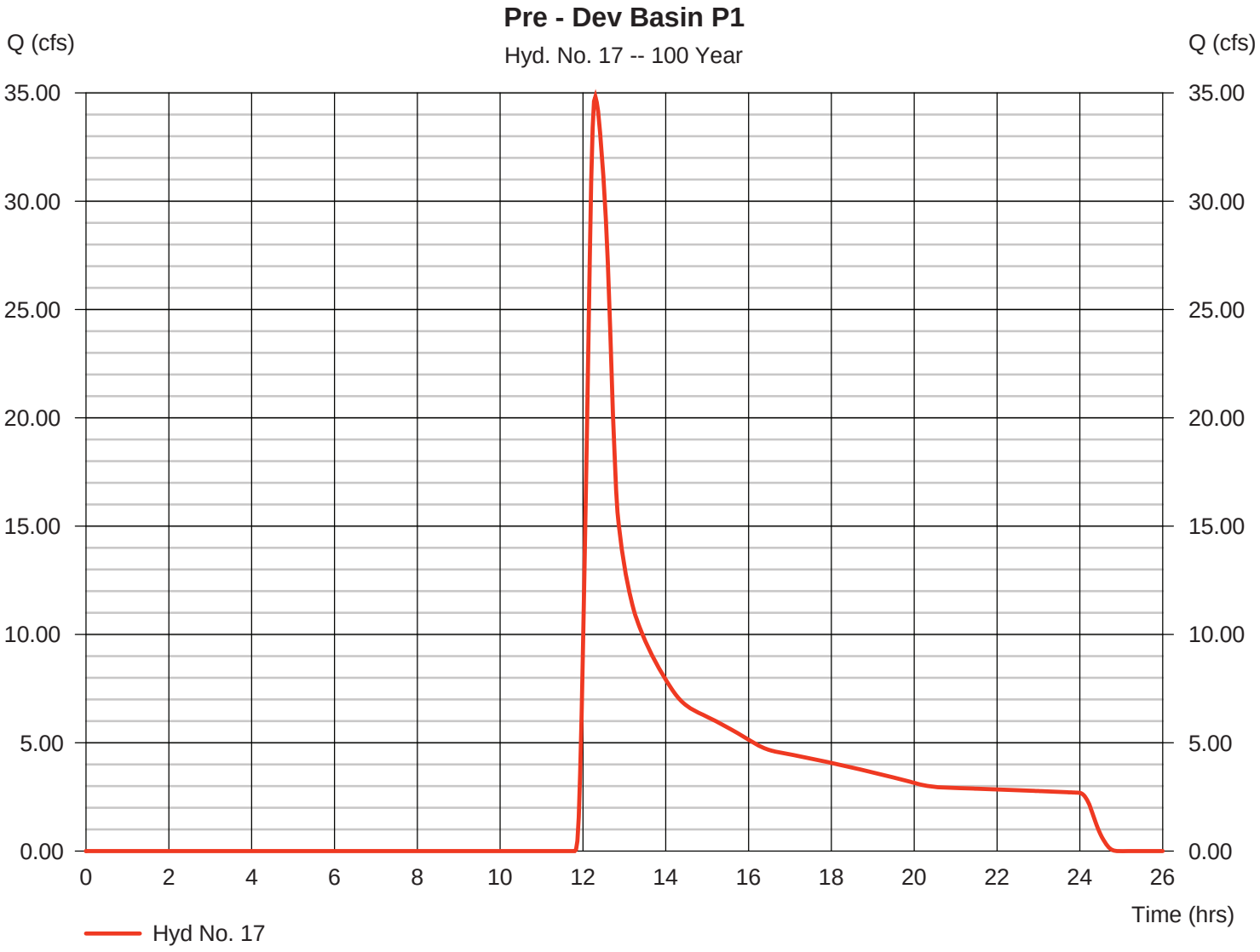
Total Travel Time, Tc ..... 48.90 min

Hydrograph Report

Hyd. No. 17

Pre - Dev Basin P1

Hydrograph type	=	SCS Runoff	Peak discharge	=	34.83 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	273,402 cuft
Drainage area	=	228.650 ac	Curve number	=	62
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	30.30 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 17

Pre - Dev Basin P1

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.400		0.011		0.011		
Flow length (ft)	= 85.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 22.20		0.00		0.00		
Travel Time (min)	**= 11.21**	**+**	**0.00**	**+**	**0.00**	**=**	**11.21**
Shallow Concentrated Flow							
Flow length (ft)	= 524.00		0.00		0.00		
Watercourse slope (%)	= 17.30		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=6.71		0.00		0.00		
Travel Time (min)	**= 1.30**	**+**	**0.00**	**+**	**0.00**	**=**	**1.30**
Channel Flow							
X sectional flow area (sqft)	= 1.10		0.00		0.00		
Wetted perimeter (ft)	= 4.70		0.00		0.00		
Channel slope (%)	= 8.88		0.00		0.00		
Manning's n-value	= 0.030		0.015		0.015		
Velocity (ft/s)	=5.59						
			0.00				
					0.00		
Flow length (ft)	({0})5978.0		0.0		0.0		
Travel Time (min)	**= 17.81**	**+**	**0.00**	**+**	**0.00**	**=**	**17.81**

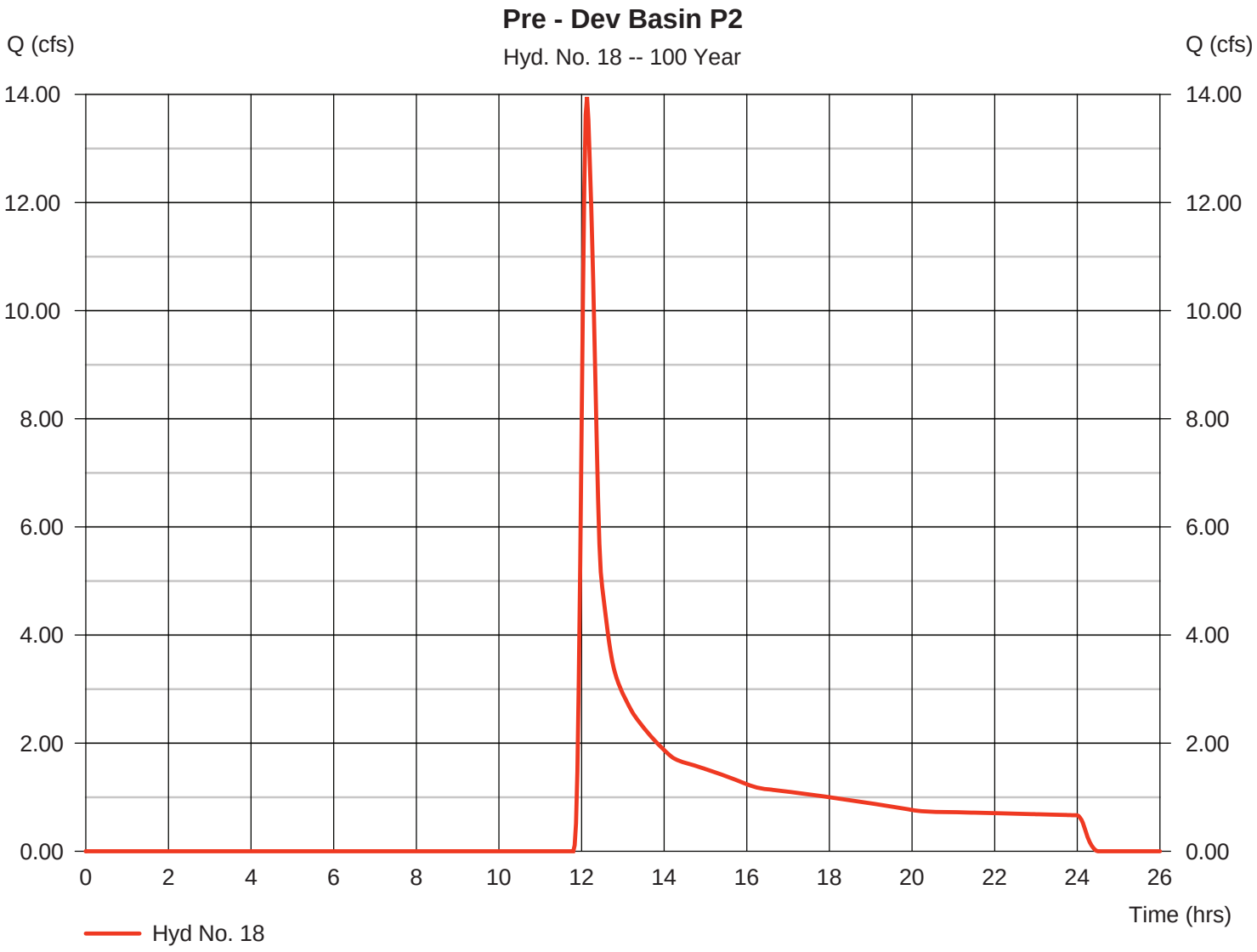
Total Travel Time, Tc ..... 30.30 min

Hydrograph Report

Hyd. No. 18

Pre - Dev Basin P2

Hydrograph type	=	SCS Runoff	Peak discharge	=	13.95 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	70,517 cuft
Drainage area	=	54.570 ac	Curve number	=	63
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	16.90 min
Total precip.	=	2.81 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



TR55 Tc Worksheet

Hyd. No. 18

Pre - Dev Basin P2

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.150		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.32		0.00		0.00		
Land slope (%)	= 8.70		0.00		0.00		
Travel Time (min)	**= 8.47**	**+**	**0.00**	**+**	**0.00**	**=**	**8.47**
Shallow Concentrated Flow							
Flow length (ft)	= 2405.00		0.00		0.00		
Watercourse slope (%)	= 8.70		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=4.76		0.00		0.00		
Travel Time (min)	**= 8.42**	**+**	**0.00**	**+**	**0.00**	**=**	**8.42**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

Total Travel Time, Tc ..... 16.90 min

Appendix D – Prior Studies and Dam Certifications

- Final Acceptance of Construction, Colorado DWR, 2022
- Engineer's Inspection Report, Colorado DWR, 2021
- Hopkins Dam Inundation Mapping, Zancanella & Associates, 2022
- Hopkins Reservoir Dam Break Analysis, Wright Water Engineers, 2007

COLORADO
Division of Water Resources
Department of Natural Resources

Dam Safety Branch

January 18, 2022

Mr. Martin Van Ardenne
Seligman Group
600 Montgomery St.
40th Floor
San Francisco, CA 94111
via email: mvanardenne@seligmangroup.com

When replying, please refer to:
HOPKINS DAM, DAMID 380113
Water Division 5, Water District 38
Construction File No. C-0090C

SUBJECT: Final Acceptance of Construction

Dear Mr. Van Ardenne,

Our office performed a final construction inspection of the newly constructed Hopkins Dam on October 7, 2020. Rule 8 of the Rules and Regulations for Dam Safety and Dam Construction (the Rules) requires that your design engineer, Zancanella & Associates, prepare as-constructed plans, a completion report documenting all aspects of construction, and their professional certification stating that the project was completed in accordance with the approved plans and specifications. Zancanella & Associates submitted completion documents on April 2, 2021. Our office provided final comments on April 30, 2021 which were satisfactorily addressed on January 12, 2022.

This project involved construction of a new, Significant Hazard dam at the site of a previously breached structure. Based on observations during construction inspections, oversight and certification by your engineer, and our review of the construction completion documents, we believe the project has been satisfactorily completed in general accordance with the approved plans and specifications. **Therefore the project is accepted for full storage when water is physically and legally available, and in accordance with your engineer's monitoring plan.**

The structure has a dam height of 25 feet and crest length of 700 feet. The reservoir created by the dam covers approximately 12 acres and has full storage capacity of 113 acre-feet at the emergency spillway crest elevation.

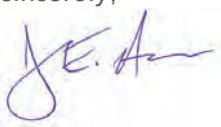
The State Engineer, by providing this construction acceptance does not assume responsibility for any unsafe condition of the subject dam. The sole responsibility for the safety of this dam rests with the reservoir owner and operator, who should take every step necessary to prevent damages caused by leakage or overflow of waters from the reservoir or floods resulting from a failure of the dam. Therefore, it is in the owner's best interest to operate and maintain the facility in a manner such that the safety of the dam and the general public are not jeopardized.

We are enclosing a copy of Rules 11 and 13 of the Rules for your reference and use. These rules pertain to general maintenance items and the owner's responsibilities, respectively.

We would like to recognize the efforts of Seligman Group, Zancanella & Associates, and Mueller Construction, and all other parties who worked to complete this dam construction project. Thanks to all for minding the safety of those who live below this dam and the resiliency of those served by it.

If you have any questions, please contact me at 719.227.5294 or Dam Safety Engineer Jackie Blumberg at 303.505.6469.

Sincerely,



John Hunyadi, P.E.
Chief, Colorado Dam Safety Branch

Enc. Copy of Rules 11 and 13 of the "Rules and Regulations for Dam Safety and Dam Construction"

ec: James Heath, Division Engineer, Water Division 5
Heather Ramsey, WD 38 Water Commissioner
Jackie Blumberg, Dam Safety Engineer
Jeremy Franz, Design Review Engineer
Jason Ward, Design Review Engineer
Matt Weisbrod, Zancanella & Associates, MWeisbrod@za-engineering.com

COLORADO
Division of Water Resources
Department of Natural Resources

Dam Safety Branch

June 22, 2021

Mr. Martin Van Ardenne
Seligman Group
500 Montgomery St., 40th Floor
San Francisco, California 94111
via email: mvanardenne@seligmangroup.com

When replying, please refer to:
HOPKINS DAM, DAMID 380113
Water Division 5, Water District 38

SUBJECT: 2021 Engineer's Inspection Report

Dear Mr. Van Ardenne,

On June 21, 2021, representatives from our dam safety office completed inspection of Hopkins Dam in accordance with Section 37-87-107 of the *Colorado Revised Statutes*; which assigns to the State Engineer's Office (SEO) responsibility for determining safe storage levels for all reservoirs in the State of Colorado. I would like to thank Mr. Matt Weisbrod of Zancanella & Associates for taking time to participate in the 2021 inspection.

Enclosed is a copy of the Engineer's Inspection Report (EIR) and field photographs of the referenced dam for your files. Please sign the signature block on page 4 of the EIR to acknowledge your receipt of the report and return a copy to our office via electronic or regular mail. If you have any questions regarding this EIR or require assistance with dam safety related issues, please feel free to contact me on my cell phone at (303) 518-1829.

Sincerely,

Korey J Kadrmas

Korey J. Kadrmas, P.E.,
Division 5 Dam Safety Engineer

Enc. a/s

ec: Bill McCormick, Chief, Dam Safety Branch
Heather Ramsey, Water Commissioner
James Heath, Division Engineer, Division 5
Matt Weisbrod, Zancanella & Associates; mweisbrod@za-engineering.com
Doreen Herriott, Spring Valley Holdings; daherriott@gmail.com

ENGINEER'S INSPECTION REPORT

INSPECTOR: KJK

OFFICE OF THE STATE ENGINEER - DIVISION OF WATER RESOURCES - DAM SAFETY BRANCH 1313 SHERMAN STREET, ROOM 818, DENVER, CO 80203, (303) 866-3581

DAM NAME:	HOPKINS	T: 060S	R: 0880W	S: 15	COUNTY:	GARFIELD	DATE OF INSPECTION:	6/21/2021
DAM ID:	380113	YRCompl: 2020	DAM HEIGHT(FT):	25.0	SPILLWAY WIDTH(FT):	20.0	PREVIOUS INSPECTION:	5/28/2008
CLASS:	Significant hazard		DAM LENGTH(FT):	700.0	SPILLWAY CAPACITY(CFS):	700.0	NORMAL STORAGE (AF):	113.0
DIV:	5	WD: 38	CRESTWIDTH(FT):	15.0	FREEBOARD (FT):	6.0	SURFACE AREA(AC):	12.0
EAP:	11/10/2019		CRESTELEV(FT):	9001.0	DRAINAGE AREA (AC.):	350.0	OUTLET INSPECTED:	8/27/2020

CURRENT RESTRICTION: **-- NONE --**

OWNER:	SELIGMAN GROUP	OWNER REP.:	MARTIN VAN ARDENNE
ADDRESS:	600 MONTGOMERY ST.	CONTACT NAME:	DOREEN HERRIOTT
	SAN FRANCISCO CA 94111	CONTACT PHONE:	(970) 945-6478X

INSPECTION PARTY :	Matt Weisbrod	Heather Ramsey	Korey Kadrmas
REPRESENTING :	Zancanella & Associates - Owner Rep	Water Commissioner	CO Dam Safety Branch

FIELD CONDITIONS OBSERVED

WATER LEVEL: BELOW DAM CREST _____ FT. Below Spillway _____ FT. GAGE ROD READING 2.5

GROUND MOISTURE CONDITION: ☐ DRY ☐ WET ☐ SNOWCOVER OTHER _____

DIRECTIONS: MARK AN X FOR CONDITIONS FOUND AND UNDERLINE WORDS THAT APPLY

UPSTREAM SLOPE

PROBLEMS NOTED: ☑ (0)NONE ☑ (1)RIPRAP - MISSING, SPARSE, DISPLACED, WEATHERED ☐ (2) WAVE EROSION - WITH SCARPS

☐ (3) CRACKS WITH DISPLACEMENT ☐ (4) SINKHOLE ☐ (5) APPEARS TOO STEEP ☐ (6) DEPRESSIONS OR BULGES ☐ (7) SLIDES

☐ (8) CONCRETE FACING - HOLES, CRACKS, DISPLACED, UNDERMINED ☐ (9) OTHER

OBSERVATIONS:
The upstream slope is in good condition with uniform riprap coverage. Locally sourced riprap is well graded with larger boulders placed at toe to key in riprap on slope. Minor areas of observed riprap bedding gravel below rock. No observed areas of surface rilling or erosion along the groins or toe area; however, reservoir level is low and did not achieve the first hold elevation for the first fill plan.

REQUIRED ACTIONS:
None.

Refer to Photos #1 to #4

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

CREST

PROBLEMS NOTED: ☑ (10) NONE ☐ (11 RUTS OR PUDDLES ☐ (12) EROSION ☐ (13) CRACKS - WITH DISPLACEMENT ☐ (14) SINKHOLES

☐ (15) NOT WIDE ENOUGH ☐ (16) LOW AREA ☐ (17) MISALIGNMENT ☐ (18) IMPROPER SURFACE DRAINAGE ☐ (19) OTHER

OBSERVATIONS:
The dam crest is in good condition with even base course across the full extent to the crest. Crest has positive drainage toward the reservoir.

REQUIRED ACTIONS:
None.

Refer to Photos #5 and #6

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

DOWNSTREAM SLOPE

PROBLEMS NOTED: ☑ (20) NONE ☐ (21) LIVESTOCK DAMAGE ☐ (22) EROSION OR GULLIES ☐ (23) CRACKS - WITH DISPLACEMENT ☐ (24) SINKHOLE

☐ (25) APPEARS TOO STEEP ☐ (26) DEPRESSIONS OR BULGES ☐ (27) SLIDE ☐ (28) SOFT AREAS ☐ (29) OTHER

OBSERVATIONS:
The downstream slope is in good condition with uniform slope and slowly developing grass coverage. Currently, some native grasses have established on the slope, but Engineer noted that seeding occurred in Fall 2020 and may take 1 to 2 seasons to established adequate coverage. This item is under construction warranty and will be evaluated again in 2022. No observed areas of erosion or rilling along the slope. Slope appears to be stable. A low lying area at the downstream toe along the spillway channel right berm was observed to have a thicker establishment of grasses. Based on low reservoir levels, grasses in this area likely thicker since backfill had a high quantity of clay and this area was graded as a bowl feature and likely retains water lower than other portion of the reseeded areas.

REQUIRED ACTIONS:
None.

Refer to Photos #7 to #10

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

SEEPAGE

PROBLEMS NOTED: ☑ (30) NONE ☐ (31) SATURATED EMBANKMENT AREA ☐ (32) SEEPAGE EXITS ON EMBANKMENT

☐ (33) SEEPAGE EXITS AT POINT SOURCE ☐ (34) SEEPAGE AREA AT TOE ☐ (35) FLOW ADJACENT TO OUTLET ☐ (36) SEEPAGE INCREASED / MUDDY

DRAIN OUTFALLS SEEN ☐ No ☑ Yes Show location of drains on sketch and indicate amount and quality of discharge. ☐ (37) FLOW INCREASED / MUDDY ☐ (38) DRAIN DRY / OBSTRUCTED

☐ (39) OTHER

OBSERVATION
The Engineer estimates the reservoir reached a maximum pool of about El. 8980.5 feet this season; corresponding to a stage of about 4.5 feet (24 foot max). This pool level was below the first hold level (El. 8985) required in the Initial Fill and Monitoring Plan dated March 2021. No seepage discharge as observed from the drain outfalls during this inspection or previous site visits by the Engineer. The initial fill and monitoring plan should continue to be followed during the 2022 fill season. The low lying area near the right spillway berm with thicker grass coverage noted in the DOWNSTREAM SLOPE section should be monitored during higher reservoir levels for possible seepage.

REQUIRED ACTIONS:
(1) Monitor low lying area with thicker grass coverage at the downstream toe along the spillway right berm for possible seepage.

Refer to Photo #11

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

OUTLET

PROBLEMS NOTED: ☑ (40) NONE ☐ (41) NO OUTLET FOUND ☐ (42) POOR OPERATING ACCESS ☐ (43) INOPERABLE

☐ (44) UPSTREAM OR DOWNSTREAM STRUCTURE DETERIORATED (45) OUTLET OPERATED DURING INSPECTION ☑ YES ☐ NO

INTERIOR INSPECTED ☑ (120) NO ☐ (121)YES ☐ (46) CONDUIT DETERIORATED OR COLLAPSED ☐ (47) JOINTS DISPLACED ☐ (48) VALVE LEAKAGE

☑ (49) OTHER Riprap mounded d/s of outfall. Minor bank erosion

OBSERVATION
The outlet works consists of a concrete encased, 12-inch-diameter HDPE pipe with intake structure and outfall impact basin. The visible portions of the outlet were generally in good condition with negligible gate leakage. The gate has been operated several times this year with no issues. The gate was successfully exercised during this site visit. The gate operator and concrete block were in good operating condition. Riprap downstream of the outfall structure was mounded beyond the end sill resulting in deflection of the flow at higher rates to the sides of the riprap apron. Engineer noted that a swale (i.e., belly) will be graded in the riprap from the outfall to improve conveying of flows downstream of the structure. There appears to be minor bank erosion within the backwater pool to the right of the outfall structure.

REQUIRED ACTIONS:
(1) Provide a swale or low flow channel within the riprap apron downstream of the outlet structure. Provide riprap along the toe of the dam in the vicinity of the outfall structure to mitigate any bank erosion due to outlet discharge (e.g., armor bank within the backwater pool to the right of the outlet.

Refer to Photos #12 to #18

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

SPILLWAY

PROBLEMS NOTED: ☑ (50) NONE ☐ (51) NO EMERGENCY SPILLWAY FOUND ☐ (52) EROSION WITH BACKCUTTING ☐ (53) CRACK - WITH DISPLACEMENT

☐ (54) APPEARS TO BE STRUCTURALLY INADEQUATE ☐ (55) APPEARS TOO SMALL ☐ (56) INADEQUATE FREEBOARD ☐ (57) FLOW OBSTRUCTED

☐ (58) CONCRETE DETERIORATED / UNDERMINED ☐ (59) OTHER

OBSERVATIONS:
The emergency spillway consists of a riprap lined channel with buried concrete control crest, rock lined chute with a lower concrete cutoff wall, and a small rock plunge pool. Concrete structure were in good condition with no observed cracks. Spillway has not operated.

REQUIRED ACTIONS:
None.

Refer to Photos #19 to #22

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

MONITORING

EXISTING INSTRUMENTATION FOUND ☐ (110) NONE ☑ (111) GAGE ROD ☑ (112) PIEZOMETERS ☐ (113) SEEPAGE WEIRS / FLUMES
☑ (114) SURVEY MONUMENTS ☑ (115) OTHER Station Markers
MONITORING OF INSTRUMENTATION ☐ (116) NO ☑ (117) YES PERIODIC INSPECTIONS BY: ☐ (118) OWNER ☑ (119) ENGINEER

OBSERVATIONS:
Monitoring instruments consist of a reservoir staff gage integral to the air vent/gate stem encasement, four (4) piezometers, embankment movement/settlement monuments, one sand blanket, outlet filter diaphragm drain, toe drains on both sides of the outlet pipe, and station markers (every 100 feet).

The reservoir staff gage is integral to the air vent/gate stem concrete encasement along the upstream slope and consists of embedded steel plates with elevation markings. The piezometers include three located along the dam crest and one located along the maximum section near mid-downstream slope. The toe drain outfalls are integrated into the outlet outfall structure. The outlet filter diaphragm outfall is located to the right of the outfall structure and daylights from the downstream toe of the dam (no headwall).

Owner/Engineer to provide an annual monitoring report with an update on the status of the initial fill per approved plans at the end of the irrigation season for our office to review. Engineer collects monitoring data during each trip to the dam (about 2 times per month); which is in conformance with Rule 13.4.1.1. However, due to low reservoir level and lack of water availability this season our office agreed with the Engineer that only monthly monitoring is required for remainder of this season unless the reservoir fills from a large precipitation event. Movement monuments are to be surveyed annually for the first 5 years after construction in accordance with Rule 13.4.2.1. Engineer plans to schedule survey later this summer. Reservoir not likely to fill this season baring a large rainfall event due to draining in Spring for maintenance and early runoff season. Also, reservoir max fill level under approved Initial Fill and Monitoring Plan (Plan) has been around El. 8980.5. The monitored initial fill of the reservoir will continue next Spring.

REQUIRED ACTIONS:
(1) Continue to follow monitoring and reporting requirements as documented in the Initial Fill and Monitoring Plan and agreed upon by SEO and owner. Submit collected monitoring data in an annual monitoring report to our office at the end of the irrigation season. Include monument survey in the annual monitoring report.

Refer to Photos #23 to #25

CONDITIONS OBSERVED: ☒ Good ☐ Acceptable ☐ Poor

MAINTENANCE AND REPAIRS

PROBLEMS NOTED: ☑ (60 NONE ☐ (61) ACCESS ROAD NEEDS MAINTENANCE ☐ (62) LIVESTOCK DAMAGE
☐ (63) BRUSH ON UPSTREAM SLOPE, CREST, DOWNSTREAM SLOPE, TOE ☐ (64) TREES ON UPSTREAM SLOPE, CREST, DOWNSTREAM SLOPE, TOE
☐ (65) RODENT ACTIVITY ON UPSTREAM SLOPE, CREST, DOWNSTREAM SLOPE, TOE ☐ (66) DETERIORATED CONCRETE - FACING, OUTLET SPILLWAY
☐ (67) GATE AND OPERATING MECHANISM NEED MAINTENANCE ☐ (68) OTHER

OBSERVATIONS:
Hopkins Dam was recently reconstructed (2020) and vegetated coverage is establishing in an effective manner on the downstream slope and toe areas. The dam crest is well graded. Currently there is no need for vegetation control or animal abatement plans; however, our office encourages the owner to start planning for woody vegetation removal via cut or spray and addressing animal burrows when present as these are annual maintenance items are typical for most dams. The owner is commended on reconstructing the dam and providing the necessary O&M and Engineering oversight.

REQUIRED ACTIONS:
None at this time; however, our office recommends to start planning for annual vegetation control (i.e., woody plant removal) and animal abatement (i.e., filling animal burrows).

CONDITIONS OBSERVED: ☐ Good ☒ Acceptable ☐ Poor

Go to next page for Overall Conditions and Items Requiring Actions

OVERALL CONDITIONS

Hopkins Dam is assigned a SATISFACTORY rating on the basis that the dam has performed well under initial filling; however, requires continued inspection and monitoring in accordance with the approved Initial Fill and Monitoring Plan until full storage is achieved to maintain a satisfactory rating. The owner is commended for its efforts to rehabilitate the dam and continued monitoring of this dam. Monitoring data collected by the owner/Engineer under the requirements of the Initial Fill and Monitoring Plan should be submittal as an annual report to our office for record purposes. Perform an annual review of the EAP and updated accordingly. Our office will provide recent EAP contact updates to the Engineer as a redline PDF. The Engineer to update the EAP document and distribute the revised EAP to all plan holders. Please note that email distribution of the EAP is acceptable. Our office would be happy to assist with this effort so please don't hesitate to contact us.

Based on this Safety Inspection and recent file review, the overall condition is determined to be:

☑ (71) SATISFACTORY ☐ (72) CONDITIONALLY SATISFACTORY ☐ (73) UNSATISFACTORY

ITEMS REQUIRING ACTION BY OWNER TO IMPROVE THE SAFETY OF THE DAM

MAINTENANCE - ORDINARY REPAIR - MONITORING

☐ LUBRICATE AND OPERATE OUTLET GATES THROUGH FULL CYCLE

6/21/2021 - **EXERCISE THE OUTLET GATE THROUGH A FULL CYCLE ON AN ANNUAL BASIS.**

☐ CLEAR TREES AND/OR BRUSH FROM

6/21/2021 - **MONITOR FOR WOODY VEGETATION ON ALL ASPECTS OF THE DAM AND REMOVE VIA CUT, SPRAY, OR PULL WHEN OBSERVED (LIKLEY AN ANUALLY MAINTENANCE ITEM). CURRENTLY NO SIGN OF WOODY VEGETATION.**

☐ INITIATE RODENT CONTROL PROGRAM AND PROPERLY BACKFILL EXISTING HOLES

6/21/2021 - **MONITOR ANIMAL BURROW ACTIVITY AND IMPLEMENT AN ABATEMENT PROGRAM IF CONDITIONS WORSEN. CURRENTLY NO ACTIVITY WAS OBSERVED.**

☐ MONITOR

6/21/2021 - **MONITOR LOW LYING AREA WITH THICKER GRASS COVERAGE AT THE DOWNSTREAM TOE ALONG THE SPILLWAY RIGHT BERM FOR POSSIBLE SEEPAGE.**

☐ MONITOR

6/21/2021 - **MONITOR EROSION RILLING ON ALL ASPECTS OF THE DAM AS GRASS COVERAGE IS ESTABLISHING. IF CONDITIONS WORSEN, PLACE COMPACTED FILL AND SEED TO REVEGETATE THE BARE AREAS.**

☐ MONITOR

6/21/2021 - **CONTINUE TO FOLLOW MONITORING AND REPORTING REQUIREMENTS AS DOCUMENTED IN THE INITIAL FILL AND MONITORING PLAN AND AGREED UPON BY SEO AND OWNER. SUBMIT COLLECTED MONITORING DATA IN AN ANNUAL MONITORING REPORT TO OUR OFFICE AT THE END OF THE IRRIGATION SEASON. INCLUDE MONUMENT SURVEY IN THE ANNUAL MONITORING REPORT.**

☐ OTHER

6/21/2021 - **PROVIDE A SWALE OR LOW FLOW CHANNEL WITHIN THE RIPRAP APRON DOWNSTREAM OF THE OUTLET STRUCTURE. PROVIDE RIPRAP ALONG THE TOE OF THE DAM IN THE VICINITY OF THE OUTFALL STRUCTURE TO MITIGATE ANY BANK EROSION DUE TO OUTLET DISCHARGE (E.G., ARMOR BANK WITHIN THE BACKWATER POOL TO THE RIGHT OF THE OUTLET.**

EMERGENCY ACTION PLAN

☐ UPDATE EXISTING EMERGENCY ACTION PLAN

6/21/2021 - **ENGINEER TO PERFORM ANNUAL REVIEW AND UPDATE OF THE EAP AND DISTRIBUTE TO ALL PLAN HOLDERS.**

The State Engineer, by providing this dam safety inspection report, does not assume responsibility for any unsafe condition of the subject dam. The sole responsibility for the safety of this dam rests with the reservoir owner or operator, who should take every step necessary to prevent damages caused by leakage or overflow of waters from the reservoir or floods resulting from a failure of the dam.

SAFE STORAGE LEVEL: RECOMMENDED AS A RESULT OF THIS INSPECTION

☐ (101) FULL STORAGE
☑ (102) CONDITIONAL FULL STORAGE
☐ (103) RECOMMENDED RESTRICTION
☐ (104) CONTINUE EXISTING RESTRICTION

→ { _____ FT. BELOW DAM CREST
_____ FT. BELOW SPILLWAY CREST
_____ FT. GAGE HEIGHT
☐ ☐ NO STORAGE-MAINTAIN OUTLET FULLY OPEN

REASON FOR RESTRICTION

ACTIONS REQUIRED FOR CONDITIONAL FULL STORAGE OR CONTINUED STORAGE AT THE RESTRICTED LEVEL:

Continued inspection and monitoring in accordance with the approved Initial Fill and Monitoring Plan until full storage is achieved and performance of the dam deemed to be acceptable.

Engineer's Signature Korey J Kadrmas INSPECTED BY

Owner's Signature _____ OWNER/OWNER'S REPRESENTATIVE

DATE: 07 07 21

GUIDELINES FOR DETERMINING CONDITIONS

CONDITIONS OBSERVED - APPLIES TO UPSTREAM SLOPE, CREST, DOWNSTREAM SLOPE, OUTLET, SPILLWAY

GOOD
In general, this part of the structure has a near new appearance, and conditions observed in this area do not appear to threaten the safety of the dam.

ACCEPTABLE
Although general cross-section is maintained, surfaces may be irregular, eroded, rutted, spalled, or otherwise not in new condition. Conditions in this area do not currently appear to threaten the safety of the dam.

POOR
Conditions observed in this area appear to threaten the safety of the dam.

CONDITIONS OBSERVED - APPLIES TO SEEPAGE

GOOD
No evidence of uncontrolled seepage. No unexplained increase in flows from designed drains. All seepage is clear. Seepage conditions do not appear to threaten the safety of the dam.

ACCEPTABLE
Some seepage exists at areas other than the drain outfalls, or other designed drains. No unexplained increase in seepage. All seepage is clear. Seepage conditions observed do not currently appear to threaten the safety of the dam.

POOR
Seepage conditions observed appear to threaten the safety of the dam. Examples:
1) Designed drain or seepage flows have increased without increase in reservoir level.
2) Drain or seepage flows contain sediment, i.e., muddy water or particles in jar samples.
3) Widespread seepage, concentrated seepage, or ponding appears to threaten the safety of the dam.

CONDITIONS OBSERVED - APPLIES TO MONITORING

GOOD
Monitoring includes movement surveys and leakage measurements for all dams, and piezometer readings for High hazard dams. Instrumentation is in reliable, working condition. A plan for monitoring the instrumentation and analyzing results by the owner's engineer is in effect. Periodic inspections by owner's engineer.

ACCEPTABLE
Monitoring includes movement surveys and leakage measurements for High and Significant hazard dams; leakage measurements for Low hazard dams. Instrumentation is in serviceable condition. A plan for monitoring instrumentation is in effect by owner. Periodic inspections by owner or representative. OR, NO MONITORING REQUIRED.

POOR
All instrumentation and monitoring described under "ACCEPTABLE" here for each class of dam, are not provided, or required periodic readings are not being made, or unexplained changes in readings are not reacted to by the owner.

CONDITIONS OBSERVED - APPLIES TO MAINTENANCE AND REPAIR

GOOD
Dam appears to receive effective on-going maintenance and repair, and only a few minor items may need to be addressed.

ACCEPTABLE
Dam appears to receive maintenance, but some maintenance items need to be addressed. No major repairs are requirecl

POOR
Dam does not appear to receive adequate maintenance. One or more items needing maintenance or repair has begun to threaten the safety of the dam.

OVERALL CONDITIONS

SATISFACTORY
The safety inspection indicates no conditions that appear to threaten the safety of the dam, and the dam is expected to perform satisfactorily under all design loading conditions. Most of the required monitoring is being performed.

CONDITIONALLY SATISFACTORY
The safety inspection indicates symptoms of structural distress (seepage, evidence of minor displacements, etc.), which, if conditions worsen, could lead to the failure of the dam. Essential monitoring, inspection, and maintenance must be performed as a requirement for continued full storage in the reservoir.

UNSATISFACTORY
The safety inspection indicates definite signs of structural distress (excessive seepage, cracks, slides, sinkholes, severe deterioration, etc.), which could lead to the failure of the dam if the reservoir is used to full capacity. The dam is judged unsafe for full storage of water.

SAFE STORAGE LEVEL

FULL STORAGE
Dam may be used to full capacity with no conditions attached.

CONDITIONAL FULL STORAGE
Dam may be used to full storage if certain monitoring, maintenance, or operational conditions are met.

RESTRICTION
Dam may not be used to full capacity, but must be operated at some reduced level in the interest of public safety.

HAZARD CLASSIFICATION OF DAMS

High hazard
Loss of human life is expected in the event of failure of the dam, while the reservoir is at the high water line.

Significant hazard
Significant damage to improved property is expected in the event of failure of the dam while the reservoir is at the high water line, but no loss of human life is expected.

Low hazard
Loss of human life is not expected, and damage to improved property is expected to be small, in the event of failure of the dam while the reservoir is at high water fine.

NPH hazard - No loss of life or damage to improved property, or loss of downstream resource is expected in the event of failure of the dam while the reservoir is at the high water line.

PHOTOGRAPHS

Upstream Slope

Photo 1. View from left abutment of the upstream slope. Reservoir filled to about stage 4.5 feet and most of the upstream slope was exposed all season.

Upstream Slope

Photo 2. View looking right along the upstream slope from near Sta. 3+00. Slope is uniform with well graded riprap rock that is angular and interlocked. No areas of exposed riprap bedding.

Upstream Slope

Photo 3. View of shoring wall pile installation from the spillway stilling basin. Precast concrete shoring wall panels to be installed from downstream end up as the CMP is being installed.

PHOTOGRAPHS

Upstream Slope

Photo 4. View from the right abutment of the upstream slope. Large riprap and boulders placed along the right abutment to protect against possible erosion.

CREST

Photo 5. View of the dam crest from the right abutment with the Landis Ditch diversion in the foreground.

CREST

Photo 6. Dam crest is in good condition with positive drainage toward the reservoir. Gravel surfacing on road is uniform with no observed rutting.

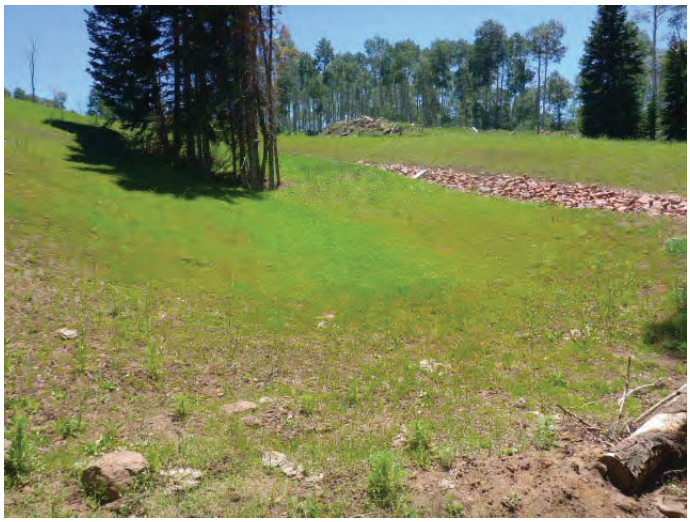
PHOTOGRAPHS

Downstream Slope

Photo 7. Looking east along the downstream toe of the dam. Toe area graded to avoid surface water along the toe area.

Downstream Slope

Photo 8. Looking west (right) along the downstream slope from about Sta. 2+00. Slope is uniform with native grass establishment in process. Engineer noted that this item is under 2 year warranty and likely will take 2 seasons to establish native grasses.



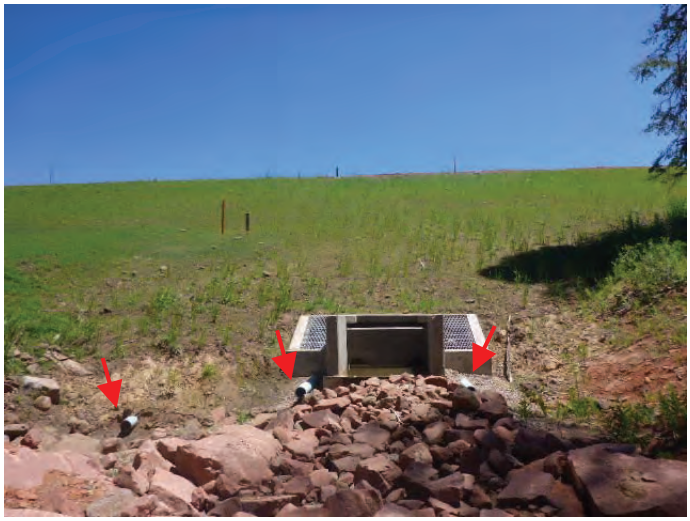
Downstream Slope

Photo 9. A low lying area at the downstream toe along the spillway channel was observed to have a thicker establishment of grasses. Based on low reservoir levels, grasses in this area likely thicker since fill had a high quantity of clay and this area was graded as a bowl feature and likely retains water lower than other portion of the reseeded areas.

PHOTOGRAPHS

Downstream Slope

Photo 10. Looking east along the downstream slope from the right abutment. Slope is uniform and stable.



Seepage

Photo 11. No signs of seepage or drain activity was observed on the dam. Drains were dry during the inspection and Engineer has not observed any drain discharge to date.

Outlet

Photo 12. Intake structure on the outlet was submerged. Trashrack observed in place on the intake structure.

PHOTOGRAPHS

Outlet

Photo 13. View of the outlet manual operator at the dam crest. Engineer successfully exercised the gate.

Outlet

Photo 14. Looking downstream at the outlet outfall structure currently in operation.

Outlet

Photo 15. Looking upstream at the outfall structure from the discharge channel. Riprap downstream of the structure was mounded at the structure outfall resulting in deflection of the flow with higher rates along the sides of the riprap apron. Engineer noted that a swale (i.e., belly) will be graded in the riprap from the outfall to improve conveying of flows downstream of the structure.

PHOTOGRAPHS

Outlet

Photo 16. Profile view of the outlet discharge. Note the deflected water spilling along the riprap apron and backwater pool to the right side of the outfall channel.

Outlet

Photo 17. View of the outlet outfall pool area prior to operation of the outlet. Minor bank erosion noted along the right side of the backwater pool area..

Outlet

Photo 18. Looking downstream at the outlet discharge channel from the riprap apron below the outfall structure. Apron consists of gap graded riprap with infilled rock to stabilize the rock fill.

PHOTOGRAPHS

Spillway

Photo 19. Looking west along the dam axis with the emergency spillway control structure in the foreground. The concrete control sill was in good condition with no observed cracks.

Spillway

Photo 20. Looking downstream at the spillway discharge channel from the left abutment area. Spillway control structure (i.e., buried cutoff sill) in the foreground.

Spillway

Photo 21. View along the lower spillway cutoff wall Concrete in good condition with no observed cracks.

PHOTOGRAPHS

Spillway

Photo 22. Looking upstream at the spillway discharge channel from end of riprap lining about 200 feet downstream of the control sill.

Monitoring

Photo 23. Typical view of the reservoir staff gauge/concrete grade beam with 1-foot elevation steel plates. Maximum reservoir level this season appears to be about El. 8980.5 (~stage 4.5 feet).

Monitoring

Photo 24. View of typical piezometer with lockable steel casing. Engineer measures piezometer levels during each

PHOTOGRAPHS

Monitoring

Photo 25. View of piezometer with locking well cap (on left) and survey monument with yellow marker lathe (on right). Location shown near mid-downstream slope along the maximum section.

Diversion Structure

Photo 26. Intake end of the diversion culvert on the Landis Ditch (location along the dam axis just outside of the dam embankment footprint.

Diversion Structure

Photo 27. Outfall end of the diversion ditch culvert location about 50 feet from the upstream toe of the dam at the right abutment.

P.O. Box 1908
1011 Grand Avenue
Glenwood Springs,
CO 81602

ZANCANELLA AND ASSOCIATES, INC.
ENGINEERING CONSULTANTS

(970) 945-5700
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February 11, 2022

Martin Van Ardenne
The Seligman Group
600 Montgomery St, 40th floor
San Francisco, CA 94111
415-658-2889

RE: Review of the Hopkins Dam Inundation Mapping on Proposed Phase Development of Spring Valley Ranch and the future development.

Dear Martin:

Garfield County has a requirement for a dam break analysis of Hopkins Dam and the impacts it has on the proposed emergency access road and future phases of the development. This report is intended to respond to Condition No. 8.0 of the Preliminary Plan Approval (Reception No. 747016), which states:

The dam break failure analysis for an enlarged Hopkins Reservoir must be incorporated into the drainage plan and subdivision improvements agreement for phase 2 and incorporated into subsequent phases as applicable in a manner adequate to prevent damage or potential loss of life or structures within the subdivision.

Zancanella & Associates has reviewed the sunny day dam break as defined by Colorado Dam Safety from the Dam Reconstruction Project that was recently completed including the inundation flood boundaries from said break. This project consisted of removing the existing dam and rebuilding it to current Dam Safety Standards.

The flood wave is confined to the Landis Creek drainage and currently does not severely impact existing structures. It does impact the existing access road and County Road 115. With the construction of the emergency access road (future High Grange Pass Rd) which involves improving the existing road and raising the grades, the flood inundation wave will be affected as will the impacts on the infrastructure.

After the flood wave impacts County Road 115, it diffuses and spreads out to have minimal impacts on future development. The proposed improvements to the emergency access road is not anticipated to change this. An attached map is included with this analysis that includes the flood inundation wave boundaries, the proposed future phase lots, and other information pertinent to this analysis.

The flood inundation wave is not anticipated to impact current structures significantly more than current conditions, nor get to the point of potential for loss of life with the improvements, but the emergency access road (High Grange Pass Rd) will be impacted to the point of possible failure.

As there are alternative egress routes on the property, we do not anticipate this to be a deterrence to the development of the property. Additionally, access to the site from Highway 82 can be achieved by either using County Road 115 from the North or Spring Valley Road and County Road 115 from the South.

With the construction of the emergency access road, the dam should still maintain the Significant Hazard Classification which is defined from Colorado Dam Safety as potential for loss of property but not loss of life.

No structure that is habitable should be located within the inundation boundary unless additional review and analysis has taken place to ensure no loss of life or significant property damage will occur during a sunny day dam break.

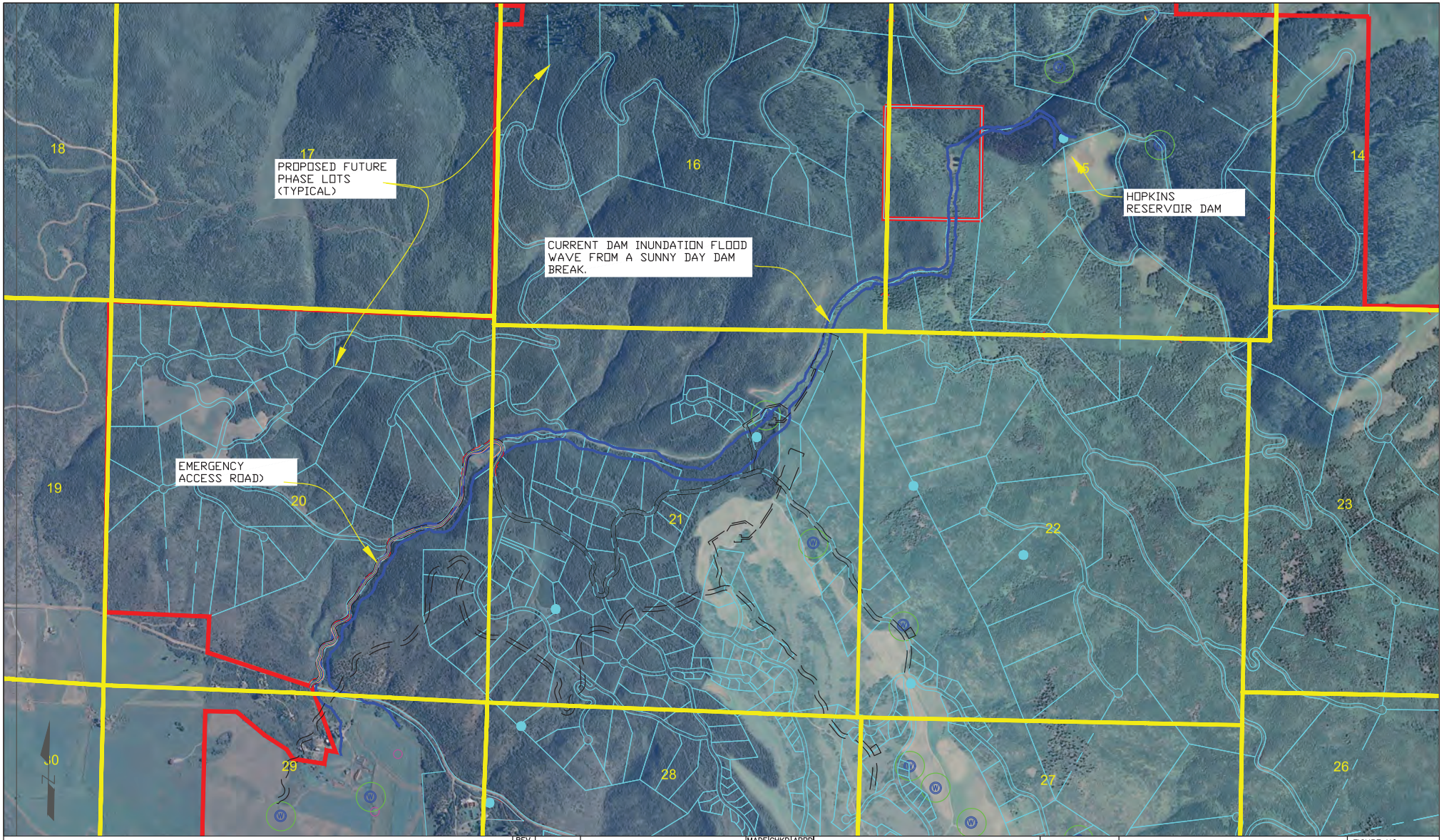
Included in this report is the full dam break and inundation study performed as part of the Hopkins Reservoir approval documents. Additionally, the Hopkins Dam Certificate of Acceptance for the recent dam reconstruction project is included for reference in this report.

Should you have any questions or need additional information, please feel free to contact us to discuss the additional

Very truly yours,
Zancanella & Associates, Inc.

Matthew V Weisbrod, PE

Attachments: Inundation Map.
Dam Break Analysis.
Hopkins Dam Reconstruction Certificate of Acceptance.



REV. NO.	DATE	REVISION	MADE BY	CHKD BY	APPD BY

INUNDATION MAP

SCALE:	DATE:	SHEET:
1" = 1200'	11 FEB 22	1 OF 1

DRAWN BY:	CHKD BY:	APPD BY:	DRAWING:
MVW	TPB	---	DEE FOOTER

SPRING VALLEY RANCH

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FIGURE NO. 1

PROJECT: 28604

Hopkins Reservoir
Dam Break Analysis

Spring Valley Ranch
Planned Unit Development

PREPARED FOR:

Michael Gamba, P.E. & P.L.S.
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113 Ninth Street
Suite 214
Glenwood Springs, CO 81601

Wright Water Engineers, Inc.

October 2007
931-004.040

Hopkins Reservoir Dam Break Analysis

Spring Valley Ranch
Planned Unit Development

PREPARED FOR:

Michael Gamba, P.E. & P.L.S.
Gamba & Associates, Inc.

Prepared by:

WRIGHT WATER ENGINEERS, INC.
Glenwood Springs, Colorado

October 2007

931-004.040