

465

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Burger King				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Saturday PM							
Project Description								Village Plaza Option 3 Analysis (Driveway A)
East/West Street:			Elliott Rd		North/South Street:			Burger King
Intersection Orientation:			East-West		Study Period (hrs):			0.25
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	10	463	12	20	431	65		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	10	487	12	21	453	68		
Proportion of heavy vehicles, P _{HV}	1	-	-	1	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	1	1	0		
Configuration	L		TR	L		TR		
Upstream Signal		0			1			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	6	3	18	87	3	10		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	6	3	18	91	3	10		
Proportion of heavy vehicles, P _{HV}	1	1	1	1	1	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	
Lane Configuration	L	L	LTR			LTR		
Volume, v (vph)	10	21	27			104		
Capacity, c _m (vph)	1054	1070	357			206		
v/c ratio	0.01	0.02	0.08			0.50		
Queue length (95%)	0.03	0.06	0.24			2.55		
Control Delay (s/veh)	8.4	8.4	15.9			39.1		

466

LOS	A	A	C	E
Approach delay (s/veh)	-	-	15.9	39.1
Approach LOS	-	-	C	E

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Erin Harrington
Agency/Co.	PBS&J
Date Performed	5/7/2004
Analysis Time Period	Saturday PM

Site Information

Intersection	Elliott Rd & Plaza
Jurisdiction	Town of Chapel Hill
Analysis Year	2006

Project Description *Village Plaza Option 3 Analysis (Driveway B)*

East/West Street: *Elliott Rd*

North/South Street: *Plaza*

Intersection Orientation: *East-West*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street Movement	Eastbound			Westbound		
	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	90	348	0	0	319	127
Peak-Hour Factor, PHF	0.90	0.90	0.95	0.95	0.90	0.90
Hourly Flow Rate, HFR	100	386	0	0	354	141
Percent Heavy Vehicles	1	--	--	0	--	--

Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street Movement	Northbound			Southbound		
	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	130	0	111
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.90	0.95	0.90
Hourly Flow Rate, HFR	0	0	0	144	0	123
Percent Heavy Vehicles	0	0	0	1	1	1
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4						
Lane Configuration	L					L		R
v (vph)	100					144		123
C (m) (vph)	1074					242		632
v/c	0.09					0.60		0.19
95% queue length	0.31					3.44		0.72
Control Delay	8.7					39.6		12.1
LOS	A					E		B
Approach Delay	--	--				26.9		
Approach LOS	--	--				D		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Erin Harrington	Intersection	Elliott Rd & Theater
Agency/Co.	PBS&J	Jurisdiction	Town of Chapel Hill
Date Performed	5/7/2004	Analysis Year	2006
Analysis Time Period	Saturday PM		

Project Description Village Plaza Option 3 Analysis (Driveway C)

East/West Street: Elliott Rd

North/South Street: Theater

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
	1	2	3	4	5	6
Movement	L	T	R	L	T	R
Volume	209	328	0	0	321	111
Peak-Hour Factor, PHF	0.90	0.90	0.95	0.95	0.90	0.90
Hourly Flow Rate, HFR	232	364	0	0	356	123
Percent Heavy Vehicles	1	-	-	0	-	-
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
	7	8	9	10	11	12
Movement	L	T	R	L	T	R
Volume	0	0	0	108	0	158
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.90	0.95	0.90
Hourly Flow Rate, HFR	0	0	0	120	0	175
Percent Heavy Vehicles	0	0	0	1	0	1
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
	1	4	7	8	9	10	11	12
Movement	L					L		R
v (vph)	232					120		175
C (m) (vph)	1089					152		637
v/c	0.21					0.79		0.27
95% queue length	0.81					5.00		1.11
Control Delay	9.2					84.6		12.8
LOS	A					F		B
Approach Delay	-	-					42.0	
Approach LOS	-	-					E	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Erin Harrington	Intersection	Elliott Rd & Red Hot Blue 2
Agency/Co.	PBS&J	Jurisdiction	Town of Chapel Hill
Date Performed	5/7/2004	Analysis Year	2006
Analysis Time Period	Saturday PM		

Project Description *Village Plaza Option 3 Analysis (Driveway D)*

East/West Street: *Elliott Rd*

North/South Street: *Red Hot Blue 2*

Intersection Orientation: *East-West*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound			
	Movement	1	2	3	4	5	6
	L	T	R	L	T	R	
Volume	14	495	1	5	440	34	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	15	550	1	5	488	37	
Percent Heavy Vehicles	1	--	--	1	--	--	
Median Type	<i>Undivided</i>						
RT Channelized			0			0	
Lanes	1	1	0	1	1	0	
Configuration	L		TR	L		TR	
Upstream Signal		0			0		

Minor Street	Northbound			Southbound			
	Movement	7	8	9	10	11	12
	L	T	R	L	T	R	
Volume	0	0	8	33	0	17	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	0	0	8	36	0	18	
Percent Heavy Vehicles	1	1	1	1	1	1	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L		LTR			LTR	
v (vph)	15	5		8			54	
C (m) (vph)	1047	1024		537			238	
v/c	0.01	0.00		0.01			0.23	
95% queue length	0.04	0.01		0.05			0.85	
Control Delay	8.5	8.5		11.8			24.5	
LOS	A	A		B			C	
Approach Delay	--	--		11.8			24.5	
Approach LOS	--	--		B			C	



470

TWO-WAY STOP CONTROL SUMMARY

General Information				Site Information			
Analyst	Erin Harrington			Intersection	Elliott Rd & Red Hot Blue 1		
Agency/Co.	PBS&J			Jurisdiction	Town of Chapel Hill		
Date Performed	5/7/2004			Analysis Year	2006		
Analysis Time Period	Saturday PM						
Project Description Village Plaza Option 3 Analysis (Driveway E)							
East/West Street: Elliott Rd				North/South Street: Red Hot Blue 1			
Intersection Orientation: East-West				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	25	441	0	0	412	44	
Peak-four factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate (veh/h)	26	464	0	0	433	46	
Proportion of heavy vehicles, P _{HV}	1	-	-	0	-	-	
Median type	Undivided						
RT Channelized?			0			0	
Lanes	1	1	0	0	1	0	
Configuration	L	T				TR	
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	0	0	0	69	0	21	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate (veh/h)	0	0	0	72	0	22	
Proportion of heavy vehicles, P _{HV}	0	0	0	1	1	1	
Percent grade (%)	0			0			
Flared approach		N			N		
Storage		0			0		
RT Channelized?			0			0	
Lanes	0	0	0	0	1	0	
Configuration					LTR		
Control Delay, Queue Length, Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11 12
Lane Configuration	L						LTR
Volume, v (vph)	26						94
Capacity, c _m (vph)	1089						314
v/c ratio	0.02						0.30
Queue length (95%)	0.07						1.23

(471)

Control Delay (s/veh)	8.4						21.3
LOS	A						C
Approach delay (s/veh)	--	--					21.3
Approach LOS	--	--					C

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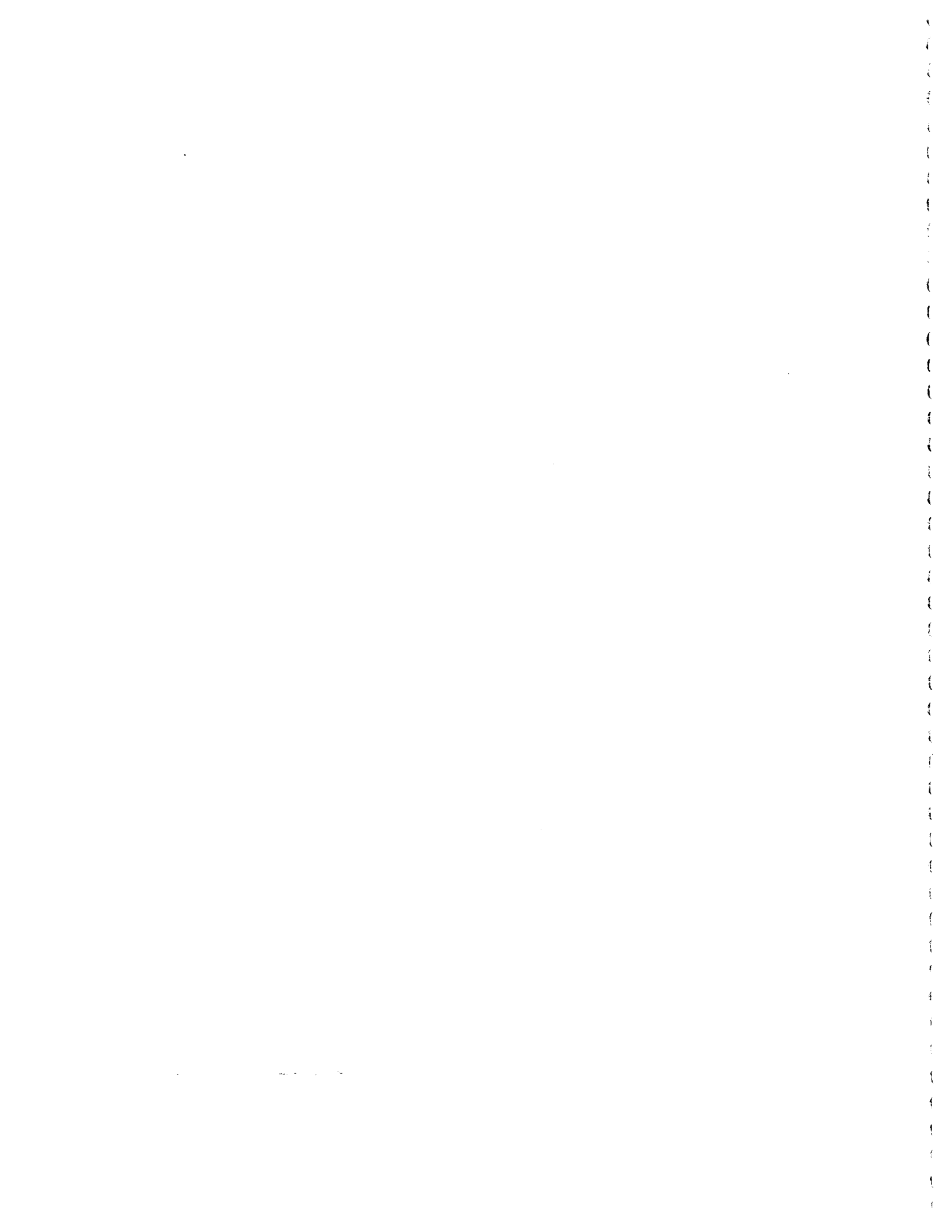
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472

INTERSECTION ANALYSES

SCENARIO 4 CONDITIONS



TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Erin Harrington	Intersection	Elliott Rd & Theater
Agency/Co.	PBS&J	Jurisdiction	Town of Chapel Hill
Date Performed	5/7/2004	Analysis Year	2006
Analysis Time Period	Saturday PM		

Project Description Village Plaza Option 4 Analysis (Driveway C)

East/West Street: Elliott Rd

North/South Street: Theater

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street Movement	Eastbound			Westbound		
	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	263	274	0	0	271	183
Peak-Hour Factor, PHF	0.90	0.90	0.95	0.95	0.90	0.90
Hourly Flow Rate, HFR	292	304	0	0	301	203
Percent Heavy Vehicles	1	-	-	0	-	-
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	
Minor Street Movement	Northbound			Southbound		
	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	174	0	208
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.90	0.95	0.90
Hourly Flow Rate, HFR	0	0	0	193	0	231
Percent Heavy Vehicles	0	0	0	1	0	1
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4						
Lane Configuration	L					L		R
v (vph)	292					193		231
C (m) (vph)	1066					131		650
v/c	0.27					1.47		0.36
95% queue length	1.12					13.22		1.60
Control Delay	9.6					310.9		13.6
LOS	A					F		B
Approach Delay	--	--				148.9		
Approach LOS	--	--				F		

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Plaza				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Saturday PM							
Project Description Village Plaza Option 4 Analysis (Driveway B)								
East/West Street: Elliott Rd			North/South Street: Plaza					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	36	415	0	0	391	73		
Peak-Hour Factor, PHF	0.90	0.90	0.95	0.95	0.90	0.90		
Hourly Flow Rate, HFR	40	461	0	0	434	81		
Percent Heavy Vehicles	1	-	-	0	-	-		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	0	0	1	0		
Configuration	L	T				TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	80	0	61		
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.90	0.95	0.90		
Hourly Flow Rate, HFR	0	0	0	88	0	67		
Percent Heavy Vehicles	0	0	0	1	1	1		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	40					88		67
C (m) (vph)	1056					255		592
v/c	0.04					0.35		0.11
95% queue length	0.12					1.48		0.38
Control Delay	8.5					26.4		11.9
LOS	A					D		B
Approach Delay	--	--				20.1		
Approach LOS	--	--				C		

Two-Way Stop Control

475

LOS	A	A	C	E
Approach delay (s/veh)	-	-	16.2	35.9
Approach LOS	-	-	C	E

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(476)

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Burger King				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Saturday PM							
Project Description Village Plaza Option 4 Analysis (Driveway A)								
East/West Street: Elliott Rd			North/South Street: Burger King					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	10	480	12	20	449	47		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	10	505	12	21	472	49		
Proportion of heavy vehicles, P _{HV}	1	-	-	1	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	1	1	0		
Configuration	L		TR	L		TR		
Upstream Signal		0			1			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	6	3	18	71	3	10		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	6	3	18	74	3	10		
Proportion of heavy vehicles, P _{HV}	1	1	1	1	1	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LTR			LTR		
Volume, v (vph)	10	21	27			87		
Capacity, c _m (vph)	1054	1054	347			201		
v/c ratio	0.01	0.02	0.08			0.43		
Queue length (95%)	0.03	0.06	0.25			2.01		
Control Delay (s/veh)	8.4	8.5	16.2			35.9		

477

LOS	A				D		B
Approach delay (s/veh)	-	-				18.3	
Approach LOS	-	-				C	

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478

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Theater				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Saturday Noon							
Project Description Village Plaza Option 4 Analysis (Driveway C)								
East/West Street: Elliott Rd			North/South Street: Theater					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	164	350	0	0	407	79		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	172	368	0	0	428	83		
Proportion of heavy vehicles, P _{HV}	1	-	-	0	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	0	1	0		
Configuration	L	T				TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	0	0	40	0	85		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	0	0	0	42	0	89		
Proportion of heavy vehicles, P _{HV}	0	0	0	1	0	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
Volume, v (vph)	172					42		89
Capacity, c _m (vph)	1059					177		596
v/c ratio	0.16					0.24		0.15
Queue length (95%)	0.58					0.89		0.52
Control Delay (s/veh)	9.1					31.6		12.1

479

LOS	A				C		B
Approach delay (s/veh)	-	-				18.0	
Approach LOS	-	-				C	

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480

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	Erin Harrington	Intersection	Elliott Rd & Plaza
Agency/Co.	PBS&J	Jurisdiction	Town of Chapel Hill
Date Performed	5/7/2004	Analysis Year	2006
Analysis Time Period	Saturday Noon		

Project Description Village Plaza Option 4 Analysis (Driveway B)

East/West Street: Elliott Rd

North/South Street: Plaza

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
	1	2	3	4	5	6
Movement	L	T	R	L	T	R
Volume (veh/h)	35	357	0	0	426	87
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	36	375	0	0	448	91
Proportion of heavy vehicles, P _{HV}	1	-	-	0	-	-
Median type	Undivided					
RT Channelized?			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
	7	8	9	10	11	12
Movement	L	T	R	L	T	R
Volume (veh/h)	0	0	0	77	0	60
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	0	0	0	81	0	63
Proportion of heavy vehicles, P _{HV}	0	0	0	1	1	1
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4						
Lane Configuration	L					L		R
Volume, v (vph)	36					81		63
Capacity, c _m (vph)	1034					283		577
v/c ratio	0.03					0.29		0.11
Queue length (95%)	0.11					1.15		0.37
Control Delay (s/veh)	8.6					22.7		12.0

481

LOS	A	A	C	F
Approach delay (s/veh)	-	-	17.9	52.8
Approach LOS	-	-	C	F

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482

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Erin Harrington			Intersection	Elliott Rd & Burger King			
Agency/Co.	PBS&J			Jurisdiction	Town of Chapel Hill			
Date Performed	5/7/2004			Analysis Year	2006			
Analysis Time Period	Saturday Noon							
Project Description Village Plaza Option 4 Analysis (Driveway A)								
East/West Street: Elliott Rd				North/South Street: Burger King				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	25	379	19	51	470	88		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	26	398	20	53	494	92		
Proportion of heavy vehicles, P _{HV}	1	-	-	1	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	1	1	0		
Configuration	L		TR	L		TR		
Upstream Signal		0			1			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	19	2	57	82	5	30		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	20	2	60	86	5	31		
Proportion of heavy vehicles, P _{HV}	1	1	1	1	1	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L		LTR			LTR	
Volume, v (vph)	26	53		82			122	
Capacity, c _m (vph)	999	1146		360			190	
v/c ratio	0.03	0.05		0.23			0.64	
Queue length (95%)	0.08	0.15		0.86			3.74	
Control Delay (s/veh)	8.7	8.3		17.9			52.8	

483

LOS	A				E	B
Approach delay (s/veh)	-	-			24.2	
Approach LOS	-	-			C	

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484

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Theater				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Friday PM							
Project Description Village Plaza Option 4 Analysis (Driveway C)								
East/West Street: Elliott Rd			North/South Street: Theater					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	132	467	0	0	498	79		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	138	491	0	0	524	83		
Proportion of heavy vehicles, P_{HV}	1	-	-	0	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	0	1	0		
Configuration	L	T				TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	0	0	52	0	89		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	0	0	0	54	0	93		
Proportion of heavy vehicles, P_{HV}	0	0	0	1	0	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
Volume, v (vph)	138					54		93
Capacity, c_m (vph)	976					147		526
v/c ratio	0.14					0.37		0.18
Queue length (95%)	0.49					1.54		0.64
Control Delay (s/veh)	9.3					43.1		13.3

485

LOS	A				D	B
Approach delay (s/veh)	-	-			26.8	
Approach LOS	-	-			D	

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486

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	Erin Harrington		Intersection	Elliott Rd & Plaza				
Agency/Co.	PBS&J		Jurisdiction	Town of Chapel Hill				
Date Performed	5/7/2004		Analysis Year	2006				
Analysis Time Period	Friday PM							
Project Description Village Plaza Option 4 Analysis (Driveway B)								
East/West Street: Elliott Rd			North/South Street: Plaza					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	25	576	0	0	548	68		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	26	543	0	0	576	71		
Proportion of heavy vehicles, P _{HV}	1	-	-	0	-	-		
Median type	Undivided							
RT Channelized?			0			0		
Lanes	1	1	0	0	1	0		
Configuration	L	T				TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	0	0	69	0	33		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Hourly Flow Rate (veh/h)	0	0	0	72	0	34		
Proportion of heavy vehicles, P _{HV}	0	0	0	1	1	1		
Percent grade (%)	0			0				
Flared approach		N			N			
Storage		0			0			
RT Channelized?			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Control Delay, Queue Length, Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
Volume, v (vph)	26					72		34
Capacity, c _m (vph)	943					197		495
v/c ratio	0.03					0.37		0.07
Queue length (95%)	0.08					1.57		0.22
Control Delay (s/veh)	8.9					33.4		12.8

487

LOS	A	A	F	D
Approach delay (s/veh)	-	-	50.8	27.3
Approach LOS	-	-	F	D

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(488)

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	Erin Harrington
Agency/Co.	PBS&J
Date Performed	5/7/2004
Analysis Time Period	Friday PM

Site Information

Intersection	Elliott Rd & Burger King
Jurisdiction	Town of Chapel Hill
Analysis Year	2006

Project Description Village Plaza Option 4 Analysis (Driveway A)

East/West Street: Elliott Rd

North/South Street: Burger King

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street Movement	Eastbound			Westbound		
	1 L	2 T	3 R	4 L	5 T	6 R
Volume (veh/h)	40	446	113	29	533	16
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	42	469	118	30	561	16
Proportion of heavy vehicles, P_{HV}	1	-	-	1	-	-
Median type	Undivided					
RT Channelized?			0			0
Lanes	1	1	0	1	1	0
Configuration	L		TR	L		TR
Upstream Signal		0			1	

Minor Street Movement	Northbound			Southbound		
	7 L	8 T	9 R	10 L	11 T	12 R
Volume (veh/h)	69	1	42	21	1	22
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	72	1	44	22	1	23
Proportion of heavy vehicles, P_{HV}	1	1	1	1	1	1
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

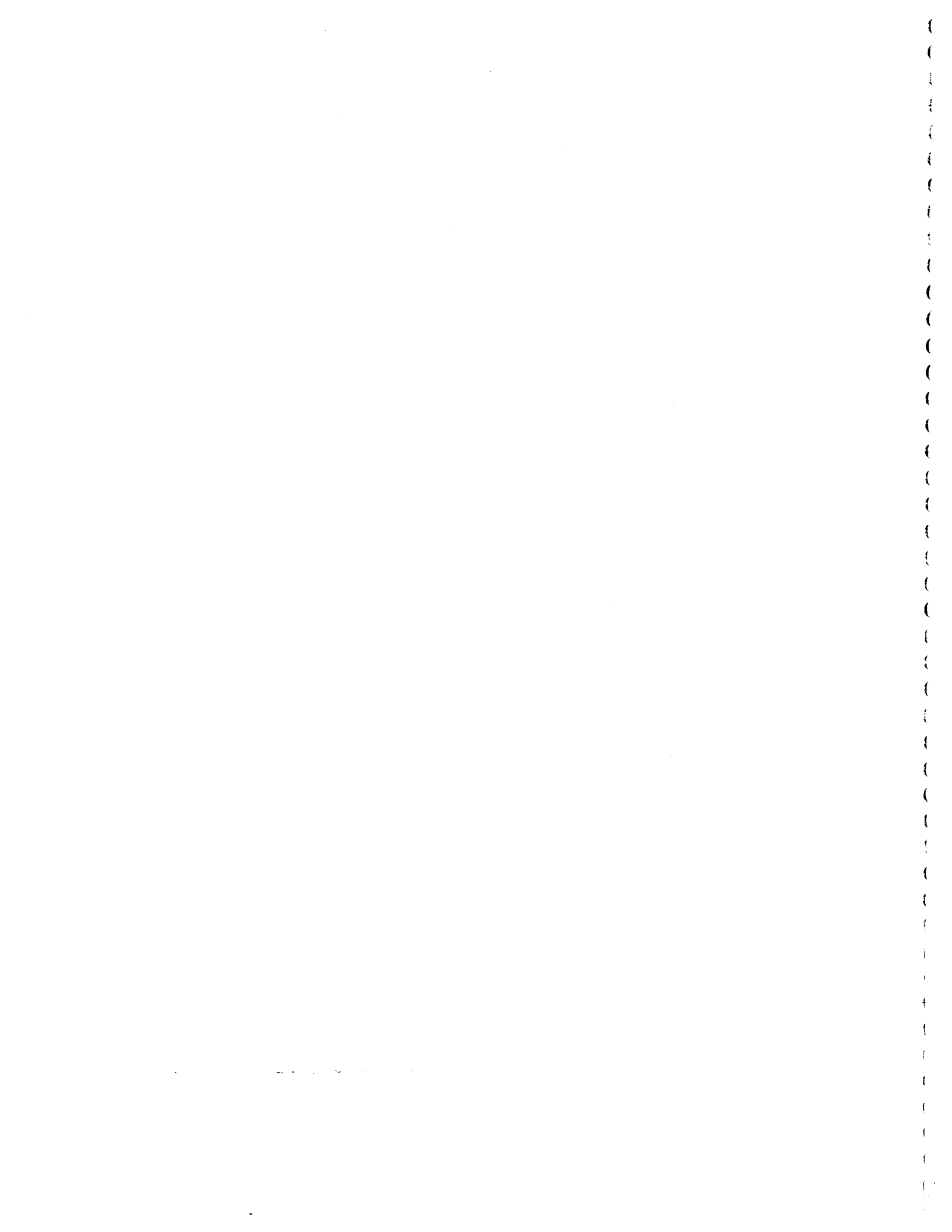
Control Delay, Queue Length, Level of Service

Approach Movement	EB 1 L	WB 4 L	Northbound			Southbound		
			7	8 LTR	9	10	11 LTR	12
Lane Configuration	L	L		LTR			LTR	
Volume, v (vph)	42	30		117			46	
Capacity, c_m (vph)	1006	993		189			207	
v/c ratio	0.04	0.03		0.62			0.22	
Queue length (95%)	0.13	0.09		3.51			0.82	
Control Delay (s/veh)	8.7	8.7		50.8			27.3	

Summary of Parking Occupancy Surveys

489

Time	Zone 1: Ginn & Company				Zone 2: Little & Clontiger				Zone 3: Mark Properties				Total (Zones 1-3)				Net Result (number)	
	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)		Required Spaces (number)
Friday 4:00 - 4:30pm	254	115	369	68.83%	82	88	170	48.24%	175	138	313	55.91%	511	341	852	59.98%	282	59
Friday 4:30 - 5:00pm	287	82	369	77.78%	100	70	170	58.82%	199	114	313	63.58%	586	266	852	68.78%	282	-16
Friday 5:00 - 5:30pm	275	94	369	74.53%	98	72	170	57.65%	220	93	313	70.29%	593	259	852	69.60%	282	-23
Friday 5:30 - 6:00pm	289	80	369	78.32%	99	71	170	58.24%	232	81	313	74.12%	620	232	852	72.77%	282	-50
Friday 6:00 - 6:30pm	250	119	369	67.75%	69	101	170	40.59%	226	87	313	72.20%	545	307	852	63.97%	282	25
Friday 6:30 - 7:00pm	228	141	369	61.79%	63	107	170	37.06%	232	81	313	74.12%	523	329	852	61.38%	282	47
Friday 7:00 - 7:30pm	210	159	369	56.91%	64	106	170	37.65%	242	71	313	77.32%	516	336	852	60.56%	282	54
Friday 7:30 - 8:00pm	186	183	369	50.41%	55	115	170	32.35%	222	91	313	70.93%	463	389	852	54.34%	282	107
Friday 8:00 - 8:30pm	163	206	369	44.17%	50	120	170	29.41%	180	133	313	57.51%	393	459	852	46.13%	282	177
Saturday 11:00 - 11:30am	310	59	369	84.01%	104	66	170	61.18%	155	158	313	49.52%	569	283	852	66.78%	282	1
Saturday 11:30 - 12:00pm	319	50	369	86.45%	104	66	170	61.18%	179	134	313	57.19%	602	250	852	70.66%	282	-32
Saturday 12:00 - 12:30pm	311	58	369	84.28%	90	80	170	52.94%	205	108	313	65.50%	606	246	852	71.13%	282	-36
Saturday 12:30 - 1:00pm	337	32	369	91.33%	93	77	170	54.71%	233	80	313	74.44%	663	189	852	77.82%	282	-93
Saturday 1:00 - 1:30pm	336	33	369	91.06%	101	69	170	59.41%	243	70	313	77.64%	680	172	852	79.81%	282	-110
Saturday 1:30 - 2:00pm	337	32	369	91.33%	98	72	170	57.65%	227	86	313	72.52%	662	190	852	77.70%	282	-92
Saturday 2:00 - 2:30pm	343	26	369	92.95%	101	69	170	59.41%	199	114	313	63.58%	643	209	852	75.47%	282	-73
Saturday 2:30 - 3:00pm	329	40	369	89.16%	101	69	170	59.41%	211	102	313	67.41%	641	211	852	75.23%	282	-71
Saturday 5:00 - 5:30pm	269	100	369	72.90%	78	92	170	45.88%	191	122	313	61.02%	538	314	852	63.15%	282	32
Saturday 5:30 - 6:00pm	243	126	369	65.85%	67	103	170	39.41%	164	149	313	52.40%	474	378	852	55.63%	282	96
Saturday 6:00 - 6:30pm	243	126	369	65.85%	75	95	170	44.12%	139	174	313	44.41%	457	395	852	53.64%	282	113
Saturday 6:30 - 7:00pm	225	144	369	60.98%	42	128	170	24.71%	132	181	313	42.17%	399	453	852	46.83%	282	171
Saturday 7:00 - 7:30pm	207	162	369	56.10%	62	108	170	36.47%	130	183	313	41.53%	399	453	852	46.83%	282	171
Saturday 7:30 - 8:00pm	148	221	369	40.11%	55	115	170	32.35%	124	189	313	38.02%	327	525	852	38.38%	282	243
Saturday 8:00 - 8:30pm	123	246	369	33.33%	45	125	170	26.47%	119	194	313	38.02%	287	565	852	33.69%	282	283
Saturday 8:30 - 9:00pm	125	244	369	33.88%	41	129	170	24.12%	96	217	313	30.67%	262	590	852	30.75%	282	308



Mark Properties Parking Occupancy Surveys

490

Time	Zone 3: Mark Properties - Existing Configuration						Zone 3: Mark Properties - Proposed Configuration					
	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)	Required Spaces (number)	Net Result (number)	Occupied Spaces (number)	Available Spaces (number)	Total Spaces (number)	Percentage Occupied (percentage)	Required Spaces (number)	Net Result (number)
Friday 4:00 - 4:30pm	175	138	313	55.91%	282	-144	175	191	366	47.81%	282	-91
Friday 4:30 - 5:00pm	199	114	313	63.58%	282	-168	199	167	366	54.37%	282	-115
Friday 5:00 - 5:30pm	220	93	313	70.29%	282	-189	220	146	366	60.11%	282	-136
Friday 5:30 - 6:00pm	232	81	313	74.12%	282	-201	232	134	366	63.39%	282	-148
Friday 6:00 - 6:30pm	226	87	313	72.20%	282	-195	226	140	366	61.75%	282	-142
Friday 6:30 - 7:00pm	232	81	313	74.12%	282	-201	232	134	366	63.39%	282	-148
Friday 7:00 - 7:30pm	242	71	313	77.32%	282	-211	242	124	366	66.12%	282	-158
Friday 7:30 - 8:00pm	222	91	313	70.93%	282	-191	222	144	366	60.66%	282	-138
Friday 8:00 - 8:30pm	180	133	313	57.51%	282	-149	180	186	366	49.18%	282	-96
Saturday 11:00 - 11:30am	155	158	313	49.52%	282	-124	155	211	366	42.35%	282	-71
Saturday 11:30 - 12:00pm	179	134	313	57.19%	282	-148	179	187	366	48.91%	282	-95
Saturday 12:00 - 12:30pm	205	108	313	65.50%	282	-174	205	161	366	56.01%	282	-121
Saturday 12:30 - 1:00pm	233	80	313	74.44%	282	-202	233	133	366	63.66%	282	-149
Saturday 1:00 - 1:30pm	243	70	313	77.64%	282	-212	243	123	366	66.39%	282	-159
Saturday 1:30 - 2:00pm	227	86	313	72.52%	282	-196	227	139	366	62.02%	282	-143
Saturday 2:00 - 2:30pm	199	114	313	63.58%	282	-168	199	167	366	54.37%	282	-115
Saturday 2:30 - 3:00pm	211	102	313	67.41%	282	-180	211	155	366	57.65%	282	-127
Saturday 5:00 - 5:30pm	191	122	313	61.02%	282	-160	191	175	366	52.19%	282	-107
Saturday 5:30 - 6:00pm	164	149	313	52.40%	282	-133	164	202	366	44.81%	282	-80
Saturday 6:00 - 6:30pm	139	174	313	44.41%	282	-108	139	227	366	37.98%	282	-55
Saturday 6:30 - 7:00pm	132	181	313	42.17%	282	-101	132	234	366	36.07%	282	-48
Saturday 7:00 - 7:30pm	130	183	313	41.53%	282	-99	130	236	366	35.52%	282	-46
Saturday 7:30 - 8:00pm	124	189	313	39.62%	282	-93	124	242	366	33.88%	282	-40
Saturday 8:00 - 8:30pm	119	194	313	38.02%	282	-88	119	247	366	32.51%	282	-35
Saturday 8:30 - 9:00pm	96	217	313	30.67%	282	-65	96	270	366	26.23%	282	-12

