

APPENDIX B

TRANSPORTATION, CIRCULATION, AND PARKING DATA

Intersection Turning Movement

Prepared by:



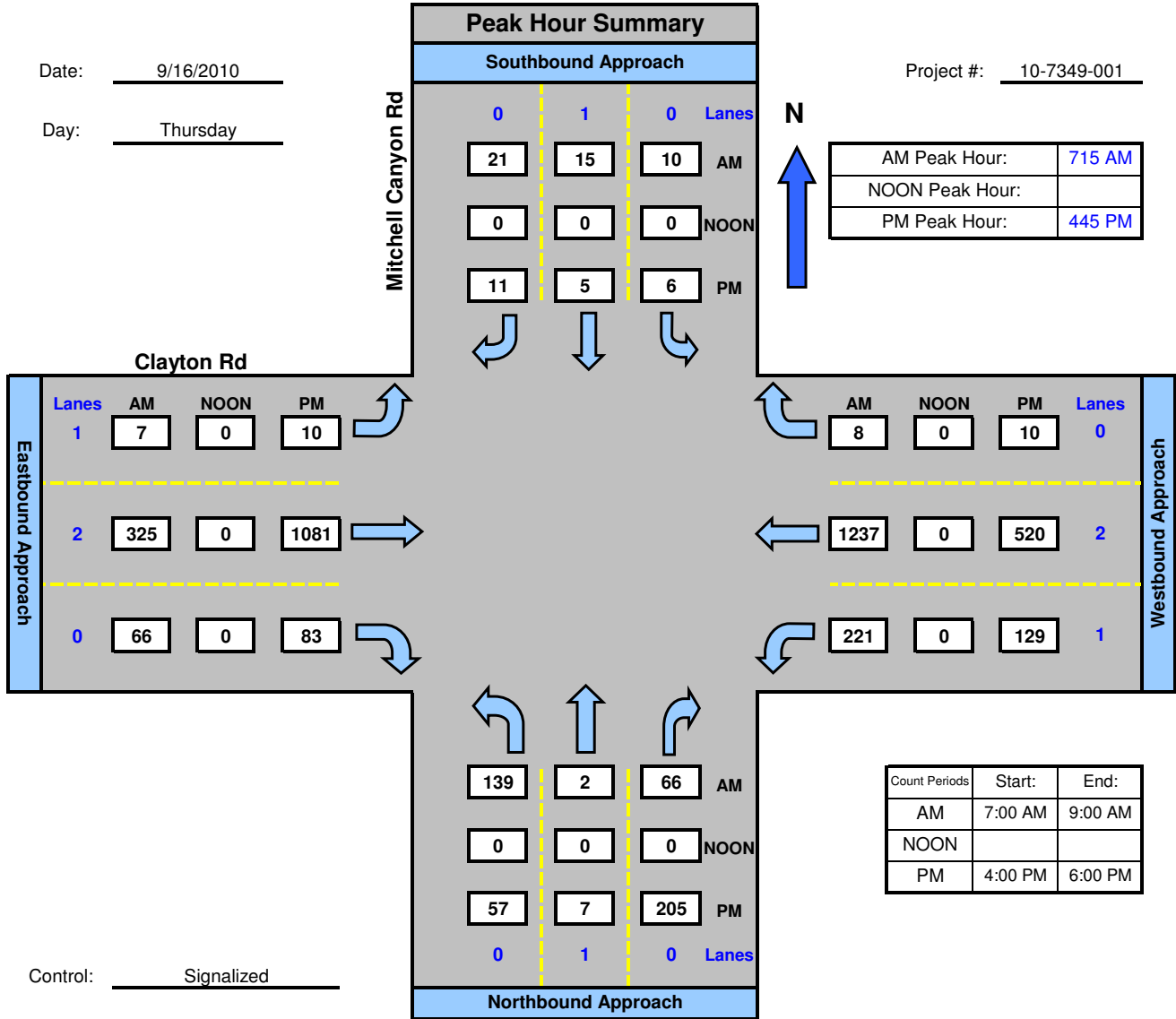
National Data & Surveying Services

Mitchell Canyon Rd and Clayton Rd , City of Clayton

Date: 9/16/2010

Day: Thursday

Project #: 10-7349-001



Intersection Turning Movement

Prepared by:



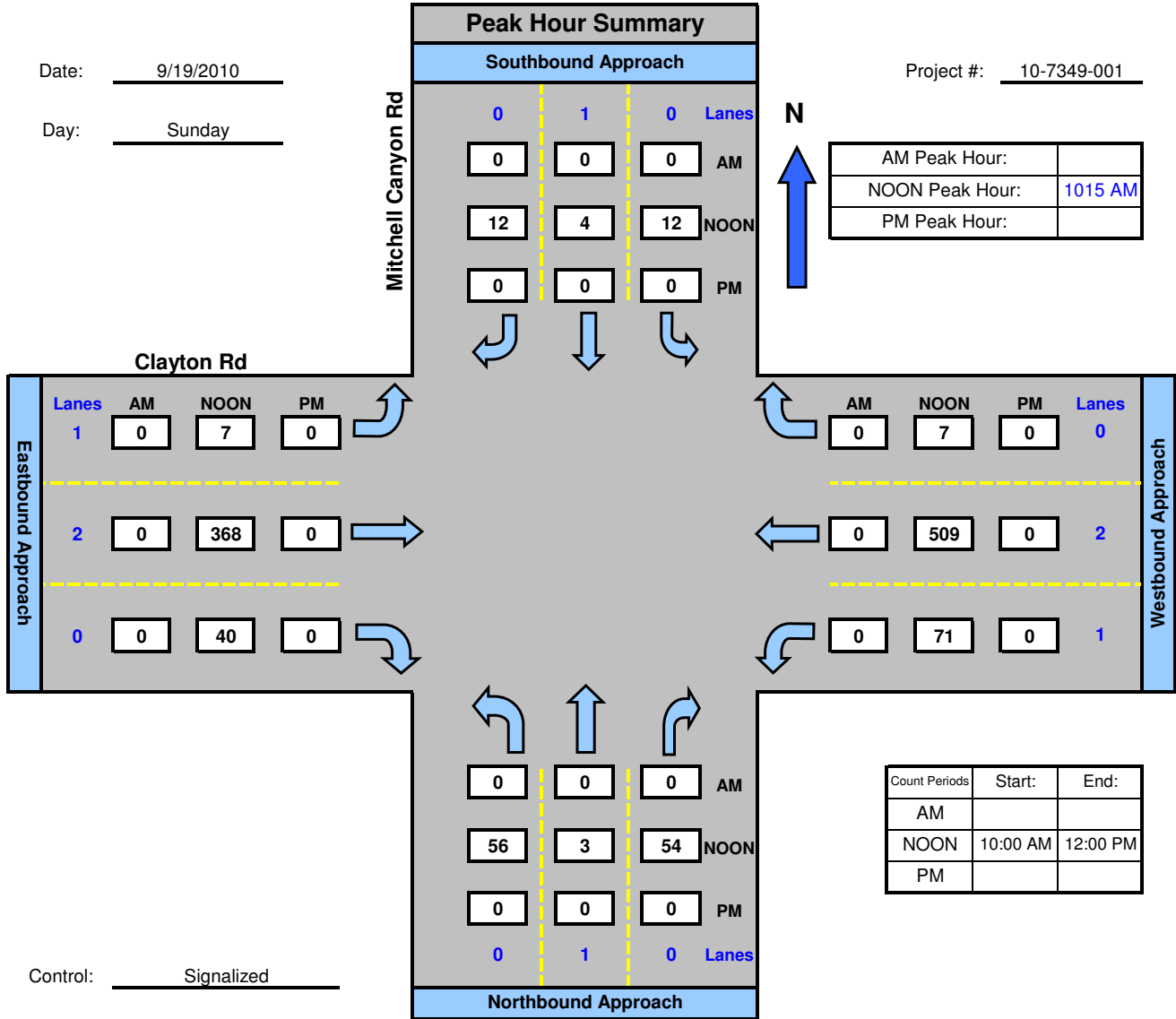
National Data & Surveying Services

Mitchell Canyon Rd and Clayton Rd , City of Clayton

Date: 9/19/2010

Day: Sunday

Project #: 10-7349-001



Intersection Turning Movement

Prepared by:



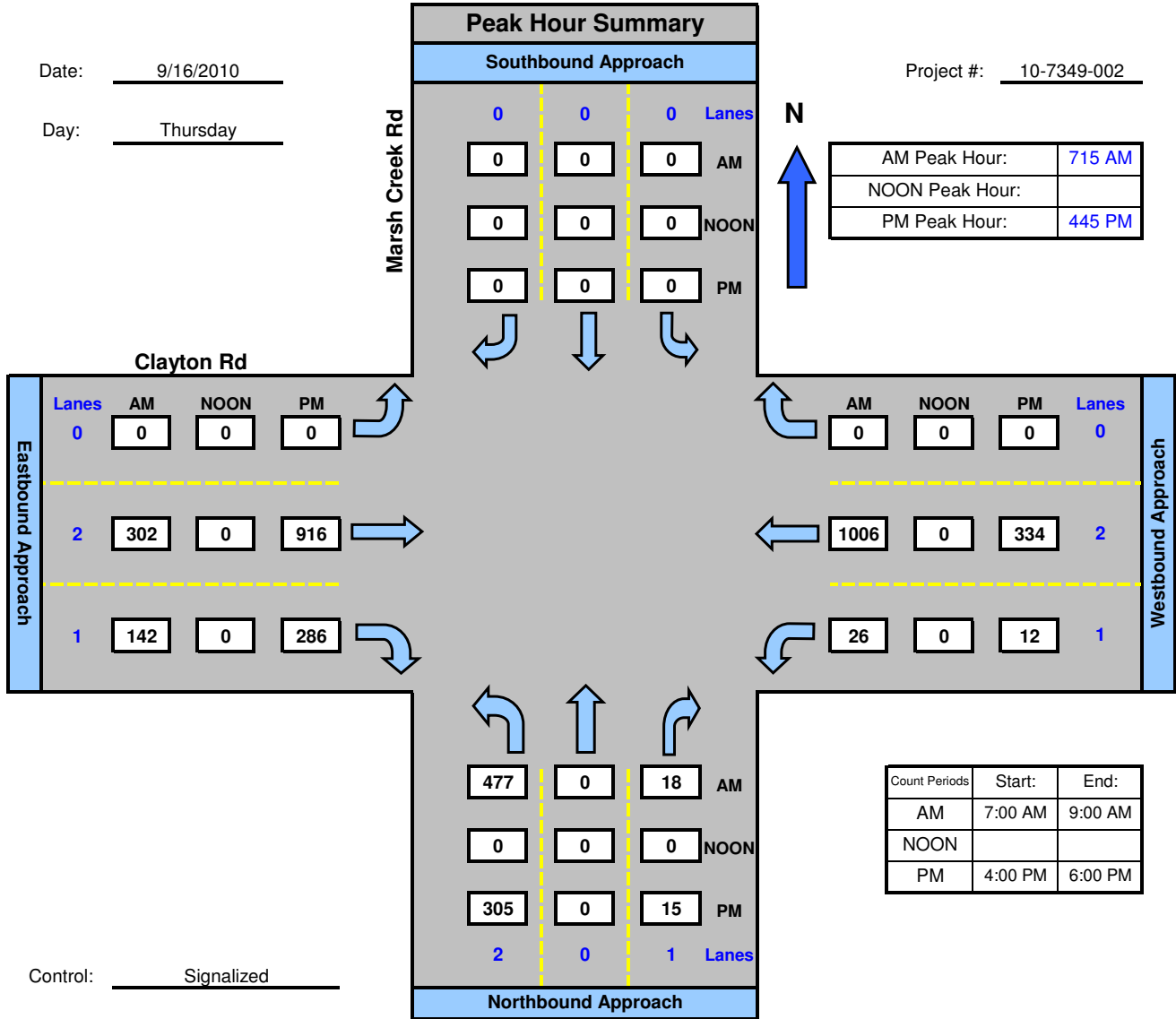
National Data & Surveying Services

Marsh Creek Rd and Clayton Rd , City of Clayton

Date: 9/16/2010

Day: Thursday

Project #: 10-7349-002



Intersection Turning Movement

Prepared by:



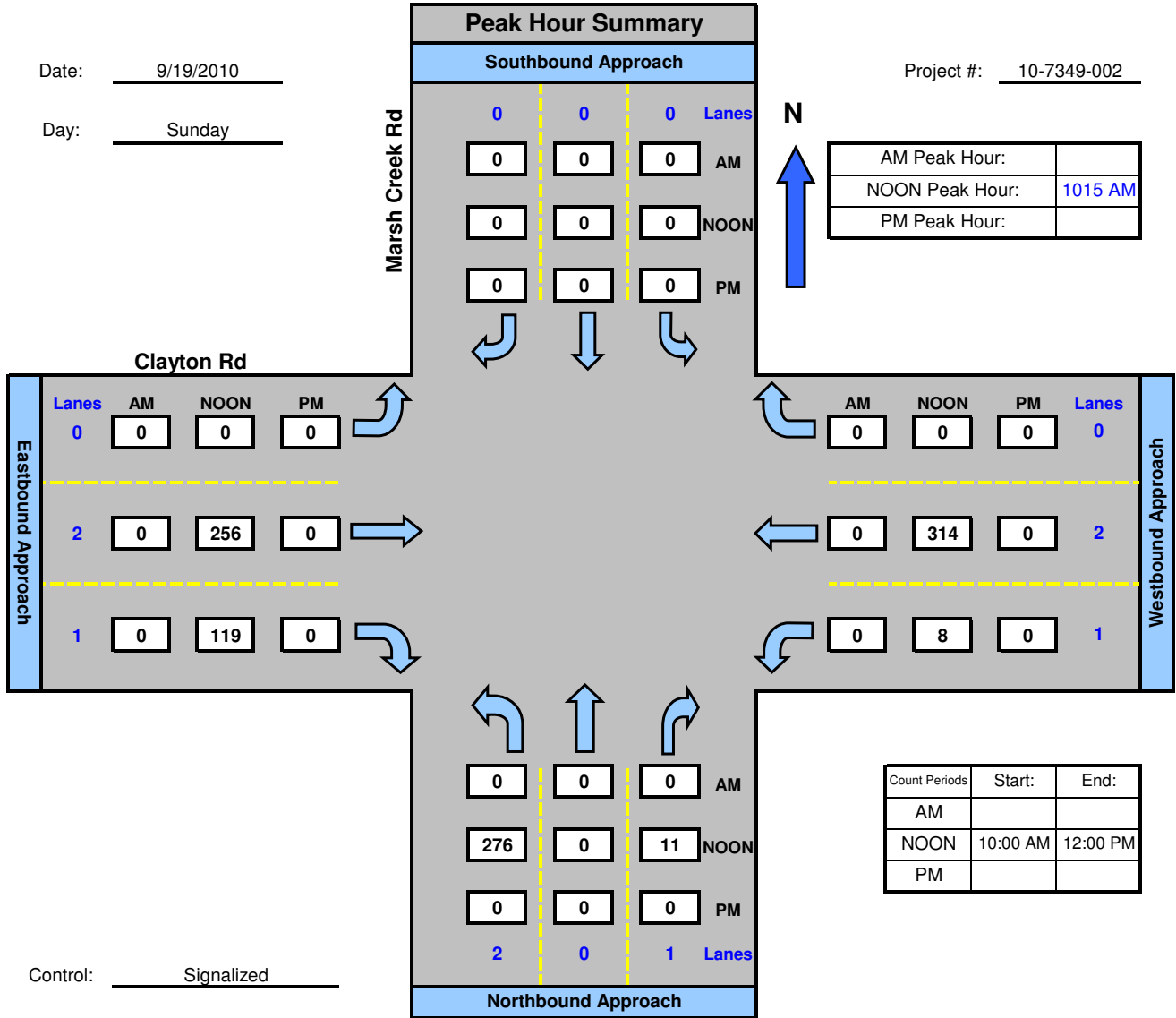
National Data & Surveying Services

Marsh Creek Rd and Clayton Rd , City of Clayton

Date: 9/19/2010

Day: Sunday

Project #: 10-7349-002



Intersection Turning Movement

Prepared by:



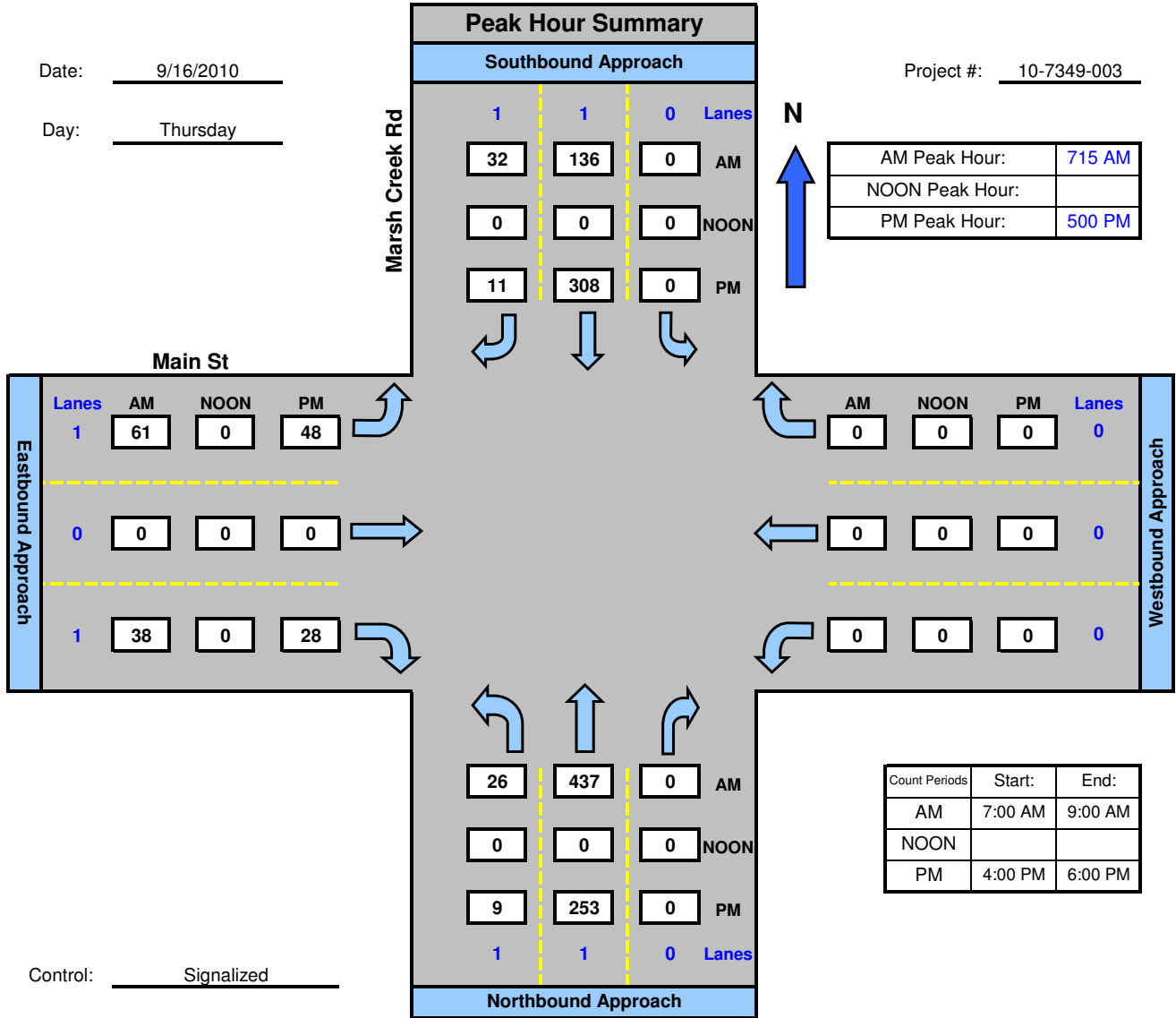
National Data & Surveying Services

Marsh Creek Rd and Main St, City of Clayton

Date: 9/16/2010

Day: Thursday

Project #: 10-7349-003



Intersection Turning Movement

Prepared by:



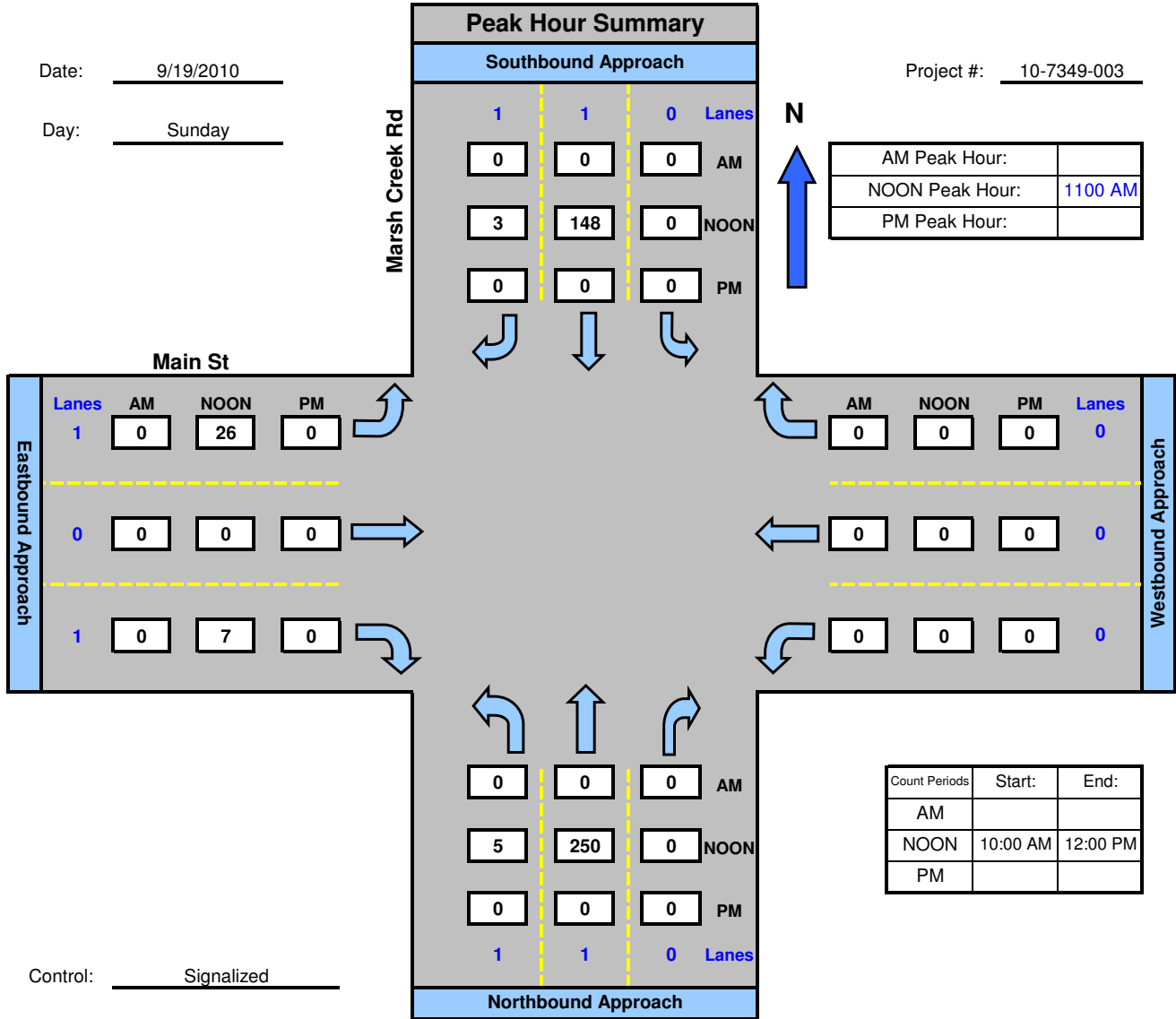
National Data & Surveying Services

Marsh Creek Rd and Main St , City of Clayton

Date: 9/19/2010

Day: Sunday

Project #: 10-7349-003



Intersection Turning Movement

Prepared by:



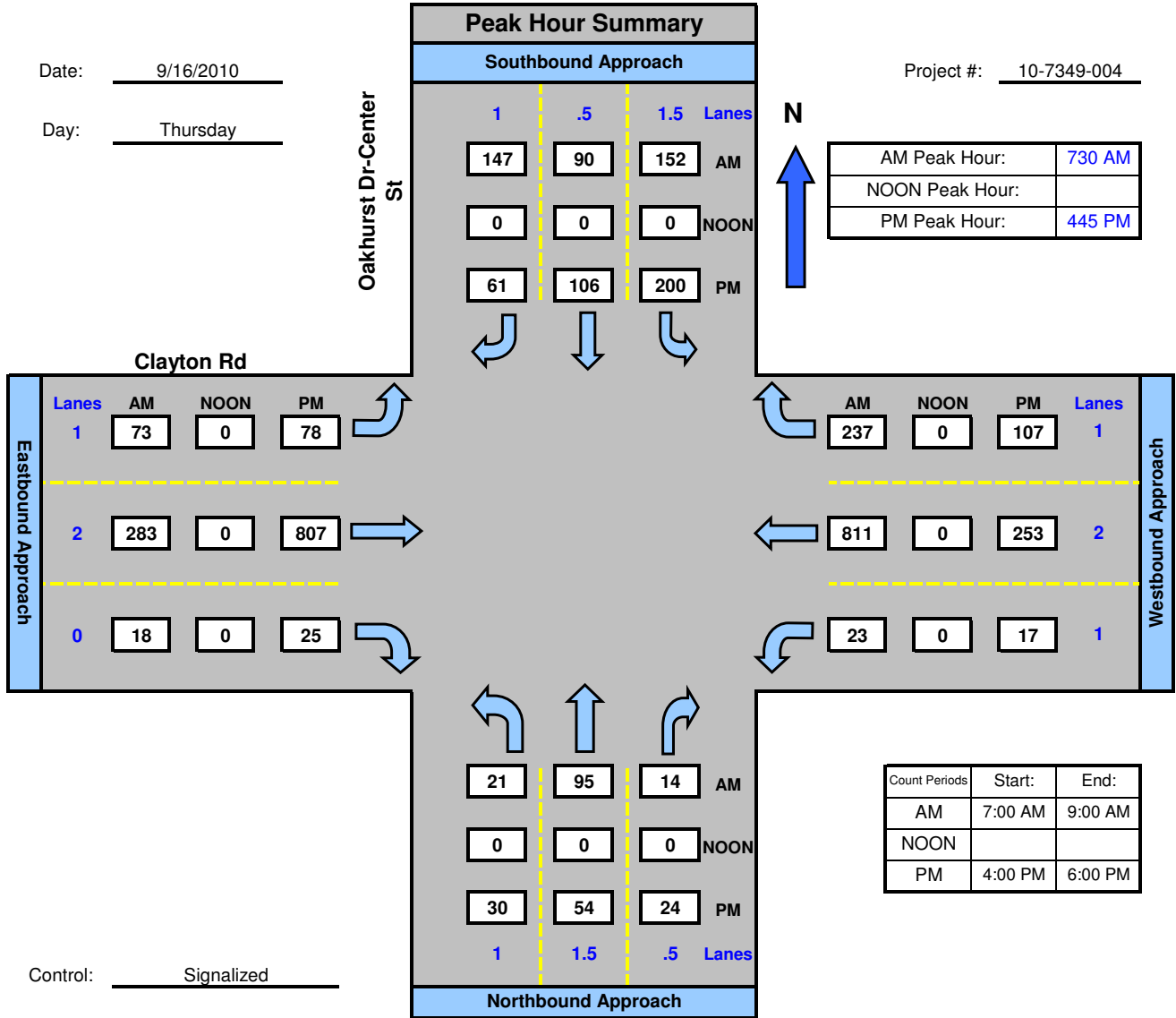
National Data & Surveying Services

Oakhurst Dr-Center St and Clayton Rd , City of Clayton

Date: 9/16/2010

Day: Thursday

Project #: 10-7349-004



Intersection Turning Movement

Prepared by:



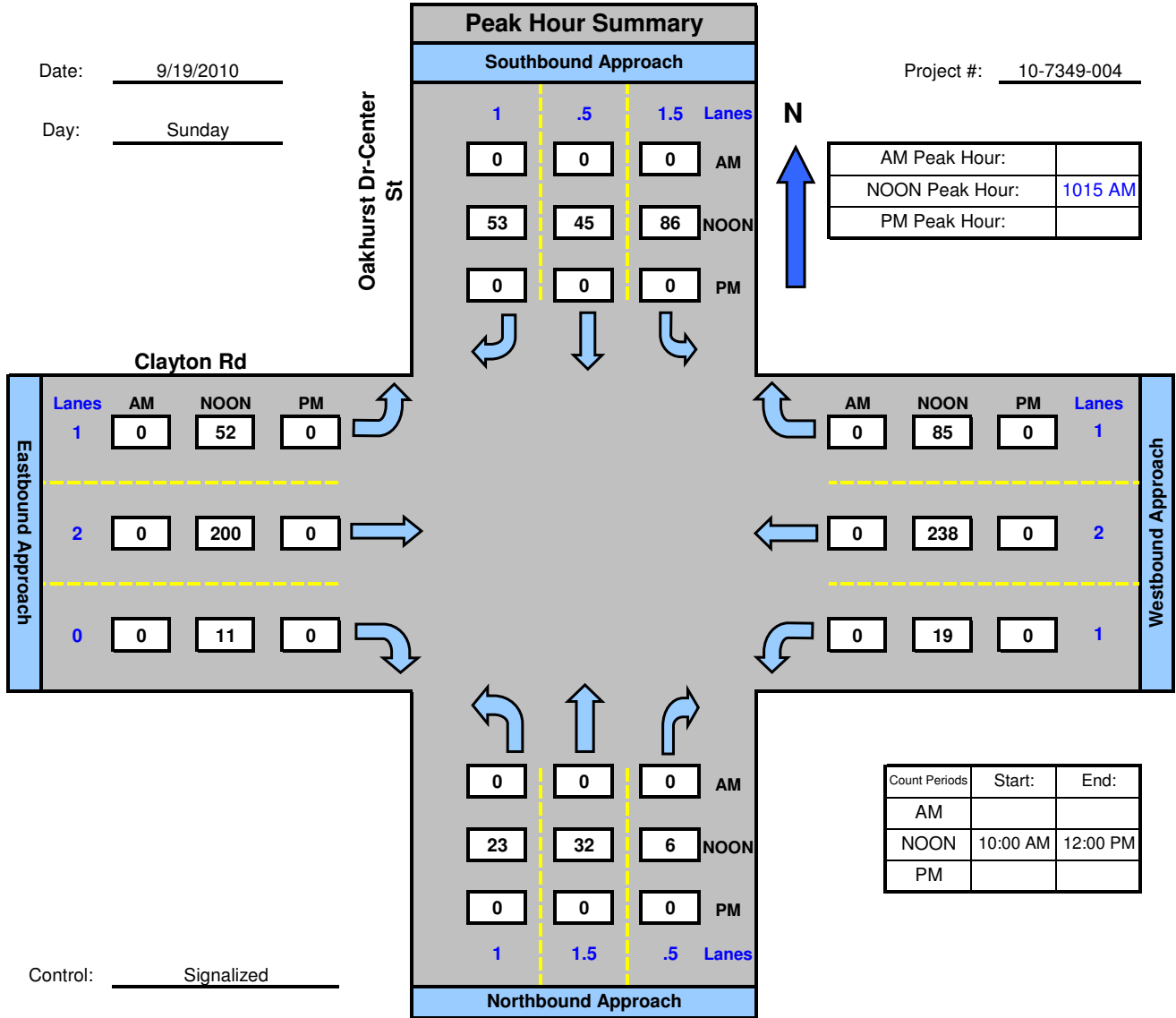
National Data & Surveying Services

Oakhurst Dr-Center St and Clayton Rd , City of Clayton

Date: 9/19/2010

Day: Sunday

Project #: 10-7349-004



Clayton Trip Generation Study

Project #: 10-7349-001 and 10-7349-002 Occupancy

Location: Diablo View Middle School Dwys

City: Clayton

Day: Sunday

Date: 10/10/2010

Time (15 minutes)	Outbound Vehicles	Inbound Vehicles	Time (1 hour)	Peak-Hour Vehicles		
				Out	In	Total
8:30 AM to 8:45 AM	2	27				
8:45 AM to 9:00 AM	3	40				
9:00 AM to 9:15 AM	1	36				
9:15 AM to 9:30 AM	0	15	8:30 AM to 9:30 AM	6	118	124
9:30 AM to 9:45 AM	0	2	8:45 AM to 9:45 AM	4	93	97
9:45 AM to 10:00 AM	0	2	9:00 AM to 10:00 AM	1	55	56
10:00 AM to 10:15 AM	0	2	9:15 AM to 10:15 AM	0	21	21
10:15 AM to 10:30 AM	28	8	9:30 AM to 10:30 AM	28	14	42
10:30 AM to 10:45 AM	37	41	9:45 AM to 10:45 AM	65	53	118
10:45 AM to 11:00 AM	21	36	10:00 AM to 11:00 AM	86	87	173
11:00 AM to 11:15 AM	6	7	10:15 AM to 11:15 AM	92	92	184
11:15 AM to 11:30 AM	10	4	10:30 AM to 11:30 AM	74	88	162
11:30 AM to 11:45 AM	2	1	10:45 AM to 11:45 AM	39	48	87
11:45 AM to 12:00 PM	3	2	11:00 AM to 12:00 PM	21	14	35
12:00 PM to 12:15 PM	38	5	11:15 AM to 12:15 PM	53	12	65
12:15 PM to 12:30 PM	46	5	11:30 AM to 12:30 PM	89	13	102
12:30 PM to 12:45 PM	27	2	11:45 AM to 12:45 PM	114	14	128
12:45 PM to 1:00 PM	12	1	12:00 PM to 1:00 PM	123	13	136
Total	236	236				

According to attendance data provided by the Clayton Community Church, the average attendance at the Sunday gatherings on October 10, 2010 was 253 people (i.e., 242 people at the 9:00 a.m. gathering and 263 people at the 10:45 a.m. gathering).

Based on a total of 184 trips (92 inbound and 92 outbound) generated by 253 people between 10:15 a.m. and 11:15 a.m., the equivalent Sunday peak-hour trip generation is 0.73 trips per person (50% inbound and 50% outbound).

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.447	A	xxxxx 0.447	+ 0.000 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.445	A	xxxxx 0.445	+ 0.000 V/C
# 3 Marsh Creek Road/Main Street	B	12.5 0.600	B	12.5 0.600	+ 0.000 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.401	A	xxxxx 0.401	+ 0.000 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.447
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 139 2 66 10 15 21 7 325 66 221 1237 8
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 139 2 66 10 15 21 7 325 66 221 1237 8
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 139 2 66 10 15 21 7 325 66 221 1237 8
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 2 66 10 15 21 7 325 66 221 1237 8
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 2 66 10 15 21 7 325 66 221 1237 8
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 139 2 66 10 15 21 7 325 66 221 1237 8

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.22 0.32 0.46 1.00 1.66 0.34 1.00 1.99 0.01
Final Sat.: 1720 51 1669 374 561 785 1720 2859 581 1720 3418 22

Capacity Analysis Module:
Vol/Sat: 0.08 0.04 0.04 0.03 0.03 0.03 0.00 0.11 0.11 0.13 0.36 0.36
Crit Moves: **** **** ****

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.445
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road and Clayton Road with North, South, East, and West Bound movements.

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat. values for various approaches.

Table with columns for Vol/Sat, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ. Rows include Vol/Sat, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ values.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.600
Loss Time (sec): 0 Average Delay (sec/veh): 12.5
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road and Main Street with North, South, East, and West Bound movements.

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat. values for various approaches.

Table with columns for Vol/Sat, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ. Rows include Vol/Sat, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ values.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Oakhurst Drive (North/South Bound) and Clayton Road (East/West Bound).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.537	A	xxxxx 0.537	+ 0.000 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.371	A	xxxxx 0.371	+ 0.000 V/C
# 3 Marsh Creek Road/Main Street	B	10.5 0.427	B	10.5 0.427	+ 0.000 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.385	A	xxxxx 0.385	+ 0.000 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.537
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 57 7 205 6 5 11 10 1081 83 129 520 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 7 205 6 5 11 10 1081 83 129 520 10
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 7 205 6 5 11 10 1081 83 129 520 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 57 7 205 6 5 11 10 1081 83 129 520 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 57 7 205 6 5 11 10 1081 83 129 520 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 57 7 205 6 5 11 10 1081 83 129 520 10

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.27 0.23 0.50 1.00 1.86 0.14 1.00 1.96 0.04
Final Sat.: 1720 57 1663 469 391 860 1720 3195 245 1720 3375 65

Capacity Analysis Module:
Vol/Sat: 0.03 0.12 0.12 0.01 0.01 0.01 0.01 0.34 0.34 0.08 0.15 0.15
Crit Moves: ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.371
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Protected		Protected	Protected		Protected
Rights:	Include		Include	Ignore		Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	0	1	0	0

Volume Module:

Base Vol:	305	0	15	0	0	0	0	916	286	12	334	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	305	0	15	0	0	0	0	916	286	12	334	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	305	0	15	0	0	0	0	916	286	12	334	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	305	0	15	0	0	0	0	916	0	12	334	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	305	0	15	0	0	0	0	916	0	12	334	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	336	0	15	0	0	0	0	916	0	12	334	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.10	0.00	0.01	0.00	0.00	0.00	0.00	0.27	0.00	0.01	0.10	0.00
Crit Moves:	****							****		****		

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.427
 Loss Time (sec): 0 Average Delay (sec/veh): 10.5
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road			Main Street		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign	Stop Sign		Stop Sign
Rights:	Include		Ignore	Include		Include
Min. Green:	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1
Lanes:	1	0	1	0	0	1

Volume Module:

Base Vol:	9	253	0	0	308	11	48	0	28	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	253	0	0	308	11	48	0	28	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	253	0	0	308	11	48	0	28	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	253	0	0	308	0	48	0	28	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	253	0	0	308	0	48	0	28	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	253	0	0	308	0	48	0	28	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	649	717	0	0	722	835	534	0	649	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.01	0.35	xxxx	xxxx	0.43	0.00	0.09	xxxx	0.04	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	8.2	10.3	0.0	0.0	11.2	0.0	9.6	0.0	8.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	10.3	0.0	0.0	11.2	0.0	9.6	0.0	8.0	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	*	A	*	A	*	*	*
ApproachDel:					11.2		9.0					xxxxxx
Delay Adj:					1.00		1.00					xxxxxx
ApprAdjDel:					10.2		11.2		9.0			xxxxxx
LOS by Appr:	B				B		A					*
AllWayAvgQ:	0.0	0.5	0.0	0.0	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.385
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Oakhurst Drive (North/South Bound) and Clayton Road (East/West Bound).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves values for different movements.

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.193	A	xxxxx 0.193	+ 0.000 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.180	A	xxxxx 0.180	+ 0.000 V/C
# 3 Marsh Creek Road/Main Street	A	9.2 0.328	A	9.2 0.328	+ 0.000 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.157	A	xxxxx 0.157	+ 0.000 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.193
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 56 3 54 12 4 12 7 368 40 71 509 7
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 56 3 54 12 4 12 7 368 40 71 509 7
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 56 3 54 12 4 12 7 368 40 71 509 7
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 56 3 54 12 4 12 7 368 40 71 509 7
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 56 3 54 12 4 12 7 368 40 71 509 7
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 56 3 54 12 4 12 7 368 40 71 509 7

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.05 0.95 0.43 0.14 0.43 1.00 1.80 0.20 1.00 1.97 0.03
Final Sat.: 1720 91 1629 737 246 737 1720 3103 337 1720 3393 47

Capacity Analysis Module:
Vol/Sat: 0.03 0.03 0.03 0.02 0.02 0.02 0.00 0.12 0.12 0.04 0.15 0.15
Crit Moves: ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.180
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 28 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Protected		Protected	Protected		Protected
Rights:	Include		Include	Ignore		Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	0	1	0	0

Volume Module:

Base Vol:	276	0	11	0	0	0	0	256	119	8	314	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	276	0	11	0	0	0	0	256	119	8	314	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	276	0	11	0	0	0	0	256	119	8	314	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	276	0	11	0	0	0	0	256	0	8	314	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	0	11	0	0	0	0	256	0	8	314	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	304	0	11	0	0	0	0	256	0	8	314	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.09	0.00
Crit Moves:	****						****			****		

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.328
 Loss Time (sec): 0 Average Delay (sec/veh): 9.2
 Optimal Cycle: 0 Level Of Service: A

Street Name:	Marsh Creek Road			Main Street		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign	Stop Sign		Stop Sign
Rights:	Include		Ignore	Include		Include
Min. Green:	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1
Lanes:	1	0	1	0	0	1

Volume Module:

Base Vol:	5	250	0	0	148	3	26	0	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	250	0	0	148	3	26	0	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	250	0	0	148	3	26	0	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	250	0	0	148	0	26	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	250	0	0	148	0	26	0	7	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	250	0	0	148	0	26	0	7	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	687	762	0	0	749	874	577	0	713	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.01	0.33	xxxx	xxxx	0.20	0.00	0.05	xxxx	0.01	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	7.9	9.7	0.0	0.0	8.6	0.0	8.9	0.0	7.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	9.7	0.0	0.0	8.6	0.0	8.9	0.0	7.4	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	*	A	*	A	*	*	*
ApproachDel:	9.6				8.6		8.6		8.6		xxxxxx	
Delay Adj:	1.00				1.00		1.00		1.00		xxxxxx	
ApprAdjDel:	9.6				8.6		8.6		8.6		xxxxxx	
LOS by Appr:	A				A		A		A		*	
AllWayAvgQ:	0.0	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.157
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Street Name:	Oakhurst Drive				Clayton Road									
Approach:	North Bound		South Bound		East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Protected		Protected		Protected		Protected							
Rights:	Include		Include		Include		Ignore							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	1	0	1	1	0	1	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	23	32	6	86	45	53	52	200	11	19	238	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	32	6	86	45	53	52	200	11	19	238	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	32	6	86	45	53	52	200	11	19	238	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	23	32	6	86	45	53	52	200	11	19	238	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	32	6	86	45	53	52	200	11	19	238	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	23	32	6	95	45	53	52	200	11	19	238	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.36	0.64	1.00	1.00	1.90	0.10	1.00	2.00	1.00
Final Sat.:	1650	2779	521	2236	1064	1650	1650	3128	172	1650	3300	1650

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.01	0.04	0.04	0.03	0.03	0.06	0.06	0.01	0.07	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Cumulative Projects Trip Generation Summary

Land Use	Size	Unit	ADT	Weekday AM Peak Hour			Weekday PM Peak Hour			Sunday Peak Hour			
				In	Out	Total	In	Out	Total	In	Out	Total	
Trip Rates¹													
820	Shopping Center		TSF	42.94	0.61	0.39	1.00	1.83	1.90	3.73	1.53	1.59	3.12
210	Single-Family Residential		DU	9.57	0.19	0.56	0.75	0.64	0.37	1.01	0.46	0.40	0.86
230	Townhome/Condominium		DU	5.81	0.07	0.37	0.44	0.35	0.17	0.52	0.22	0.23	0.45
Cumulative Projects Trip Generation													
1	Creekside Terrace												
	Retail	7,200	TSF	309	4	3	7	13	14	27	11	11	22
	Single-Family Residential	7	DU	67	1	4	5	4	3	7	3	3	6
	Total			376	6	7	12	18	16	34	14	14	28
2	Silver Oak Estates												
	Single-Family Residential	9	DU	86	2	5	7	6	3	9	4	4	8
	Townhome/Condominium	55	DU	320	4	20	24	19	9	29	12	13	25
	Total			406	6	25	31	25	13	38	16	16	32
3	Diablo Pointe												
	Single-Family Residential	24	DU	230	5	14	18	15	9	24	11	10	21
	Total			230	5	14	18	15	9	24	11	10	21
4	Oak Creek Canyon												
	Single-Family Residential	5	DU	48	1	3	4	3	2	5	2	2	4
	Total			48	1	3	4	3	2	5	2	2	4
Total				1,059	17	48	65	61	40	101	44	42	86

¹ Trip rates referenced from the Institute of Transportation Engineers *Trip Generation*, 8th Edition (2008).

Creekside Terrace Trip Distribution

40% west on Clayton Road, 10% east on Clayton Road, 5% north on Mitchell Canyon Road, 15% north on Oakhurst Drive,
5% south on Oak Street, 20% south on Marsh Creek Road, 5% south on Mitchell Canyon Road

Silver Oak Estates Trip Distribution

10% east on Clayton Road (east of Oakhurst Drive) and 90% outside of study area (northwest on Oakhurst Drive-Concord Boulevard)

Diablo Pointe Trip Distribution

90% west on Clayton Road and 10% outside of study area (southeast on Marsh Creek Road)

Oak Creek Canyon Trip Distribution

90% west on Clayton Road and 10% outside of study area (southeast on Marsh Creek Road)

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.447	A	xxxxx 0.447	+ 0.000 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.445	A	xxxxx 0.447	+ 0.002 V/C
# 3 Marsh Creek Road/Main Street	B	12.5 0.600	B	12.7 0.609	+ 0.008 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.401	A	xxxxx 0.402	+ 0.001 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.447
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 139 2 66 10 15 21 7 325 66 221 1237 8
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 139 2 66 10 15 21 7 325 66 221 1237 8
Added Vol: 0 0 4 0 0 0 0 1 0 5 1 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 139 2 70 10 15 21 7 326 66 226 1238 8
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 2 70 10 15 21 7 326 66 226 1238 8
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 2 70 10 15 21 7 326 66 226 1238 8
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 139 2 70 10 15 21 7 326 66 226 1238 8

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.22 0.32 0.46 1.00 1.66 0.34 1.00 1.99 0.01
Final Sat.: 1720 48 1672 374 561 785 1720 2861 579 1720 3418 22

Capacity Analysis Module:
Vol/Sat: 0.08 0.04 0.04 0.03 0.03 0.03 0.00 0.11 0.11 0.13 0.36 0.36
Crit Moves: ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.447
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road													
	North Bound		South Bound	East Bound		West Bound											
Approach:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Protected			Protected	Protected			Protected			Protected						
Rights:	Include			Include	Ignore			Include			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Lanes:	2	0	0	1	0	0	0	0	0	2	0	1	1	0	2	0	0

Volume Module:

Base Vol:	477	0	18	0	0	0	0	0	302	142	26	1006	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	0	18	0	0	0	0	0	302	142	26	1006	0
Added Vol:	6	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	483	0	18	0	0	0	0	0	302	142	26	1006	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
PHF Volume:	483	0	18	0	0	0	0	0	302	0	26	1006	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	0	18	0	0	0	0	0	302	0	26	1006	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
FinalVolume:	531	0	18	0	0	0	0	0	302	0	26	1006	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0	0

Capacity Analysis Module:

Vol/Sat:	0.15	0.00	0.01	0.00	0.00	0.00	0.00	0.09	0.00	0.02	0.29	0.00	0.00
Crit Moves:	****						****						

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.609
 Loss Time (sec): 0 Average Delay (sec/veh): 12.7
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road			Main Street									
	North Bound		South Bound	East Bound		West Bound							
Approach:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign	Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Ignore	Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	1	0	1	0	0	1	1	0	0	1	0	0	0
Lanes:	1	0	1	0	0	1	0	0	1	1	0	0	0

Volume Module:

Base Vol:	26	437	0	0	136	32	61	0	38	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	437	0	0	136	32	61	0	38	0	0	0	0
Added Vol:	0	6	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	443	0	0	136	32	61	0	38	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	443	0	0	136	0	61	0	38	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	443	0	0	136	0	61	0	38	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	443	0	0	136	0	61	0	38	0	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Final Sat.:	657	728	0	0	681	782	527	0	637	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.61	xxxx	xxxx	0.20	0.00	0.12	xxxx	0.06	xxxx	xxxx	xxxx	xxxx
Crit Moves:	****						****						
Delay/Veh:	8.3	14.8	0.0	0.0	9.1	0.0	9.9	0.0	8.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.3	14.8	0.0	0.0	9.1	0.0	9.9	0.0	8.2	0.0	0.0	0.0	0.0
LOS by Move:	A	B	*	*	A	*	A	*	A	*	*	*	*
ApproachDel:	14.4				9.1		9.2		9.2		xxxxxx		
Delay Adj:	1.00				1.00		1.00		1.00		xxxxxx		
ApprAdjDel:	14.4				9.1		9.2		9.2		xxxxxx		
LOS by Appr:	B				A		A		A		*		
AllWayAvgQ:	0.0	1.5	0.0	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.402
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Oakhurst Drive (North/South Bound) and Clayton Road (East/West Bound).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves for various movements.

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.537	A	xxxxx 0.551	+ 0.015 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.371	A	xxxxx 0.375	+ 0.004 V/C
# 3 Marsh Creek Road/Main Street	B	10.5 0.427	B	10.6 0.428	+ 0.001 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.385	A	xxxxx 0.385	+ 0.000 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.551
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 57 7 205 6 5 11 10 1081 83 129 520 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 7 205 6 5 11 10 1081 83 129 520 10
Added Vol: 0 0 13 1 0 0 0 2 0 11 2 1
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 7 218 7 5 11 10 1083 83 140 522 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 57 7 218 7 5 11 10 1083 83 140 522 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 57 7 218 7 5 11 10 1083 83 140 522 11
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 57 7 218 7 5 11 10 1083 83 140 522 11

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.30 0.22 0.48 1.00 1.86 0.14 1.00 1.96 0.04
Final Sat.: 1720 54 1666 523 374 823 1720 3195 245 1720 3369 71

Capacity Analysis Module:
Vol/Sat: 0.03 0.13 0.13 0.01 0.01 0.01 0.01 0.34 0.34 0.08 0.15 0.15
Crit Moves: ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.375
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Protected		Protected	Protected		Protected
Rights:	Include		Include	Ignore		Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	0	1	0	0

Volume Module:

Base Vol:	305	0	15	0	0	0	0	916	286	12	334	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	305	0	15	0	0	0	0	916	286	12	334	0
Added Vol:	14	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	319	0	15	0	0	0	0	916	286	12	334	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	319	0	15	0	0	0	0	916	0	12	334	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	319	0	15	0	0	0	0	916	0	12	334	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	351	0	15	0	0	0	0	916	0	12	334	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.10	0.00	0.01	0.00	0.00	0.00	0.00	0.27	0.00	0.01	0.10	0.00
Crit Moves:	****							****		****		

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.428
 Loss Time (sec): 0 Average Delay (sec/veh): 10.6
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road			Main Street		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign	Stop Sign		Stop Sign
Rights:	Include		Ignore	Include		Include
Min. Green:	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1
Lanes:	1	0	1	0	0	1

Volume Module:

Base Vol:	9	253	0	0	308	11	48	0	28	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	253	0	0	308	11	48	0	28	0	0	0
Added Vol:	0	14	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	267	0	0	308	11	48	0	28	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	267	0	0	308	0	48	0	28	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	267	0	0	308	0	48	0	28	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	267	0	0	308	0	48	0	28	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	649	717	0	0	720	832	532	0	644	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.01	0.37	xxxx	xxxx	0.43	0.00	0.09	xxxx	0.04	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	8.2	10.5	0.0	0.0	11.2	0.0	9.6	0.0	8.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	10.5	0.0	0.0	11.2	0.0	9.6	0.0	8.0	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	*	A	*	A	*	*	*
ApproachDel:	10.4				11.2		9.0					xxxxxx
Delay Adj:	1.00				1.00		1.00					xxxxxx
ApprAdjDel:	10.4				11.2		9.0					xxxxxx
LOS by Appr:	B				B		A					*
AllWayAvgQ:	0.0	0.6	0.0	0.0	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.385
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Oakhurst Drive (North/South Bound) and Clayton Road (East/West Bound).

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves.

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.193	A	xxxxx 0.205	+ 0.012 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.180	A	xxxxx 0.183	+ 0.004 V/C
# 3 Marsh Creek Road/Main Street	A	9.2 0.328	A	9.3 0.344	+ 0.016 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.157	A	xxxxx 0.158	+ 0.001 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.205
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 56 3 54 12 4 12 7 368 40 71 509 7
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 56 3 54 12 4 12 7 368 40 71 509 7
Added Vol: 0 0 10 1 0 0 0 1 0 10 1 1
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 56 3 64 13 4 12 7 369 40 81 510 8
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 56 3 64 13 4 12 7 369 40 81 510 8
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 56 3 64 13 4 12 7 369 40 81 510 8
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 56 3 64 13 4 12 7 369 40 81 510 8

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.04 0.96 0.45 0.14 0.41 1.00 1.80 0.20 1.00 1.97 0.03
Final Sat.: 1720 77 1643 771 237 712 1720 3104 336 1720 3387 53

Capacity Analysis Module:
Vol/Sat: 0.03 0.04 0.04 0.02 0.02 0.02 0.00 0.12 0.12 0.05 0.15 0.15
Crit Moves: ****

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.183
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: Marsh Creek Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
Base Vol: 276 0 11 0 0 0 0 0 256 119 8 314 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 276 0 11 0 0 0 0 0 256 119 8 314 0
Added Vol: 12 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 288 0 11 0 0 0 0 0 256 119 8 314 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume: 288 0 11 0 0 0 0 0 256 0 8 314 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 288 0 11 0 0 0 0 0 256 0 8 314 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj: 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume: 317 0 11 0 0 0 0 0 256 0 8 314 0

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00
Final Sat.: 3440 0 1720 0 0 0 0 3440 1720 1720 3440 0

Capacity Analysis Module:
Vol/Sat: 0.09 0.00 0.01 0.00 0.00 0.00 0.00 0.07 0.00 0.00 0.09 0.00
Crit Moves: ****

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.344
Loss Time (sec): 0 Average Delay (sec/veh): 9.3
Optimal Cycle: 0 Level Of Service: A

Street Name: Marsh Creek Road Main Street
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 0 0 0 1 0 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 5 250 0 0 0 148 3 26 0 7 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 250 0 0 148 3 26 0 7 0 0 0 0
Added Vol: 0 12 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 5 262 0 0 148 3 26 0 7 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 262 0 0 148 0 26 0 7 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 262 0 0 148 0 26 0 7 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 5 262 0 0 148 0 26 0 7 0 0 0 0

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 687 762 0 0 746 872 573 0 707 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.01 0.34 xxxxx 0.20 0.00 0.05 xxxxx 0.01 xxxxx xxxxx
Crit Moves: ****
Delay/Veh: 7.9 9.8 0.0 0.0 8.6 0.0 8.9 0.0 7.5 0.0 0.0 0.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 7.9 9.8 0.0 0.0 8.6 0.0 8.9 0.0 7.5 0.0 0.0 0.0
LOS by Move: A A * * A * A * A * * *
ApproachDel: 9.8 8.6 8.6 xxxxxx
Delay Adj: 1.00 1.00 1.00 xxxxxx
ApprAdjDel: 9.8 8.6 8.6 xxxxxx
LOS by Appr: A A A *
AllWayAvgQ: 0.0 0.5 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

Circular 212 Operations Method (Future Volume Alternative)

Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.158
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Oakhurst Drive (North/South Bound) and Clayton Road (East/West Bound).

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves.

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.447	A	xxxxx 0.453	+ 0.006 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.445	A	xxxxx 0.452	+ 0.007 V/C
# 3 Marsh Creek Road/Main Street	B	12.5 0.600	B	13.0 0.623	+ 0.023 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.401	A	xxxxx 0.407	+ 0.006 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.453
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 139 2 66 10 15 21 7 325 66 221 1237 8
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 139 2 66 10 15 21 7 325 66 221 1237 8
Added Vol: 0 0 3 3 0 0 0 24 0 2 18 2
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 139 2 69 13 15 21 7 349 66 223 1255 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 2 69 13 15 21 7 349 66 223 1255 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 2 69 13 15 21 7 349 66 223 1255 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 139 2 69 13 15 21 7 349 66 223 1255 10

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.26 0.31 0.43 1.00 1.68 0.32 1.00 1.98 0.02
Final Sat.: 1720 48 1672 456 527 737 1720 2893 547 1720 3413 27

Capacity Analysis Module:
Vol/Sat: 0.08 0.04 0.04 0.03 0.03 0.03 0.00 0.12 0.12 0.13 0.37 0.37
Crit Moves: **** **** ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.452
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Protected		Protected	Protected		Protected
Rights:	Include		Include	Ignore		Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	0	1	0	0

Volume Module:

Base Vol:	477	0	18	0	0	0	0	302	142	26	1006	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	0	18	0	0	0	0	302	142	26	1006	0
Added Vol:	22	0	8	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	499	0	26	0	0	0	0	302	142	37	1006	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	499	0	26	0	0	0	0	302	0	37	1006	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	0	26	0	0	0	0	302	0	37	1006	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	549	0	26	0	0	0	0	302	0	37	1006	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.02	0.29	0.00
Crit Moves:	****							****				

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.623
 Loss Time (sec): 0 Average Delay (sec/veh): 13.0
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road			Main Street		
Approach:	North Bound		South Bound	East Bound		West Bound
Movement:	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign	Stop Sign		Stop Sign
Rights:	Include		Ignore	Include		Include
Min. Green:	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1
Lanes:	1	0	1	0	0	1

Volume Module:

Base Vol:	26	437	0	0	136	32	61	0	38	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	437	0	0	136	32	61	0	38	0	0	0
Added Vol:	13	6	0	0	2	9	24	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	443	0	0	138	41	85	0	47	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	443	0	0	138	0	85	0	47	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	443	0	0	138	0	85	0	47	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	443	0	0	138	0	85	0	47	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	641	711	0	0	659	753	525	0	634	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.62	xxxx	xxxx	0.21	0.00	0.16	xxxx	0.07	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	8.6	15.5	0.0	0.0	9.4	0.0	10.3	0.0	8.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	15.5	0.0	0.0	9.4	0.0	10.3	0.0	8.3	0.0	0.0	0.0
LOS by Move:	A	C	*	*	A	*	B	*	A	*	*	*
ApproachDel:	14.9				9.4		9.6		9.6		xxxxxx	
Delay Adj:	1.00				1.00		1.00		1.00		xxxxxx	
ApprAdjDel:	14.9				9.4		9.6		9.6		xxxxxx	
LOS by Appr:	B				A		A		A		*	
AllWayAvgQ:	0.1	1.5	0.0	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0

 Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)
*****
Intersection #4 Oakhurst Drive/Clayton Road
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.407
Loss Time (sec):   0          Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    38          Level Of Service:         A
*****
Street Name:      Oakhurst Drive          Clayton Road
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R          L - T - R          L - T - R          L - T - R
-----
Control:         Protected          Protected          Protected          Protected
Rights:          Include          Include          Include          Ignore
Min. Green:      0 0 0          0 0 0          0 0 0          0 0 0
Y+R:            4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:          1 0 1 1 0      1 1 0 0 1      1 0 1 1 0      1 0 2 0 1
-----
Volume Module:
Base Vol:        21 95 14 152 90 147 73 283 18 23 811 237
Growth Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    21 95 14 152 90 147 73 283 18 23 811 237
Added Vol:      0 2 1 0 3 6 5 3 0 2 4 0
PasserByVol:   0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:    21 97 15 152 93 153 78 286 18 25 815 237
User Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume:    21 97 15 152 93 153 78 286 18 25 815 0
Reduct Vol:    0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:   21 97 15 152 93 153 78 286 18 25 815 0
PCE Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj:       1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume:   21 97 15 167 93 153 78 286 18 25 815 0
-----
Saturation Flow Module:
Sat/Lane:       1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:         1.00 1.73 0.27 1.29 0.71 1.00 1.00 1.88 0.12 1.00 2.00 1.00
Final Sat.:    1650 2858 442 2121 1179 1650 1650 3105 195 1650 3300 1650
-----
Capacity Analysis Module:
Vol/Sat:       0.01 0.03 0.03 0.08 0.08 0.09 0.05 0.09 0.09 0.02 0.25 0.00
Crit Moves:    ****          ****          ****          ****
*****

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Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.537	A	xxxxx 0.556	+ 0.020 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.371	A	xxxxx 0.402	+ 0.031 V/C
# 3 Marsh Creek Road/Main Street	B	10.5 0.427	B	11.4 0.468	+ 0.041 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.385	A	xxxxx 0.394	+ 0.009 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.556
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 57 7 205 6 5 11 10 1081 83 129 520 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 7 205 6 5 11 10 1081 83 129 520 10
Added Vol: 0 0 6 6 0 0 0 44 0 6 50 6
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 7 211 12 5 11 10 1125 83 135 570 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 57 7 211 12 5 11 10 1125 83 135 570 16
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 57 7 211 12 5 11 10 1125 83 135 570 16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 57 7 211 12 5 11 10 1125 83 135 570 16

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.43 0.18 0.39 1.00 1.86 0.14 1.00 1.95 0.05
Final Sat.: 1720 55 1665 737 307 676 1720 3204 236 1720 3346 94

Capacity Analysis Module:
Vol/Sat: 0.03 0.13 0.13 0.02 0.02 0.02 0.01 0.35 0.35 0.08 0.17 0.17
Crit Moves: ****

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.402
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Street Name: Marsh Creek Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
Base Vol: 305 0 15 0 0 0 0 0 916 286 12 334 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 305 0 15 0 0 0 0 0 916 286 12 334 0
Added Vol: 63 0 22 0 0 0 0 0 0 0 19 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 368 0 37 0 0 0 0 0 916 286 31 334 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume: 368 0 37 0 0 0 0 0 916 0 31 334 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 368 0 37 0 0 0 0 0 916 0 31 334 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj: 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume: 405 0 37 0 0 0 0 0 916 0 31 334 0

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00
Final Sat.: 3440 0 1720 0 0 0 0 3440 1720 1720 3440 0

Capacity Analysis Module:
Vol/Sat: 0.12 0.00 0.02 0.00 0.00 0.00 0.00 0.27 0.00 0.02 0.10 0.00
Crit Moves: **** **** ****

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.468
Loss Time (sec): 0 Average Delay (sec/veh): 11.4
Optimal Cycle: 0 Level Of Service: B

Street Name: Marsh Creek Road Main Street
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 0 0 0 1 0 1 0 0 0 0 0

Volume Module:
Base Vol: 9 253 0 0 0 308 11 48 0 28 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 9 253 0 0 308 11 48 0 28 0 0 0
Added Vol: 23 16 0 0 3 17 69 0 26 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 32 269 0 0 311 28 117 0 54 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 32 269 0 0 311 0 117 0 54 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 32 269 0 0 311 0 117 0 54 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 32 269 0 0 311 0 117 0 54 0 0 0

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 605 664 0 0 665 756 527 0 636 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.05 0.40 xxxx xxxx 0.47 0.00 0.22 xxxx 0.08 xxxx xxxx xxxx
Crit Moves: **** **** ****
Delay/Veh: 8.8 11.5 0.0 0.0 12.4 0.0 10.8 0.0 8.4 0.0 0.0 0.0
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.8 11.5 0.0 0.0 12.4 0.0 10.8 0.0 8.4 0.0 0.0 0.0
LOS by Move: A B * * B * B * A * * *
ApproachDel: 11.2 12.4 10.1 xxxxxx
Delay Adj: 1.00 1.00 1.00 xxxxxx
ApprAdjDel: 11.2 12.4 10.1 xxxxxx
LOS by Appr: B B B *
AllWayAvgQ: 0.1 0.6 0.0 0.0 0.8 0.0 0.2 0.0 0.1 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)
*****
Intersection #4 Oakhurst Drive/Clayton Road
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.394
Loss Time (sec):   0          Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    38          Level Of Service:         A
*****
Street Name:      Oakhurst Drive          Clayton Road
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:         L - T - R          L - T - R          L - T - R          L - T - R
-----
Control:          Protected          Protected          Protected          Protected
Rights:           Include          Include          Include          Ignore
Min. Green:       0 0 0          0 0 0          0 0 0          0 0 0
Y+R:              4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:            1 0 1 1 0        1 1 0 0 1        1 0 1 1 0        1 0 2 0 1
-----
Volume Module:
Base Vol:         30 54 24          200 106          61 78 807          25 17 253 107
Growth Adj:       1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00
Initial Bse:      30 54 24          200 106          61 78 807          25 17 253 107
Added Vol:        0 6 4            0 5 12           13 9 0            3 8 0
PasserByVol:     0 0 0            0 0 0            0 0 0            0 0 0
Initial Fut:      30 60 28          200 111          73 91 816          25 20 261 107
User Adj:         1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 0.00
PHF Adj:          1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 0.00
PHF Volume:       30 60 28          200 111          73 91 816          25 20 261 0
Reduct Vol:       0 0 0            0 0 0            0 0 0            0 0 0
Reduced Vol:     30 60 28          200 111          73 91 816          25 20 261 0
PCE Adj:          1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 0.00
MLF Adj:          1.00 1.00 1.00    1.10 1.00 1.00    1.00 1.00 1.00    1.00 1.00 0.00
FinalVolume:     30 60 28          220 111          73 91 816          25 20 261 0
-----
Saturation Flow Module:
Sat/Lane:         1650 1650 1650    1650 1650 1650    1650 1650 1650    1650 1650 1650
Adjustment:       1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00    1.00 1.00 1.00
Lanes:            1.00 1.36 0.64      1.33 0.67 1.00    1.00 1.94 0.06      1.00 2.00 1.00
Final Sat.:       1650 2250 1050    2193 1107 1650    1650 3202          98 1650 3300 1650
-----
Capacity Analysis Module:
Vol/Sat:          0.02 0.03 0.03    0.10 0.10 0.04    0.06 0.25 0.25    0.01 0.08 0.00
Crit Moves:       ****          ****          ****          ****
*****

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Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.213
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road (North/South Bound) and Clayton Road (East/West Bound).

Table with columns for Volume Module metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves for Capacity Analysis Module.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.395
Loss Time (sec): 0 Average Delay (sec/veh): 10.2
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road (North/South Bound) and Main Street (East/West Bound).

Table with columns for Volume Module metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves for Capacity Analysis Module.

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)
*****
Intersection #4 Oakhurst Drive/Clayton Road
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.179
Loss Time (sec):   0          Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    28          Level Of Service:         A
*****
Street Name:      Oakhurst Drive          Clayton Road
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:         Protected          Protected          Protected          Protected
Rights:          Include          Include          Include          Ignore
Min. Green:      0 0 0          0 0 0          0 0 0          0 0 0
Y+R:            4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:          1 0 1 1 0        1 1 0 0 1        1 0 1 1 0        1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:        23 32 6          86 45 53          52 200 11          19 238 85
Growth Adj:     1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Initial Bse:    23 32 6          86 45 53          52 200 11          19 238 85
Added Vol:      0 8 5          0 8 19          19 12 0          5 12 0
PasserByVol:   0 0 0          0 0 0          0 0 0          0 0 0
Initial Fut:    23 40 11        86 53 72          71 212 11          24 250 85
User Adj:       1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00
PHF Adj:        1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00
PHF Volume:     23 40 11        86 53 72          71 212 11          24 250 0
Reduct Vol:     0 0 0          0 0 0          0 0 0          0 0 0
Reduced Vol:    23 40 11        86 53 72          71 212 11          24 250 0
PCE Adj:        1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00
MLF Adj:        1.00 1.00 1.00      1.10 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00
FinalVolume:    23 40 11        95 53 72          71 212 11          24 250 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:       1650 1650 1650      1650 1650 1650      1650 1650 1650      1650 1650 1650
Adjustment:     1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Lanes:          1.00 1.57 0.43      1.28 0.72 1.00      1.00 1.90 0.10      1.00 2.00 1.00
Final Sat.:    1650 2588 712      2115 1185 1650      1650 3137 163      1650 3300 1650
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:        0.01 0.02 0.02      0.04 0.04 0.04      0.04 0.07 0.07      0.01 0.08 0.00
Crit Moves:     ****          ****          ****          ****
*****

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Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.447	A	xxxxx 0.453	+ 0.006 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.445	A	xxxxx 0.454	+ 0.009 V/C
# 3 Marsh Creek Road/Main Street	B	12.5 0.600	B	13.1 0.630	+ 0.030 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.401	A	xxxxx 0.408	+ 0.007 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.453
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 139 2 66 10 15 21 7 325 66 221 1237 8
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 139 2 66 10 15 21 7 325 66 221 1237 8
Added Vol: 0 0 7 3 0 0 0 25 0 7 18 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 139 2 73 13 15 21 7 350 66 228 1255 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 2 73 13 15 21 7 350 66 228 1255 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 2 73 13 15 21 7 350 66 228 1255 11
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 139 2 73 13 15 21 7 350 66 228 1255 11

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.26 0.31 0.43 1.00 1.68 0.32 1.00 1.98 0.02
Final Sat.: 1720 46 1674 456 527 737 1720 2894 546 1720 3410 30

Capacity Analysis Module:
Vol/Sat: 0.08 0.04 0.04 0.03 0.03 0.03 0.00 0.12 0.12 0.13 0.37 0.37
Crit Moves: **** **** ****

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.454
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: A

Street Name:	Marsh Creek Road			Clayton Road									
	North Bound		South Bound	East Bound		West Bound							
Approach:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected	Protected			Protected					
Rights:	Include			Include	Ignore			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	2	0	0	1	0	0	0	0	0	2	0	1	1

Volume Module:

Base Vol:	477	0	18	0	0	0	0	0	302	142	26	1006	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	0	18	0	0	0	0	0	302	142	26	1006	0
Added Vol:	28	0	8	0	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	505	0	26	0	0	0	0	0	302	142	37	1006	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
PHF Volume:	505	0	26	0	0	0	0	0	302	0	37	1006	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	505	0	26	0	0	0	0	0	302	0	37	1006	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
FinalVolume:	556	0	26	0	0	0	0	0	302	0	37	1006	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0	

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.02	0.29	0.00
Crit Moves:	****			****			****			****		

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630
 Loss Time (sec): 0 Average Delay (sec/veh): 13.1
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road			Main Street								
	North Bound		South Bound	East Bound		West Bound						
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign	Stop Sign			Stop Sign				
Rights:	Include			Ignore	Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1	1	0	0	1	0	0
Lanes:	1	0	1	0	0	1	1	0	0	1	0	0

Volume Module:

Base Vol:	26	437	0	0	136	32	61	0	38	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	437	0	0	136	32	61	0	38	0	0	0
Added Vol:	13	11	0	0	2	9	24	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	448	0	0	138	41	85	0	47	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	448	0	0	138	0	85	0	47	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	448	0	0	138	0	85	0	47	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	448	0	0	138	0	85	0	47	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	641	711	0	0	659	752	524	0	631	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.63	xxxx	xxxx	0.21	0.00	0.16	xxxx	0.07	xxxx	xxxx	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	8.6	15.7	0.0	0.0	9.4	0.0	10.3	0.0	8.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	15.7	0.0	0.0	9.4	0.0	10.3	0.0	8.3	0.0	0.0	0.0
LOS by Move:	A	C	*	*	A	*	B	*	A	*	*	*
ApproachDel:	15.1			9.4			9.6			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxxx		
ApprAdjDel:	15.1			9.4			9.6			xxxxxx		
LOS by Appr:	C			A			A			*		
AllWayAvgQ:	0.1	1.6	0.0	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

 Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.408
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level Of Service: A

Street Name:	Oakhurst Drive				Clayton Road									
Approach:	North Bound		South Bound		East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Protected		Protected		Protected		Protected							
Rights:	Include		Include		Include		Ignore							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	1	0	1	1	0	1	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	21	95	14	152	90	147	73	283	18	23	811	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	95	14	152	90	147	73	283	18	23	811	237
Added Vol:	0	2	1	3	3	6	5	3	0	2	4	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	97	15	155	93	153	78	286	18	25	815	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	21	97	15	155	93	153	78	286	18	25	815	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	97	15	155	93	153	78	286	18	25	815	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	21	97	15	171	93	153	78	286	18	25	815	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.29	0.71	1.00	1.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1650	2858	442	2135	1165	1650	1650	3105	195	1650	3300	1650

Capacity Analysis Module:

Vol/Sat:	0.01	0.03	0.03	0.08	0.08	0.09	0.05	0.09	0.09	0.02	0.25	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.537	A	xxxxx 0.570	+ 0.034 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.371	A	xxxxx 0.406	+ 0.035 V/C
# 3 Marsh Creek Road/Main Street	B	10.5 0.427	B	11.6 0.469	+ 0.042 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.385	A	xxxxx 0.394	+ 0.009 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.570
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 1 0

Volume Module:
Base Vol: 57 7 205 6 5 11 10 1081 83 129 520 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 7 205 6 5 11 10 1081 83 129 520 10
Added Vol: 0 0 18 6 0 0 0 46 0 17 52 7
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 7 223 12 5 11 10 1127 83 146 572 17
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 57 7 223 12 5 11 10 1127 83 146 572 17
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 57 7 223 12 5 11 10 1127 83 146 572 17
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 57 7 223 12 5 11 10 1127 83 146 572 17

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.03 0.97 0.43 0.18 0.39 1.00 1.86 0.14 1.00 1.94 0.06
Final Sat.: 1720 52 1668 737 307 676 1720 3204 236 1720 3341 99

Capacity Analysis Module:
Vol/Sat: 0.03 0.13 0.13 0.02 0.02 0.02 0.01 0.35 0.35 0.08 0.17 0.17
Crit Moves: ****

Level of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.406
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Street Name:	Marsh Creek Road				Clayton Road													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	T	R	L	T	R	L	T	R									
Control:	Protected		Protected		Protected		Protected											
Rights:	Include		Include		Ignore		Include											
Min. Green:	0	0	0	0	0	0	0	0	0									
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0									
Lanes:	2	0	0	1	0	0	0	0	0	0	2	0	1	1	0	2	0	0

Volume Module:

Base Vol:	305	0	15	0	0	0	0	916	286	12	334	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	305	0	15	0	0	0	0	916	286	12	334	0
Added Vol:	76	0	22	0	0	0	0	0	0	19	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	381	0	37	0	0	0	0	916	286	31	334	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	381	0	37	0	0	0	0	916	0	31	334	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	381	0	37	0	0	0	0	916	0	31	334	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	419	0	37	0	0	0	0	916	0	31	334	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	3440	0	1720	0	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.12	0.00	0.02	0.00	0.00	0.00	0.00	0.27	0.00	0.02	0.10	0.00
Crit Moves:	****						****			****		

 Note: Queue reported is the number of cars per lane.

Level of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
 Loss Time (sec): 0 Average Delay (sec/veh): 11.6
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Marsh Creek Road				Main Street				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Stop Sign		Stop Sign		Stop Sign		Stop Sign		
Rights:	Include		Ignore		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Y+R:	1	0	1	0	0	1	0	0	1
Lanes:	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	9	253	0	0	308	11	48	0	28	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	253	0	0	308	11	48	0	28	0	0	0
Added Vol:	23	29	0	0	3	17	69	0	26	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	282	0	0	311	28	117	0	54	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	282	0	0	311	0	117	0	54	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	282	0	0	311	0	117	0	54	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	282	0	0	311	0	117	0	54	0	0	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	604	664	0	0	663	754	523	0	631	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.42	xxxx	xxxx	0.47	0.00	0.22	xxxx	0.09	xxxx	xxxx	xxxx
Crit Moves:	****				****		****					
Delay/Veh:	8.8	11.7	0.0	0.0	12.5	0.0	10.9	0.0	8.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	11.7	0.0	0.0	12.5	0.0	10.9	0.0	8.4	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	*	B	*	A	*	*	*
ApproachDel:	11.5				12.5		10.1		xxxxxx			
Delay Adj:	1.00				1.00		1.00		xxxxxx			
ApprAdjDel:	11.5				12.5		10.1		xxxxxx			
LOS by Appr:	B				B		B		*			
AllWayAvgQ:	0.1	0.7	0.0	0.0	0.8	0.0	0.2	0.0	0.1	0.0	0.0	0.0

 Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
 Circular 212 Operations Method (Future Volume Alternative)

 Intersection #4 Oakhurst Drive/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.394
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: A

Street Name:	Oakhurst Drive				Clayton Road							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected		Protected		Protected		Protected		Protected		Protected	
Rights:	Include		Include		Include		Include		Ignore		Ignore	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	30	54	24	200	106	61	78	807	25	17	253	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	54	24	200	106	61	78	807	25	17	253	107
Added Vol:	0	6	4	1	5	12	13	9	0	3	8	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	60	28	201	111	73	91	816	25	20	261	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	60	28	201	111	73	91	816	25	20	261	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	60	28	201	111	73	91	816	25	20	261	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	60	28	221	111	73	91	816	25	20	261	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.36	0.64	1.33	0.67	1.00	1.00	1.94	0.06	1.00	2.00	1.00
Final Sat.:	1650	2250	1050	2197	1103	1650	1650	3202	98	1650	3300	1650

Capacity Analysis Module:

Vol/Sat:	0.02	0.03	0.03	0.10	0.10	0.04	0.06	0.25	0.25	0.01	0.08	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Mitchell Canyon Road/Clayton R	A	xxxxx 0.193	A	xxxxx 0.236	+ 0.043 V/C
# 2 Marsh Creek Road/Clayton Road	A	xxxxx 0.180	A	xxxxx 0.217	+ 0.038 V/C
# 3 Marsh Creek Road/Main Street	A	9.2 0.328	B	10.3 0.412	+ 0.084 V/C
# 4 Oakhurst Drive/Clayton Road	A	xxxxx 0.157	A	xxxxx 0.180	+ 0.022 V/C

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #1 Mitchell Canyon Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.236
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Street Name: Mitchell Canyon Road Clayton Road

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	1	1	0	1

Volume Module:

Base Vol:	56	3	54	12	4	12	7	368	40	71	509	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	3	54	12	4	12	7	368	40	71	509	7
Added Vol:	0	0	19	10	0	0	0	72	0	19	72	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	3	73	22	4	12	7	440	40	90	581	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	3	73	22	4	12	7	440	40	90	581	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	3	73	22	4	12	7	440	40	90	581	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	3	73	22	4	12	7	440	40	90	581	17

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.04	0.96	0.58	0.10	0.32	1.00	1.83	0.17	1.00	1.94	0.06
Final Sat.:	1720	68	1652	996	181	543	1720	3153	287	1720	3342	98

Capacity Analysis Module:

Vol/Sat:	0.03	0.04	0.04	0.02	0.02	0.02	0.00	0.14	0.14	0.05	0.17	0.17
Crit Moves:	***			***			***			***		

Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)

Intersection #2 Marsh Creek Road/Clayton Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.217
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road (North/South Bound) and Clayton Road (East/West Bound).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ for Capacity Analysis Module.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Marsh Creek Road/Main Street

Cycle (sec): 100 Critical Vol./Cap.(X): 0.412
Loss Time (sec): 0 Average Delay (sec/veh): 10.3
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes, and Volume Module. Rows include Marsh Creek Road (North/South Bound) and Main Street (East/West Bound).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ for Capacity Analysis Module.

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Level Of Service Computation Report
Circular 212 Operations Method (Future Volume Alternative)
*****
Intersection #4 Oakhurst Drive/Clayton Road
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.180
Loss Time (sec):   0           Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    28           Level Of Service:         A
*****
Street Name:      Oakhurst Drive          Clayton Road
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R          L - T - R          L - T - R          L - T - R
-----
Control:         Protected          Protected          Protected          Protected
Rights:          Include          Include          Include          Ignore
Min. Green:      0 0 0          0 0 0          0 0 0          0 0 0
Y+R:            4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0
Lanes:          1 0 1 1 0      1 1 0 0 1      1 0 1 1 0      1 0 2 0 1
-----
Volume Module:
Base Vol:        23 32 6          86 45 53 200    11 19 238 85
Growth Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    23 32 6          86 45 53 200    11 19 238 85
Added Vol:      0 8 5          2 8 19 19 12 0 5 12 2
PasserByVol:   0 0 0          0 0 0 0 0 0 0 0 0 0
Initial Fut:    23 40 11     88 53 72 71 212 11 24 250 87
User Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume:    23 40 11     88 53 72 71 212 11 24 250 0
Reduct Vol:    0 0 0          0 0 0 0 0 0 0 0 0 0
Reduced Vol:   23 40 11     88 53 72 71 212 11 24 250 0
PCE Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj:       1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume:   23 40 11     97 53 72 71 212 11 24 250 0
-----
Saturation Flow Module:
Sat/Lane:       1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:         1.00 1.57 0.43 1.29 0.71 1.00 1.00 1.90 0.10 1.00 2.00 1.00
Final Sat.:    1650 2588 712 2132 1168 1650 1650 3137 163 1650 3300 1650
-----
Capacity Analysis Module:
Vol/Sat:       0.01 0.02 0.02 0.05 0.05 0.04 0.04 0.07 0.07 0.01 0.08 0.00
Crit Moves:    ****          ****          ****          ****
*****

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