

Appendix J
Traffic Impact Study and Related Correspondence



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION FOUR
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KEVIN C. BUSH, P.E.
REGIONAL DIRECTOR

JOAN MCDONALD
COMMISSIONER

April 16, 2014

Mr. Frank Dolan
Bergmann Associates
28 East Main Street
200 First Federal Plaza
Rochester, NY 14614-1909

APR 21 2014

Re: Proposed Fishers Ridge Lifestyle Center
Route 96 at Route 251
Town of Victor, Ontario County

Frank
Dear Mr. ~~Dolan~~:

We have completed our review of the February, 2013 Traffic Impact Study for the proposed Lifestyle Center development. This project proposes two driveways on Route 96. The first is located directly across from Route 251 and the second driveway is located approximately 1100 feet north of Route 251.

Through our review we noted that at full development of the Fishers Ridge development, certain intersections will exceed capacity with little to no mitigation available to offset traffic impacts. Traffic delays and queue lengths will be significant and occur for long periods of time during the weekday PM and Saturday peak hours. Once an intersection operation is at or above capacity, there are no real ways to mitigate traffic impacts other than physical geometric improvements and/or a reduction in traffic volumes at the intersection. The result would be to accept a lower level of service with corresponding longer travel times and delays on the corridor and at intersections. We have identified the following comments at each intersection discussed in this study.

Route 96 and Main Street Fishers: Through our review of the Pinnacle Athletic Campus Traffic Impact Study, we noted that this intersection will operate at or near its capacity as the Pinnacle Athletic Campus approaches full development. This will result in failing levels-of-service and excessive queues on and approaching Route 96 during background conditions. With full development of Fishers Ridge, this intersection will operate at approximately 15-20% over its capacity during the weekday PM peak hour with limited mitigating measures available to

reduce/offset traffic impacts. Once an intersection reaches or exceeds capacity, the recommended optimization of the intersection operation and/or synchronizing traffic signals will not have an appreciable impact on intersection delays and queue lengths.

NYS Thruway: The report suggests that the Thruway is an alternate route to Route 96 congestion. The limiting point is the toll booths which currently experience back-ups on I-490 at about the same times as Route 96 congestion. Because of this, the recommendation to divert Route 96 traffic to the Thruway is not expected to provide the desired relief.

The report also suggests a possible solution would be to install real time traffic message signs on I-490 approaching the NYS Route 96 exit and on Route 332 approaching NYS Route 96. These signs would be based on real time traffic delay measured in the Village of Victor which would display a simple message indication to drivers of the congestion conditions in the form of colors. The color concept would present challenges due to the needs of color blind travelers. An alternative approach would be to develop a vehicle detection system that is part of an advanced traffic management system that would then post travel times on electronic message boards at key diversion points. This would match the direction the department is heading but has not yet reached on its primary expressway routes. One of the keys to the success of such a system is that alternate routes need to be available which have the excess capacity to give drivers a viable alternative when congestion is identified. Another important factor is that as of right now the Regional Traffic Operations Center is not staffed to real time monitor this corridor. The department is still developing the ability to automate the travel time messages. So while this alternative may be feasible in the future, there would be ongoing costs incurred to operate it as well as the initial costs to install such a system along the Route 96 corridor and along each of identified diversion routes.

Route 96 and Omnitech driveway: Left turn vehicles approaching Route 96 will experience significant delays throughout each peak period. As traffic volumes on and approaching Route 96 increase, a three color traffic signal may be warranted at the Omnitech driveway. Additionally, a three color traffic signal at this location may divert traffic from the Route 96 and Main Street Fishers intersection, which is discussed above. However, it is doubtful that this would appreciably reduce existing and future traffic impacts at the Route 96 and Main Street Fishers intersection.

Route 96 and Rowley Road: Left turn vehicles approaching Route 96 will experience significant delays throughout each peak period as traffic volumes on Route 96 increase. It is doubtful that a three color traffic signal would be warranted unless development and traffic volumes on Rowley Road significantly increase.

Route 96 from the Omnitech driveway to Lane Road: We agree with the recommendation to widen Route 96, to provide a 5 lane section from approximately the Omnitech driveway to Lane Road. This will increase the capacity on this section of Route 96 and facilitate future synchronization of traffic signals.

Route 96 at North driveway: We agree with providing two northbound and two southbound through lanes with dual southbound left turn lanes on Route 96. The site driveway should have

one exiting left turn lane, one exiting right turn lane and two entering lanes to receive the dual southbound left turn movements. We also agree that this intersection will warrant a three color traffic signal with a protected only southbound left turn phase prior to full development of this project. With full development of Fishers Ridge the northbound through movement is expected to be very near capacity with queue lengths extending into and beyond the Route 96 and Route 251 intersection during the Saturday peak period. Therefore to offset this impact a northbound right turn lane on Route 96 at the site driveway is also justified.

Route 96 and Route 251/South driveway: We agree with providing two northbound and two southbound through lanes, dual southbound left turn lanes, a southbound right turn lane, a northbound left turn lane and a northbound right turn lane on Route 96. We also agree that the site driveway and Route 251 should each have dual left turn lanes, a through lane, and a right turn lane approaching Route 96. A three color traffic signal with a protected only left turn phases for each approach will be warranted prior to full development of this project. With full development of Fishers Ridge the northbound and southbound through queue lengths are expected to extend into and beyond adjacent intersections during peak periods. This will disrupt the operation of adjacent intersections and lead to a breakdown of corridor progression.

Route 96 and Lane Road: We agree with providing two northbound and two southbound through lanes with a dedicated southbound left turn lane on Route 96. Lane Road should have two lanes approaching Route 96, a left turn lane and a right turn lane. As background and development traffic volumes increase, delays for left turn vehicles on Lane Road approaching Route 96 and southbound left turn vehicles on Route 96 will significantly increase. Due to these significant delays and increasing traffic volumes, a three color traffic signal may be warranted at this intersection.

Route 96 at High Street (Village of Victor): During existing peak periods this intersection is operating at or near capacity. Interruptions in traffic flow regularly occur when a pedestrian phase is actuated (creating all-red indications for motor vehicles) or when school buses (and other vehicular traffic) arrive at the intersection in a non uniform manner. With the difficulties in providing for the Route 96 northbound and southbound progression of traffic, due to closely spaced traffic signals in the Village of Victor, traffic congestion and delays significantly increase. As background traffic volumes increase and Fishers Ridge nears full development, this intersection will operate well above its capacity. The northbound and southbound through movement will be approximately 40%-50% above capacity during weekday PM and Saturday peak periods. As stated previously, the proposal to divert traffic from Route 96 to the Thruway will have little impact on reducing traffic volumes during PM peak hours since the Route I490 toll booths approaching the Thruway already operate at capacity with long queue lengths during existing peak hours. We can only conclude that this level of traffic generation will result in significant delays, queue lengths, and recovery times from gridlock conditions on Route 96 and on Route I490 approaching the Thruway.

Route 96 at School Street and Route 96 at Maple Avenue: Each of these intersections will also operate well above capacity during the weekday AM, weekday PM and Saturday peak hours with year 2022 full development traffic volumes. These intersections will operate similarly to

Mr. Frank Dolan
April 16, 2014
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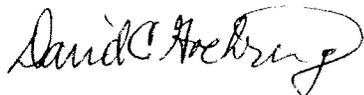
the Route 96 and High Street intersection with significant delays and queue lengths on and approaching Route 96, with no traffic mitigation available to offset/reduce traffic impacts.

Route 96 and Lynaugh Road: Left and right turn vehicles approaching Route 96 will experience significant delays throughout each peak hour as traffic volumes on Route 96 increase. A second lane on Lynaugh Road approaching Route 96 will be warranted and will reduce approach delays and traffic impacts, however as traffic volumes on and approaching Route 96 increase other measures need to be considered. The department is currently reviewing existing traffic conditions at this intersection and will have further comment on possible measures upon completion of that review. The Route 96 and Church Street intersection was not included in this study, however similar comments made at the Route 96 and Lynaugh Road intersection also apply here.

In conclusion, the Route 96 and Main Street Fishers intersection along with the traffic signals on Route 96 in the Village of Victor will approach and exceed capacity as background traffic volumes increase, without the proposed development in place. This will occur during the non-holiday season with the retiming of traffic signals and the optimal progression of traffic on Route 96 as recommended in the study. Given the complexity of this project, we are available to meet to discuss as necessary.

If there are any questions regarding our review please contact Mr. Robert Duennebacke at 272-3475.

Very truly yours,



David C. Goehring, P.E.
Regional Traffic Engineer

- c: J. Logan, Town of Victor Planning Board
M. Chaides, Village of Victor Planning Board
M. Rudzinski, Ontario County Planning Department
T. Pericak, New York State Thruway Authority, Buffalo Division

Technical Memorandum

Re: Fishers Ridge Phase I Build Traffic Analysis

Date: March 25, 2013

The objective of this technical memorandum is to present the recommended Fishers Ridge Phase One Build traffic mitigation at the driveway (Full Build North Driveway Location). Phase I includes the anchor tenant, 200 room hotel, 214 apartments and 36 town homes with a total trips generated of 624 and 1203 during the weekday PM and Saturday Mid-day (MD) peak hours respectively.

A summary table of intersection Level of Service (LOS) is provided to show the comparison of Phase I Build without mitigation on Route 96 to feasible mitigation scenarios. The LOS shown is for the peak hour (worst case governing required mitigation) which occurs from 12:00 PM to 1:00 PM on Saturday.

LEVEL OF SERVICE RESULTS

INTERSECTION OF ROUTE 96 AT THE PHASE ONE DRIVEWAY			MID-DAY PEAK HOUR					
			Phase I Build with 3 Lane Section on Route 96		Phase I Build with double left turn lanes on RT. 96		Phase I Build with 5 Lane Section on Route 96	
			LOS	Delay	LOS	Delay	LOS	Delay
Route 96 at Proposed North Driveway	WB	L	F	133				
		R	B	13				
		Approach	E	78				
	NB	TR	F	204				
Signalized with a 3 lane section on Route 96	SB	L	F	109				
		T	B	14				
		Approach	D	36				
	Overall		F	112				
Route 96 at Proposed North Driveway	WB	L			F	133		
		R			B	19		
		Approach			F	81		
	NB	TR			F	157		
Signalized with double left turn lanes on Route 96	SB	L L			F	215		
		T			B	14		
		Approach			E	60		
	Overall				F	103		
Route 96 at Proposed North Driveway	WB	L					D	53
		R					A	8
		Approach					C	32
	NB	T TR					C	30
Signalized with a 5 lane section on Route 96	SB	L					D	53
		T T					A	9
		Approach					B	19
	Overall						C	26



RECOMMENDED MITIGATION:

Route 96 at Fishers Ridge Phase I Entrance/Exit (Full Build North Driveway)

Signalize the intersection with a multi-phase traffic signal. Coordinate the new signal with the signal at Victor-Mendon Road (Route 251). One exclusive southbound left turn lane is recommended with two through lanes in each direction at the driveway with a protected and then permissive left turn phase (green left turn arrow indication followed by a green circle for the left turn). On the Fishers Ridge driveway exit: two exit lanes are recommended, one left turn lane and one right turn lane. On the Fishers Ridge driveway entrance: one enter lane is recommended to accept the single left turn lane from Route 96. Widening of Route 96 is also recommended at this intersection as described above to accommodate two through lanes in each direction, two northbound and two southbound.

Note that one exclusive southbound left turn lane is recommended for Phase I Build-out and double southbound left turn lanes are recommended for Full Build-out which will require two enter lanes on the driveway for Full Build.

Route 96 at Route 251 (Victor-Mendon Road)

Signal retiming is recommended to achieve LOS D or better for Phase I Build-out conditions with one driveway (Full Build-out North Driveway).

LEVEL OF SERVICE RESULTS

INTERSECTION OF ROUTE 96 AT ROUTE 251 (VICTOR- MENDON ROAD)			PM PEAK HOUR		MID-DAY PEAK	
			Phase I Build		Phase I Build	
			LOS	Delay	LOS	Delay
Route 96 at Route 251 (Victor-Mendon Road) Signalized	EB	L	D	55	D	54
		R	B	17	B	14
		Approach	D	38	D	36
Signalized	NB	L	D	54	C	29
		T	B	14	B	13
		Approach	B	19	B	14
Signalized	SB	T	B	15	B	15
		R	A	1	A	1
		Approach	B	12	B	13
Overall			B	19	B	16

FISHERS RIDGE

Phase I Buildout

LAND USE (ITE CODE)	SIZE	TRIP TYPE	AM PEAK HOUR	PM PEAK HOUR	MIDDAY PEAK HOUR
			TRIPS	TRIPS	TRIPS
Sports Retail*	130,129 SF	Total	61	433	1,041
		Shared within Site	6	43	73
		External to Site	55	390	968
Shopping Center (820)	0,000 SF	Total	0	0	0
		Shared within Site	0	0	0
		External to Site	0	0	0
Supermarket (850)	0,000 SF	Total	0	0	0
		Shared within Site	0	0	0
		External to Site	0	0	0
Office (710)	0,000 SF	Total	0	0	0
		Shared within Site	0	0	0
		External to Site	0	0	0
Hotel (310)	200 Units	Total	112	118	144
		Shared within Site	0	18	43
		External to Site	112	100	101
Apartments (220)	214 Units	Total	109	133	111
		Shared within Site	5	21	20
		External to Site	104	112	91
Townhouses (231)	36 Units	Total	23	26	53
		Shared within Site	1	4	10
		External to Site	22	22	43
TOTAL		Total	305	710	1,349
		Shared within Site	12	86	146
		External to Site	293	624	1,203

*Trip generation based on rates for similar sports retail stores
(XXX) ITE Trip Generation Land Use Codes

PASS-BY & NEW TRIPS DERIVATION

PASS-BY & NEW TRIPS DERIVATION

LAND USE TYPES & AREAS

TOTAL TRIP GENERATION

Sports Retail	
AM	
PM	
Sat MID	

TOTAL minus SHARED TRIPS		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
	55	
	390	
		968

PASS-BY TRIP PERCENTAGE		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
0		
	10	
		10

PASS-BY TRIPS		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
0		
	39	
		97

TOTAL NEW TRIPS		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
55		
	351	
		871

Sports Retail	
AM	
PM	
Sat MID	

Shopping Center	
AM	
PM	
Sat MID	

0		
	0	
		0

Figure 5.5		
0		
	25	
		25

0		
	0	
		0

0		
	0	
		0

Shopping Center	
AM	
PM	
Sat MID	

Supermarket	
AM	
PM	
Sat MID	

0		
	0	
		0

Figure 5.12		
10		
	25	
		25

0		
	0	
		0

0		
	0	
		0

Supermarket	
AM	
PM	
Sat MID	

Office	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Office	
AM	
PM	
Sat MID	

Hotel	
AM	
PM	
Sat MID	

112		
	100	
		101

0		
	0	
		0

0		
	0	
		0

112		
	100	
		101

Hotel	
AM	
PM	
Sat MID	

Apartments	
AM	
PM	
Sat MID	

104		
	112	
		91

0		
	0	
		0

0		
	0	
		0

104		
	112	
		91

Apartments	
AM	
PM	
Sat MID	

Townhouses	
AM	
PM	
Sat MID	

22		
	22	
		43

0		
	0	
		0

0		
	0	
		0

22		
	22	
		43

Townhouses	
AM	
PM	
Sat MID	

TOTAL TRIP GENERATION		
AM	305	
PM	710	
Sat MID	1,349	

293	624	1203
	2120	

0	39	97
	136	
0.0%	5.5%	7.2%
0.0%	6.3%	8.1%

0	39	97
	136	
0.0%	5.5%	7.2%
0.0%	6.3%	8.1%

293	585	1106
	1,984	
96.1%	82.4%	82.0%
100.0%	93.8%	91.9%

TOTAL NEW TRIPS	
AM	293
PM	585
Sat MID	1106

PERCENT of TOTAL
PERCENT of EXTERNAL

PASS-BY + DIVERTED TRIPS

PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
100%	100%	100%
0	39	
		97

DIVERTED TRIPS		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
0%	50%	50%
0	19	
		48

FINAL PASS-BY TRIPS		
PEAK PERIOD		
FRIDAY		SATURDAY
AM	PM	
100%	50%	50%
0	20	
		49

Sports Retail	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Shopping Center	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Supermarket	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Office	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Hotel	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Apartments	
AM	
PM	
Sat MID	

0		
	0	
		0

0		
	0	
		0

0		
	0	
		0

Townhouses	
AM	
PM	
Sat MID	

TOTAL TRIP GENERATION		
AM	305	
PM	710	
Sat MID	1,349	

0	39	97
0.0%	5.5%	7.2%

0	19	48
0.0%	2.7%	3.6%

0	20	49
0.0%	2.8%	3.6%

0 39 97

**Fishers Ridge
Phase I Buildout
ENTER / EXIT TRIP DISTRIBUTION**

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
Sports Retail	130,129 SF				IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
AM	55	0	0	55	61%	39%	0	0	0	0	34	21	34	21
PM	390	19	20	351	49%	51%	9	10	10	10	172	179	191	199
Sat MID	968	48	49	871	49%	51%	24	24	24	25	427	444	475	493

Shopping Center	0 SF				IN	OUT								
AM	0	0	0	0	61%	39%	0	0	0	0	0	0	0	0
PM	0	0	0	0	49%	51%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	49%	51%	0	0	0	0	0	0	0	0

Supermarket	0 SF				IN	OUT								
AM	0	0	0	0	61%	39%	0	0	0	0	0	0	0	0
PM	0	0	0	0	51%	49%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	51%	49%	0	0	0	0	0	0	0	0

Office	0 SF				IN	OUT								
AM	0	0	0	0	88%	12%	0	0	0	0	0	0	0	0
PM	0	0	0	0	17%	83%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	54%	46%	0	0	0	0	0	0	0	0

Hotel	200 Units				IN	OUT								
AM	112	0	0	112	61%	39%	0	0	0	0	68	44	68	44
PM	100	0	0	100	53%	47%	0	0	0	0	53	47	53	47
Sat MID	101	0	0	101	56%	44%	0	0	0	0	57	44	57	44

Apartments	214 Units				IN	OUT								
AM	104	0	0	104	20%	80%	0	0	0	0	21	83	21	83
PM	112	0	0	112	65%	35%	0	0	0	0	73	39	73	39
Sat MID	91	0	0	91	NA	NA	0	0	0	0	49	42	49	42

Townhouses	36 Units				IN	OUT								
AM	22	0	0	22	17%	83%	0	0	0	0	4	18	4	18
PM	22	0	0	22	67%	33%	0	0	0	0	15	7	15	7
Sat MID	43	0	0	43	54%	46%	0	0	0	0	23	20	23	20

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
Total					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
AM	293	0	0	293	43%	57%	0	0	0	0	127	166	127	166
PM	624	19	20	585	53%	47%	9	10	10	10	313	272	332	292
Sat MID	1,203	48	49	1,106	50%	50%	24	24	24	25	556	550	604	599

**Fishers Ridge
Phase I Buildout
ENTER / EXIT TRIP DISTRIBUTION**

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Sports Retail	130,129 SF													
AM	55	0	0	55	61%	39%	0	0	0	0	34	21	34	21
PM	390	19	20	351	49%	51%	9	10	10	10	172	179	191	199
Sat MID	968	48	49	871	49%	51%	24	24	24	25	427	444	475	493

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Shopping Center	0 SF													
AM	0	0	0	0	61%	39%	0	0	0	0	0	0	0	0
PM	0	0	0	0	49%	51%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	49%	51%	0	0	0	0	0	0	0	0

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Supermarket	0 SF													
AM	0	0	0	0	61%	39%	0	0	0	0	0	0	0	0
PM	0	0	0	0	51%	49%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	51%	49%	0	0	0	0	0	0	0	0

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Office	0 SF													
AM	0	0	0	0	88%	12%	0	0	0	0	0	0	0	0
PM	0	0	0	0	17%	83%	0	0	0	0	0	0	0	0
Sat MID	0	0	0	0	54%	46%	0	0	0	0	0	0	0	0

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Hotel	200 Units													
AM	112	0	0	112	61%	39%	0	0	0	0	68	44	68	44
PM	100	0	0	100	53%	47%	0	0	0	0	53	47	53	47
Sat MID	101	0	0	101	56%	44%	0	0	0	0	57	44	57	44

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Apartments	214 Units													
AM	104	0	0	104	20%	80%	0	0	0	0	21	83	21	83
PM	112	0	0	112	65%	35%	0	0	0	0	73	39	73	39
Sat MID	91	0	0	91	NA	NA	0	0	0	0	49	42	49	42

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Townhouses	36 Units													
AM	22	0	0	22	17%	83%	0	0	0	0	4	18	4	18
PM	22	0	0	22	67%	33%	0	0	0	0	15	7	15	7
Sat MID	43	0	0	43	54%	46%	0	0	0	0	23	20	23	20

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Total														
AM	293	0	0	293	43%	57%	0	0	0	0	127	166	127	166
PM	624	19	20	585	53%	47%	9	10	10	10	313	272	332	292
Sat MID	1,203	48	49	1,106	50%	50%	24	24	24	25	556	550	604	599

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Total														
AM														
PM							6	6	5	5	141	122		
Sat MID							14	14	12	12	250	248		
							to/from north (62%)[59%]		to/from north 50%		to/from north 45%			

	External Trips	Diverted	Pass-By Trips	Primary Trips	Percent In/Out		Diverted		Pass-By Trips		Primary Trips		External Trips	
					IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Total														
AM														
PM							3	4	5	5	172	150		
Sat MID							10	10	12	13	306	303		
							to/from south (38%)[41%]		to/from south 50%		to/from south 55%			

phase 1- 96@driveway PM PEAK

	2011 ex	2012 nb	2015 nb	2022 nb	diverted	passby	primary	build
wb left	0	0	0	0	4	5	150	159
wb right	0	0	0	0	6	5	122	133
nb thru	880	915	971	1115	0	-5	0	966
nb right	0	0	0	0	3	5	172	180
sb left	0	0	0	0	6	5	141	152
sb thru	1123	1168	1239	1424	0	-5	0	1234

MD PEAK

	2011 ex	2012 nb	2015 nb	2022 nb	diverted	passby	primary	build
wb left	0	0	0	0	10	13	303	326
wb right	0	0	0	0	14	12	248	274
nb thru	839	872	925	1063	0	-12	0	913
nb right	0	0	0	0	10	12	306	328
sb left	0	0	0	0	14	12	250	276
sb thru	868	902	957	1100	0	-12	0	945

Lanes, Volumes, Timings
40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
3/20/2013

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↗		↘	↙
Volume (vph)	326	274	913	328	276	945
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	500	
Storage Lanes	1	1		0	1	
Taper Length (ft)	75	75		75	75	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.850	0.964			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1796	0	1770	1863
Flt Permitted	0.950				0.074	
Satd. Flow (perm)	1770	1583	1796	0	138	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		261	32			
Link Speed (mph)	30		50			50
Link Distance (ft)	461		1204			967
Travel Time (s)	10.5		16.4			13.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	362	304	1014	364	307	1050
Shared Lane Traffic (%)						
Lane Group Flow (vph)	362	304	1378	0	307	1050
Turn Type		Perm			pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	21.0	21.0	21.0		10.0	21.0
Total Split (s)	21.0	21.0	54.0	0.0	15.0	69.0
Total Split (%)	23.3%	23.3%	60.0%	0.0%	16.7%	76.7%
Maximum Green (s)	16.0	16.0	49.0		10.0	64.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Min		None	Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Dont Walk (s)	9.0	9.0	9.0			9.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	16.0	16.0	49.0		64.0	64.0
Actuated g/C Ratio	0.18	0.18	0.54		0.71	0.71
v/c Ratio	1.15	0.61	1.39		1.10	0.79
Control Delay	133.3	12.9	203.7		108.7	14.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	133.3	12.9	203.7		108.7	14.3
LOS	F	B	F		F	B

Lanes, Volumes, Timings
 40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
 3/20/2013



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Approach Delay	78.4		203.7			35.7
Approach LOS	E		F			D
Queue Length 50th (ft)	~245	21	~1055		~149	335
Queue Length 95th (ft)	#414	100	#1312		#312	527
Internal Link Dist (ft)	381		1124			887
Turn Bay Length (ft)					500	
Base Capacity (vph)	315	496	992		279	1325
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	1.15	0.61	1.39		1.10	0.79

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.39
 Intersection Signal Delay: 112.1
 Intersection LOS: F
 Intersection Capacity Utilization 113.9%
 ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 40: Fishers Ridge Driveway & Rte 96



Lanes, Volumes, Timings
40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
3/25/2013

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↗		↘	↙
Volume (vph)	326	274	913	328	276	945
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	500	
Storage Lanes	1	1		0	2	
Taper Length (ft)	75	75		75	75	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Fr't		0.850	0.964			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1796	0	3433	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1796	0	3433	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		211	35			
Link Speed (mph)	30		50			50
Link Distance (ft)	461		1204			967
Travel Time (s)	10.5		16.4			13.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	362	304	1014	364	307	1050
Shared Lane Traffic (%)						
Lane Group Flow (vph)	362	304	1378	0	307	1050
Turn Type		Perm			Prot	
Protected Phases	8		2		1	6
Permitted Phases		8				
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	21.0	21.0	21.0		10.0	21.0
Total Split (s)	21.0	21.0	58.0	0.0	11.0	69.0
Total Split (%)	23.3%	23.3%	64.4%	0.0%	12.2%	76.7%
Maximum Green (s)	16.0	16.0	53.0		6.0	64.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Min		None	Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Dont Walk (s)	9.0	9.0	9.0			9.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	16.0	16.0	53.0		6.0	64.0
Actuated g/C Ratio	0.18	0.18	0.59		0.07	0.71
v/c Ratio	1.15	0.67	1.29		1.34	0.79
Control Delay	133.3	19.3	156.8		214.9	14.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	133.3	19.3	156.8		214.9	14.3
LOS	F	B	F		F	B

Lanes, Volumes, Timings
 40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
 3/25/2013



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Approach Delay	81.3		156.8			59.7
Approach LOS	F		F			E
Queue Length 50th (ft)	~245	47	~1006		~118	335
Queue Length 95th (ft)	#414	135	#1262		#200	527
Internal Link Dist (ft)	381		1124			887
Turn Bay Length (ft)					500	
Base Capacity (vph)	315	455	1072		229	1325
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	1.15	0.67	1.29		1.34	0.79

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.34
 Intersection Signal Delay: 103.3
 Intersection LOS: F
 Intersection Capacity Utilization 106.4%
 ICU Level of Service G
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 40: Fishers Ridge Driveway & Rte 96



Lanes, Volumes, Timings
40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
3/20/2013

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↔		↘	↘↘
Volume (vph)	326	274	913	328	276	945
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	500	
Storage Lanes	1	1		0	1	
Taper Length (ft)	75	75		75	75	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.960			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3398	0	1770	3539
Flt Permitted	0.950				0.094	
Satd. Flow (perm)	1770	1583	3398	0	175	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		290	74			
Link Speed (mph)	30		50			50
Link Distance (ft)	461		531			513
Travel Time (s)	10.5		7.2			7.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	362	304	1014	364	307	1050
Shared Lane Traffic (%)						
Lane Group Flow (vph)	362	304	1378	0	307	1050
Turn Type		Perm			pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	21.0	21.0	21.0		10.0	21.0
Total Split (s)	27.0	27.0	46.0	0.0	17.0	63.0
Total Split (%)	30.0%	30.0%	51.1%	0.0%	18.9%	70.0%
Maximum Green (s)	22.0	22.0	41.0		12.0	58.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Min		None	Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Dont Walk (s)	9.0	9.0	9.0			9.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	20.2	20.2	37.5		54.7	54.7
Actuated g/C Ratio	0.24	0.24	0.44		0.64	0.64
v/c Ratio	0.86	0.51	0.89		0.90	0.46
Control Delay	52.8	7.6	29.7		52.8	8.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	52.8	7.6	29.7		52.8	8.6
LOS	D	A	C		D	A

Lanes, Volumes, Timings
 40: Fishers Ridge Driveway & Rte 96

Fishers Ridge
 3/20/2013

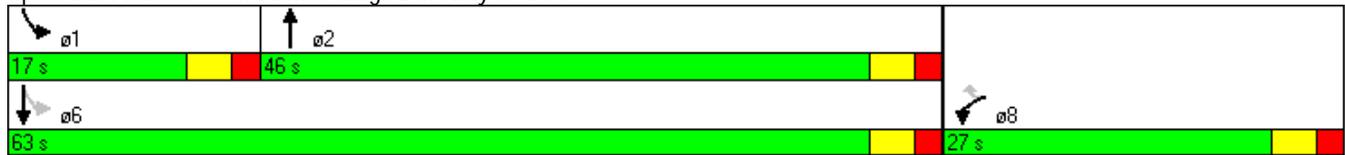


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Approach Delay	32.2		29.7			18.6
Approach LOS	C		C			B
Queue Length 50th (ft)	196	6	342		118	141
Queue Length 95th (ft)	#344	71	443		#279	183
Internal Link Dist (ft)	381		451			433
Turn Bay Length (ft)					500	
Base Capacity (vph)	463	628	1692		340	2437
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.78	0.48	0.81		0.90	0.43

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	85
Natural Cycle:	70
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	25.7
Intersection LOS:	C
Intersection Capacity Utilization:	81.6%
ICU Level of Service:	D
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	

Splits and Phases: 40: Fishers Ridge Driveway & Rte 96



Lanes, Volumes, Timings
4: Rte 251 & Rte 96

Fishers Ridge
3/26/2013



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	198	165	155	937	1043	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	180	0			550
Storage Lanes	1	1	1			1
Taper Length (ft)	75	75	75			75
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1599	1787	1881	1881	1615
Flt Permitted	0.950		0.143			
Satd. Flow (perm)	1787	1599	269	1881	1881	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		143				
Link Speed (mph)	50			50	50	
Link Distance (ft)	2095			439	2172	
Travel Time (s)	28.6			6.0	29.6	
Peak Hour Factor	0.80	0.80	0.92	0.92	0.97	0.97
Heavy Vehicles (%)	1%	1%	1%	1%	1%	0%
Adj. Flow (vph)	248	206	168	1018	1075	357
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	206	168	1018	1075	357
Turn Type		Perm	Perm			pm+ov
Protected Phases	3			5	1	3
Permitted Phases		3	5			1
Detector Phase	3	3	5	5	1	3
Switch Phase						
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	8.0
Minimum Split (s)	26.0	26.0	20.5	20.5	20.5	26.0
Total Split (s)	26.0	26.0	78.0	78.0	78.0	26.0
Total Split (%)	25.0%	25.0%	75.0%	75.0%	75.0%	25.0%
Maximum Green (s)	22.0	22.0	72.5	72.5	72.5	22.0
Yellow Time (s)	3.0	3.0	3.5	3.5	3.5	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	5.5	5.5	5.5	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	None
Walk Time (s)	7.0	7.0				7.0
Flash Dont Walk (s)	15.0	15.0				15.0
Pedestrian Calls (#/hr)	0	0				0
Act Effect Green (s)	18.3	18.3	72.6	72.6	72.6	100.4
Actuated g/C Ratio	0.18	0.18	0.72	0.72	0.72	1.00
v/c Ratio	0.76	0.50	0.86	0.75	0.79	0.22
Control Delay	54.6	16.9	54.3	13.6	15.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	16.9	54.3	13.6	15.4	0.3



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	B	D	B	B	A
Approach Delay	37.5			19.4	11.7	
Approach LOS	D			B	B	
Queue Length 50th (ft)	152	35	74	364	412	0
Queue Length 95th (ft)	206	78	#237	580	666	0
Internal Link Dist (ft)	2015			359	2092	
Turn Bay Length (ft)		180				550
Base Capacity (vph)	392	463	195	1360	1360	1608
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.44	0.86	0.75	0.79	0.22

Intersection Summary

Area Type: Other
 Cycle Length: 104
 Actuated Cycle Length: 100.4
 Natural Cycle: 100
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 18.5 Intersection LOS: B
 Intersection Capacity Utilization 90.9% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rte 251 & Rte 96

↓ ø1	↙ ø3
78 s	26 s
↑ ø5	
78 s	

Lanes, Volumes, Timings
4: Rte 251 & Rte 96

Fishers Ridge
3/26/2013



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	125	94	108	1106	1108	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	180	0			0
Storage Lanes	1	1	1			1
Taper Length (ft)	75	75	75			75
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1736	1845	1863	1599
Flt Permitted	0.950		0.120			
Satd. Flow (perm)	1770	1583	219	1845	1863	1599
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		98				
Link Speed (mph)	50			50	50	
Link Distance (ft)	2095			439	673	
Travel Time (s)	28.6			6.0	9.2	
Peak Hour Factor	0.87	0.87	0.98	0.98	0.92	0.92
Heavy Vehicles (%)	2%	2%	4%	3%	2%	1%
Adj. Flow (vph)	144	108	110	1129	1204	162
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	108	110	1129	1204	162
Turn Type		Perm	Perm			pm+ov
Protected Phases	3			5	1	3
Permitted Phases		3	5			1
Detector Phase	3	3	5	5	1	3
Switch Phase						
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	8.0
Minimum Split (s)	26.0	26.0	20.5	20.5	20.5	26.0
Total Split (s)	35.0	35.0	85.0	85.0	85.0	35.0
Total Split (%)	29.2%	29.2%	70.8%	70.8%	70.8%	29.2%
Maximum Green (s)	31.0	31.0	79.5	79.5	79.5	31.0
Yellow Time (s)	3.0	3.0	3.5	3.5	3.5	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	5.5	5.5	5.5	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	None
Walk Time (s)	7.0	7.0				7.0
Flash Dont Walk (s)	15.0	15.0				15.0
Pedestrian Calls (#/hr)	0	0				0
Act Effect Green (s)	13.6	13.6	79.6	79.6	79.6	102.7
Actuated g/C Ratio	0.13	0.13	0.78	0.78	0.78	1.00
v/c Ratio	0.62	0.37	0.65	0.79	0.83	0.10
Control Delay	53.5	13.6	28.7	12.9	15.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	13.6	28.7	12.9	15.2	0.1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	B	C	B	B	A
Approach Delay	36.4			14.3	13.4	
Approach LOS	D			B	B	
Queue Length 50th (ft)	90	6	26	347	406	0
Queue Length 95th (ft)	148	50	#157	695	#858	0
Internal Link Dist (ft)	2015			359	593	
Turn Bay Length (ft)		180				
Base Capacity (vph)	535	547	170	1430	1444	1599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.20	0.65	0.79	0.83	0.10

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 102.7
 Natural Cycle: 110
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 15.8 Intersection LOS: B
 Intersection Capacity Utilization 90.2% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rte 251 & Rte 96



TRAFFIC IMPACT STUDY

Fishers Ridge

NYS Route 96

Located Between Lane Road and Rowley Road

TOWN OF VICTOR
COUNTY OF ONTARIO
STATE OF NEW YORK

February 2013



PREPARED BY
Bergmann Associates
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

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I. Purpose and Scope

The subject of this Traffic Impact Study (TIS) is the proposed Fishers Ridge, “Lifestyle Center”, development to be located on NYS Route 96, between Lane Road and Rowley Road in the Town of Victor. A regional project location map is shown in Figure 1. See Figure 2 for the site location. The purpose of the TIS is to document the existing traffic conditions of the study area and to evaluate the estimated future traffic conditions and impacts as a result of the proposed development.

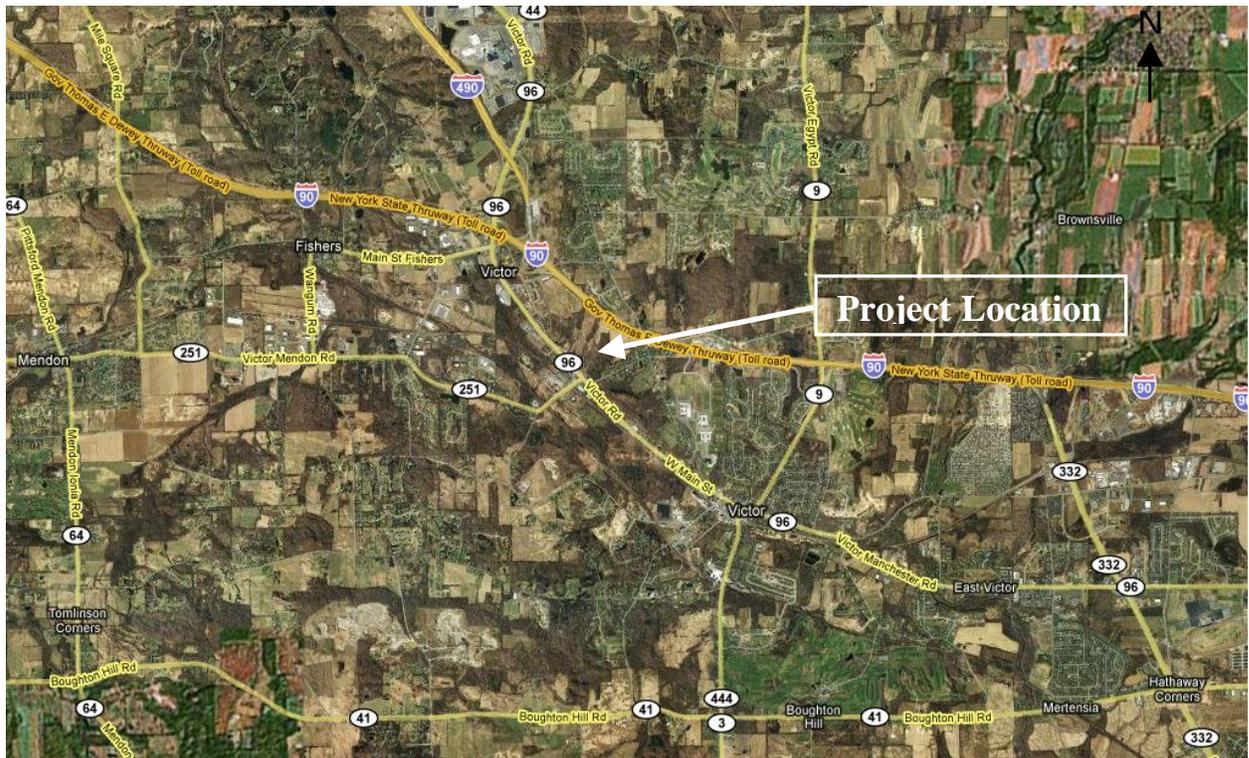


Figure 1 - Regional Location Map

The target year of project completion is 2022. Two access driveways will be provided along NYS Route 96 between Rowley Road to the west and Lane Road to the east. The southern driveway will intersect NYS Route 96 at Victor-Mendon Road (Route 251) and be a fourth leg to the existing signalized intersection. The northern driveway will be a signalized intersection as concluded through this TIS. The site plan is provided in Appendix A.



Figure 2 - Site Location Map

The following systematic procedure was used:

1. Conduct site visit to obtain roadway geometrics and observe traffic operations.
2. Perform sight distance analysis at the proposed access driveways. See the proposed site plan accompanying this document.
3. Obtain manual turning movement counts at fourteen intersections in the study area:
 - NYS Route 96 and Main Street Fishers
 - NYS Route 96 and Omnitech Driveway
 - NYS Route 96 and Rowley Road
 - NYS Route 96 and Victor-Mendon Road (Route 251)

- NYS Route 96 and Lane Road
- NYS Route 96 and High Street (in Village)
- NYS Route 96 and School Street
- NYS Route 96 and Maple Avenue
- NYS Route 96 and Lynaugh Road
- High Street and Willowbrook Road
- High Street and Aldridge Road
- High Street and Lane Road
- High Street and Gillis Road
- County Route 9 and Lane Road Extension

The counts were obtained between 7:00 and 9:00 AM and between 2:00 and 6:00 PM on a typical Friday and between 11:30 AM and 1:30 PM on a typical Saturday.

4. Determine the existing AM, PM and Saturday Mid-Day peak hour turning movements at the subject intersections.
5. Define trips generated and distributed by the new development for the 2022 future Build scenario.
6. Estimate projected traffic at the subject intersections.
7. Evaluate traffic operations at the subject intersections under:
 - Existing (2011) conditions
 - Future (2022) No-Build conditions
 - Future (2022) Build conditions (with development traffic)

The analyses and evaluations in this report have been performed using standard traffic engineering methodologies in accordance with the ITE *Trip Generation Handbook, 8th Edition*. Data used in this impact assessment has been collected from field investigations, field visits (including vehicular traffic counts), developer plans, and the New York State Department of Transportation (NYSDOT), including the NYSDOT 2009 Traffic Data Report for New York State.

II. Surrounding Land Use and Transportation System

A. Existing Land Use

The prominent land uses in the vicinity of the proposed development are commercial, industrial, and residential.

B. Existing Roadway System

NYS Route 96

NYS Route 96 is a north-south urban arterial route located immediately south-west of the project site. NYS Route 96 is a three-lane roadway near the site, providing normal two-way traffic flow with one lane in each direction and a two way left turn lane through the immediate project area. Travel lanes are 12 feet wide with shoulders and gutters. The profile of NYS Route 96 is flat in the study area, and the alignment of the road is generally straight. Local posted speed limit is 50 mph in the immediate area of the project but reduces to 30 mph south of the project site through the Village of Victor.

High Street

High Street is a local collector roadway. Land use along the roadway is mostly residential. It is a north-south road located north of NYS Route 96 and the project site. High Street is a two lane roadway and provides normal two-way traffic flow with one lane in each direction. Local posted speed limit is 40 mph.

C. Existing Intersections

NYS Route 96 and Main Street Fishers – NYS Route 96 and Main Street Fishers operates as a signalized intersection with four approaches. The southbound NYS Route 96 approach provides two through lanes and separate left and right turn lanes. The northbound NYS Route 96 approach provides a separate left turn lane, a through lane, and a through/right turn lane. The eastbound Main Street Fishers approach provides a separate left turn and right turn lane and a left turn/through lane. The westbound Rowley Road approach has an exclusive left turn lane and a through/right turn lane.

NYS Route 96 and Omnitech Driveway – NYS Route 96 is free flowing in both directions at the intersection with Omnitech Driveway, which is stop controlled. NYS Route 96 expands to two lanes in the northbound direction and loses a lane from two to one in the southbound direction, just south of this intersection.

NYS Route 96 and Rowley Road – NYS Route 96 is free flowing with single lanes in either direction. A left turn lane is provided on the southbound approach. A two-way left turn lane (TWLTL) extends south from the northbound approach. Rowley Road provides a single lane for left-turn/through/right-turn movements.

NYS Route 96 and Victor-Mendon Road (Route 251) – NYS Route 96 and Victor-Mendon Road operates as a signalized intersection with three approaches. The NYS Route 96 southbound approach provides a 25 foot wide striped median, a 12 foot wide through lane and a 12 foot wide right turn lane. The northbound NYS Route 96 approach provides a left turn lane and a through lane. The eastbound Victor Mendon Road approach provides an exclusive left turn lane and right turn lane.

NYS Route 96 and Lane Road – NYS Route 96 is free flowing with a left turn lane provided in the southbound direction and a TWLTL extending south from the northbound approach. Lane Road provides a single lane for all movements.

NYS Route 96 and High Street (in the Village) – NYS Route 96 and High Street is a signalized intersection with three approaches. A single lane for both left and right turn movements is provided on the High Street approach. Both approaches on NYS Route 96 provide a single through lane. The southbound NYS Route 96 approach provides a single lane for the left turn movements.

NYS Route 96 and School Street – NYS Route 96 and School Street is a signalized intersection with three approaches. A channelized right turn lane and through lane are provided on the intersections southbound approach. An exclusive left turn lane and single through lane are provided on the northbound approach. The eastbound School street approach operates with exclusive left and right turn lanes.

NYS Route 96 and Maple Avenue – NYS Route 96 and Maple Avenue is a four way signalized intersection. The southbound approach provides a left turn lane, through lane, and right turn lane. The northbound approach provides a left turn lane and through/right turn lane. The eastbound Maple Avenue approach has an exclusive left turn lane and shared through/right turn lane while the westbound Maple Avenue approach has a shared lane for all movements.

NYS Route 96 and Lynaugh Road – NYS Route 96 is free flowing with single lanes in either direction. Lynaugh Road provides a shared single lane for left-turn/through/right-turn movements.

High Street and Willowbrook Road – The High Street northbound and southbound approaches are free flowing and provide a shared single lane for all movements. The eastbound Willowbrook approach also provides a shared single lane and is stop controlled.

High Street and Aldridge Road – High Street and Aldridge Road is a three way unsignalized intersection with shared single lanes at each approach. The Aldridge Road westbound approach is stop controlled.

High Street and Lane Road – High Street and Lane Road is a four way unsignalized intersection with shared single lanes at each approach. All approaches are stop controlled with flashing red.

High Street and Gillis Road – High Street and Gillis Road is a three way unsignalized intersection with shared single lanes at each approach. The Gillis Road westbound approach is stop controlled.

County Route 9 and Lane Road Extension – County Route 9 and Lane Road Extension is a four way unsignalized intersection with shared single lanes at each approach. The Lane Road Extension eastbound and westbound approaches are stop controlled.

III. Existing Traffic Conditions

A. Existing Traffic Volumes

Bergmann Associates obtained manual turning movement counts at the fourteen intersections within the study area on Friday, September 16th and 23rd, 2011 and Saturday, September 17th and 24th, 2011. All counts were obtained between 7:00 and 9:00 AM and between 2:00 and 6:00 PM on a typical Friday and between 11:30 AM and 1:30 PM on a typical Saturday. This data was increased by 4% to update to the base year of 2012, accounting for area development and normal traffic growth. Figure 2 shows the intersection locations. Figure 3 contains the existing peak hour traffic volumes at the subject intersections.

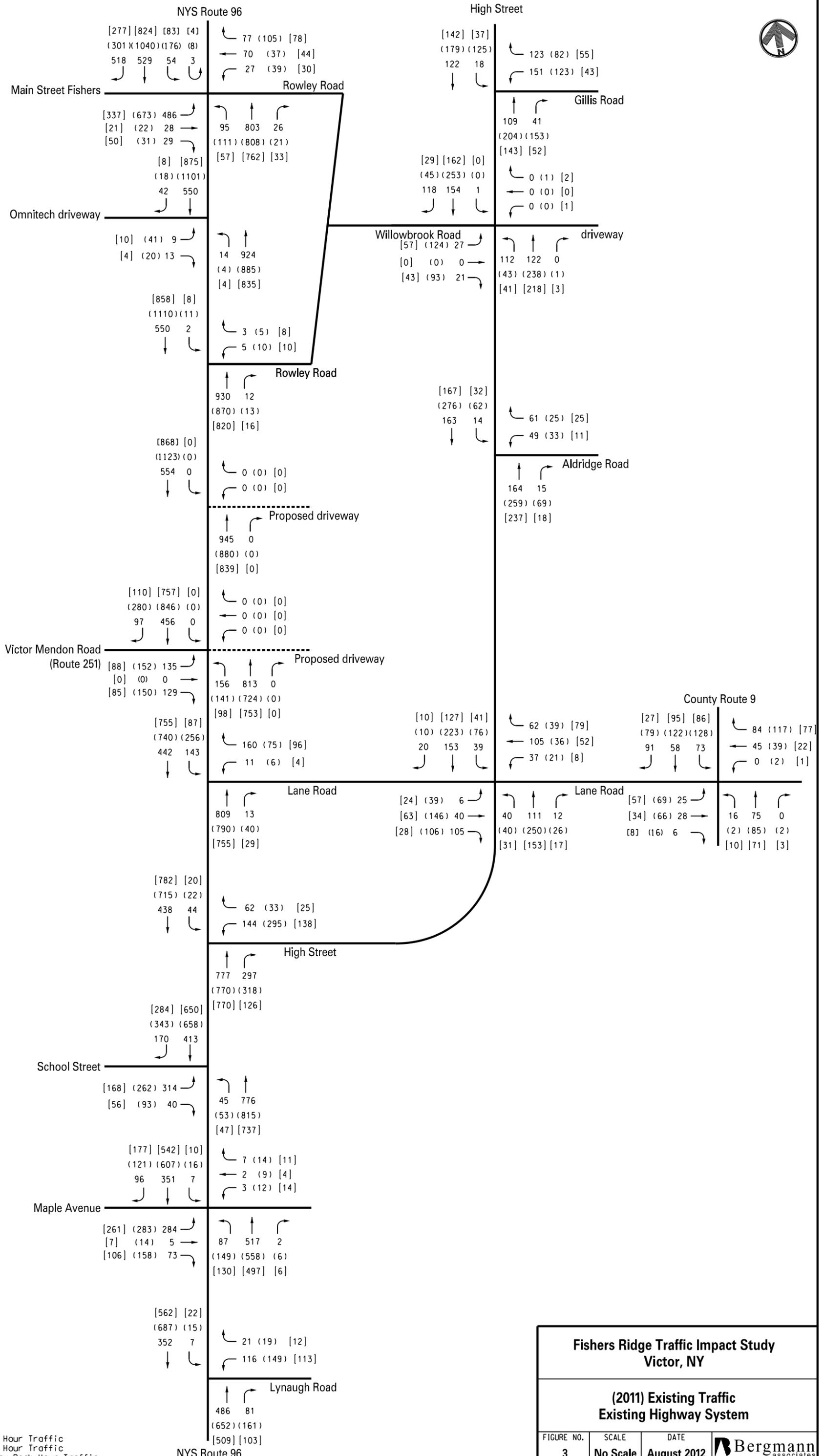
The traffic count time periods were chosen because the combined traffic of the adjacent streets and similar land developments generally peak during these time periods. The traffic counts were recorded by 15-minute increments to enable identification of specific peak hours and traffic peaking characteristics within the peak hour. The study area AM, PM and Mid-Day peak hours were determined to be 7:30 AM to 8:30 AM, 5:00 PM to 6:00 PM, and 11:45 AM to 12:45 PM respectively. Detailed count data are contained in Appendix B.

B. Existing Levels of Service

Level of Service (LOS) analysis is a means of determining the ability of an intersection to accommodate traffic volumes. The analysis is based on intersection street geometrics, traffic controls and traffic maneuvers. The analysis produces an indication of the Level of Service at which an intersection is functioning or is expected to function for future conditions.

The Level of Service procedures are provided in the Highway Capacity Manual (HCM) published by the Transportation Research Board, 2000. Version 7 of Synchro was utilized to determine the LOS for the subject intersections. Synchro implements the methods of the HCM for signalized and unsignalized intersection analyses. Analysis of intersection operations using SimTraffic was also performed. SimTraffic offers a microscopic simulation of traffic flow considering interaction between driver and vehicle characteristics, geometry, and traffic control. Analysis using SimTraffic offers a method of assessing vehicle delay at stop sign controlled approaches where a nearby traffic signal affects gaps in traffic.

Level of Service is defined by letter characters that range from A to F, with A representing the best traffic operating conditions that have little or no delay and F characterizing the worst conditions that have significant delay. LOS A through D are usually considered acceptable and LOS E is usually considered representative of conditions where improvements may be needed. LOS F operating conditions are typically unacceptable and improvements are needed, in the form of traffic control, geometric changes or a combination of both.



Fishers Ridge Traffic Impact Study Victor, NY			
(2011) Existing Traffic Existing Highway System			
FIGURE NO. 3	SCALE No Scale	DATE August 2012	

Levels of service for signalized and unsignalized intersections are identified by the average control delay experienced by vehicles in seconds/vehicle. LOS for signalized intersections is determined for each traffic movement and the total intersection. The range of seconds of delay defining level of service is different for signalized and unsignalized intersections, so the LOS results should not be compared to one another. Full definitions of levels of service for signalized and unsignalized intersections are included in Appendix C.

Existing Traffic Operations

The existing traffic operations during the peak hours at the subject intersections range from LOS A to F for all traffic movements according to Synchro 7. Level of service analysis results for the intersections are provided in Table 3 and described below. Detailed level of service analysis results are contained in Appendix C.

NYS Route 96 and Main Street Fishers – This intersection operates at LOS C during the AM and Mid-Day peak hours and LOS D during the PM peak hour. All movements operate at LOS D or better during all peak hours with the exception of the southbound through movement during the PM peak hour which operates at LOS E.

NYS Route 96 and Omnitech Driveway – The northbound through movement and southbound through lanes and right turn movement operate at LOS B or better during all peak hours. The northbound left turn movement and eastbound right turn movement operate at LOS B or better during all peak hours. The eastbound left turn movement operates at LOS C or better during the AM and Mid-day peak hours, and at LOS D during the PM peak hour.

NYS Route 96 and Rowley Road – The northbound and southbound movements operate at LOS B or better during all peak hours. The westbound left/right movement operates at LOS C during all peak hours.

NYS Route 96 and Victor-Mendon Road Route 251 – The eastbound right turn movement, northbound approach, southbound movements, and overall intersection operate at LOS B or better during all peak hours. The eastbound left turn movement operates at LOS C during all peak hours. The northbound left turn lane operates at LOS B during the PM peak hour and LOS A during the AM and Mid-Day peak hours. The northbound through movement operates at LOS B during the AM peak hour and LOS A during the PM and Mid-Day peak hours.

NYS Route 96 and Lane Road – The westbound approach operates at LOS C during the PM and Mid-Day peak hours and LOS E during the AM peak hour. The northbound approach operates at LOS A during the peak hours. The southbound left turn lane operates at LOS B and the southbound through lane operates at LOS A during all peak hours.

NYS Route 96 and High Street (in the Village) – This intersection operates at an overall LOS B during the AM and Mid-Day peak hours and LOS C during the PM peak hour. All movements operate at LOS C or better with the exception of the westbound approach which operates at LOS D during the AM and PM peak hours.

NYS Route 96 and School Street – Overall, this intersection operates at LOS C during the AM peak hour and LOS B during the PM and Mid-Day peak hours. All movements operate at LOS C or better with the exception of the eastbound left turn movement and eastbound approach. The eastbound left turn movement operates at LOS D during the AM peak hour and LOS E during the PM peak hour. The eastbound approach operates at LOS D during both of these peak hours.

NYS Route 96 and Maple Avenue – This intersection operates at LOS C during the PM and Mid-Day peak hours and LOS B during the AM peak hour. The eastbound left turn movement operates at LOS D or better during the AM and Mid-Day peak hours and at LOS E during the PM peak hour. The westbound approach operates at LOS D only during the PM peak hour. All other movements operate at LOS C or better during all peak hours.

NYS Route 96 and Lynaugh Road – The northbound and southbound movements operate at LOS A with minimal delay during all peak hours. The westbound approach operates at LOS D during the AM peak hour, LOS F during the PM peak hour, and LOS F during the Mid-Day peak hour. SimTraffic results show better LOS and less delay and based on field tests, actual delays have often been shown to fall between Synchro and SimTraffic results.

County Route 9 and Lane Road Extension – This intersection operates at an overall LOS C or better during the peak hours. The eastbound and westbound approaches operate at LOS C or better with the exception of the eastbound approach during the PM peak hour which operates at LOS E. The northbound and southbound approaches operate at LOS B or better during all peak hours.

High Street and Lane Road – This intersection operates at an overall LOS C during the PM peak hour and LOS B during the AM and Mid-Day peak hours. All movements operate at LOS C or better during all peak hours.

High Street and Aldridge Road – The northbound and southbound movements operate at LOS A with minimal delay during all peak hours. The westbound approach operates at LOS B during all peak hours.

High Street and Willowbrook Road – This intersection operates at an overall LOS A during all peak hours as do the northbound and southbound movements. The eastbound movement operates at LOS C or better during the peak hours. The westbound approach operates at LOS A during the AM and PM peak hours and LOS B during the Mid-Day peak hour.

High Street and Gillis Road – The northbound and southbound movements operate at LOS A with minimal delay during all peak hours. The westbound approach operates at LOS B during the AM and Mid-Day peak hours and at LOS D during the PM peak hour.

C. Sight Distance

Table 1 contains sight distances at four key intersections, identified as important locations to measure based on an initial review. Intersection sight distances are adequate for vehicles turning left and right onto High Street from Lane Road from both directions according to American Association of State Highway and Transportation Officials (AASHTO) recommendations. The posted speed limit is 40 mph. AASHTO recommends 445 feet of intersection sight distance for a design speed of 40 mph. The intersection sight distances measured in the field were found to be greater than 445 feet.

Vehicles exiting both site driveways onto NYS Route 96 have more than adequate sight distance to view vehicles approaching from the north and south according to AASHTO recommendations. Based upon field observations the intersection sight distances are adequate according to the AASHTO Policy on Geometric Design of Highways and Streets. AASHTO recommends 555 feet of sight along a 2 lane major road for a passenger car turning from the minor road to the major road for a design speed of 40 mph on the major road.

Vehicles on the Aldridge Road approach at High Street have adequate sight distance looking to the right. Sight distance looking to the left is only 300 feet and falls short of the recommended 445 feet. The northbound High Street approach has an intersection warning sign and 35 mph speed advisory plaque with flashing beacons to enhance safety and make motorists aware of the upcoming intersection at Aldridge Road.

**TABLE 1
INTERSECTION SIGHT DISTANCES**

Major Roadway	Approach		ISD to the Left	ISD to the Right
High Street	EB Lane Road	Available	1350	1595
		Recommended	>445	>445
	WB Lane Road	Available	1425	1020
		Recommended	>445	>445
Route 96	Site Driveway South	Available	2250	730
		Recommended	>555	>555
Route 96	Site Driveway North	Available	1050	840
		Recommended	>555	>555
High Street	Aldridge Road	Available	300	>600
		Recommended	>445	>445

Note: All measurements in feet

D. Accident History Analysis

The most currently available accident information was obtained from the Ontario County Sherriff's Department and the New York State Accident Location Information System (ALIS). The road segments considered consisted of NYS Route 96 between Main Street Fishers (CR 43) and Lynaugh Road, High Street between NYS Route 96 and Gillis Road, and Lane Road between NYS Route 96 and County Road 9. A summary of the 184 accidents reported is presented in the attached Appendix D.

Analysis of the accident history for the segments listed above did not show any significant current condition meriting immediate mitigation.

The largest numbers of accidents since 2008 were of the "Rear End" classification (48%). This is typical of a signalized corridor subject to large traffic volumes and associated congestion. The next most frequent accident types were of the "Right Angle" (15%) and "Left Turn" (6%) consistent with large traffic volumes and numerous uncontrolled points of access. Also, the absence of separate or protected left turn phasing at the signalized intersections may be a contributing factor to these "Right Angle" and "Left Turn" accidents.

The majority of the causal factors, other than animal (deer) action (3%), were attributed to operator error and there are no locations or patterns of contributing circumstances which indicate any geometric deficiency requiring investigation. The project generated traffic volumes are not expected to exacerbate this set of conditions.

IV. Trip Generation

The Institute of Transportation Engineers (ITE) Report, Trip Generation, 8th Edition, was utilized for the trip generation analysis of the proposed development. ITE Land Use (LU) Codes 220, 231, 310, 820, and 850 were used to predict the total number of trips generated by the apartments, townhouses, hotel, office, shopping center, and supermarket, respectively. A separate trip generation based on rates for a particular sports retail store was used to predict the trips for a sports retail development.

The trip generation analyses were performed using standard traffic engineering methodologies in accordance with the ITE *Trip Generation Handbook* and in collaboration with the NYSDOT and the Town of Victor Traffic Engineer. The NYSDOT and Town Traffic Engineer reviewed and accepted the trip generation and distribution analyses including the basis for determining shared, pass-by and diverted trips explained below. Agreement was made that the trip generation and distribution analysis is a reasonable determination continuing forward.

Trips generated by the development will consist of shared trips, primary (new) trips, pass-by trips, and diverted trips. Shared trips will patronize two or more land uses within the development and represent less trips entering and exiting the development. The shared trip usage was initially determined using the August 8, 2007 study by Jeffrey M. DePaolis, "Trips Sharing between Multiple Retail Developments in Retail Corridors". During a collaborative meeting with the NYSDOT and Town Traffic Engineer the following shared trip rates were determined to be more reasonable for the area of study:

- 5.0% of the total trips from the apartments, townhouses, hotel, office, shopping center, and supermarket land uses during the AM peak hour,
- 16% of the total trips from all the land uses except the hotel during the PM peak hour and
- 18% of the total trips from the all the land uses except the office and hotel during the Mid-Day peak hour.

Primary trips are a direct result of the development and represent new traffic to the surrounding traffic system. Pass-by trips do not represent new traffic to the surrounding street system. The source of pass-by trips is traffic that is projected to exist on NYS Route 96 without regard to the proposed development. Pass-by trips represent an increment to traffic entering and exiting. Diverted trips are similar to pass-by trips in that they do not represent new traffic in the system, but these trips are diverted from roadway systems further from the site than those just passing by on an adjacent roadway.

The percentage of pass-by trips was determined to range from 0% to 25% for the Fishers Ridge developments, based upon count data and data taken from the ITE Trip Generation Handbook. The NYSDOT and Town Traffic Engineer reviewed and accepted the determination of pass-by trips as reasonable continuing forward. The office, hotel, apartments, and townhouses are not expected to have any pass-by trips, and the shopping center, and sports retail are not expected to

have any pass-by trips during the AM peak hour. It is expected that the supermarket will produce 10% pass-by trips during the AM peak hour and 25% pass-by trips during the PM and Mid-Day peak hours. The sports retail land use is expected to produce 10% pass-by trips and the shopping center 25% during the PM and Mid-Day peak hours. The remaining trips are primary (new) trips added to the surrounding street system.

A. 2022 Full Trip Generation

For the purposes of this traffic impact study as outlined in the original DEIS, full development includes all 96 contiguous acres of land to account for future potential development of additional land to the east. The full development in 2022 is expected to generate 1,276, 2,448, and 3,241 primary vehicle trips during the AM, PM and Mid-Day peak hours, respectively. A summary of the total number of trips generated by the development is provided in Table 2.

TABLE 2
2022 Full Trip Generation

LAND USE (ITE CODE)	SIZE	TRIP TYPE	AM PEAK HOUR	PM PEAK HOUR	MIDDAY PEAK HOUR
			TRIPS	TRIPS	TRIPS
Sports Retail*	130,129 SF	Total	61	433	1,041
		Shared within Site	0	69	187
		External to Site	61	364	854
Shopping Center (820)	387,265 SF	Total	342	1,576	2,066
		Shared within Site	17	252	372
		External to Site	325	1,324	1,694
Supermarket (850)	120,197 SF	Total	432	964	1,304
		Shared within Site	22	154	235
		External to Site	410	810	1,069
Office (710)	107,500 SF	Total	199	199	44
		Shared within Site	10	32	0
		External to Site	189	167	44
Hotel (310)	200 Units	Total	112	118	144
		Shared within Site	0	0	0
		External to Site	112	118	144
Apartments (220)	374 Units	Total	191	232	194
		Shared within Site	10	37	35
		External to Site	181	195	159
Townhouses (231)	76 Units	Total	41	48	65
		Shared within Site	2	8	12
		External to Site	39	40	53
TOTAL		Total	1,378	3,570	4,858
		Shared within Site	61	552	841
		External to Site	1,317	3,018	4,017

*Trip generation rates based on similar sports retail stores
(XXX) ITE Trip Generation Land Use Codes

V. Trip Distribution

This phase of the traffic analysis involved distribution of the projected peak hour traffic generated by the development to the surrounding roadway system. The projected traffic volumes calculated during the trip generation phase were distributed onto the roadway system based on existing traffic patterns coupled with the predominant land use in the area of the proposed development.

The overall distribution pattern anticipated of how trips will arrive and depart the site has been developed based on consideration of present traffic patterns and location of adjacent and regional development. The distribution patterns have been developed for Friday AM and PM and Saturday Mid-Day peak hours. The patterns for each peak hour are shown in Figures 4 through 6. The distribution patterns show percentage of total trips that are likely to approach and depart along specific highways and streets.

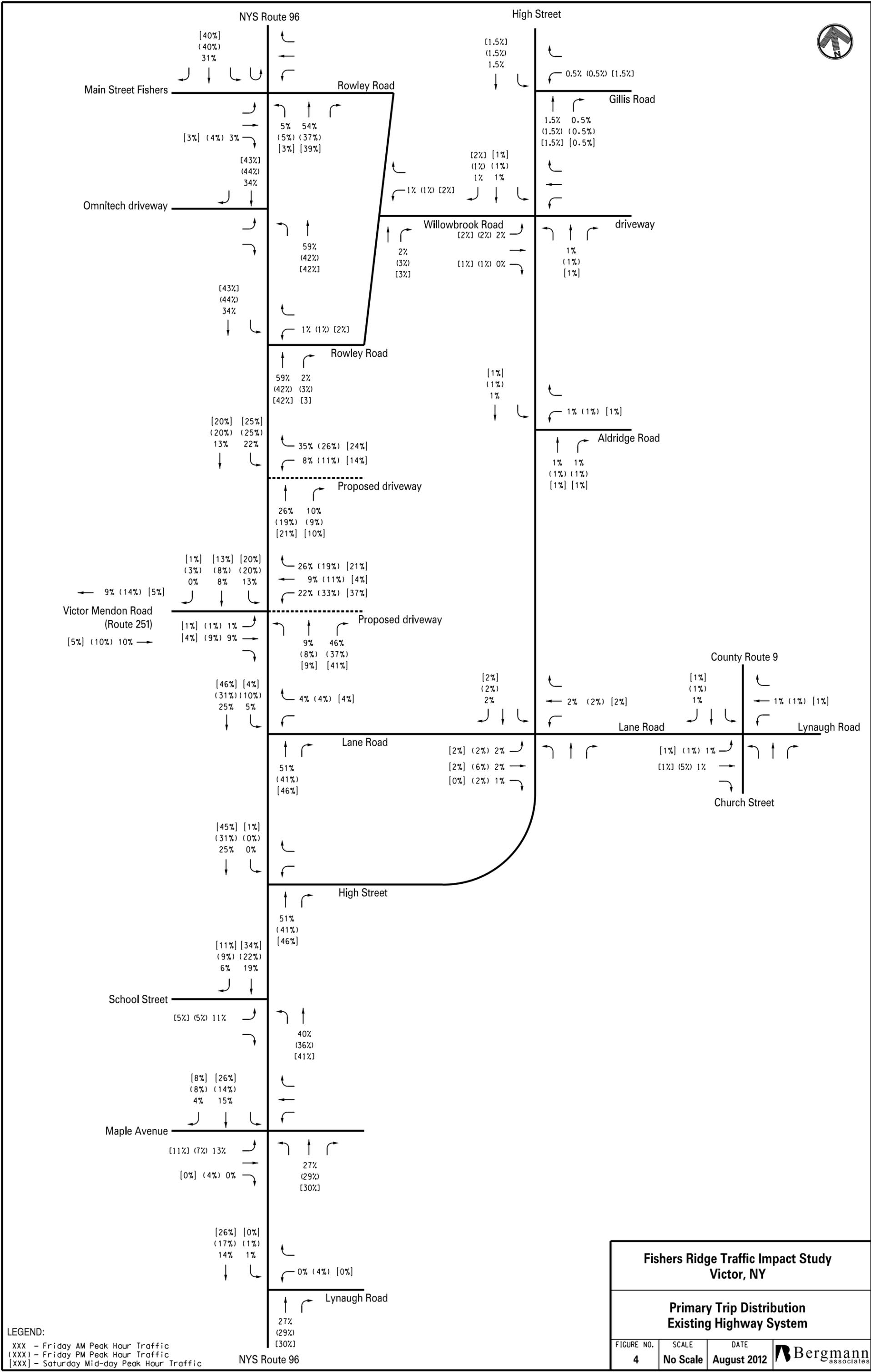
The pattern of how vehicles are anticipated to enter and leave site driveways is a function of the distribution of each land use type within the site. The pattern of trips assigned to each driveway reflects the distribution pattern of land use within the site and the driveway most likely utilized to access specific land use.

Some land use types are distributed throughout the site, such as retail. Trips for this land use were assigned to each driveway by the proportion of retail space assumed to likely be most readily accessible.

Some land use types are located adjacent to a specific driveway. Trips for land uses that are located adjacent to the south driveway opposite Route 251 were assigned to that specific driveway. Conversely, the trips for land uses located near the north driveway were assigned to that driveway. Finally, land uses that are more centrally located in the site were more equally assigned to each driveway.

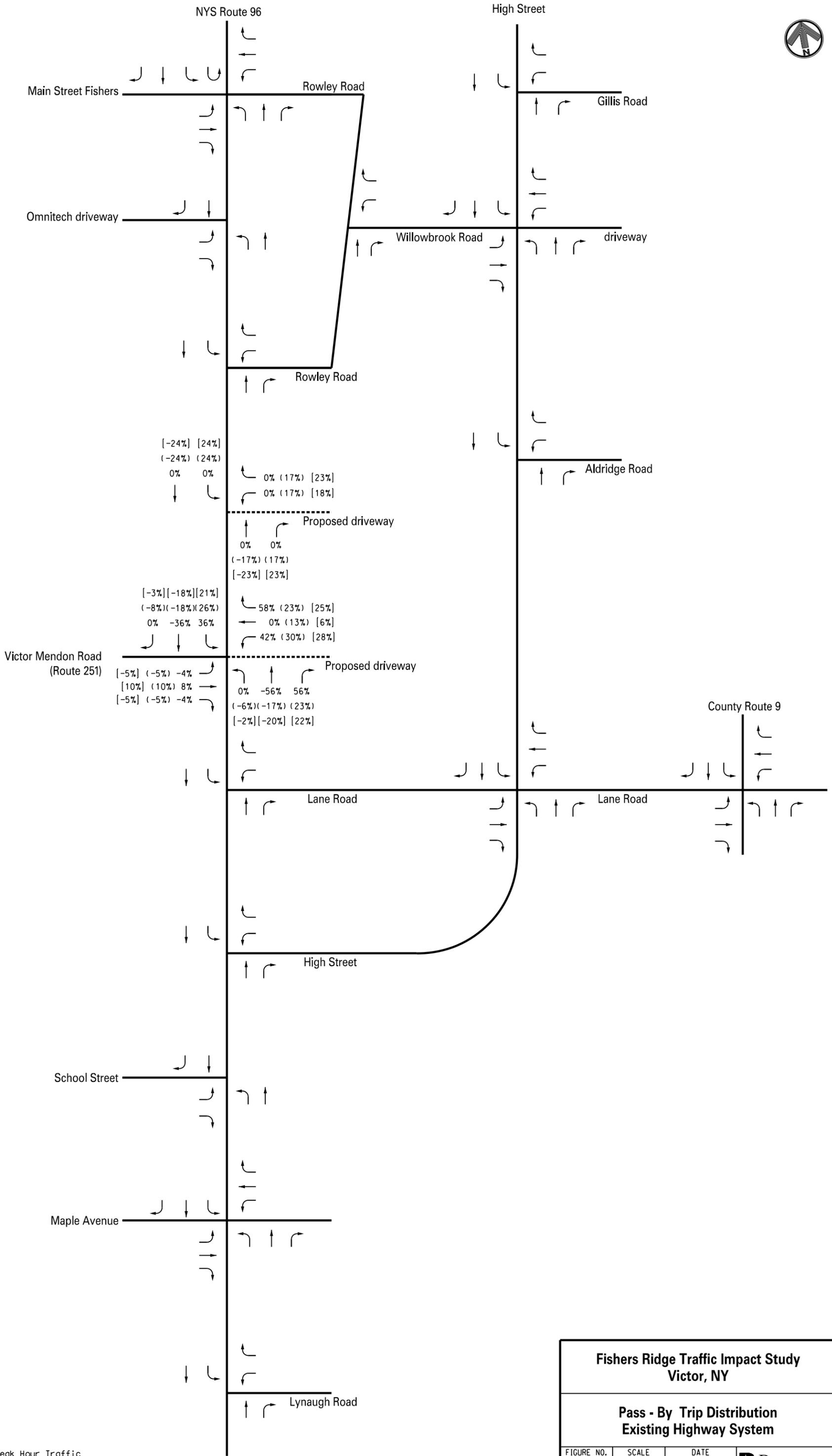
These guidelines were utilized for primary, pass-by and diverted trip categories.

The trip assignment is a result of multiplying the corresponding trip distribution with each trip generation. Primary trip assignments are shown in Figure 7 for 2022. Pass-by trip assignments are shown in Figure 8 for 2022. Diverted trip assignments are shown in Figure 9 for 2022.

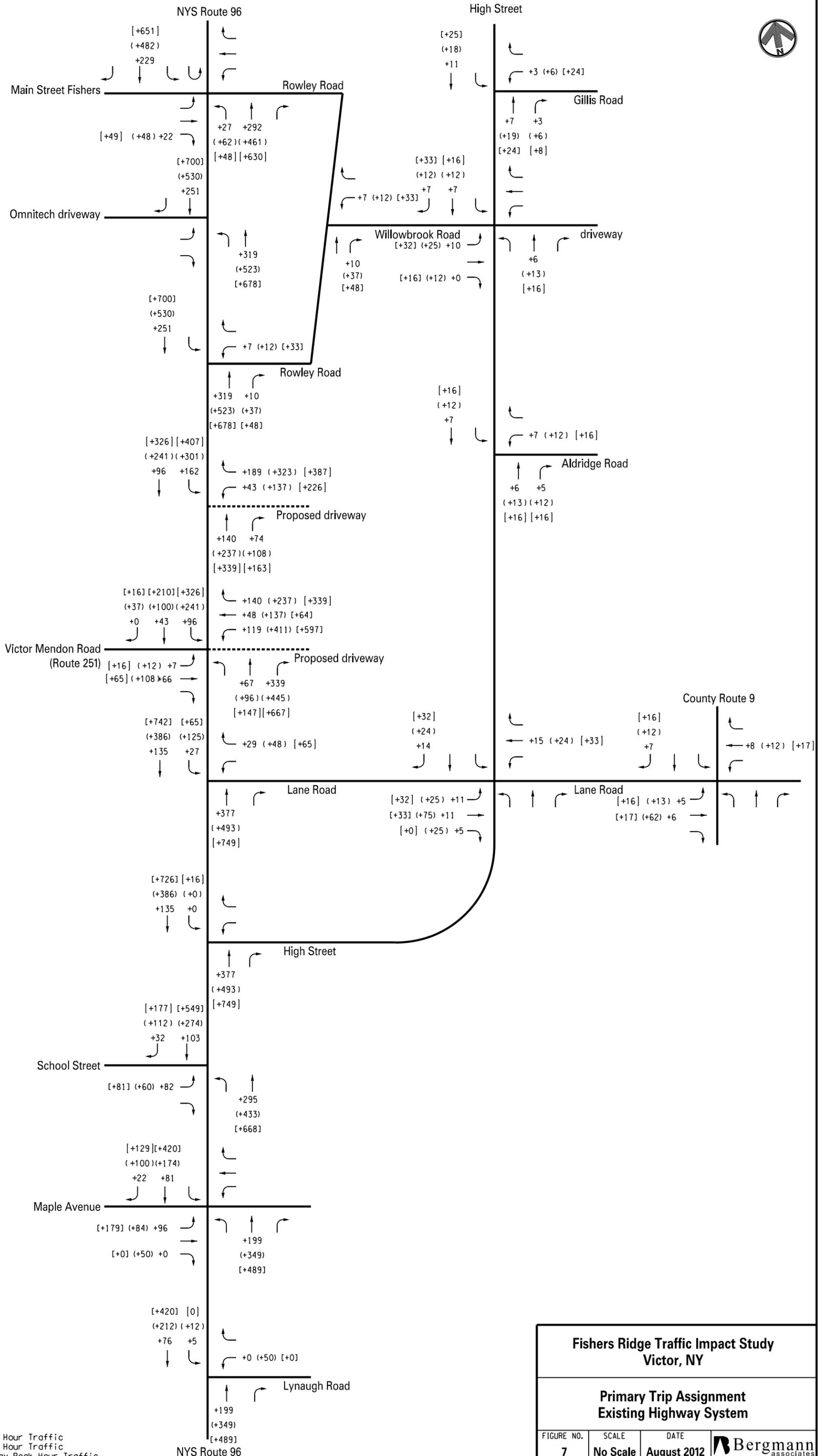


LEGEND:
 XXX - Friday AM Peak Hour Traffic
 (XXX) - Friday PM Peak Hour Traffic
 [XXX] - Saturday Mid-day Peak Hour Traffic

Fishers Ridge Traffic Impact Study Victor, NY			
Primary Trip Distribution Existing Highway System			
FIGURE NO. 4	SCALE No Scale	DATE August 2012	

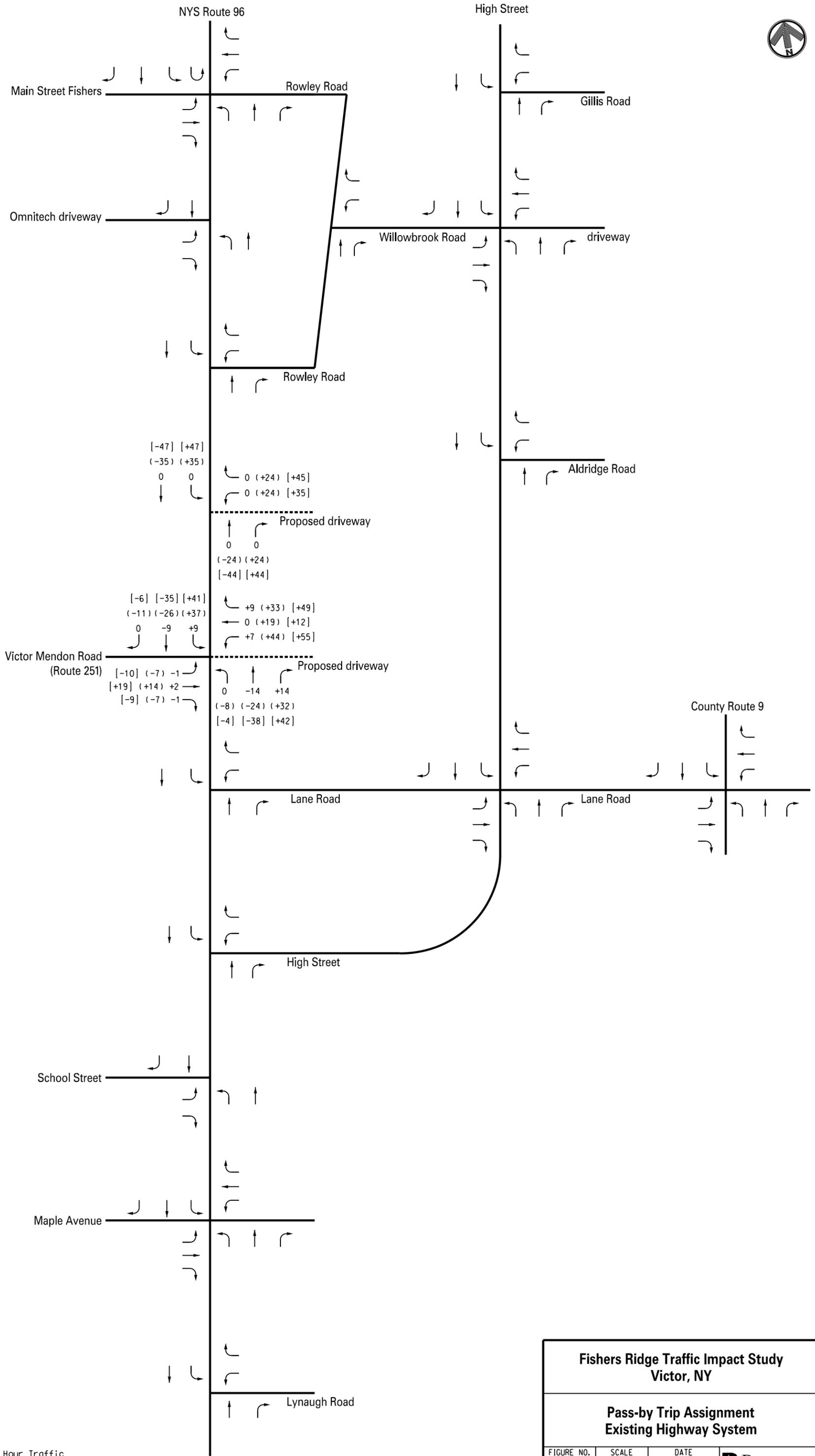


Fishers Ridge Traffic Impact Study Victor, NY			
Pass - By Trip Distribution Existing Highway System			
FIGURE NO. 5	SCALE No Scale	DATE August 2012	



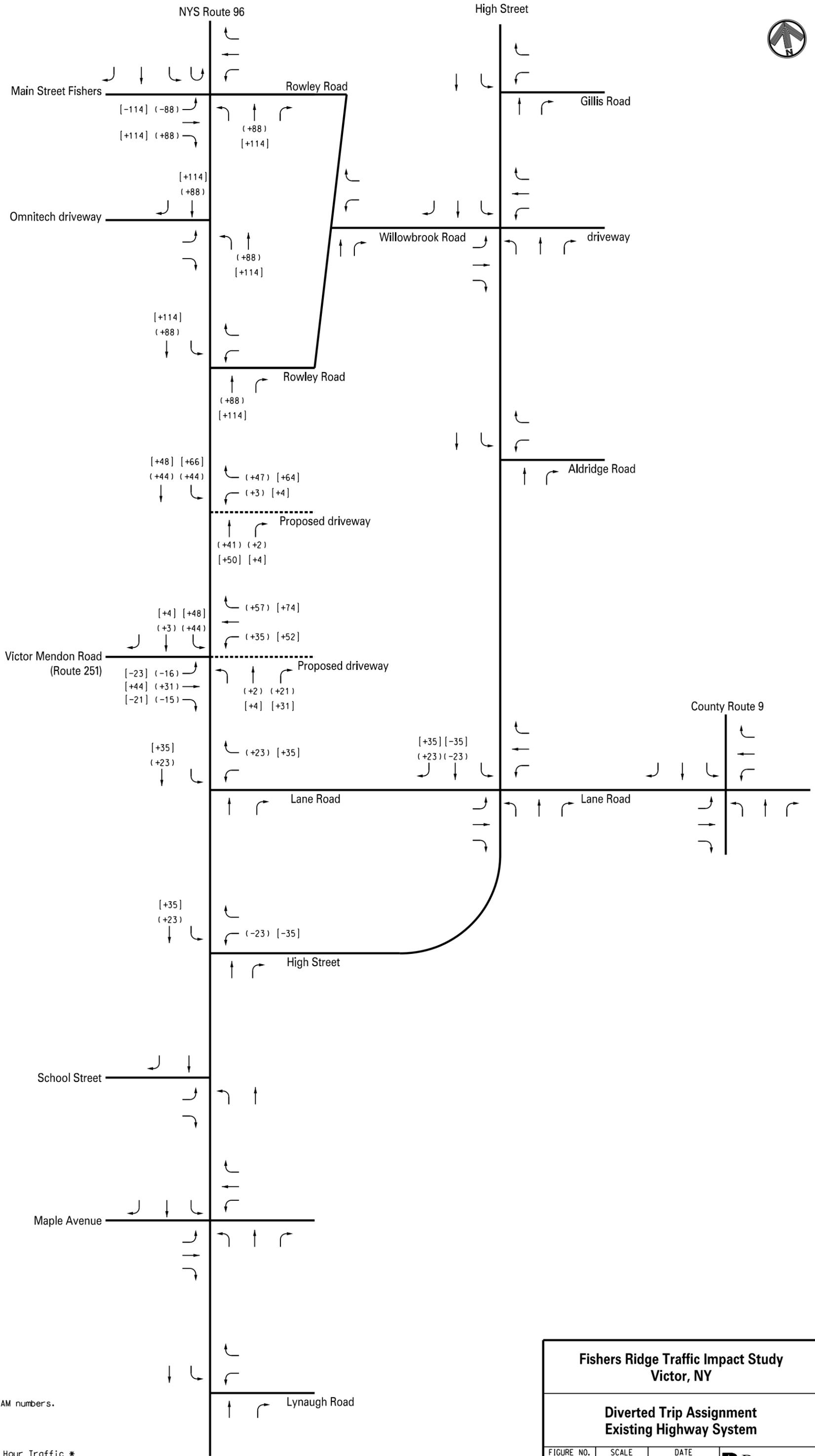
LEGEND:
 XXX - Friday AM Peak Hour Traffic
 (XXX) - Friday PM Peak Hour Traffic
 [XXX] - Saturday Mid-day Peak Hour Traffic

Fishers Ridge Traffic Impact Study Victor, NY			
Primary Trip Assignment Existing Highway System			
FIGURE NO. 7	SCALE No Scale	DATE August 2012	



LEGEND:
 XXX - Friday AM Peak Hour Traffic
 (XX) - Friday PM Peak Hour Traffic
 [XX] - Saturday Mid-day Peak Hour Traffic

Fishers Ridge Traffic Impact Study Victor, NY			
Pass-by Trip Assignment Existing Highway System			
FIGURE NO. 8	SCALE No Scale	DATE August 2012	



* Note: There are no AM numbers.

LEGEND:

- XXX - Friday AM Peak Hour Traffic *
- (XXX) - Friday PM Peak Hour Traffic
- [XXX] - Saturday Mid-day Peak Hour Traffic

**Fishers Ridge Traffic Impact Study
Victor, NY**

**Diverted Trip Assignment
Existing Highway System**

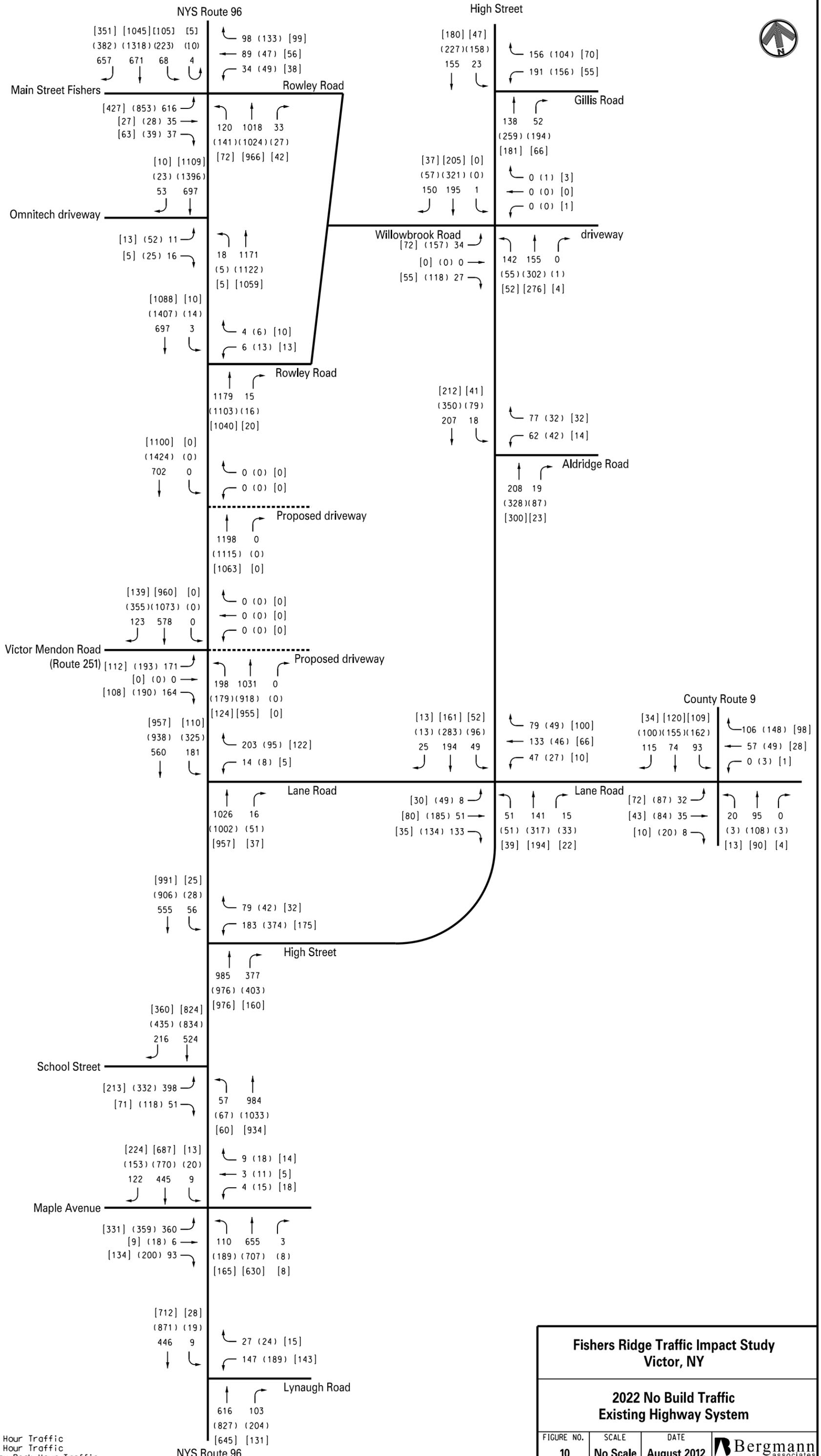
FIGURE NO.	SCALE	DATE	
9	No Scale	August 2012	

VI. Future Traffic Evaluation

A. 2022 Traffic

The 2011 peak hour volumes were increased by 4.0 % for base year 2012 and then 2.0 % per year over 10 years to project the 2022 No-Build peak hour traffic volumes at the subject intersections. The short term and long term growth rates were established with the Town's Traffic Consultant and the NYSDOT to account for general traffic growth trends and also specific developments planned for the area in the near future. It was determined that the baseline growth rate of 2% remains a reasonable estimate for long term growth based on traffic data trends on Route 96 in the 2000's (starting roughly from 2000 through 2009). This is based on data from the 2009 New York State Traffic Data Report. A greater rate of increase is expected in the near term due to various area developments planned for the near future. This increase to background traffic includes traffic specific to the following developments: High Point Business Park, Victor Crossing, Fisher's Landing, The Fairways and the Farmington Aldi.

The total projected 2022 Build traffic volumes are a sum of the 2022 No-Build volumes and the trips generated by the proposed development. Total primary vehicle trips for the proposed development are shown in Figure 7. The Pass-By vehicle trips are shown in Figure 8. The Diverted vehicle trips are shown in Figure 9. The sum of background traffic, in Figure 10, and all site-generated trips are shown in Figure 11. This condition represents traffic after full build out of the proposed development, the 2022 Build condition.



Fishers Ridge Traffic Impact Study Victor, NY			
2022 No Build Traffic Existing Highway System			
FIGURE NO. 10	SCALE No Scale	DATE August 2012	

B. 2022 No Build Levels of Service

The traffic operations during the peak hours at the subject intersections are projected to range from LOS A to F in 2022 according to Synchro. Projected Synchro 2022 No-Build level of service results for the intersections are provided in Table 3 and described below. Detailed level of service analysis results are contained in Appendix E.

NYS Route 96 and Main Street Fishers – During the AM peak hour the overall intersection is projected to operate at LOS D as compared to LOS C in the 2011 Existing condition. The approaches are expected to operate at LOS D or better with the exception of the northbound through/through-right movement which will operate at LOS E. The eastbound and westbound approaches will change to LOS D and the northbound approach will change to LOS E. During the PM peak hour the overall intersection is projected to operate at LOS F as compared to LOS D in the 2011 Existing condition. The westbound approach is expected to operate at LOS D and the northbound and southbound approaches are expected to operate at LOS F. All other movements and approaches will operate at LOS D or better. During the Midday peak hour the overall intersection is projected to operate at LOS C and all approaches will operate at LOS D or better.

NYS Route 96 and Omnitech Driveway – During the AM peak hour all approach LOS's operate the same as the 2011 Existing Condition with the exception of the eastbound left condition which will change to LOS C. During the PM peak hour, the eastbound left, right, and approach change to LOS F, LOS C, and LOS F respectively, while the all other movements operate at the same LOS. During the Mid-Day peak hour the northbound left movement changes to LOS B while all other movements operate at the same LOS

NYS Route 96 and Rowley Road – During the AM peak hour all LOS's operate the same as the 2011 Existing condition. During the PM peak hour the westbound approach and southbound left movement changes to LOS D and LOS B respectively. During the Mid-day peak hour the southbound left movement changes to LOS B and all other movements remain the same LOS as the 2011 Existing condition.

NYS Route 96 and Victor-Mendon Road Route 251 – During the AM peak hour the eastbound northbound approach changes to LOS C and the overall intersection LOS remains LOS B. During the PM peak hour the northbound and southbound approaches change to LOS F and B respectively. The northbound left turn movement changes to LOS F and the overall intersection LOS changes to LOS D during the PM peak hour. The Midday peak hour overall intersection LOS changes to LOS B while all movements at the intersection operate at LOS C or better.

NYS Route 96 and Lane Road – The westbound left/right turn movement changes to LOS F during the AM and PM peak hour and changes to LOS E during the Midday peak hour. The southbound left turn movement changes to LOS C during the PM peak hour. All other movements operate at the same LOS as the 2011 Existing condition.

NYS Route 96 and High Street (in the Village) – During the AM peak hour the overall intersection LOS changes to LOS C. The northbound through movement changes to LOS D and

the approach changes to LOS C. The southbound left turn movement changes to LOS E and the approach changes to LOS C. All other operations operate at LOS D or better. During the PM peak hour the overall intersection LOS changes to LOS F. The northbound through movement and approach changes to LOS F and the southbound left turn movement changes to LOS E while the through movement and approach change to LOS F. All other approaches and movements operate at LOS D or better. During the Midday peak hour the overall intersection, approaches, and movements operate at LOS D or better with the exception of the southbound through movement and approach which changes to LOS E.

NYS Route 96 and School Street – During the AM peak hour the eastbound left turn movement and approach change to LOS E. All other movements operate at LOS D or better. The overall intersection changes to LOS D. During the PM peak hour the eastbound left turning movement remains at LOS E. The northbound through movement and approach change to LOS F. The overall intersection LOS changes to LOS E. During the Mid-day peak hour the overall intersection LOS changes to LOS C. The remaining movements operate at LOS C or better.

NYS Route 96 and Maple Avenue – During the AM peak hour the approach changes to LOS D. The northbound approach and the overall intersection change to LOS C. During the PM peak hour the eastbound left turn movement and approach change to LOS F and LOS E, respectively, and the overall intersection changes to LOS D.

During the Mid-day peak hour the southbound through movement and approach change to LOS F and LOS E respectively. The overall intersection changes to LOS D during the Mid-day peak hour. All other operations operate at LOS C or better.

NYS Route 96 and Lynaugh Road – There are no changes in LOS at this intersection from the 2011 Existing condition with the exception of the westbound left/right movement that changes to LOS F during the AM peak hour.

County Route 9 and Lane Road Extension – The eastbound approach changes to LOS C during the AM peak hour, LOS F during the PM peak hour and LOS E during the Mid-Day peak hour. All other movements operate at LOS C or better.

High Street and Lane Road – All approaches change to LOS C during the AM peak hour. The eastbound, northbound, and southbound approaches as well as the overall intersection change to LOS F, during the PM peak hour. During the Mid-Day peak hour, eastbound and northbound approached change to LOS B and C, respectively while all other operations operate at LOS B.

High Street and Aldridge Road – The westbound approach changes to LOS C during the PM peak hour. All other movements operate at LOS B or better.

High Street and Willowbrook Road – The eastbound approach changes to LOS E during the PM peak and to LOS C during the Mid-Day peak hour. The westbound approach LOS is expected to remain the same at LOS B during the peak hours. All other movements operate at LOS B or better.

High Street and Gillis Road – The Gillis Road approach changes to LOS C during the AM peak, to LOS F during the PM peak hour and remains at LOS B during the Mid-Day peak. The High Street approaches are projected to continue to operate at LOS A.

C. 2022 Full Build Levels of Service without Mitigation

The traffic operations during the peak hours at the subject intersections are projected to range from LOS A to F in 2022 with full build out of the proposed development according to Synchro. Projected Synchro 2022 Build level of service results for the intersections are provided in Table 3 and described below. Detailed level of service analysis results are contained in Appendix F.

NYS Route 96 and Main Street Fishers – During the AM peak hour the overall intersection is projected to operate at LOS E as compared to LOS D in the 2022 No Build condition. The northbound through/through right and approach change to LOS F and the southbound through/through movement and approach change to LOS E and D respectively. During the PM peak hour the northbound left movement changes to LOS E while all other movements and approaches remain the same as in the 2022 No Build condition. During the Mid-day peak hour the northbound through/through-right movement and approach change to LOS F and the southbound through/through movement and approach change to LOS F. All other movements and approach LOS remain the same as in the 2022 No Build condition.

NYS Route 96 and Omnitech Driveway – The eastbound approach changes to LOS D and the northbound left movement changes to LOS C during the AM peak hour. During the PM peak hour the eastbound right movement changes to LOS D and the northbound left movement changes to LOS C. During the Mid-day peak hour the eastbound left and right movements change to LOS F and LOS C respectively. The eastbound approach changes to LOS F while the northbound left movement changes to LOS C. All other movements at this intersection operate at the same LOS as the 2022 No Build condition during the peak hours.

While the Synchro level of service analysis shows long delays during the PM period, observations in the field show much better operating conditions due to the gaps created by the signal at Route 96 and Main St. Fishers.

NYS Route 96 and Rowley Road – During the AM peak hour the westbound approach changes to LOS F and the southbound left movement changes to LOS C. During the PM peak hour the westbound approach also changes to LOS F and southbound left turn movement changes to LOS F. During the Mid-day peak hour the westbound approach changes to LOS F and the southbound left changes to LOS F. All other movements operate at the same LOS as the No-Build condition.

NYS Route 96 and Victor-Mendon Road Route 251 – During the AM peak hour the overall intersection is projected to operate at LOS F as compared to LOS B in the 2022 No Build condition. The approaches are expected to operate at LOS C or better with the exception of the northbound approach which changes to LOS F. During the PM peak hour the overall intersection is projected to operate at LOS F as compared to LOS D in the 2022 No Build condition. The eastbound, westbound, and southbound approaches change to LOS F. During the Mid-day peak

hour the overall intersection is projected to operate at LOS F as compared to LOS B in the 2022 No Build condition. The eastbound approach LOS changes to LOS D and the westbound, northbound and southbound approaches change to LOS F.

NYS Route 96 and Lane Road –During the AM peak hour the southbound left movement changes to LOS C and during the PM peak hour the same movement changes to LOS F. The westbound approach and southbound left turn movement changes to LOS F and LOS D respectively, during the Mid-Day peak hour. All other movements operate at the same LOS as the 2022 No Build condition.

NYS Route 96 and High Street (in the Village) – During the AM peak hour the northbound approach and overall intersection LOS change to LOS F from the 2022 No Build conditions. During the PM peak hour there is no change in LOS from the 2022 No Build condition. During the Mid-day peak hour the northbound and southbound through movement and approaches also change to LOS F. There are no other changes to LOS at this intersection from the 2022 No Build conditions.

NYS Route 96 and School Street – During the AM peak hour the eastbound left and approach change to LOS F and the northbound through movement and approach change to LOS F from the 2022 No Build condition. The overall intersection LOS changes to LOS F. During the PM peak hour the eastbound left, right, and approach change to LOS F, LOS C, and LOS F, respectively. The northbound left turn movement changes to LOS B and the southbound left turn movement and approach change to LOS F. The overall intersection LOS changes to LOS F from the 2022 No Build condition. During the Mid-day peak hour the northbound and southbound through movement and approach change to LOS F and the overall intersection LOS also changes to LOS F. The northbound left turn movement changes to LOS B. All other movements and approaches remain the same as the 2022 No Build condition.

NYS Route 96 and Maple Avenue – During the AM peak hour the eastbound left turn movement and approach change to LOS F. The northbound through/right movement and southbound through movement change to LOS F and the approaches also change to LOS F. The overall LOS of the intersection changes to LOS F as compared to LOS C in the 2022 No Build condition. All other movements and approaches remain the same as the 2022 No Build condition. During the PM peak hour the eastbound and westbound approach changes to LOS F and the southbound through movement and approach also change to LOS F. The overall intersection LOS changes to LOS F. All other movements and approaches operate at LOS D or better. During the Mid-day peak hour the eastbound left movement and approach change to LOS E and LOS F, respectively. The northbound through/right movement and approach change to LOS F and the southbound approach also changes to LOS F. The overall intersection LOS changes from LOS D to LOS F from the 2022 No Build condition.

NYS Route 96 and Lynaugh Road – There is no change in LOS from the 2022 No Build condition.

County Route 9 and Lane Road Extension – During the AM peak hour the eastbound and westbound approaches change to LOS D and LOS C, respectively. During the Mid-Day peak

hour the eastbound and overall LOS change to LOS F and LOS D, respectively. All other movements remain the same as the 2022 No Build condition.

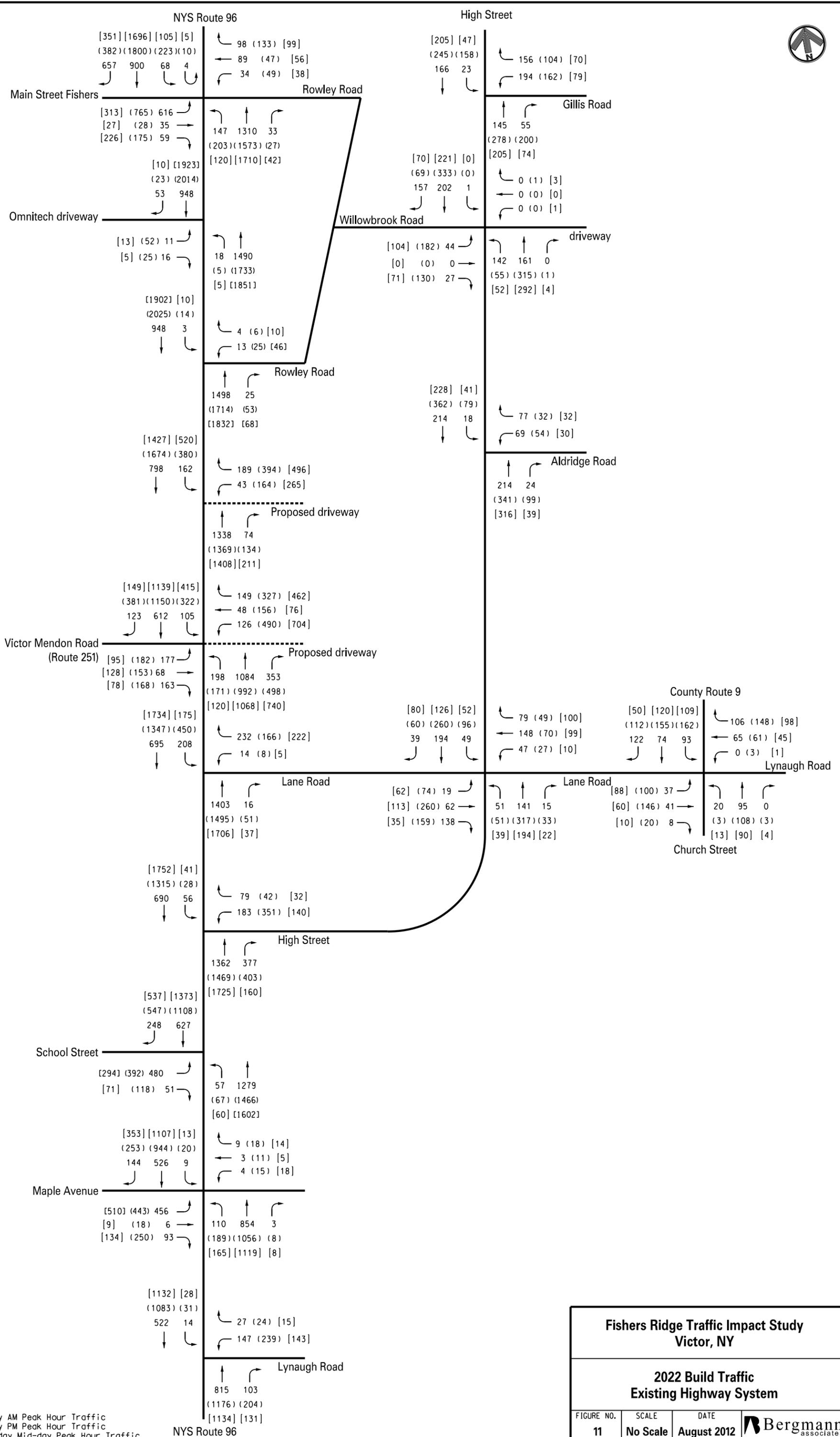
High Street and Lane Road – During the Mid-day peak hour the eastbound, westbound, southbound and overall intersection LOS changes to LOS C. All other movements and approaches remain the same as the 2022 No Build condition.

High Street and Aldridge Road – There is no change in LOS from the 2022 No Build condition with the exception of the westbound approach which changes from LOS B to LOS C during the PM and Mid-Day peak hours.

High Street and Willowbrook Road– During the AM peak hour the eastbound approach changes to LOS D. During the PM peak hour the eastbound approach and overall intersection LOS changes to LOS F and LOS C, respectively. There are no other changes in LOS from the 2022 No Build condition.

High Street and Gillis Road – There are no changes in LOS at this intersection from the 2022 No Build condition with the exception of the westbound approach which changes to LOS C, LOS F, and LOS C, during the AM, PM, and Mid-Day peak hours, respectively.

Route 96 at Proposed Driveway – During the AM peak hour the northbound through/right movement will operate at LOS F. The overall intersection will operate at LOS E and all other movements and approaches will operate at LOS D or better. During the PM peak hour the westbound right movement and approach will operate at LOS F and LOS E, respectively. The northbound through/right will operate at LOS F. The southbound left and through movement as well as the approach will operate at LOS F. The overall intersection LOS will operate at LOS F. During the Mid-day peak hour all movements and approaches will operate at LOS F with the exception of the westbound left movement which will operate at LOS E. The overall intersection LOS will operate at LOS F.



LEGEND:
 XXX - Friday AM Peak Hour Traffic
 (XXX) - Friday PM Peak Hour Traffic
 [XXX] - Saturday Mid-day Peak Hour Traffic

Fishers Ridge Traffic Impact Study Victor, NY			
2022 Build Traffic Existing Highway System			
FIGURE NO.	SCALE	DATE	
11	No Scale	August 2012	

D. 2022 Build with Mitigation Levels of Service

The traffic operations during the peak hours at the subject intersections are projected to range from LOS A to F in 2022 with full build out and mitigation of the proposed development according to Synchro. Projected Synchro 2022 Build with mitigation level of service results for the intersections are provided in Table 3 and described below. Detailed level of service analysis results are contained in Appendix G.

The following mitigation measures are proposed to improve LOS, alleviating the traffic generated by the proposed development, as well as mitigating some existing problems within the study area:

- Signal retiming is recommended at the intersections of NYS Route 96 and Main Street Fishers, High Street (in the Village), School Street, and Maple Avenue. Signal synchronization within the Village of Victor is a heavily discussed topic as evidenced by recent Town and Village Transportation meetings. The Town of Victor, Village of Victor and Genesee Transportation Council have long discussed a possible upgrade to improve coordination of the signals and link these signals to the Regional Traffic Operations Center (RTOC) for real time monitoring.
- A second northbound and southbound lane should be added to NYS Route 96 through the immediate project area, from Omni Tech Driveway to Lane Road. This is a widening of the existing 3 lane section between Omni Tech and the northerly Fishers Ridge Entrance/Exit to 5 lanes, two lanes in each direction with a center left turn lane. Between the northerly entrance/exit and Lane Road it is a widening of 4 lanes to 6 lanes, two lanes in each direction with dual left turn lanes.
- Additional turning lanes should be added to the intersection of NYS Route 96 and Victor-Mendon Road (Route 251) to accommodate the new approach, the southern site driveway. On NYS Route 96: one northbound right turn lane and two southbound left turn lanes are recommended. On Route 251: two left turn lanes, one through lane and one right turn lane is recommended, basically a widening of the approach for two exclusive left turn lanes. On the south Fishers Ridge driveway exit four exit lanes are recommended, two left turn lanes, one through lane and one right turn lane. On the Fishers Ridge entrance two lanes are recommended to accept the double left turn lanes from NYS Route 96.
- The proposed NYS Route 96 traffic signal at the northern site driveway should be coordinated with the signal at Victor-Mendon Road (Route 251). Two exclusive southbound left turn lanes are recommended at the north driveway with a protected only phase (green left turn arrow indication with no green circle for the left turn). On the Fishers Ridge driveway exit: two exit lanes are recommended, one left turn lane and one right turn lane. On the Fishers Ridge driveway entrance: two enter lanes are recommended to accept the double left turn lanes from NYS Route 96. Widening of NYS Route 96 is also recommended at this intersection as described above to

accommodate two through lanes in each direction, two northbound and two southbound.

- Addition of a right turn lane on Lane Road is recommended so motorists turning right onto NYS Route 96 north do not have to wait for queued left turn vehicles. This is expected to alleviate congestion on Lane Road based on SimTraffic model results. Widening of NYS Route 96 is also recommended at this intersection as described above for two through lanes in each direction.
- Synchro shows extremely poor LOS F for several unsignalized study intersections. In general, the Synchro model overestimates stop sign delays for TWSC (two way stop control) and AWSC (all way stop control) intersections where the major road is two lanes (no center two way left turn lane). The SimTraffic model which simulates traffic flow indicates/predicts less delay and better LOS. Field observations have found that often times actual delays fall between that predicted by Synchro and by SimTraffic (sometimes closer to the average and sometimes closer to the SimTraffic prediction, depending on driver behavior and gaps in traffic at the intersection under study).
- Traffic flowing on NYS Route 96 through the Village of Victor, approximately 30% of the peak period flow, contributes to the delay and backups that are experienced. Although there is an alternate route by using the New York State Thruway between exit 44 and 45, some motorists choose not to use this route. As traffic flow continues to grow by normal background growth and development, this delay will increase. Since the Village is developed, installation of additional through lanes on NYS Route 96 would not be a considerable option. A possible mitigation measure would be to work with the New York State Department of Transportation to install real time traffic measuring devices on NYS Route 96 that would indicate actual delay and adjust traffic signal timings real time based on this delay. While this can help to reduce delay, it will not be the answer to reducing through traffic. A possible solution would be to install real time traffic message signs on I-490 approaching the NYS Route 96 exit and on Route 332 approaching NYS Route 96. These signs would be based on real time traffic delay measured in the Village of Victor and can display a simple message indication to drivers of the congestion conditions in the form of colors: RED - Long Delays, Yellow - Moderate Delays, and Green – Short Delays. The ultimate goal would be that when the sign showed Red or Yellow motorists would divert to the Thruway to bypass the Village. As a mitigation measure it is recommended that this be pursued with the New York State Department of Transportation.

NYS Route 96 and Main Street Fishers with retiming of existing multi-phase signal – Proposed balancing of traffic signal green by phase is expected to achieve better overall operation. During the AM peak hour the overall intersection LOS is mitigated to operate at LOS D as compared to LOS E in the 2022 Build Condition without mitigation. In balancing signal timing, the northbound through/through-right movement and approach are mitigated to LOS D. The

southbound through/through movement and approach are mitigated to LOS C and LOS B, respectively. During the PM peak hour the overall intersection LOS and delay improves from LOS F with 257 seconds of delay to LOS F with 91 seconds of delay due to the proposed mitigation. Similar to the AM peak hour results, reduced delays for Route 96 are expected with balanced signal timing splits. During the Mid-day peak hour the northbound and the southbound delays are reduced improving service levels to LOS D or better for the Route 96 movements in conjunction with a marked overall improvement from LOS F to LOS D.

NYS Route 96 and Omnitech Driveway with existing stop sign control on driveway to 5 lane arterial – During the AM peak hour no change in LOS is expected from the 2022 Build condition. During the PM and Mid-day peaks, long delays are expected on the Omnitech exit without a traffic signal, but signalization is expected at this intersection by the development owner at such time as delays require and NYSDOT approves.

NYS Route 96 and Rowley Road with existing stop sign control on Rowley Road approach to 5 lane arterial – During the AM peak hour the westbound approach is mitigated to LOS D and the southbound left movement is mitigated to LOS B from the 2022 Build condition. During the PM peak hour the westbound approach is mitigated to LOS E and the southbound left movement is mitigated to LOS C. During the Mid-day peak hour the westbound approach is also mitigated to LOS E and the southbound left movement is mitigated to LOS B. All other movements and approach LOS operate at LOS A.

Route 96 at Proposed North Driveway with new multi-phase coordinated traffic signal, addition of one through lane in each direction on Route 96 and addition of a second left turn lane on Route 96 – During the AM peak hour the northbound approach is mitigated to LOS A with the addition of another through lane. The overall intersection LOS is mitigated to LOS A from LOS E in the 2022 Build condition.

During the PM peak hour the northbound approach is mitigated from LOS F to LOS B with the addition of another through lane. The LOS F projected for the southbound left and through movements is mitigated to LOS D and LOS A respectively while the southbound approach altogether is mitigated to LOS B with the addition of another through lane. The overall intersection LOS is mitigated to LOS B from LOS F in the 2022 Build condition.

During the Mid-day peak hour the Route 96 approaches are mitigated from LOS F to LOS C with the addition of another through lane in each direction. The overall intersection LOS is mitigated to LOS C from LOS F in the 2022 Build condition.

NYS Route 96 and Victor-Mendon Road Route 251 with the Fishers Ridge driveway connection, new multiphase coordinated traffic signal, additional through lanes on Route 96 and other improvements as described above – During the AM peak hour the overall intersection is mitigated to operate at LOS C from LOS F in the 2022 Build Condition. The eastbound left

movement is mitigated to LOS D and the northbound through movement and approach are mitigated to LOS B with the addition of another through lane. All movements and approaches operate at LOS D or better during the AM peak hour.

During the PM peak hour the overall intersection is mitigated to LOS C as compared to LOS F in the 2022 Build condition. All movements and approaches are mitigated to operate at LOS D or better with the exception of the eastbound through, westbound left/left, northbound left, and southbound left/left movement which will operate at LOS E. All approaches are projected to operate at LOS D or better during the PM peak hour.

During the Mid-day peak hour the overall intersection is mitigated to operate at LOS D as compared to LOS F in the 2022 Build condition. The westbound left movement and approach operate at LOS E and LOS D, respectively. The northbound through movement and approach are mitigated to LOS D with the addition of another through lane. The southbound left and through movements are mitigated to operate at LOS E and C respectively with the addition of another through lane. All other movements and approaches operate at LOS D or better with the exception of the eastbound through movement which will operate at LOS E.

NYS Route 96 and Lane Road with existing stop sign control of Lane Road, addition of one through lane in each direction on Route 96 and addition of a right turn lane on Lane Road – During the peak hours the delays on the westbound approach are reduced by adding lane capacity. The addition of lanes on Route 96 provides improved capacity and a right turn lane is also recommended so motorists turning right onto Route 96 north do not have to wait for queued left turn vehicles. This is expected to alleviate congestion on Lane Road based on SimTraffic model results.

Route 96 Signals in the Village – at High Street, at School Street and at Maple Avenue – Real time signal timing is recommended at the traffic signals in the Village of Victor; at High Street, at School Street, and at Maple Avenue. Signal synchronization within the Village of Victor is a heavily discussed topic as evidenced by recent Town and Village Transportation meetings. The Town of Victor, Village of Victor and Genesee Transportation Council have long discussed a possible upgrade to improve coordination of the signals and link these signals to the Regional Traffic Operations Center (RTOC) for real time monitoring.

In general the proposed signal timing plan would add more delay for movements with the least volume in order to improve traffic movements with the highest volume for the Village corridor signals at High Street, School Street and Maple Avenue. The proposed retiming is an overall benefit to provide the most optimum operation. The three signals on Route 96 in the Village are coordinated and therefore were reviewed together for the optimum overall corridor benefit. Balancing the coordination timing for all three intersections overall meant certain intersections/movements had increased delay and others improved. The proposed retiming is an overall benefit to provide the most optimum operation. Real time signal timing is also recommended for added benefit as increased trip levels are reached.

Route 96 Intersection at Lynaugh Road – Stop Sign Control to a 2 Lane Arterial – Synchro shows poor LOS F for Lynaugh Road. SimTraffic indicates/predicts less delay and better LOS, but it is still poor. Expected delays are lengthy, but installation of a traffic signal could have negative impacts and encourage commuters to use Lane Road and Lynaugh Road, local roads.

In general, the Synchro model overestimates stop sign delays for TWSC (two way stop control) intersections where the major road is two lanes (no center two way left turn lane). The SimTraffic model which simulates traffic flow indicates/predicts less delay and better LOS. Field observations have found that often times actual delays fall between that predicted by Synchro and by SimTraffic (sometimes closer to the average and sometimes closer to the SimTraffic prediction, depending on driver behavior and gaps in traffic at the intersection under study).

Lane Road at Church Street – TWSC at a 2 Lane Major Road – Synchro shows LOS F for Lane Road during the PM and MD peaks. SimTraffic indicates less delay and better than acceptable LOS.

Lane Road at High Street – AWSC for Two 2-Lane Roads – Synchro shows LOS F at this intersection during the PM peak. SimTraffic indicates less delay and better than acceptable LOS.

High Street at Willowbrook Road – TWSC at a 2 Lane Major Road – Synchro shows LOS F for Willowbrook Road during the PM peak. SimTraffic indicates less delay and better than acceptable LOS.

High Street at Gillis Road – TWSC at a 2 Lane Major Road – Synchro shows LOS F for Gillis Road during the PM peak. SimTraffic indicates less delay and better than acceptable LOS.

**TABLE 3
LEVEL OF SERVICE RESULTS**

			AM PEAK HOUR								PM PEAK HOUR								MID-DAY PEAK HOUR								
			Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	
Route 96 at Main Street	EB	L	C	32	D	39	D	40	E	59	D	35	D	45	D	39	F	113	C	28	C	32	C	33	D	52	
		LT	D	36	D	45	D	46	E	70	D	40	D	54	D	45	F	127	C	31	D	37	D	37	E	58	
		R	A	6	A	6	A	5	A	7	A	5	A	5	A	5	C	31	A	6	A	5	A	9	C	26	
		Approach	C	32	D	40	D	40	E	60	D	36	D	48	D	36	F	104 *	C	27	C	31	C	25	D	43	
	WB	L	C	34	C	35	C	35	D	46	D	39	D	41	D	41	E	80	C	34	D	37	D	36	D	54	
		TR	C	32	D	40	D	41	E	74	C	21	D	38	D	37	F	150	C	22	C	34	C	34	E	73	
		Approach	C	32	D	39	D	40	E	69	C	25	D	39	D	37	F	135 *	C	25	C	35	C	34	E	70	
	NB	L	B	16	C	20	C	27	C	26	C	21	C	29	E	59	F	226	B	12	B	14	B	17	C	28	
		T TR	D	35	E	65	F	150	D	46	D	38	F	109	F	354	E	77	C	25	C	33	F	156	D	51	
		Approach	C	33	E	61	F	138	D	44	D	36	F	100	F	321	F	93 *	C	24	C	32	F	148	D	49	
SB	UL	B	16	B	19	B	19	B	18	D	41	F	96	F	91	F	169	B	12	B	16	B	14	C	25		
	T T	C	27	C	32	E	62	C	30	E	69	F	211	F	419	F	86	C	24	C	32	F	158	D	41		
	R	A	2	A	6	A	7	B	7	A	1	A	1	A	1	A	2	A	1	A	1	A	1	A	1		
	Approach	B	15	B	19	D	38	B	20	D	53	F	156	F	321	F	80 *	B	18	C	24	F	125	C	34		
Overall		C	25	D	38	E	73	D	38	D	43	F	110	F	257	F	91 *	C	22	C	28	F	117	D	43		
Route 96 at Omnitech Dr.	EB	L	B	15	C	17	C	22			D	30	F	75	F	>300			C	17	C	22	F	66			
		R	B	11	B	11	B	13			B	14	C	17	D	28			B	12	B	13	C	21			
	Approach	B	12	B	14	C	17			C	25	F	56	F	>300			C	16	C	20	F	53				
NB	L	A	9	A	10	B	11			B	11	B	13	C	19			A	10	B	11	C	18				
	T T	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
Approach	A	0	A	0	A	0			A	0	A	0	A	0				A	0	A	0	A	0				
SB	T TR	A	0	A	0	A	0			A	0	A	0	A	0				A	0	A	0	A	0			
Route 96 at Rowley Road	WB	LR	C	18	C	25	F	>300			C	22	D	32	F	>300			C	17	C	22	F	>300			
	NB	TR	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0			
	SB	L	B	10	B	12	C	43			A	10	B	12	F	71			A	10	B	11	F	59			
Approach	T	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
Route 96 at Rowley Road	WB	LR						D	26								E	48							E	40	
	NB	T TR						A	0								A	0							A	0	
	SB	L						B	14								C	17							B	15	
Approach	T T						A	0									A	0						A	0		
Route 96 at Proposed North Driveway	WB	L						D	43						D	42									E	72	
		R						C	29						F	92									F	95	
		Approach						C	32						E	77									F	87	
	NB	TR					F	121							F	244									F	>300	
	SB	L					C	23							F	>300									F	>300	
Approach	T					A	4							F	192									F	102		
Overall							E	71						F	251									F	298		
Route 96 at Proposed North Driveway	WB	L							D	41							E	57							E	69	
R								C	34								D	43							D	42	
Approach								D	35									D	47							D	52
NB	T TR							A	4									B	13							C	29
	SB	L L							D	39								D	53							D	54
		T T							A	2								A	8							A	9
Approach							A	8									B	17							C	21	
Overall								A	8									B	19							C	29

* Balancing green time allocation for the various phases provides the least overall delay, similar to existing conditions.

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**TABLE 3
LEVEL OF SERVICE RESULTS**

			AM PEAK HOUR								PM PEAK HOUR								MID-DAY PEAK HOUR							
			Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Route 96 at Route 251/South Driveway	EB	L	C	25	C	33					C	32	C	33					C	21	C	31				
		R	A	7	A	7					B	11	C	22					A	8	B	13				
		Approach	B	16	C	20					C	22	C	28					B	15	C	22				
	NB	L	A	8	B	13					B	16	F	>300					A	9	C	32				
T		B	15	C	25					A	10	B	18					A	9	B	12					
Approach		B	14	C	23					B	11	F	84					A	9	B	14					
signalized	SB	T	A	8	A	9					B	11	C	24					A	9	B	15				
		R	A	0	A	0					A	0	A	0					A	0	A	0				
		Approach	A	6	A	7					A	8	B	18					A	8	B	13				
	Overall	B	12	B	18					B	11	D	45					A	9	B	14					
Route 96 at Route 251/South Driveway	EB	L					E	69							F	205							D	50		
		TR						D	41							F	148						E	55		
		Approach						D	53							F	168						D	53		
	WB	L						C	29							F	>300							F	>300	
TR							B	16							F	87							F	122		
Approach							C	21							F	203							F	>300		
signalized	NB	L					B	19							F	130							D	46		
		TR						F	>300							F	>300						F	>300		
		Approach						F	>300							F	>300						F	>300		
SB	L						C	29							F	>300							F	>300		
	T						C	22							F	222							F	215		
	Approach						A	2							A	3							A	2		
	Overall						F	176							F	231							F	>300		
															F	277							F	>300		
Route 96 at Route 251/South Driveway	EB	L L							D	54								D	54						D	50
		T							D	46								E	62					E	70	
		Approach							B	11								C	31					C	31	
	WB	L L							D	43									D	49					D	54
T								D	39									E	63					E	65	
Approach								C	28									D	47					D	37	
signalized	NB	L						D	46									D	49					D	53	
		T T							D	46								E	64					E	72	
		Approach							B	13								C	27					D	47	
SB	L							A	0									A	1					B	19	
	T T							B	14									C	23					D	38	
	Approach							D	46									E	66					E	60	
	Overall							C	21									D	36					C	34	
								A	2									A	1					A	1	
								C	21									C	34					D	37	
								C	21									C	35					D	42	
Route 96 at Lane Road	WB	LR	E	39	F	191	F	>300			C	23	F	83	F	>300			C	21	E	43	F	>300		
		TR	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0		
		Approach	B	11	B	13	C	22			B	13	C	19	F	189			B	10	B	12	D	29		
unsignalized	SB	L	A	3	A	3	A	5			A	0	A	0	A	0			A	0	A	0	A	0		
		T																								
Route 96 at Lane Road	WB	L						E	38									F	>300					E	48	
		R							F	78									E	36				F	159	
		Approach							F	76									F	>300				F	157	
unsignalized	NB	T TR						A	0										A	0				A	0	
		L							C	22										F	192				D	30
	Overall	T T						A	0										A	0				A	0	

* Balancing green time allocation for the various phases provides the least overall delay, similar to existing conditions.

** Synchro shows LOS F, but conditions are expected to be better than this indicates. SimTraffic indicates less delay and better than acceptable LOS and Synchro overestimates stop sign delays for stop control intersections where the major road is two lanes (no center two way left turn lane).

**TABLE 3
LEVEL OF SERVICE RESULTS**

			AM PEAK HOUR								PM PEAK HOUR								MID-DAY PEAK HOUR									
			Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation		Existing 2011		No Build 2022		Build 2022		Build 2022 with Mitigation			
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay		
Route 96 at High Street	WB	LR	D	41	D	39	D	39	C	32	D	44	D	36	D	36	E	69	C	25	C	23	C	25	D	41		
		NB	T	B	17	D	40	F	215	F	293	C	23	F	139	F	>300	F	251	B	13	D	41	F	>300	F	272	
	R		A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0
	Approach		B	12	C	29	F	168	F	230	B	16	F	99	F	299	F	197	B	11	D	36	F	281	F	249		
	SB	L	B	11	E	71	E	60	E	74	B	14	E	59	E	59	D	50	A	8	B	13	B	18	E	58		
T		B	10	B	16	B	16	C	22	C	23	F	130	F	>300	F	276	B	16	E	56	F	>300	F	265			
Approach		B	10	C	21	B	19	C	26	C	23	F	128	F	296	F	272	B	15	E	55	F	>300	F	260			
Overall		B	16	C	28	F	114	F	154	C	23	F	99	F	269	F	211	B	15	D	43	F	287	F	243			
Route 96 at School Street	EB	L	D	47	E	66	F	132	F	324	E	64	E	72	F	>300	F	149	C	27	C	27	C	29	F	234		
		R	A	4	A	4	A	4	A	6	A	6	B	12	C	21	B	17	A	4	A	5	A	9	B	13		
		Approach	D	42	E	59	F	120	F	293	D	49	E	56	F	283	F	119	C	21	C	22	C	26	F	190		
	NB	L	B	11	B	13	B	13	A	6	A	5	A	9	B	14	B	16	A	7	A	10	B	10	B	11		
		Approach	B	19	D	47	F	162	F	92	A	10	F	156	F	137	F	282	B	11	B	18	F	256	F	127		
SB	T	B	19	C	28	C	34	B	15	B	15	C	30	F	167	F	160	C	23	C	30	F	>300	F	140			
	Approach	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0			
Overall		C	24	D	42	F	111	F	119	B	17	E	76	F	148	F	177	B	15	C	20	F	219	F	121			
Route 96 at Maple Avenue	EB	L	D	39	D	45	F	207	F	334	E	61	F	117	F	>300	F	205	C	23	C	28	F	98	F	>300		
		TR	A	7	A	5	A	5	A	9	A	8	A	8	A	7	C	22	A	4	A	4	A	4	A	8		
		Approach	C	32	D	36	F	171	F	276	D	41	E	76	F	>300	F	136	B	17	C	21	E	77	F	253		
	WB	LTR	C	29	C	29	C	29	C	31	D	47	D	49	F	>300	E	80	C	27	C	33	D	38	F	84		
	NB	L	B	10	B	19	B	19	B	20	B	14	D	49	D	48	F	123	C	22	C	28	C	28	E	76		
Approach		B	19	C	34	F	>300	F	121	B	18	C	25	F	91	E	70	B	19	C	26	F	214	F	82			
SB	T	B	18	C	32	F	289	F	110	B	17	C	30	F	84	E	78	B	20	C	26	F	191	F	81			
	L	A	6	A	8	A	8	A	7	A	5	A	8	A	9	B	12	B	17	B	18	B	19	B	10			
	Approach	B	16	D	39	F	111	C	21	B	18	D	51	F	137	F	111	C	32	F	94	F	>300	F	113			
Overall		A	1	A	3	A	4	A	4	A	1	A	4	A	6	B	12	B	11	B	12	B	17	B	10			
Overall		B	12	C	31	F	87	B	17	B	15	D	43	F	107	F	89	C	27	E	73	F	>300	F	88			
Overall		B	19	C	32	F	182	F	106	C	22	D	46	F	183	F	94	C	22	D	44	F	216	F	116			
Route 96 at Lynaugh Road unsignalized	WB	LR	D	31	F	109	F**	326			F	>300	F	>300	F**	>300			F	59	F	>300	F**	>300				
	NB	TR	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
	SB	LT	A	0	A	0	A	1			A	1	A	1	A	4			A	1	A	1	A	3				
Lane Road at Church Street CR 9 unsignalized	EB	LTR	C	17	C	23	D	26			E	45	F	245	F**	>300			C	20	E	36	F**	63				
	WB	LTR	B	12	B	14	C	15			B	13	C	16	C	19			B	11	B	12	B	13				
	NB	LTR	A	1	A	2	A	2			A	0	A	0	A	1			A	1	A	1	A	0				
	Overall		A	3	A	3	A	3			A	4	A	4	A	4			A	4	A	4	A	4				
Overall		A	7	A	8	A	9			C	16	F	69	F	160			A	8	B	12	D	21					
Lane Road at High Street All-Way Stop unsignalized	EB	LTR	B	11	C	16	C	20			C	19	F	63	F**	192			A	10	B	12	C	16				
	WB	LTR	B	13	C	19	C	24			B	13	C	19	C	23			B	11	B	14	C	22				
	NB	LTR	B	12	C	18	C	20			C	20	F	74	F**	86			B	11	C	16	C	20				
	Overall		B	12	C	18	C	22			C	21	F	94	F**	129			B	11	B	14	C	18				
Overall		B	12	C	18	C	21			C	19	F	71	F**	126			B	11	B	14	C	20					
High Street at Aldridge Road unsignalized	WB	LR	B	12	B	14	B	15			B	15	C	19	C	23			B	12	B	13	C	15				
	NB	TR	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
	SB	LT	A	1	A	0	A	1			A	2	A	2	A	2			A	2	A	2	A	2				
High Street at Willowbrook unsignalized	EB	LTR	C	16	C	21	D	25			C	21	E	47	F**	81			B	13	C	16	C	20				
	WB	LTR	A	0	A	0	A	0			A	10	B	10	B	10			B	11	B	12	B	12				
	NB	LTR	A	5	A	5	A	5			A	2	A	2	A	2			A	2	A	2	A	2				
	Overall		A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
Overall		A	4	A	5	A	5			A	6	B	13	C	24			A	3	A	4	A	5					
High Street at Gillis Road unsignalized	WB	LR	B	13	C	17	C	18			D	30	F	133	F**	178			B	11	B	13	C	15				
	NB	TR	A	0	A	0	A	0			A	0	A	0	A	0			A	0	A	0	A	0				
	SB	LT	A	1	A	1	A	1			A	4	A	5	A	5			A	2	A	2	A	2				

* Balancing green time allocation for the various phases provides the least overall delay, similar to existing conditions.

** Synchro shows LOS F, but conditions are expected to be better than this indicates. SimTraffic indicates less delay and better than acceptable LOS and Synchro overestimates stop sign delays for stop control intersections where the major road is two lanes (no center two way left turn lane).

E. Pedestrian Accommodations

Proposed traffic impact mitigation for the development is subject to NYSDOT Engineering Instruction (EI) 04-11 “Procedural Requirements for Pedestrian Accommodation”. The NYSDOT Pedestrian Generator Checklist required by this EI is contained in Appendix H. The Pedestrian Generator Checklist aids in the determination of need for pedestrian accommodation.

The existing site has no pedestrian accommodations except for the Seneca Trail that leads through the middle of the site from the intersection of NYS Route 96 and Route 251 to the northwest corner of the site near the NYS Thruway. The trail location through the site will be changed and the trail will be upgraded but the trail heads at either end will remain in the same location. In addition, during the design phase of the project, pedestrian accommodations will be designed within the project which can be connected with any future pedestrian facilities constructed. County Area Transit System (CATS) of Ontario County provides two bus routes on NYS Route 96 in the study area. Route 3 Canandaigua / Victor and Route 7 Eastview / Bloomfield / Canandaigua both make stops at the intersections of Route 96 at Route 251 and Route 96 at Maple Avenue. The Fishers Ridge site will be designed to provide access and internal connectivity for public transportation and pedestrians. This enhancement will allow safe access for all user groups and promote the proposed “Main Street” feel of the site.

VII. Summary and Conclusions

A. Existing Conditions

Study area intersections include fourteen intersections on NYS Route 96, High Street, and Lane Road. Existing levels of service at most study area intersections are poor with many movements at LOS F.

B. Future Conditions

Growth of background traffic between 2011, 2012 and 2022 is expected to have impacts on levels of service.

The proposed multi-use development is projected to generate 1,276, 2,448, and 3,241 primary vehicle trips during the AM, PM, and Mid-Day peak hours, respectively. Levels of service at all study area intersections are projected to range from LOS A to LOS F for all individual intersection approach lanes. Mitigations as suggested should be implemented at intersections in the study area to mitigate the effects of the proposed development.

Results of the sight distance analysis identified that sufficient intersection sight distance is available at the site driveways and on Lane Road at High Street. Aldridge Road has insufficient

sight distance to the right onto High Street but this sight distance can be increased by cutting back the existing foliage.

VIII. Recommendations

Proposed mitigations:

The following mitigation measures are proposed to improve LOS, alleviating the traffic generated by the proposed development, as well as mitigating some existing problems within the study area:

- Signal retiming is recommended at the intersections of NYS Route 96 and Main Street Fishers, High Street (in the Village), School Street, and Maple Avenue. Signal synchronization within the Village of Victor is a heavily discussed topic as evidenced by recent Town and Village Transportation meetings. The Town of Victor, Village of Victor and Genesee Transportation Council have long discussed a possible upgrade to improve coordination of the signals and link these signals to the Regional Traffic Operations Center (RTOC) for real time monitoring.
- A second northbound and southbound lane should be added to NYS Route 96 through the immediate project area, from Omni Tech Driveway to Lane Road. This is a widening of the existing 3 lane section between Omni Tech and the northerly Fishers Ridge Entrance/Exit to 5 lanes, two lanes in each direction with a center left turn lane. Between the northerly entrance/exit and Lane Road it is a widening of 4 lanes to 6 lanes, two lanes in each direction with dual left turn lanes.
- Additional turning lanes should be added to the intersection of NYS Route 96 and Victor-Mendon Road (Route 251) to accommodate the new approach, the southern site driveway. On NYS Route 96: one northbound right turn lane and two southbound left turn lanes are recommended. On Route 251: two left turn lanes, one through lane and one right turn lane is recommended, basically a widening of the approach for two exclusive left turn lanes. On the south Fishers Ridge driveway exit four exit lanes are recommended, two left turn lanes, one through lane and one right turn lane. On the Fishers Ridge entrance two lanes are recommended to accept the double left turn lanes from NYS Route 96.
- The proposed NYS Route 96 traffic signal at the northern site driveway should be coordinated with the signal at Victor-Mendon Road (Route 251). Two exclusive southbound left turn lanes are recommended at the north driveway with a protected only phase (green left turn arrow indication with no green circle for the left turn). On the Fishers Ridge driveway exit: two exit lanes are recommended, one left turn lane and one right turn lane. On the Fishers Ridge driveway entrance: two enter lanes are recommended to accept the double left turn lanes from NYS Route 96. Widening of NYS Route 96 is also recommended at this intersection as described above to accommodate two through lanes in each direction, two northbound and two southbound.

- Addition of a right turn lane on Lane Road is recommended so motorists turning right onto NYS Route 96 north do not have to wait for queued left turn vehicles. This is expected to alleviate congestion on Lane Road based on SimTraffic model results. Widening of NYS Route 96 is also recommended at this intersection as described above for two through lanes in each direction.
- Synchro shows extremely poor LOS F for several unsignalized study intersections. In general, the Synchro model overestimates stop sign delays for TWSC (two way stop control) and AWSC (all way stop control) intersections where the major road is two lanes (no center two way left turn lane). The SimTraffic model which simulates traffic flow indicates/predicts less delay and better LOS. Field observations have found that often times actual delays fall between that predicted by Synchro and by SimTraffic (sometimes closer to the average and sometimes closer to the SimTraffic prediction, depending on driver behavior and gaps in traffic at the intersection under study).
- Traffic flowing on NYS Route 96 through the Village of Victor, approximately 30% of the peak period flow, contributes to the delay and backups that are experienced. Although there is an alternate route by using the New York State Thruway between exit 44 and 45, some motorists choose not to use this route. As traffic flow continues to grow by normal background growth and development, this delay will increase. Since the Village is developed, installation of additional through lanes on NYS Route 96 would not be a considerable option. A possible mitigation measure would be to work with the New York State Department of Transportation to install real time traffic measuring devices on NYS Route 96 that would indicate actual delay and adjust traffic signal timings real time based on this delay. While this can help to reduce delay, it will not be the answer to reducing through traffic. A possible solution would be to install real time traffic message signs on I-490 approaching the NYS Route 96 exit and on Route 332 approaching NYS Route 96. These signs would be based on real time traffic delay measured in the Village of Victor and can display a simple message indication to drivers of the congestion conditions in the form of colors: RED - Long Delays, Yellow - Moderate Delays, and Green – Short Delays. The ultimate goal would be that when the sign showed Red or Yellow motorists would divert to the Thruway to bypass the Village. As a mitigation measure it is recommended that this be pursued with the New York State Department of Transportation.

Alternative Highway System – Lane Road Alternative

Fishers Ridge

NYS Route 96

Located Between Lane Road and Rowley Road

**TOWN OF VICTOR
COUNTY OF ONTARIO
STATE OF NEW YORK**

August 2009



PREPARED BY
Bergmann Associates
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

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I. Purpose and Scope

The subject of this study is the potential alternative Lane Road alignment for Fishers Ridge, “Lifestyle Center”, development to be located on NYS Route 96, between Lane Road and Rowley Road in the Town of Victor. A location map is shown in Figure 1. The purpose of the alternative Lane Road study is to evaluate the estimated future traffic conditions and impacts with and without the realignment of Lane Road. The target year of project completion is 2018.



Figure 1 - Location Map

A. Access to and through the Site

Access to the site will be accommodated by 1) the proposed signalized driveway to Route 96 and 2) internal roads connecting to Lane Road Extension. The realigned segment of Lane Road that is proposed to run through the site and intersect Route 96 across from Route 251 will be referred to as Lane Road Extension. Essentially three access points will be provided for the Lane Road realignment alternative; one directly to NYS Route 96 (the north driveway at same the location) and Lane Road Extension will provide access to Route 96 to the west and the High Street / Lane Road intersection to the east. Based on the traffic analysis, the NYS Route 96 driveway will be signalized, the NYS Route 96 intersection with Route 251 and Lane Road Extension will be signalized and the north-eastbound Lane Road approach to Lane Road Extension will be stop sign controlled.

The north driveway and the Route 251 intersections (now four legged) are spaced 1150 feet apart and provide good traffic flow and coordination for NYS Route 96 and the proposed site. The north driveway will provide direct access to and from the site for traffic using NYS Route 96.

Route 96 traffic coming from the north will be able to enter the site via the two signalized intersections. Left turn lanes will be provided on Route 96 at the north driveway and at the Lane Road Extension. One northbound right turn lane is proposed at Lane Road Extension for use by motorists coming from the south.

The study of realigning Lane Road through the site was reviewed. This realignment will be beneficial to the overall traffic flow in the area and to the school district routing of school buses to the schools on High Street as well as circulation in the Town of Victor. If this is determined desirable by the Town, accomplishing this in subsequent phases of development would be feasible and should be pursued by the Town.

B. 2018 Traffic

Full build 2018 traffic with the proposed development and realignment of Lane Road is shown in Figure 25 at the end of this document.

C. 2018 Build Lane Road Alternative LOS

The traffic operations during the peak hours at the subject intersections are projected to range from LOS A to E in 2018 with realignment of Lane Road according to Synchro. Projected Synchro 2018 Lane Road Build LOS results for the intersections are provided in Table 1 and described below.

NYS Route 96 and Site Driveway North – Intersection LOS is B or better during the peak hours and individual lanes are LOS D or better with the Lane Road realignment. Overall little to no change is expected at this intersection due to the realignment of Lane Road.

**TABLE 1
LEVEL OF SERVICE RESULTS**

			AM PEAK HOUR						PM PEAK HOUR						MID-DAY PEAK HOUR					
			Existing 2008		Build 2018		Lane Road Build 2018		Existing 2008		Build 2018		Lane Road Build 2018		Existing 2008		Build 2018		Lane Road Build 2018	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Route 96 at Proposed Drwy	WB	L			D	36	D	36			D	45	D	45			D	42	D	45
		R			C	22	C	23			C	24	C	24			B	19	B	20
		Approach			C	25	C	25			C	31	C	31			C	27	C	28
	NB	TTR			A	2	A	3			B	11	B	15			B	14	B	14
		L			A	3	A	3			C	23	C	22			C	31	C	32
	SB	TT			A	2	A	2			A	6	A	6			A	6	A	6
		Approach			A	2	A	2			A	9	A	8			B	12	B	12
Overall					A	3	A	3			B	12	B	13			B	15	B	15
Route 96 at Route 251	EB	L	C	27					C	31					C	22				
		R	A	8					A	9					A	8				
		Approach	B	18					C	20					B	15				
	NB	L	A	5					B	11					A	5				
		T	B	11					A	7					A	9				
		Approach	A	10					A	7					A	9				
	SB	T	A	5					A	10					A	8				
		R	A	0					A	0					A	0				
		Approach	A	4					A	8					A	7				
	Overall			A	9				A	9					A	9				
Route 96 at Route 251	EB	L			D	39	D	46			C	31	D	38			C	28	D	41
		TR			B	19	C	23			D	52	D	50			D	45	D	51
		Approach			C	28	C	34			D	44	D	45			D	39	D	47
	WB	L			C	27	C	25			D	46	D	47			D	54	D	50
		TR			B	15	C	22			C	23	C	34			B	12	B	11
		Approach			B	20	C	23			D	35	D	39			D	35	C	30
	NB	L			A	8	A	8			C	31	C	24			B	15	B	14
		TT			B	17	C	24			C	27	D	44			D	53	D	54
		R			A	3	A	3			A	2	A	5			A	5	A	6
	SB	Approach			B	14	B	19			C	21	C	31			D	38	D	39
		L			A	9	B	20			D	36	D	51			D	55	E	55
		TT			B	14	B	14			C	29	C	22			B	18	B	17
	signalized	R			A	2	A	2			A	1	A	1			A	1	A	1
		Approach			B	11	B	13			C	27	C	24			C	24	C	25
		Overall			B	15	B	20			C	28	C	31			C	33	C	33
Lane Road Ext. at Lane Road	EB	TR					A	0					A	0					A	0
		WB	LT					A	0					A	0				A	0
	unsignalized	NB	LR					B	11				B	11					B	10

NYS Route 96 and Victor-Mendon Road Route 251 – Overall intersection LOS is C or better during the peak hours and the same with or without the Lane Road realignment. The eastbound, northbound and southbound approaches also operate at the same LOS with or without the realignment and are LOS D or better. The westbound approach does show a change to LOS, but the change to vehicle delay is small, showing little impact.

Lane Road Extension and Lane Road – Lane Road Extension will be free flow at this intersection and Lane Road will be controlled by a stop sign. The Lane Road Extension approaches are projected to operate at LOS A during the peak hours. The stop sign on Lane Road is projected to operate at LOS B during the peak hours. This intersection is expected to operate acceptably during peak hours based on Synchro and SimTraffic results.

II. Summary and Conclusions

As part of the traffic impact study the possibility of realigning Lane Road through the site was reviewed. If this is determined desirable by the Town, accomplishing this in subsequent phases of development would be feasible and should be pursued by the Town.

This realignment will be beneficial to the overall traffic flow in the area and to the school district routing of school buses to the schools on High Street as well as circulation in the Town of Victor.

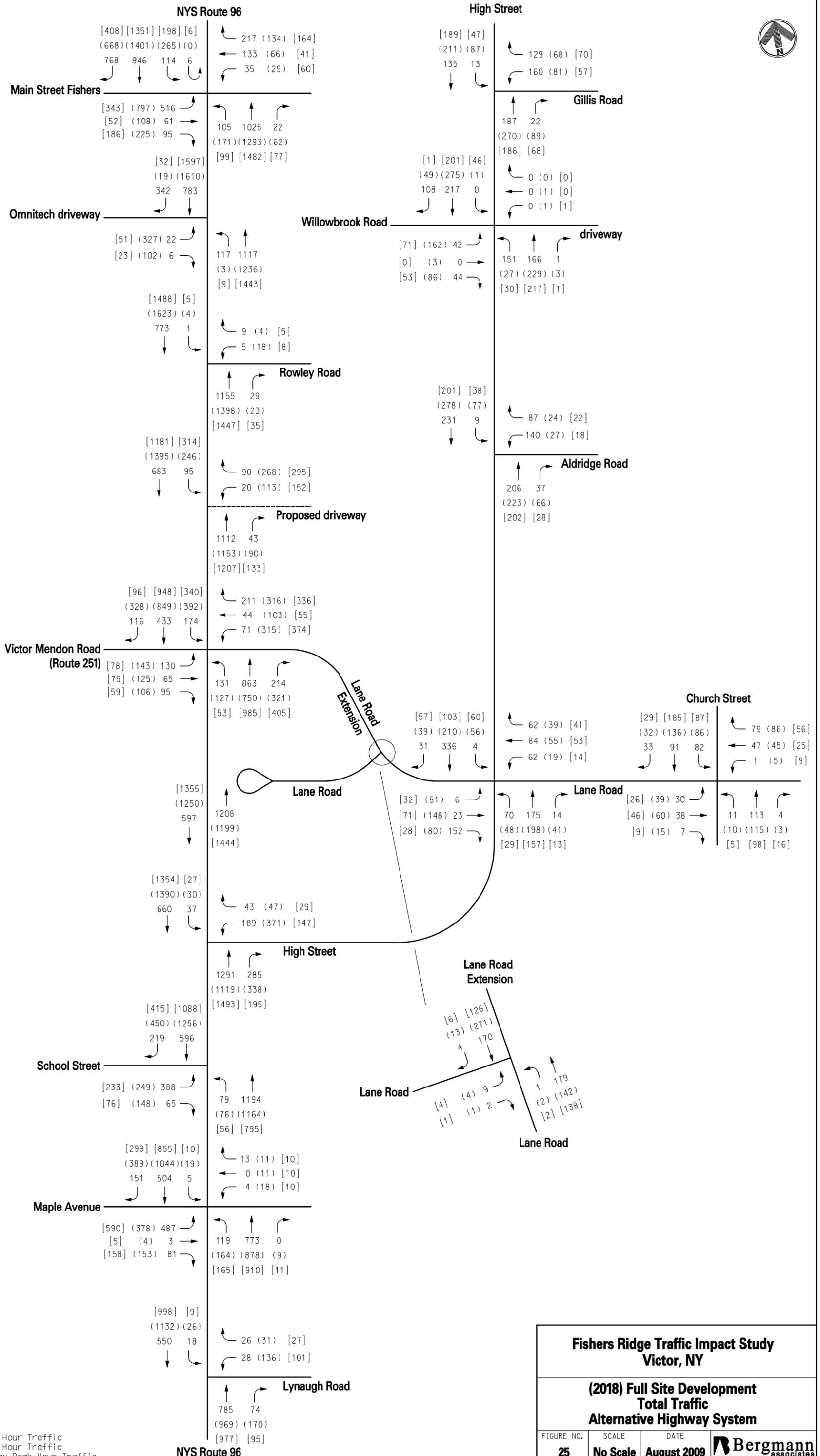
The proposed multi-use development is projected to generate 690, 1520, and 1793 primary vehicle trips during the AM, PM, and Mid-Day peak hours, respectively. Levels of service at all study area intersections are projected to range from LOS A to LOS E for all individual intersection approach lanes. Mitigations as suggested below should be implemented at intersections in the study area to mitigate the effects of the proposed development.

III. Recommendations

Proposed Lane Road alternative mitigations:

The following mitigation measures are proposed to improve LOS, alleviating the traffic generated by the proposed development, as well as mitigating some existing problems within the study area:

- Follow highway design guidelines for the realignment of Lane Road. Follow stopping sight distance and intersection sight distance recommendations.
- Signal retiming is recommended at the intersections of Route 96 and High Street (in the Village), School Street, and Maple Avenue. Coordination and adjustment of timing splits and phases between the three intersections should also be achieved for better operation.
- A second northbound and southbound lane should be added to NYS Route 96 through the immediate project area, from Rowley Road to Lane Road.
- Additional turning lanes should be added to the intersection of NYS Route 96 and Victor-Mendon Road (Route 251) to accommodate the new approach, referred to as Lane Road Extension. A northbound right turn lane and southbound left turn lane on NYS Route 96 should be added as well as accommodations for one left lane and one shared through/right lane on Route 251 and on Lane Road Extension.
- The proposed NYS Route 96 traffic signal at the northern site driveway should be coordinated with the signal at Victor-Mendon Road (Route 251). An exclusive southbound left turn lane is recommended at the northern site driveway with a protected phase (green left turn arrow indication) and then a permissive phase (green circle indication).



LEGEND:
 XXX - Friday AM Peak Hour Traffic
 (XXX) - Friday PM Peak Hour Traffic
 [XXX] - Saturday Mid-day Peak Hour Traffic

Fishers Ridge Traffic Impact Study Victor, NY			
(2018) Full Site Development Total Traffic Alternative Highway System			
FIGURE NO. 25	SCALE No Scale	DATE August 2009	