APPENDIX 13

TRAFFIC IMPACT STUDY

Traffic Impact Study

The Windham Mountain Sporting Club

Town of Windham, New York

CME Project No. 108-120

Prepared For:

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November 4, 2011

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CHAPTER I
INTRODUCTION

This report summarizes the results of a Traffic Impact Study for the proposed Windham Mountain Sporting Club (WMSC) second home resort community located in the Town of Windham, Greene County, New York. The project site is located in the Catskill State Park along the south side of South Street (County Road 12 (CR 12)) between the intersections with Church Street (County Road 79) and NY Route 296. The project location is shown on Figure 1.1.

A. Planned Project

The proposed project consists of the development of a maximum of 302 residential units comprised of 143 single-family homes, 24 duplexes/attached single family homes, 54 townhouse units and 81 condominium units. The project also includes 2 new ski lifts, a member's lodge and clubhouse, an east lodge, and a wellness center. Primary access to the site is proposed via the existing intersection of Trailside Road with South Street with the Panarama Lane/South Street intersection reserved for emergency access. It is anticipated that the proposed project will be completed by 2027. The project master plan illustrating the proposed land uses and site access points is included under Appendix A.

B. Study Area and Methodology

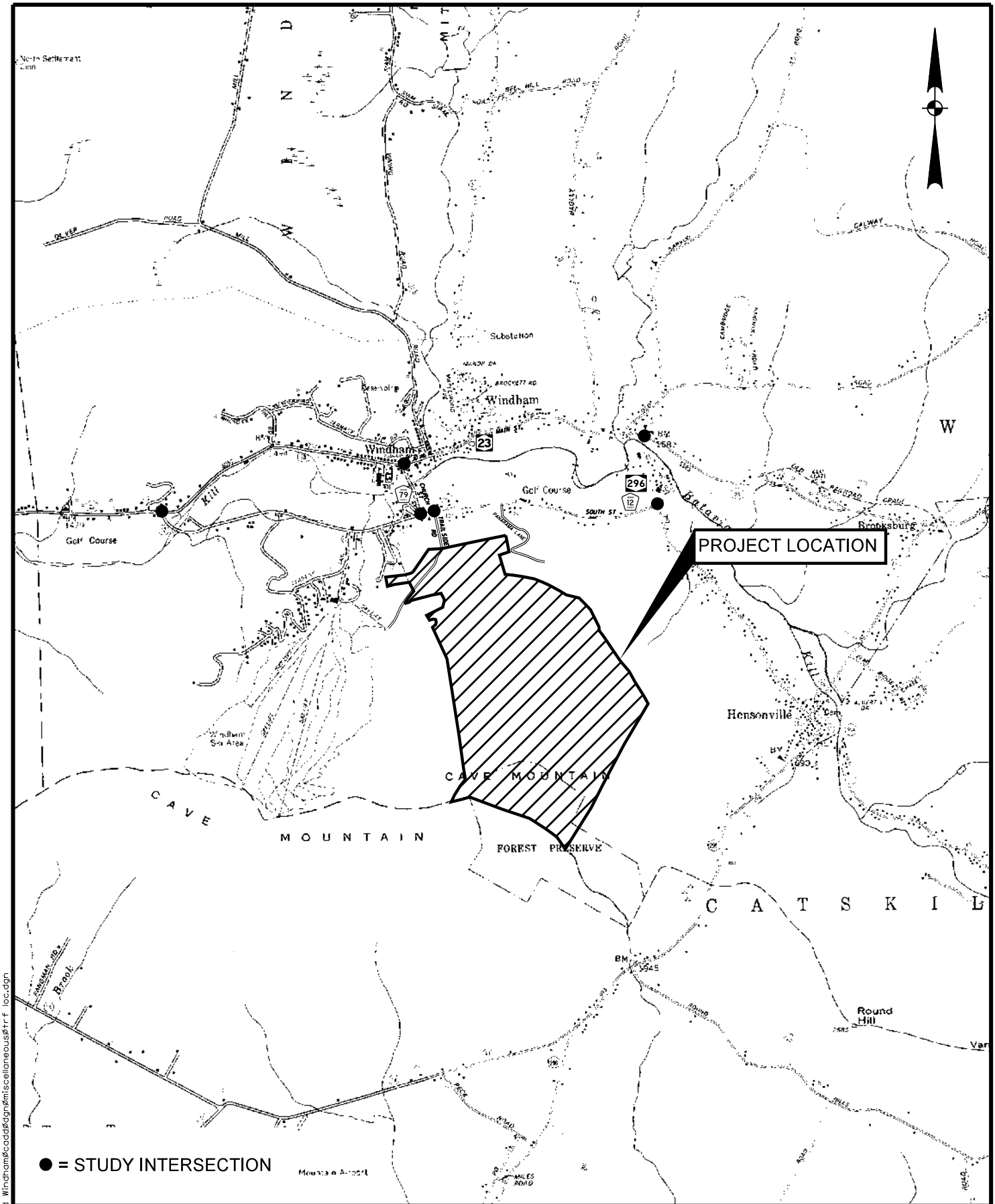
In accordance with the Scoping Document with final issuance date of March 18, 2010, the study area includes the following intersections:

- Main Street (NY Route 23)/South Street (CR 12)
- Main Street (NY Route 23)/Church Street (CR 79)
- Main Street (NY Route 23)/NY Route 296
- South Street (CR 12)/Church Street (CR 79)
- South Street (CR 12)/NY Route 296

The existing intersection of South Street/Trailside Road will serve as the primary access road to the site. Trailside Road provides access to a few homes and therefore

has very low existing traffic volumes. Due to the low volumes, turning movement counts were not conducted at this intersection to measure existing volumes.

The potential traffic impact of the proposed project was determined by documenting the existing traffic conditions in the area, projecting future traffic volumes, including the peak hour trip generation of the site, and determining the operating conditions of the study area intersections after development of the proposed project.



PROJECT LOCATION

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 08-120	DATE: 9/2011	FIGURE: 1.1

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CHAPTER II

EXISTING CONDITIONS

A. Roadways Serving the Site

- Main Street (NY Route 23) – NY Route 23 is a state roadway providing east-west travel through Greene County and is designated Main Street in the project area. NY Route 23 is classified as a rural minor arterial near the project site consisting of two 12-foot travel lanes and shoulder widths ranging from 0 to 8 feet. Within the core hamlet area, sidewalks and on-street parking are provided on both sides of the roadway. Data published by the New York State Department of Transportation (NYSDOT) in the *2010 Highway Sufficiency Ratings* indicates that the pavement on NY Route 23 near the project site is in fair to good condition. The posted speed limit on NY Route 23 is 55-mph, but is reduced to 35-mph through the hamlet area.

- NY Route 296 – NY Route 296 is a state roadway classified as rural major collector road near the project site and provides north-south access from NY Route 23A in the Town of Hunter to its end at NY Route 23 (Main Street) in the Town of Windham. NY Route 296 generally provides access to residential, farming, and commercial land uses and consists of two 10 to12-foot travel lanes with 2 to 3-foot shoulders. Data published by NYSDOT in the *2010 Highway Sufficiency Ratings* indicates that the pavement on NY Route 296 near the project site is in fair to good condition. The posted speed limit on NY Route 296 is 40-mph near the project site.

- South Street (CR 12) – South Street is Greene County Road 12 and consists of two 10-foot travel lanes with 1-foot shoulders. South Street generally provides access to residential and commercial uses, including Windham Mountain ski area. The posted speed limit on South Street is 45-mph near the project site.

- Trailside Road – Trailside Road is a privately-owned, local, paved road that provides access to Village East Residents. Trailside Road consists of one 25-foot travel lane with no shoulders and no posted speed limit.

B. Study Area Intersections

- Main Street/South Street – This is a three-leg intersection located northwest of the project site operating under stop sign control on the northbound South Street intersection approach. All approaches to the intersection consist of a single lane for shared travel movements. There are no sidewalks at the intersection.

- Main Street (NY Rt 23)/Church Street (CR 79) – This is a three-leg intersection located northwest of the project site operating under stop-sign control on the northbound Church Street approach. A single lane is provided on each approach for shared travel movements. There are sidewalks on the north and south side of Main Street at this intersection.

- Main Street (NY Route 23)/NY Route 296 – This is a three-leg intersection located northeast of the project site operating under stop-sign control on the northbound NY Route 296 approach. A single lane is provided on each approach for shared travel movements. There are sidewalks on the east and west side of the NY Route 296 approach to this intersection.

- South Street (CR 12)/Church Street (CR 79) – This is a three-leg intersection located northwest of the project site operating under yield sign control on the southbound Church Street approach. All approaches to this intersection consist of a single lane for shared travel movements. There are no sidewalks at this intersection.

- South Street (CR 12)/NY Route 296/Retail Driveway – This is a four-leg intersection located northeast of the project site operating under stop sign control on the eastbound South Street and westbound Retail Driveway intersection approaches. All approaches to this intersection consist of a single lane for shared travel movements. There are no pedestrian accommodations at this intersection.

C. Existing Conditions

Intersection turning movement counts were conducted at the study area intersections on Friday, January 16, 2009 from 4:00 to 7:00 p.m. and on Sunday, January 18, 2009 from 3:00 to 6:00 p.m. This was Martin Luther King Junior weekend and corresponds to peak ski season activity in Windham. Data was also collected on Friday, March 26, 2010 from 4:00 to 7:00 p.m. and on Sunday, March 28, 2010 from 3:00 to 6:00 p.m. The data collected in March was adjusted to represent peak ski season conditions. The raw turning movement count data is included in Appendix B. The traffic volume data collected in 2009 and 2010 was adjusted to represent 2011 conditions. These 2011 Existing Traffic Volumes are summarized on Figure 2.1 and form the basis for all traffic forecasts.

Creighton Manning installed automatic traffic recorders (ATR's) on South Street adjacent to Trailside Road to record vehicle speeds and directional hourly traffic

volumes for the period from Friday, February 13, 2009 through Tuesday, February 17, 2009.

The following observations are evident based on the existing traffic volume data:

- The Friday afternoon peak hour of adjacent street traffic generally occurred from 4:00 to 5:00 p.m. The Sunday afternoon peak hour of adjacent street traffic varied but generally occurred from 4:15 to 5:15 p.m.

- The two-way traffic volume on South Street near Trailside Road is approximately 400 vehicles during the Friday peak hour and approximately 735 vehicles during the Sunday peak hour.

- Heavy vehicles and school buses accounted for approximately 1% of two-way traffic on South Street during the Friday peak hour. During the Sunday peak hour heavy vehicles accounted for approximately 1% of two-way traffic.

D. Pedestrian/Bicycle Accommodations and Environment

Adjacent to the project site on Trailside Road and South Street there are no sidewalks. In this rural area, bicyclists and pedestrians share the road with vehicles. In the hamlet area, sidewalks are provided on both sides of Main Street as pedestrians and bicyclists access local shopping, entertainment, and residential uses.

E. Transit

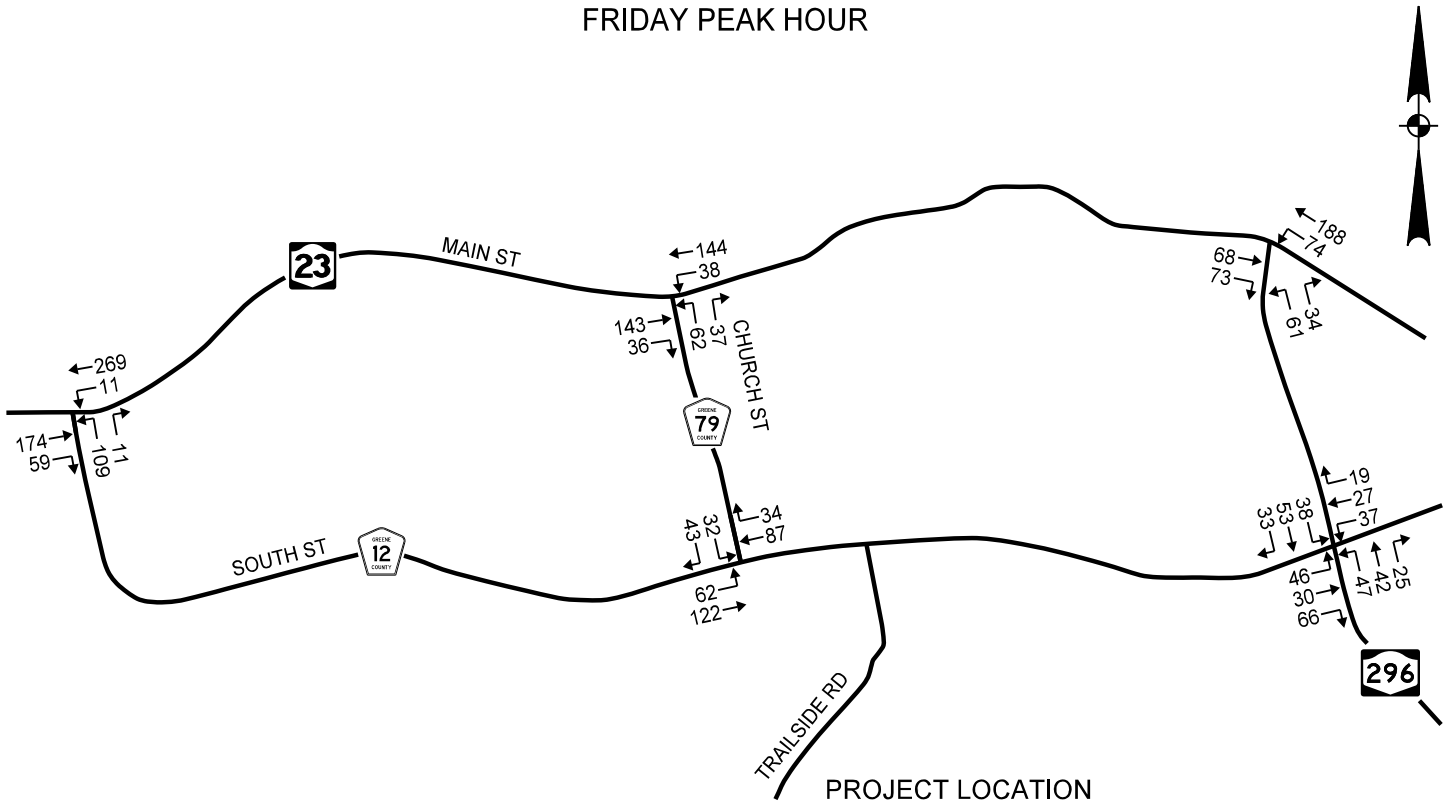
Public transit service in Windham is primarily provided by Greene County Transit which runs the Rip Van Winkle Express. In addition to the public provider, Windham Mountain has local shuttle service between its various facilities and works with a number of regional operators, including Trailways, to bring skiers and other resort users to the area.

F. Accident History

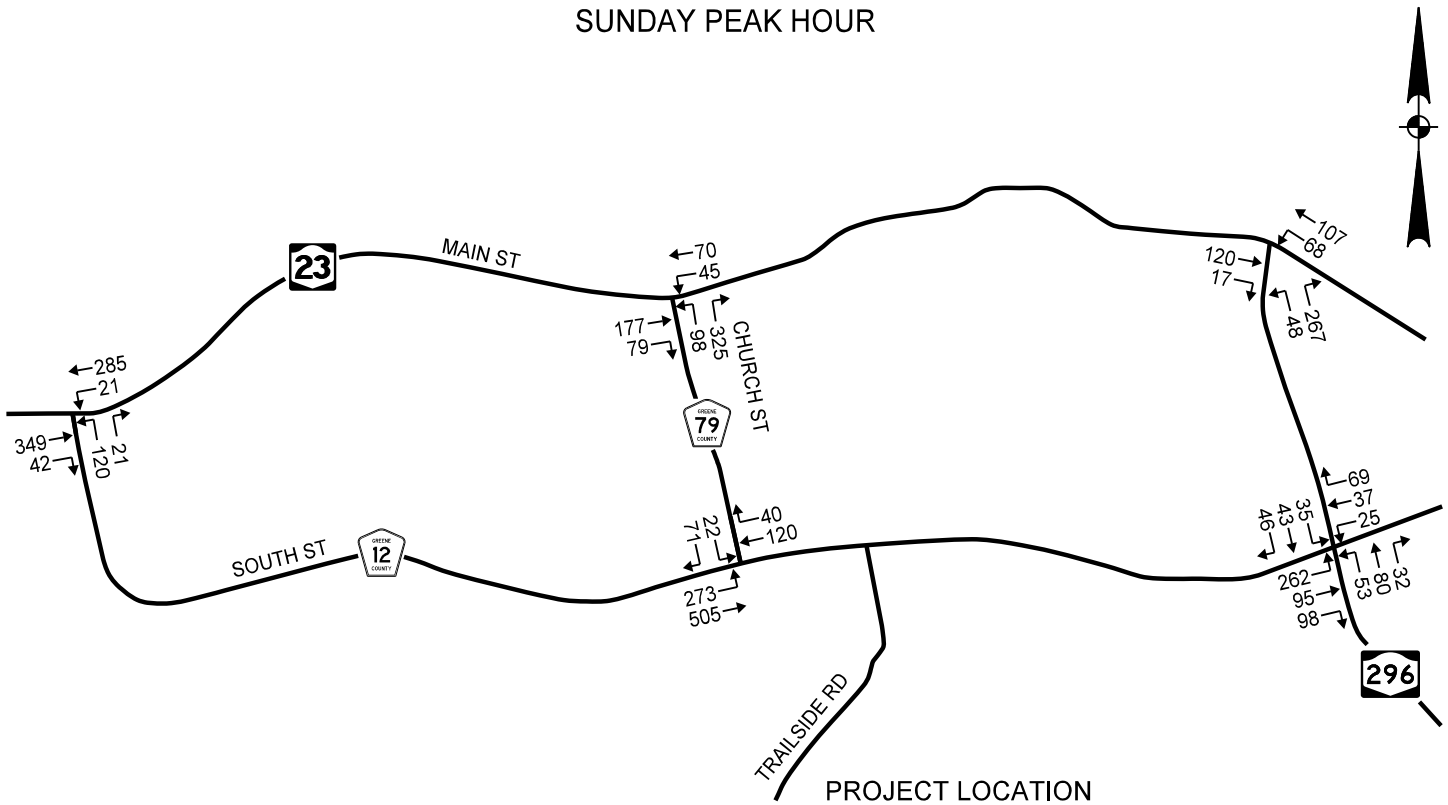
Accident data was obtained from NYSDOT to determine accident trends along South Street near Trailside Road. Accident summaries were provided by the NYSDOT Accident Location Information System (ALIS) for the latest three years of available data from the period between February 29, 2008 and February 28, 2011. A review of the data indicated that South Street between Main Street and NY Route 296 experienced 13 accidents over the three year period. Of the accidents 2 were personal injury, 9

were property damage, and 2 non-reportable with the most prevalent type of accident (6) single vehicle collisions with a ditch or embankment or an animal. Based on the accident records, no crashes occurred on South Street near Trailside Road in the last three years.

FRIDAY PEAK HOUR



SUNDAY PEAK HOUR



2011 EXISTING
TRAFFIC VOLUMES

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 110-216	DATE: 9/2011	FIGURE: 2.1

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CHAPTER III
TRAFFIC FORECASTS

To evaluate the impact of the proposed development, traffic projections were prepared for the expected year of completion. It is expected that the project will be completed and fully operation by the end of 2027.

A. No-Build Traffic Volumes

No-Build traffic volumes consist of normal growth plus future traffic from other development projects in the area. These volumes represent traffic that would exist without the construction of the proposed development. Based on historical traffic data published by NYSDOT in the *2009 Traffic Data Report*, a growth rate of 0.5% per year was applied to the 2011 existing traffic volumes to account for background growth. This resulted in an 8% increase in background traffic volumes over the 16-year study period.

The Town of Windham was contacted regarding other approved but un-built developments or currently proposed developments in the vicinity of the project that may have an effect on future traffic volumes near the project site. The following projects were included as "other developments" in the project area:

- Upper Wipeout – 9 single family homes
- Copper Ridge – 12 single family homes
- Stonewall Glen – 59 condominiums, clubhouse, commercial building
- The Diamonds – 9 condominiums
- Destination Windham – 41 condominiums and ice rink

Trips associated with the "other developments" are shown on Figure C.1 in Appendix C. These volumes were added to the 2027 background traffic volumes to develop the 2027 No-Build traffic volumes. The 2027 No-Build traffic volumes are shown on Figure 3.1 and represent future traffic conditions before the project is complete.

B. Trip Generation

Trip generation is the quantity of traffic expected to travel to/from a given site. The peak hour trip generation for the project was estimated using the Institute of

Transportation Engineers (ITE) *Trip Generation*, 8th edition which provides trip generation data for various land uses based on studies of similar existing developments located across the country. Trips were estimated for the PM and Sunday peak hours using Land Use Code (LUC) 260 for Recreational Homes. Table 1 summarizes the trip generation estimate for the proposed project.

Table 3.1 – Trip Generation Summary

Land Use	Friday Peak Hour			Sunday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Recreational Homes 302-units	41	53	94	50	59	109

The table shows that the project is expected to generate 94 trips (41 entering and 53 exiting) during the Friday peak hour and 109 vehicles trips (50 entering and 59 exiting) during the Sunday peak hour.

C. Trip Distribution

Trip distribution describes where traffic originates or where traffic is destined. Traffic generated by the proposed project was distributed based on the existing travel patterns and probable travel routes for residents of the Windham Mountain Sporting Club. In general, it is expected that 25% of the site generated traffic will travel to and from the south on NY Route 296, 60% will travel to and from the east on NY Route 23, and 15% will travel to and from the west NY Route 23. The trip distribution pattern is shown on Figure 3.2.

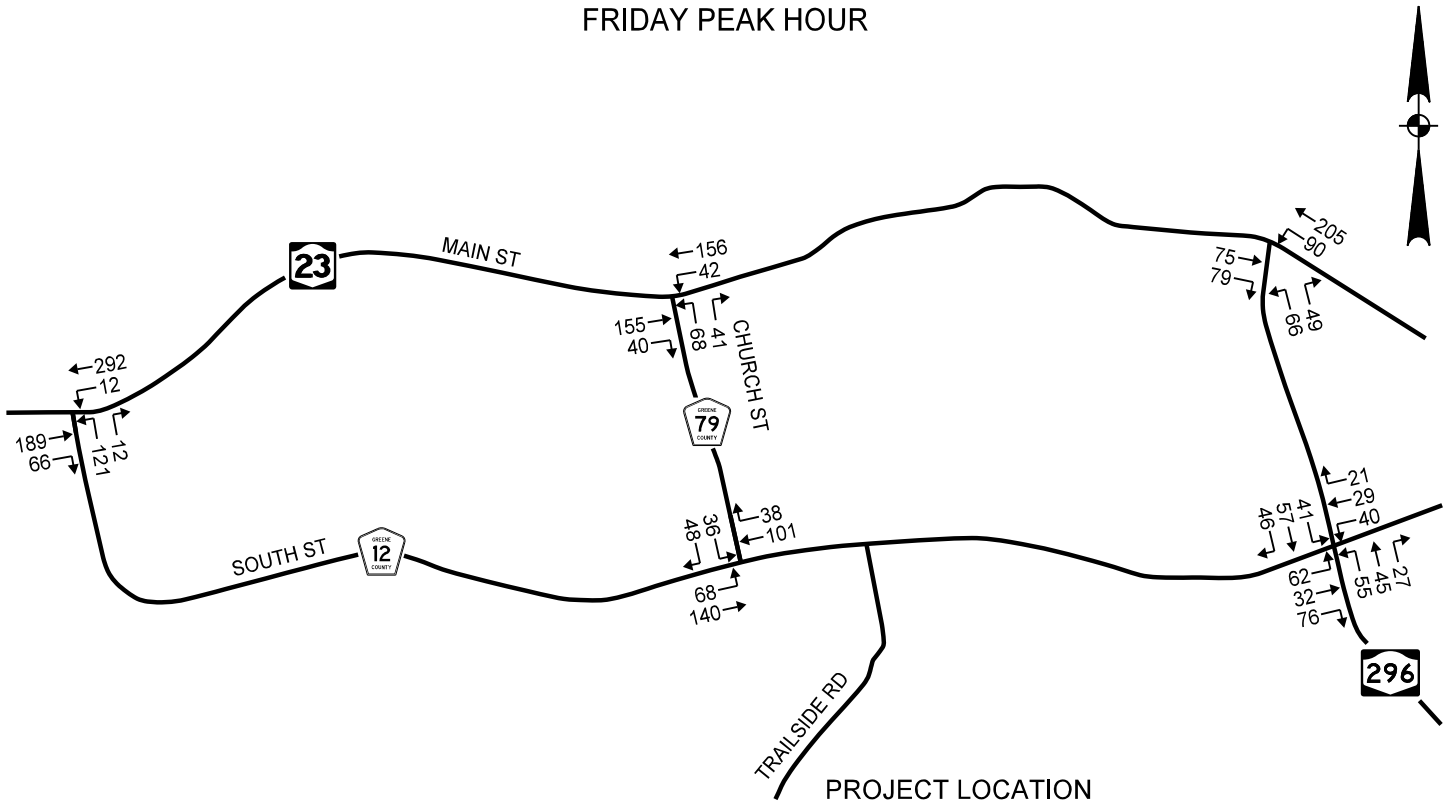
D. Trip Assignment

Trip assignment combines the results of the trip generation and trip distribution and determines the specific paths and roadways that will be used between various origin/destination pairs. Figure 3.3 show the resulting peak hour trip assignments for the project development.

E. Build Traffic Volumes

The results of the site generated traffic assignment were added to the No-Build traffic volumes to develop the Build traffic volumes. The 2027 Build traffic volumes for the Friday and Sunday peak hours are shown on Figure 3.4.

FRIDAY PEAK HOUR



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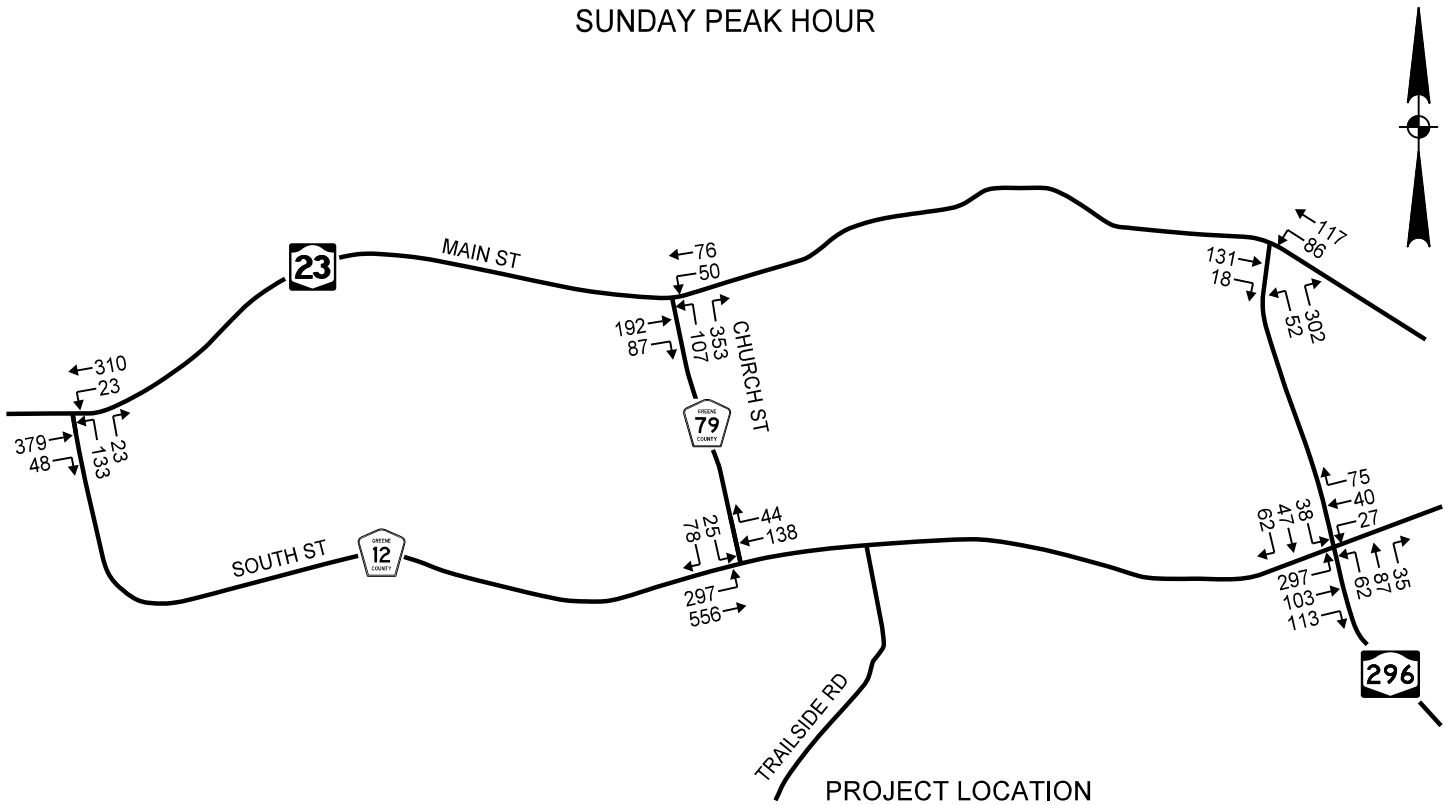

2027 NO-BUILD
TRAFFIC VOLUMES

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 110-216	DATE: 9/2011	FIGURE: 3.1

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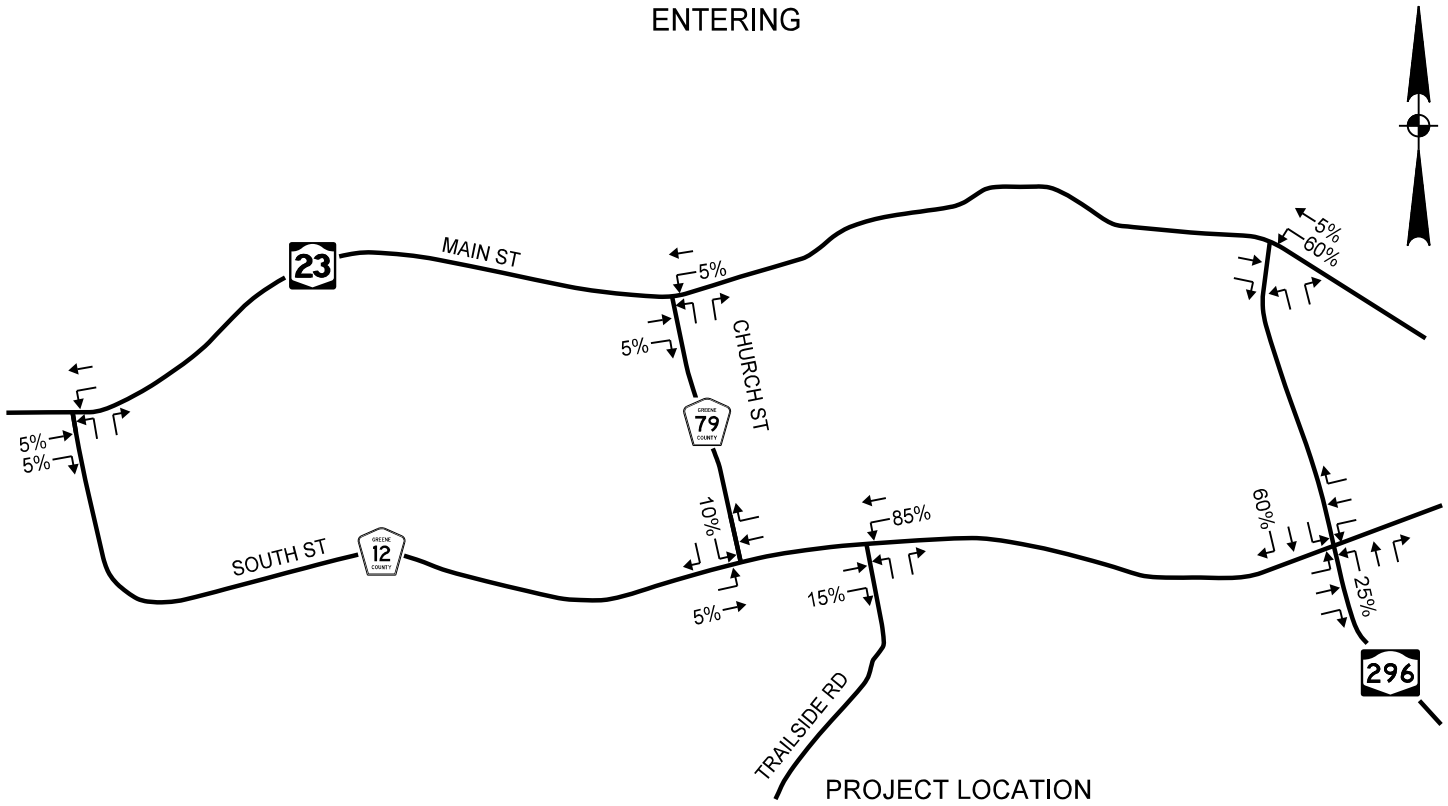
ENTERING



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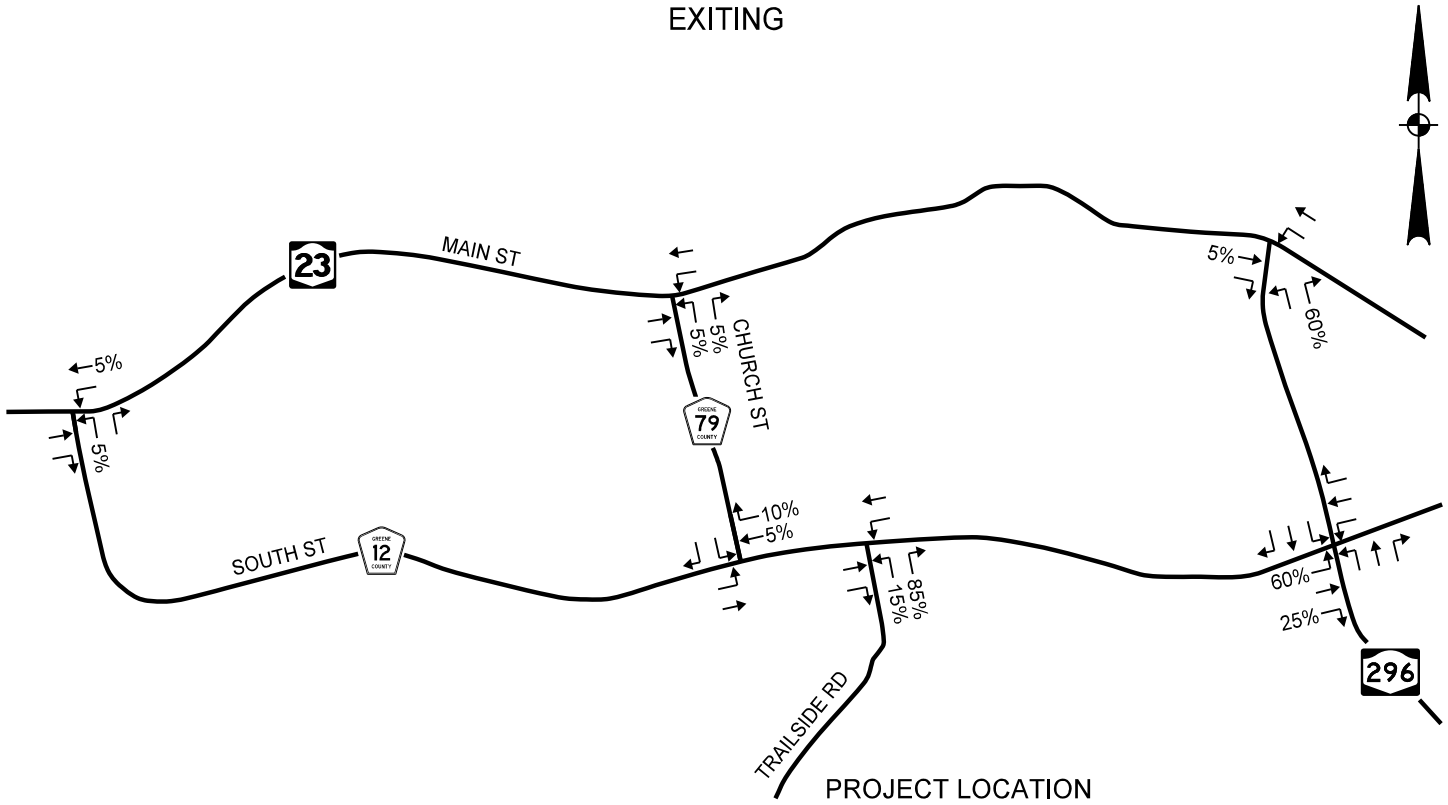

TRIP DISTRIBUTION

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

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PROJECT: 110-216	DATE: 9/2011	FIGURE: 3.2

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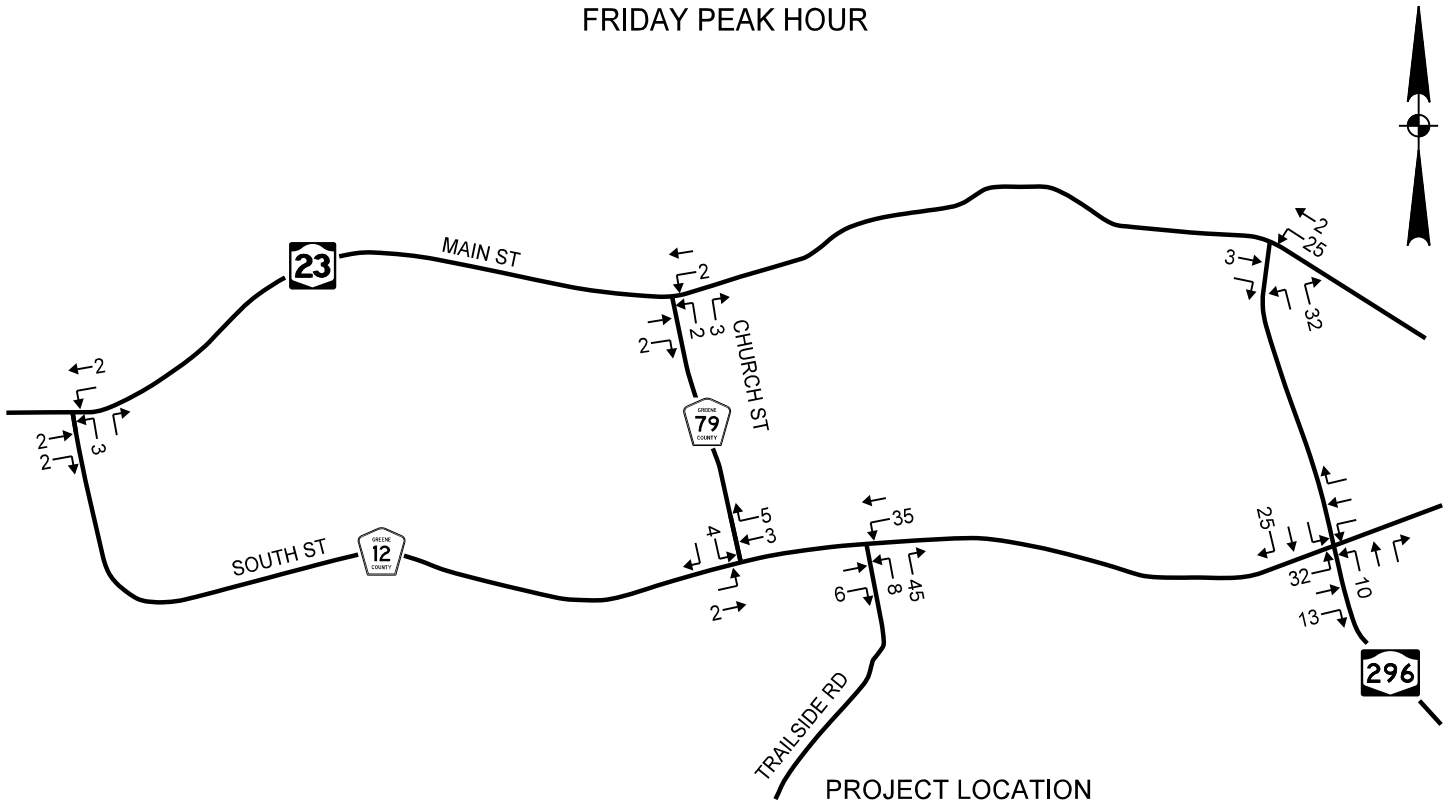
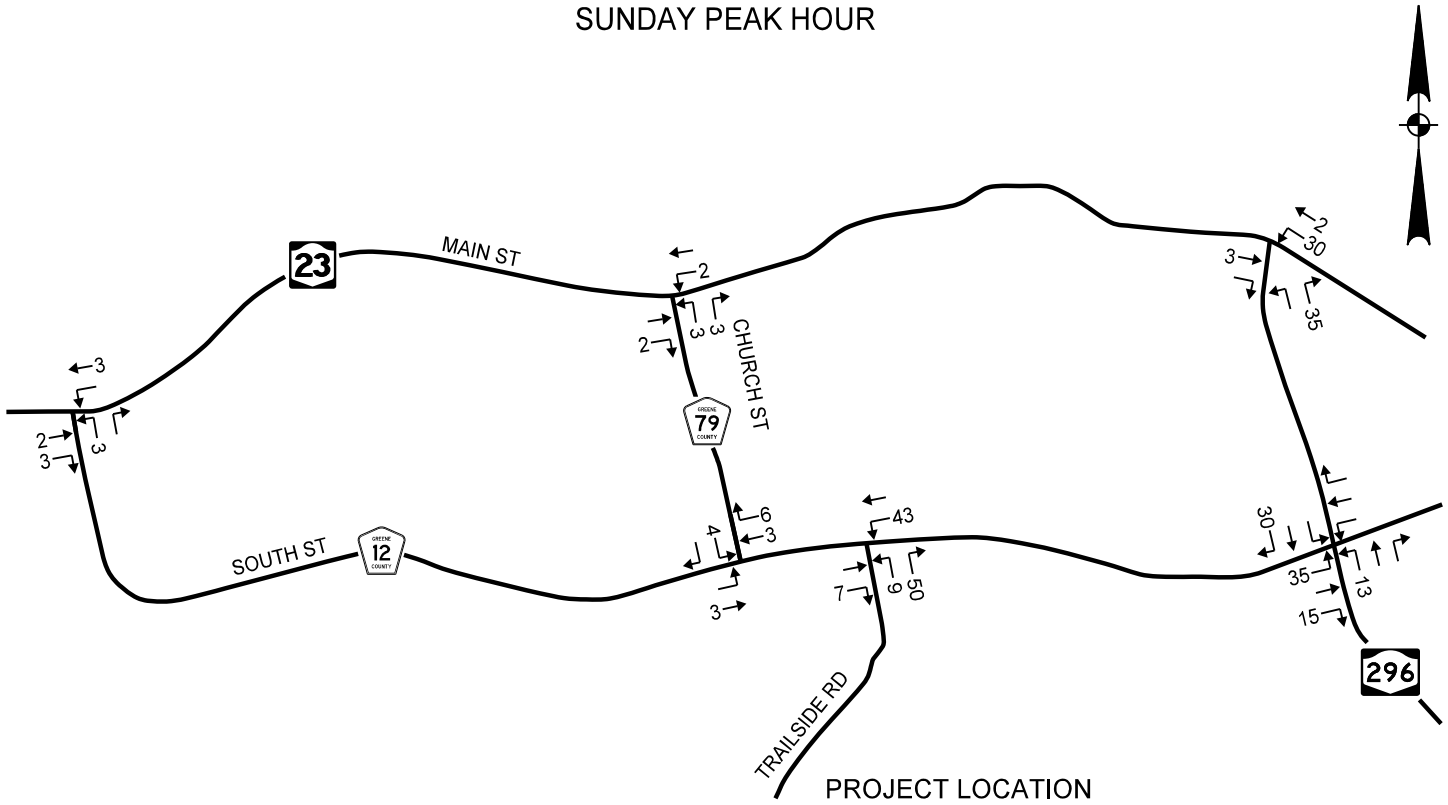
FRIDAY PEAK HOUR



SUNDAY PEAK HOUR



TRIP ASSIGNMENT

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 110-216	DATE: 9/2011	FIGURE: 3.3

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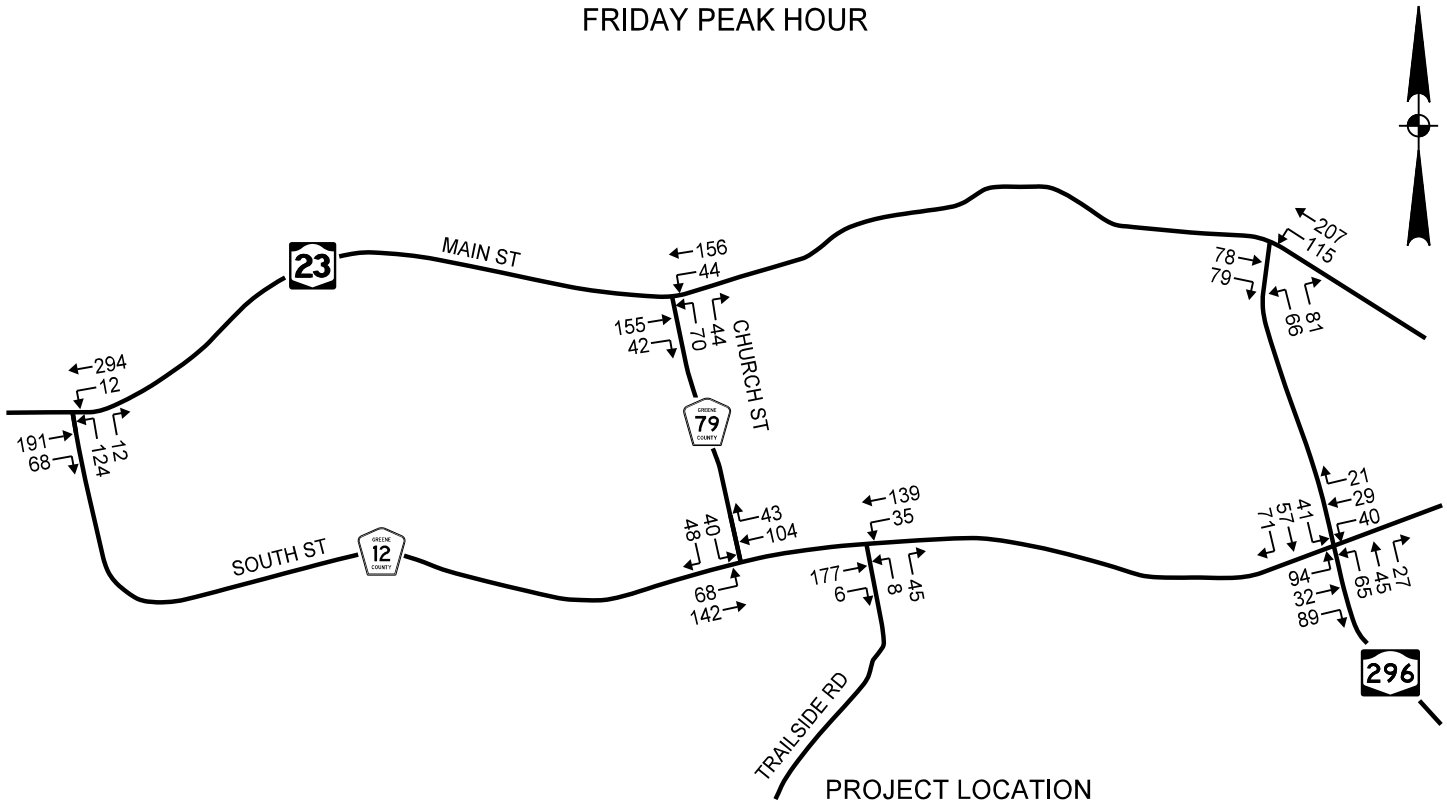
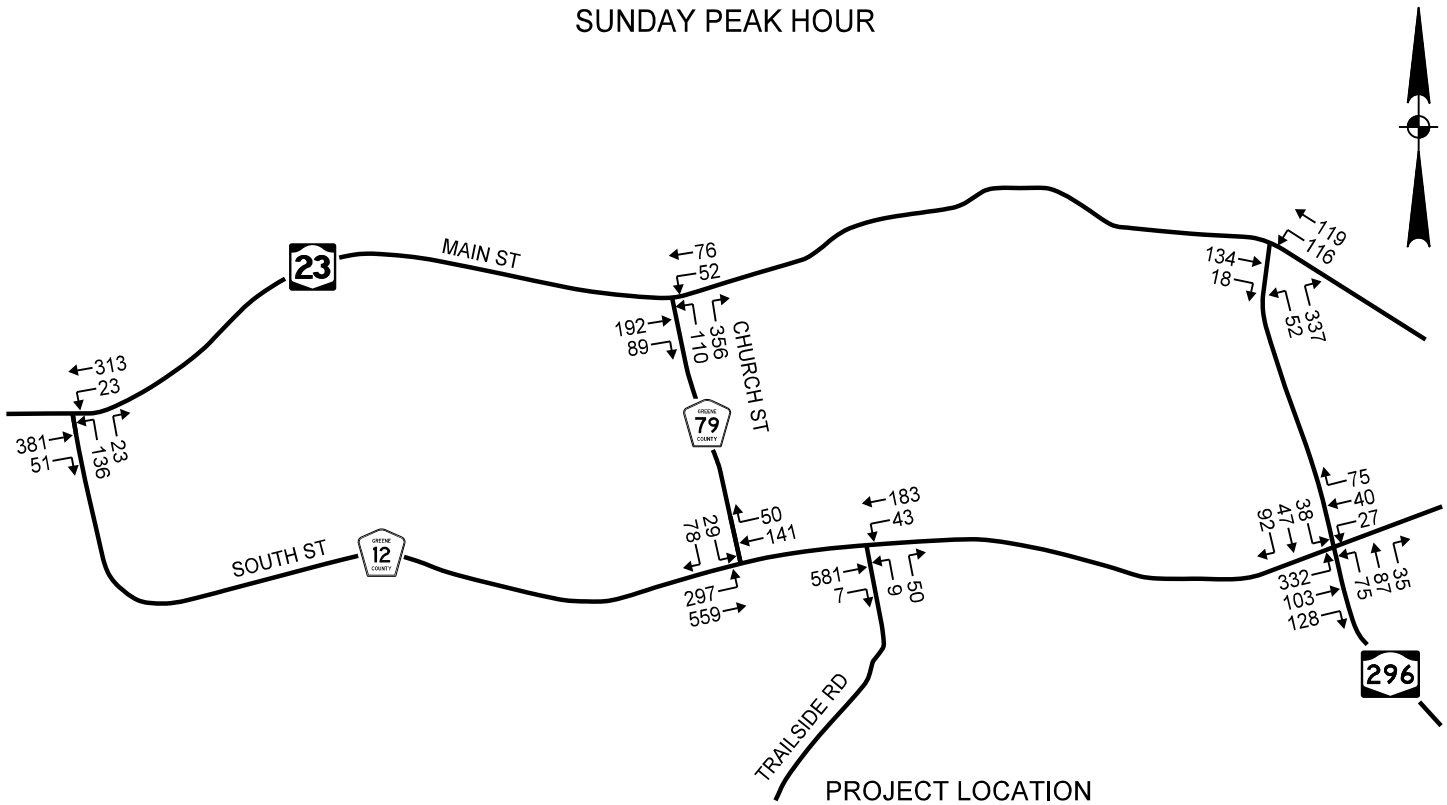
FRIDAY PEAK HOUR



SUNDAY PEAK HOUR



2027 BUILD
TRAFFIC VOLUMES

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 110-216	DATE: 9/2011	FIGURE: 3.4

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CHAPTER IV
ANALYSIS

A. Sight Distance Analysis

The available intersection sight distance was measured from the perspective of a driver exiting Trailside Road looking in both directions along South Street. The intersection sight distance for vehicles traveling on South Street looking straight ahead to turn left into Trailside Road was also measured. The posted speed limit on South Street near the project site is 45-mph. Based on speed data collected by Creighton Manning, the 85th percentile speeds were measured to be approximately 47-mph. Therefore the sight distances measured in the field were compared to the guidelines presented in the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets*, 2004 for a 50-mph operating speed.

Stopping sight distance was also measured along South Street approaching the Trailside Road. Stopping sight distance is the length of the roadway ahead that is visible to the driver. The available stopping sight distance on a roadway should be of sufficient length to enable a vehicle traveling at or near the operating speed to stop before reaching a stationary object in its path. Diagram 1 illustrates the intersection and stopping sight distance lines of sight. The sight distance evaluation is summarized in Table 4.1.

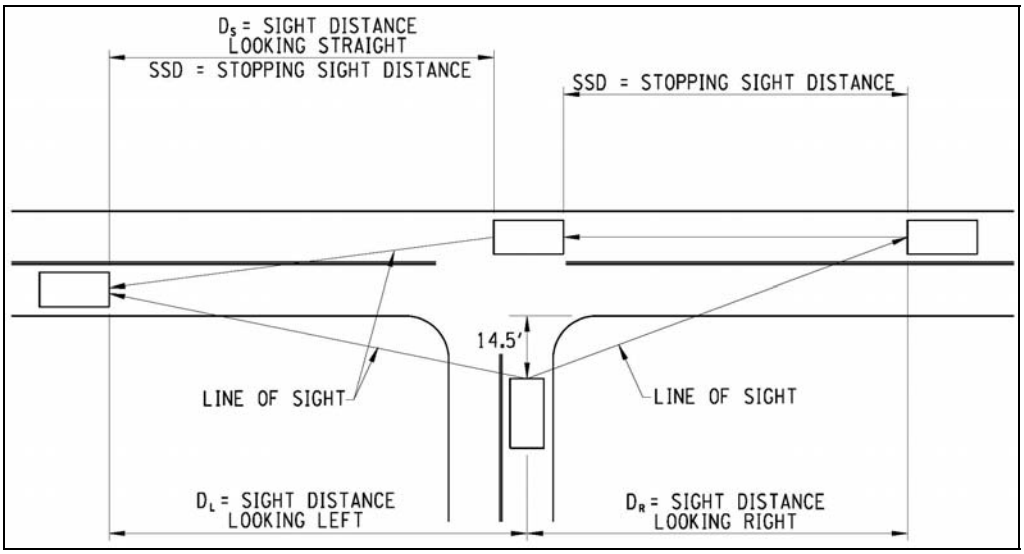


Diagram 1 – Sight Distance Lines of Sight

Table 4.1 – Sight Distance Summary (feet)

Intersection		Intersection[1]				Stopping[2]	
		Right-Turn from Trailside (D_L)	Left-Turn from Trailside		Left-Turn from South St (D_S)	SSD_{EB}	SSD_{WB}
			Looking Left (D_L)	Looking Right (D_R)			
South Street/ Trailside Road	Available	265	265	850	1000+	700	1000+
	Recommended	480	555	555	405	425	425

[1] Intersection sight distance is measured at 14.5 feet back from the travel way at an eye height and object height of 3.5 feet.
[2] Stopping sight distance is measured for a 2 foot object located in the path of eastbound (EB) and westbound (WB) vehicles on South Street

The available sight distance looking left from Trailside Road along South Street is limited by a small rise along the frontage of the nearby properties as shown below in Photographs 1 and 2. Review of the *New York State Supplement to the National Manual on Uniform Traffic Control Devices for Streets and Highways – 2003 Edition* (New York State Supplement) Figure 2C-101 indicates that the available sight distance looking left is critically limited. Review of available mapping shows that the sight distance at the intersection can be improved to meet AASHTO guidelines through grading work completed within the existing right-of-way as shown on Figure 4.1. It is recommended that the Applicant coordinate with the County to re-grade along the nearby property frontage to meet the AASHTO guidelines.

Photo 1: Sight Distance looking left (winter)

Photo 2: Sight Distance looking left (spring)

B. Capacity/Level of Service Analysis

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made by following the procedures contained in the *2000 Highway Capacity Manual* using the Highway Capacity Software (HCS+ version 5.6). Levels of service range from A to F with level of service A conditions considered excellent with very little delay while level of service F generally represents conditions with very long delays. Further detailed information about levels of service criteria is included in Appendix F.

The relative impact of the proposed project can be determined by comparing the level of service during the 2027 design year for the No-Build and Build traffic volume conditions. Table 4.2 summarizes the results of the Level of Service calculations.

Table 4.2 – Level of Service Summary

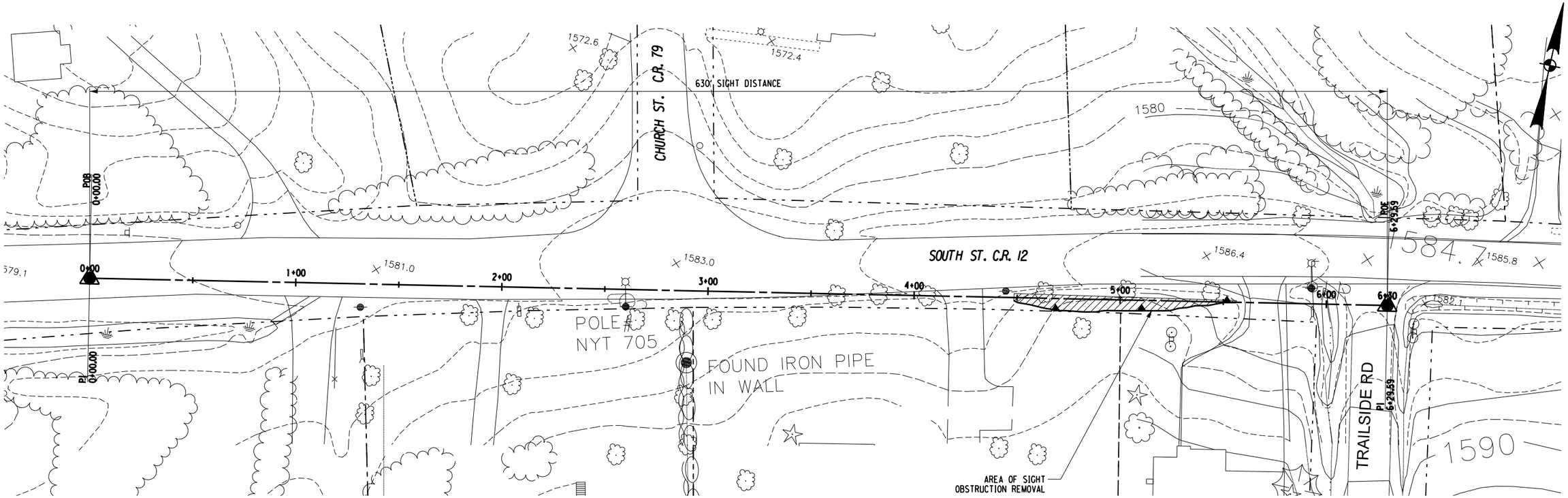
Intersection		Control	Friday Peak Hour			Sunday Peak Hour		
			Existing	No-Build	Build	Existing	No-Build	Build
Main St/South St		TW						
Main St WB	L		A (7.7)	A (7.8)	A (7.8)	A (8.2)	A (8.3)	A (8.3)
South St NB	LR		B (14.3)	C (15.5)	C (15.7)	C (19.3)	C (22.7)	C (23.4)
Main St/Church St		TW						
Main St WB	L		A (7.7)	A (7.7)	A (7.8)	A (7.9)	A (8.0)	A (8.0)
Church St NB	LR		B (11.7)	B (12.3)	B (12.4)	C (17.3)	C (20.7)	C (21.3)
Main St/Rt 296		TW						
Main St WB	L		A (7.7)	A (7.7)	A (7.8)	A (7.6)	A (7.7)	A (7.8)
Rt 296 NB	LR		B (12.2)	B (13.0)	B (13.5)	B (12.6)	B (13.9)	C (15.3)
South St/Church St		TW						
South St EB	L		A (7.7)	A (7.8)	A (7.8)	A (8.2)	A (8.3)	A (8.4)
Church St SB	LR		B (10.9)	B (11.4)	B (11.7)	C (16.2)	C (19.3)	C (21.3)
South St/Rt 296		TW						
Rt 296 NB	L		A (7.5)	A (7.5)	A (7.6)	A (7.5)	A (7.5)	A (7.6)
Rt 296 SB	L		A (7.4)	A (7.4)	A (7.4)	A (7.5)	A (7.5)	A (7.5)
South St EB	LTR		B (11.5)	B (12.4)	B (14.1)	F (53.7)	F (121)	F (206)
Retail Dwy WB	LTR		B (12.0)	B (12.8)	B (13.5)	B (12.6)	B (13.7)	B (14.6)
South St/Trailside Rd		TW						
South St WB	L		---	---	A (7.8)	---	---	A (8.9)
Trailside Rd NB	LR				B (10.2)			B (14.2)

S, AW, TW, R = Signalized, All-Way Stop, Two-Way Stop, or Roundabout controlled intersection
NB, SB, EB, WB = Northbound, Southbound, Eastbound, or Westbound intersection approaches
L, T, R = Left-turn, Through, and/or Right-turn intersection movements
X (Y.Y) = Level of service (Average delay in seconds per vehicle)
--- = Not Applicable

During the Friday peak hour all study area intersections operate at good levels of service with little or no increases in the average vehicle delay associated with the development of the site. During the Sunday peak hour slight increases in delay occur (2 seconds or less) at the Main Street/South Street and Main Street/NY Route 296 intersections which result in a drop in level of service. All movements at these intersections maintain acceptable operating conditions and mitigation is not recommended.

During the Sunday peak hour, the South Street eastbound approach to NY Route 296 currently operates at level of service F conditions. The average vehicle delays on this approach will continue to increase with the development of the site. The eastbound South Street traffic volume during the Sunday peak hour is approximately three times larger than any of the other intersection approaches resulting in the high delays during this time period. The 2027 Build traffic volumes at the intersection were compared to the signal warrant criteria contained in the *2009 Manual of Uniform Traffic Control*

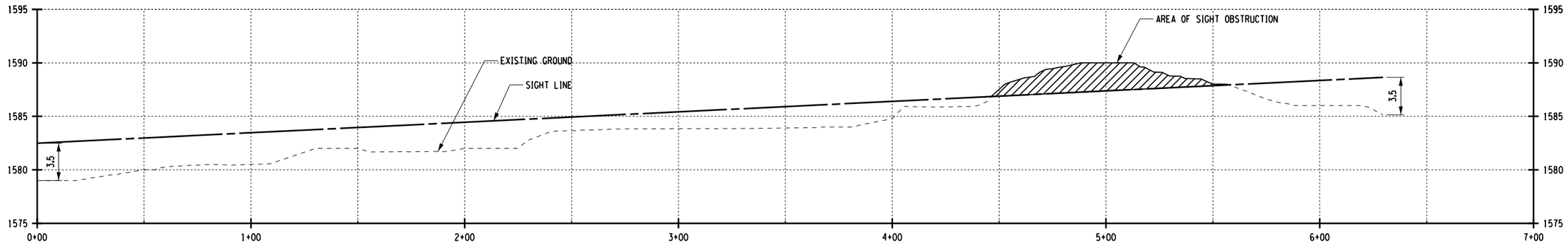
Devices (National MUTCD), published by The Federal Highway Administration (FHWA). This publication specifies the minimum criteria which must be met in order for a new traffic signal to be justified. The comparison shows that the traffic volumes do not meet the minimum volume thresholds for installation of a traffic signal. In addition, this length of delay is expected to be limited to weekend afternoon peak periods when the Windham Mountain ski traffic and seasonal weekend visitors are leaving the area; therefore, no mitigation is recommended. It is noted that as this project site and other sites develop over the sixteen year study period, travel patterns may begin to shift as some intersections begin to reach capacity during busy travel times. As shown in Table 4.2, the analysis results indicate that all other intersections in the study area operate with a large amount of reserve capacity available to handle these shifts in traffic flow.



SIGHT DISTANCE PLAN

25 0 25 50 75 100′

1" = 50′



SIGHT DISTANCE PROFILE

VERTICAL SCALE 8′ 4 0

0 25 50 75 100′

HORIZONTAL SCALE

PRELIMINARY
SIGHT DISTANCE MITIGATION

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 108-120 | DATE: 11/11 | FIGURE: 4.1

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CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

A Traffic Impact Study was completed for the proposed 302 unit Windham Mountain Sporting Club with full build-out anticipated for 2027. Access to the site is proposed via the existing South Street/Trailside Road intersection with emergency access at the South Street/Panarama Lane intersection. The project is expected to generate 94 new vehicle trips during the Friday peak hour and 109 new vehicle trips during the Sunday peak hour during the peak winter season. The following conclusions and recommendations are offered:

1. A review of accident data for the latest three year period on South Street between Main Street and NY Route 296 indicates a total of 13 accidents have occurred. Single vehicle accidents (6) are the most prevalent accident type with collisions with a ditch or embankment or an animal. The data also indicated that there were no recorded accidents at or adjacent to Trailside Road.

2. The sight distance analysis shows that the available intersection sight distance looking left for a vehicle exiting Trailside Road at the South Street is less than the AASHTO recommended sight distance due to a vertical grade of nearby properties. Review of available mapping shows that grading work within the existing right-of-way will result in sight distances that meet the AASHTO guidelines. It is recommended that the Applicant work with the County to re-grade the nearby frontage to eliminate the sight distance obstruction and meet the AASHTO guidelines.

3. The level of service analysis shows that all intersections and movements will operate with good levels of service and acceptable vehicle delays with the exception of the South Street approach to NY Route 296 during the Sunday peak hour where level of service F conditions currently exist. With the development of the site, the vehicle delays on this intersection approach will continue to increase. Since these delays are limited to a single peak period during the peak season, mitigation is not recommended. It is noted that as this project site and other sties develop over the sixteen year study period, travel patterns may shift as some intersections begin to reach capacity during busy travel times. The analysis shows that all other intersections in the study area operate with a large amount of reserve capacity available to handle these shifts in traffic flow.

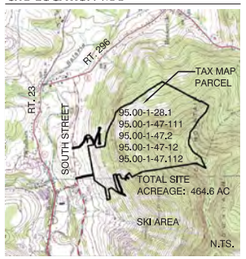
The traffic related mitigation for the project includes removing the existing sight obstruction to maximize sight distances looking left from Trailside Road. Additional mitigation is not recommended.

Appendix A

Site Plan

Traffic Impact Study
The Windham MountainSporting Club
Town of Windham, New York

SITE LOCATION MAP



LEGEND

- PROPERTY LINE
- WETLAND
- WATERCOURSE
- 100' WATERCOURSE BUFFER
- SINGLE FAMILY HOMES
- DUPLEX UNITS
- TOWNHOMES
- STORMWATER MANAGEMENT DEVICE

FACILITIES KEY

(C1) MEMBER'S LODGE AND CLUBHOUSE
- (54) CONDOMINIUMS
- (113) UNDERGROUND PARKING SPACES
- PRIVATE LOUNGE
- RESTAURANT AND BAR
- FULL-SERVICE SPA

(C2) THE WELLNESS CENTER
- WEIGHT/EXERCISE FACILITIES
- SWIMMING POOL
- TENNIS AND SQUASH
- CLIMBING WALL
- (13) SURFACE PARKING SPACES

(C3) EAST LODGE
- (27) CONDOMINIUMS
- (53) UNDERGROUND PARKING SPACES
- (28) SURFACE PARKING SPACES
- WEIGHT/EXERCISE FACILITIES
- SWIMMING POOL

LOT SUMMARY

TYPE	BLDG.	UNITS
SINGLE FAMILY HOMES	143	143
DUPLEX/ATTACHED SFH	12	24
TOWNHOMES	13	54
CONDOMINIUMS	2	81
TOTAL	170	302

NORTH
0 100 200 400
SCALE: 1"=200'

the LA group
Landscape Architecture and Engineering, PC
40 Long Alley
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Design DPS
Drawn JTS
Checked MJT/KJF

Planning/Design Consultant:
DPS Sporting Club Development Co.
14 S. Pack Square, Ste. 405
Ashville, NC 28801
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Engineering Consultant:
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517 Main Street
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P: (518) 622-9667

Submission:
FOR REGULATORY APPROVALS ONLY

PREPARED FOR:
TUCK EASTSIDE PARTNERS, L.P.
34 SALISBURY ROAD
DARIEN, CT 06820

The Windham Mountain Sporting Club

Town of Windham
Greene County, New York

Title: MASTER PLAN

Revisions

Project: 08077
Date: 08/11/11

Drawing
MP-1

Appendix B

Turning Movement Counts

Traffic Impact Study
The Windham Mountain Sporting Club
Town of Windham, New York

Project: 08-120d
Counted By: CDF
Location: Windham, NY
Other:

File Name : tm8120f5
Site Code : 08-120-5
Start Date : 3/26/2010
Page No : 1

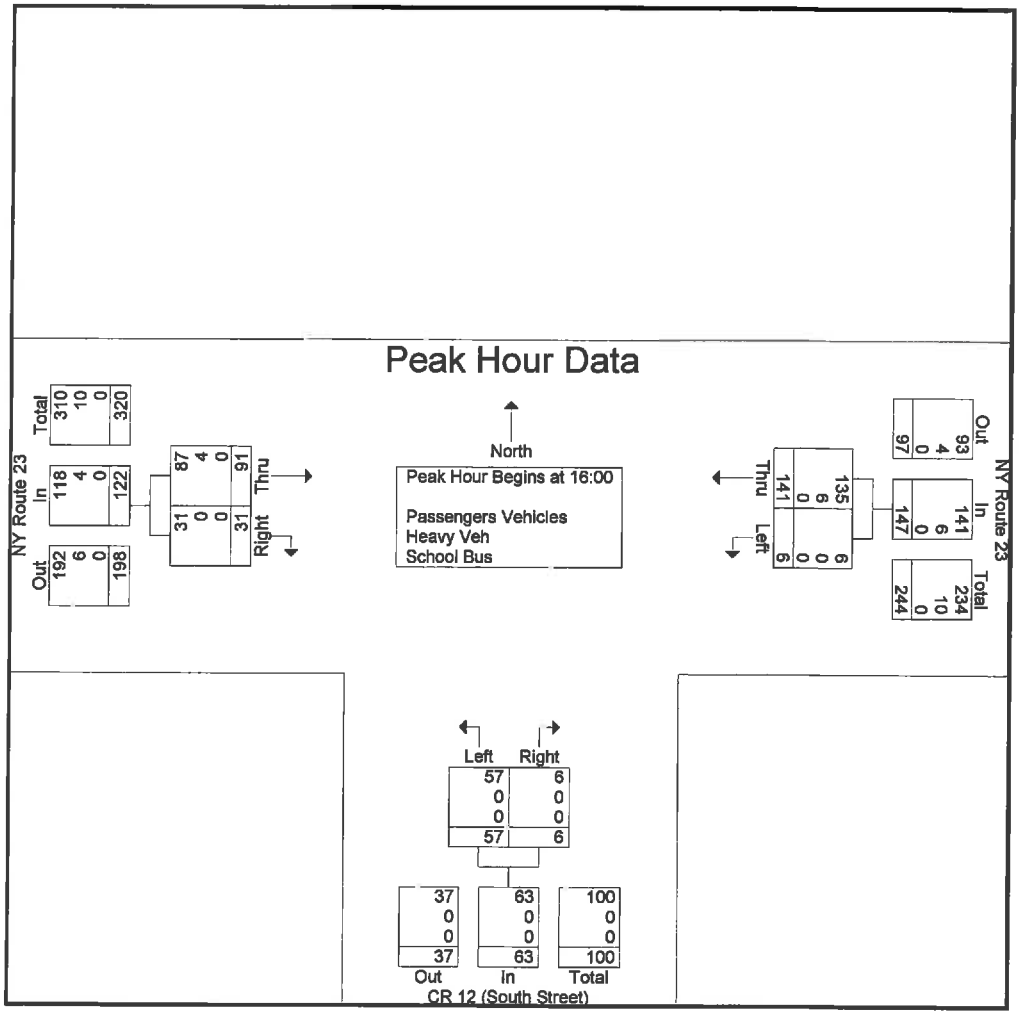
Groups Printed- Passengers Vehicles - Heavy Veh - School Bus

	NY Route 23 Westbound			CR 12 (South Street) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
16:00	1	33	34	13	0	13	30	7	37	84
16:15	1	30	31	13	2	15	15	8	23	69
16:30	3	38	41	19	1	20	21	6	27	88
16:45	1	40	41	12	3	15	25	10	35	91
Total	6	141	147	57	6	63	91	31	122	332
17:00	0	25	25	8	0	8	19	6	25	58
17:15	1	29	30	8	0	8	14	5	19	57
17:30	0	28	28	8	0	8	16	4	20	56
17:45	1	33	34	3	1	4	21	3	24	62
Total	2	115	117	27	1	28	70	18	88	233
18:00	0	23	23	4	0	4	17	4	21	48
18:15	1	22	23	5	0	5	16	3	19	47
18:30	1	24	25	5	0	5	15	4	19	49
18:45	1	24	25	6	0	6	19	7	26	57
Total	3	93	96	20	0	20	67	18	85	201
Grand Total	11	349	360	104	7	111	228	67	295	766
Apprch %	3.1	96.9		93.7	6.3		77.3	22.7		
Total %	1.4	45.6	47	13.6	0.9	14.5	29.8	8.7	38.5	
Passengers Vehicles	11	340	351	104	7	111	220	66	286	748
% Passengers Vehicles	100	97.4	97.5	100	100	100	96.5	98.5	96.9	97.7
Heavy Veh	0	9	9	0	0	0	8	1	9	18
% Heavy Veh	0	2.6	2.5	0	0	0	3.5	1.5	3.1	2.3
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0

Project: 08-120d
Counted By: CDF
Location: Windham, NY
Other:

File Name : tm8120f5
Site Code : 08-120-5
Start Date : 3/26/2010
Page No : 2

	NY Route 23 Westbound			CR 12 (South Street) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 6:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:00:00 PM										
4:00:00 PM	1	33	34	13	0	13	**30**	7	**37**	84
4:15:00 PM	1	30	31	13	**2**	15	15	8	23	69
4:30:00 PM	**3**	38	**41**	**19**	1	**20**	21	6	27	88
4:45:00 PM	1	**40**	41	12	**3**	15	25	**10**	35	**91**
Total Volume	6	141	147	57	6	63	91	31	122	332
% App. Total	4.1	95.9		90.5	9.5		74.6	25.4		
PHF	.500	.881	.896	.750	.500	.788	.758	.775	.824	.912
Passengers Vehicles	6	135	141	57	6	63	87	31	118	322
% Passengers Vehicles	100	95.7	95.9	100	100	100	95.6	100	96.7	97.0
Heavy Veh	0	6	6	0	0	0	4	0	4	10
% Heavy Veh	0	4.3	4.1	0	0	0	4.4	0	3.3	3.0
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120f3
Site Code : 08-120-3
Start Date : 1/16/2009
Page No : 1

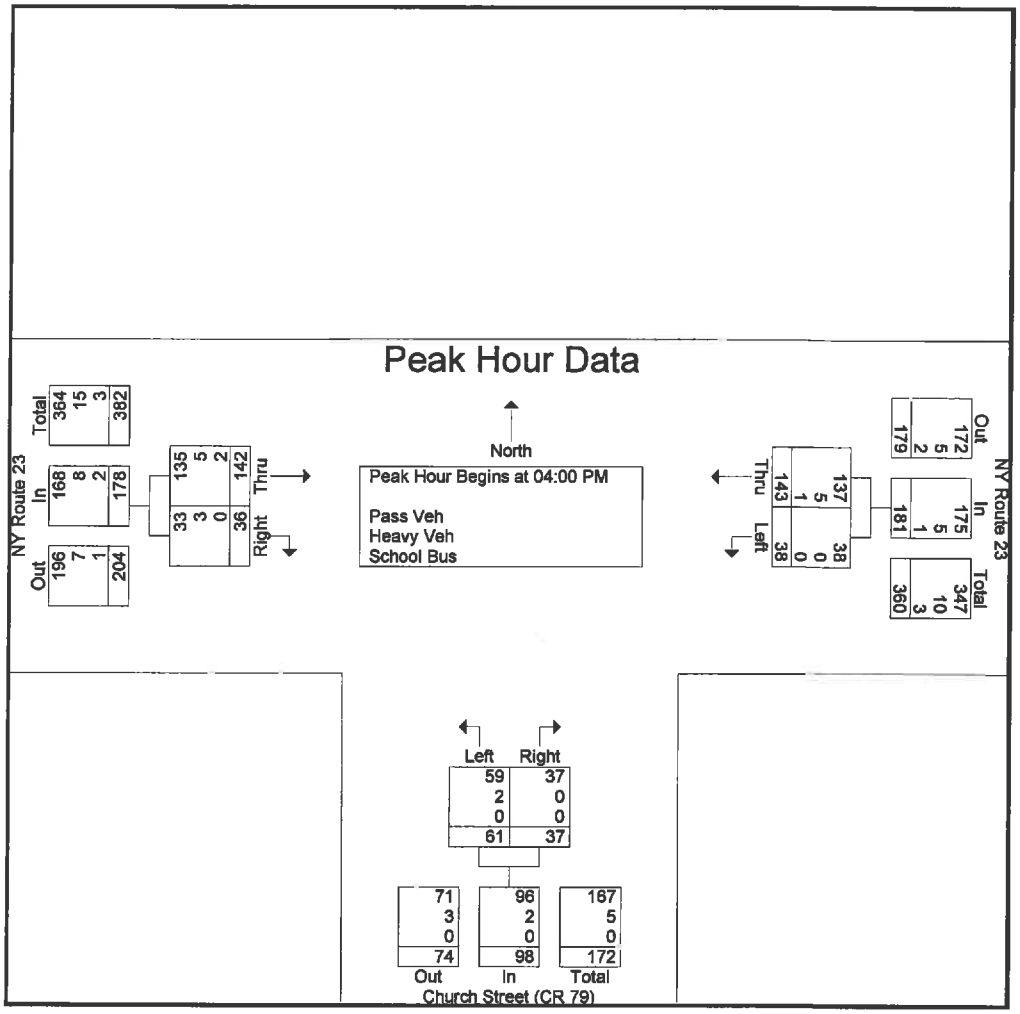
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 23 Westbound			Church Street (CR 79) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
04:00 PM	7	44	51	12	6	18	31	8	39	108
04:15 PM	12	21	33	18	13	31	34	10	44	108
04:30 PM	13	35	48	17	11	28	45	9	54	130
04:45 PM	6	43	49	14	7	21	32	9	41	111
Total	38	143	181	61	37	98	142	36	178	457
05:00 PM	6	40	46	12	10	22	23	9	32	100
05:15 PM	14	33	47	10	12	22	27	3	30	99
05:30 PM	8	37	45	13	12	25	28	6	34	104
05:45 PM	16	47	63	9	9	18	19	2	21	102
Total	44	157	201	44	43	87	97	20	117	405
06:00 PM	23	40	63	12	8	20	27	3	30	113
06:15 PM	5	34	39	4	8	12	9	1	10	61
06:30 PM	20	35	55	7	12	19	17	3	20	94
06:45 PM	16	25	41	8	6	14	21	8	29	84
Total	64	134	198	31	34	65	74	15	89	352
Grand Total	146	434	580	136	114	250	313	71	384	1214
Apprch %	25.2	74.8		54.4	45.6		81.5	18.5		
Total %	12	35.7	47.8	11.2	9.4	20.6	25.8	5.8	31.6	
Pass Veh	146	417	563	134	114	248	297	68	365	1176
% Pass Veh	100	96.1	97.1	98.5	100	99.2	94.9	95.8	95.1	96.9
Heavy Veh	0	16	16	2	0	2	14	3	17	35
% Heavy Veh	0	3.7	2.8	1.5	0	0.8	4.5	4.2	4.4	2.9
School Bus	0	1	1	0	0	0	2	0	2	3
% School Bus	0	0.2	0.2	0	0	0	0.6	0	0.5	0.2

Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120f3
Site Code : 08-120-3
Start Date : 1/16/2009
Page No : 2

	NY Route 23 Westbound			Church Street (CR 79) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 6:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:00:00 PM										
4:00:00 PM	7	**44**	**51**	12	6	18	31	8	39	108
4:15:00 PM	12	21	33	**18**	**13**	**31**	34	**10**	44	108
4:30:00 PM	**13**	35	48	17	11	28	**45**	9	**54**	**130**
4:45:00 PM	6	43	49	14	7	21	32	9	41	111
Total Volume	38	143	181	61	37	98	142	36	178	457
% App. Total	21	79		62.2	37.8		79.8	20.2		
PHF	.731	.813	.887	.847	.712	.790	.789	.900	.824	.879
Pass Veh	38	137	175	59	37	96	135	33	168	439
% Pass Veh	100	95.8	96.7	96.7	100	98.0	95.1	91.7	94.4	96.1
Heavy Veh	0	5	5	2	0	2	5	3	8	15
% Heavy Veh	0	3.5	2.8	3.3	0	2.0	3.5	8.3	4.5	3.3
School Bus	0	1	1	0	0	0	2	0	2	3
% School Bus	0	0.7	0.6	0	0	0	1.4	0	1.1	0.7



Project: 08-120d
Counted By: DL
Location: Windham, NY
Other:

File Name : tm8120f4
Site Code : 08-120-4
Start Date : 1/16/2009
Page No : 1

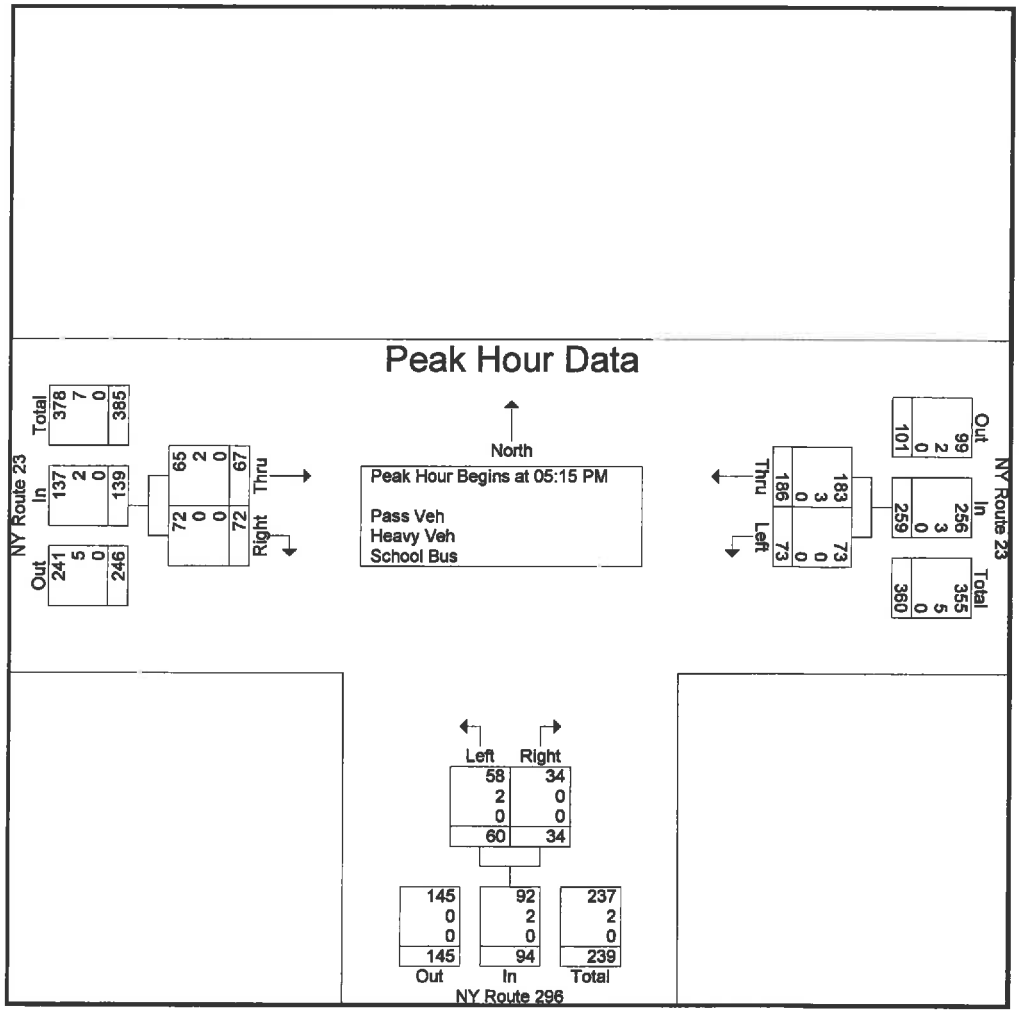
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 23 Westbound			NY Route 296 Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
04:00 PM	7	23	30	14	5	19	18	30	48	97
04:15 PM	12	44	56	12	13	25	25	11	36	117
04:30 PM	8	25	33	15	17	32	22	28	50	115
04:45 PM	14	41	55	24	12	36	16	15	31	122
Total	41	133	174	65	47	112	81	84	165	451
05:00 PM	9	23	32	22	16	38	9	11	20	90
05:15 PM	12	35	47	13	9	22	16	16	32	101
05:30 PM	14	43	57	16	10	26	14	27	41	124
05:45 PM	28	62	90	14	5	19	17	13	30	139
Total	63	163	226	65	40	105	56	67	123	454
06:00 PM	19	46	65	17	10	27	20	16	36	128
06:15 PM	19	35	54	18	3	21	5	7	12	87
06:30 PM	24	40	64	17	7	24	12	17	29	117
06:45 PM	19	33	52	11	9	20	5	20	25	97
Total	81	154	235	63	29	92	42	60	102	429
Grand Total	185	450	635	193	116	309	179	211	390	1334
Apprch %	29.1	70.9		62.5	37.5		45.9	54.1		
Total %	13.9	33.7	47.6	14.5	8.7	23.2	13.4	15.8	29.2	
Pass Veh	185	443	628	191	115	306	170	211	381	1315
% Pass Veh	100	98.4	98.9	99	99.1	99	95	100	97.7	98.6
Heavy Veh	0	5	5	2	1	3	7	0	7	15
% Heavy Veh	0	1.1	0.8	1	0.9	1	3.9	0	1.8	1.1
School Bus	0	2	2	0	0	0	2	0	2	4
% School Bus	0	0.4	0.3	0	0	0	1.1	0	0.5	0.3

Project: 08-120d
Counted By: DL
Location: Windham, NY
Other:

File Name : tm8120f4
Site Code : 08-120-4
Start Date : 1/16/2009
Page No : 2

	NY Route 23 Westbound			NY Route 296 Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 6:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 5:15:00 PM										
5:15:00 PM	12	35	47	13	9	22	16	16	32	101
5:30:00 PM	14	43	57	16	**10**	26	14	**27**	**41**	124
5:45:00 PM	**28**	**62**	**90**	14	5	19	17	13	30	**139**
6:00:00 PM	19	46	65	**17**	10	**27**	**20**	16	36	128
Total Volume	73	186	259	60	34	94	67	72	139	492
% App. Total	28.2	71.8		63.8	36.2		48.2	51.8		
PHF	.652	.750	.719	.882	.850	.870	.838	.667	.848	.885
Pass Veh	73	183	256	58	34	92	65	72	137	485
% Pass Veh	100	98.4	98.8	96.7	100	97.9	97.0	100	98.6	98.6
Heavy Veh	0	3	3	2	0	2	2	0	2	7
% Heavy Veh	0	1.6	1.2	3.3	0	2.1	3.0	0	1.4	1.4
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: CF
Location: Windham, NY
Other:

File Name : tm8120f1
Site Code : 08-120-1
Start Date : 1/16/2009
Page No : 1

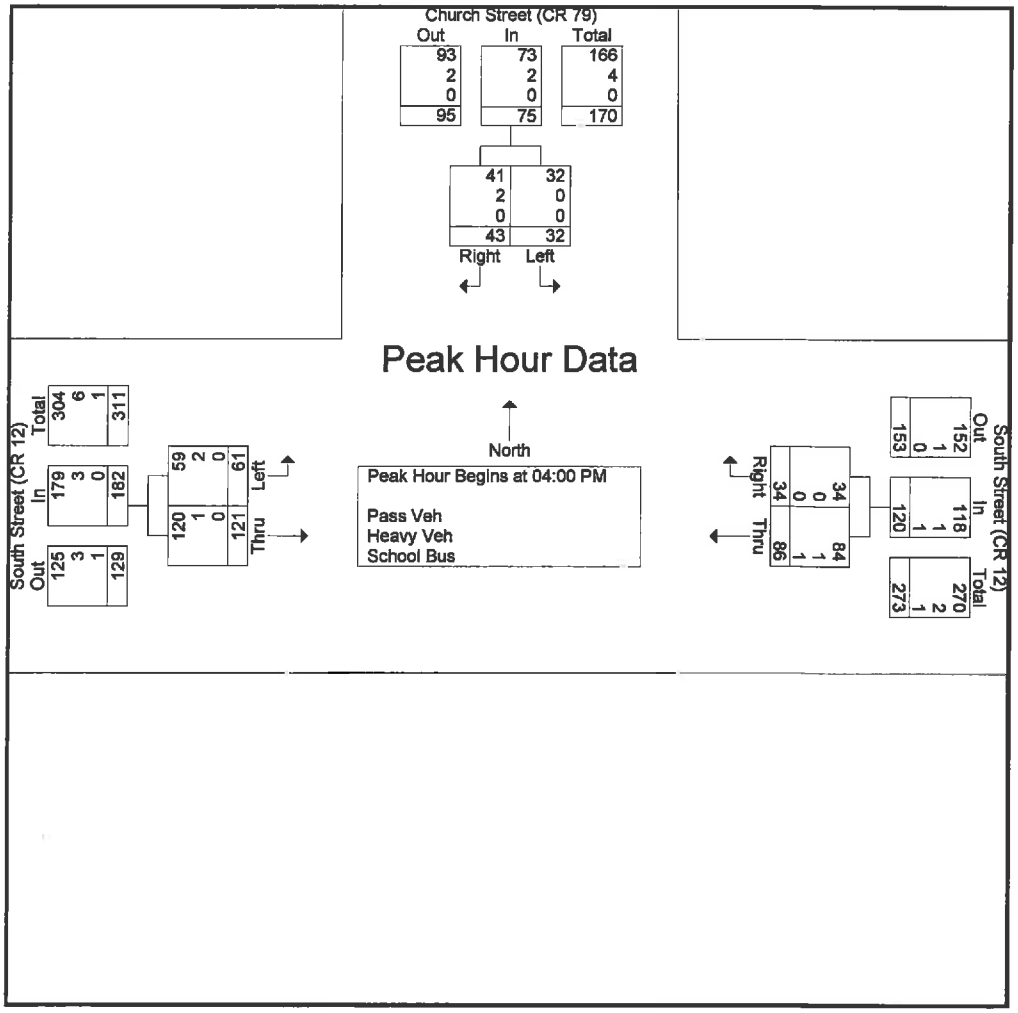
Groups Printed- Pass Veh - Heavy Veh - School Bus

	Church Street (CR 79) Southbound			South Street (CR 12) Westbound			South Street (CR 12) Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
04:00 PM	4	12	16	20	7	27	12	26	38	81
04:15 PM	12	13	25	28	10	38	16	40	56	119
04:30 PM	7	9	16	19	16	35	20	31	51	102
04:45 PM	9	9	18	19	1	20	13	24	37	75
Total	32	43	75	86	34	120	61	121	182	377
05:00 PM	8	8	16	21	10	31	10	20	30	77
05:15 PM	6	16	22	17	11	28	16	28	44	94
05:30 PM	5	12	17	30	11	41	13	17	30	88
05:45 PM	4	14	18	24	9	33	11	14	25	76
Total	23	50	73	92	41	133	50	79	129	335
06:00 PM	9	22	31	14	7	21	9	10	19	71
06:15 PM	5	7	12	10	8	18	8	8	16	46
06:30 PM	10	15	25	21	8	29	11	17	28	82
06:45 PM	10	11	21	26	10	36	3	20	23	80
Total	34	55	89	71	33	104	31	55	86	279
Grand Total	89	148	237	249	108	357	142	255	397	991
Apprch %	37.6	62.4		69.7	30.3		35.8	64.2		
Total %	9	14.9	23.9	25.1	10.9	36	14.3	25.7	40.1	
Pass Veh	89	145	234	247	108	355	140	251	391	980
% Pass Veh	100	98	98.7	99.2	100	99.4	98.6	98.4	98.5	98.9
Heavy Veh	0	3	3	1	0	1	2	3	5	9
% Heavy Veh	0	2	1.3	0.4	0	0.3	1.4	1.2	1.3	0.9
School Bus	0	0	0	1	0	1	0	1	1	2
% School Bus	0	0	0	0.4	0	0.3	0	0.4	0.3	0.2

Project: 08-120d
Counted By: CF
Location: Windham, NY
Other:

File Name : tm8120f1
Site Code : 08-120-1
Start Date : 1/16/2009
Page No : 2

	Church Street (CR 79) Southbound			South Street (CR 12) Westbound			South Street (CR 12) Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 6:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:00:00 PM										
4:00:00 PM	4	12	16	20	7	27	12	26	38	81
4:15:00 PM	**12**	**13**	**25**	**28**	10	**38**	16	**40**	**56**	**119**
4:30:00 PM	7	9	16	19	**16**	35	**20**	31	51	102
4:45:00 PM	9	9	18	19	1	20	13	24	37	75
Total Volume	32	43	75	86	34	120	61	121	182	377
% App. Total	42.7	57.3		71.7	28.3		33.5	66.5		
PHF	.667	.827	.750	.768	.531	.789	.763	.756	.813	.792
Pass Veh	32	41	73	84	34	118	59	120	179	370
% Pass Veh	100	95.3	97.3	97.7	100	98.3	96.7	99.2	98.4	98.1
Heavy Veh	0	2	2	1	0	1	2	1	3	6
% Heavy Veh	0	4.7	2.7	1.2	0	0.8	3.3	0.8	1.6	1.6
School Bus	0	0	0	1	0	1	0	0	0	1
% School Bus	0	0	0	1.2	0	0.8	0	0	0	0.3



Project: 08-120d
Counted By: JMK
Location: Windham, NY
Other:

File Name : tm8120f2
Site Code : 08-120-2
Start Date : 1/16/2009
Page No : 1

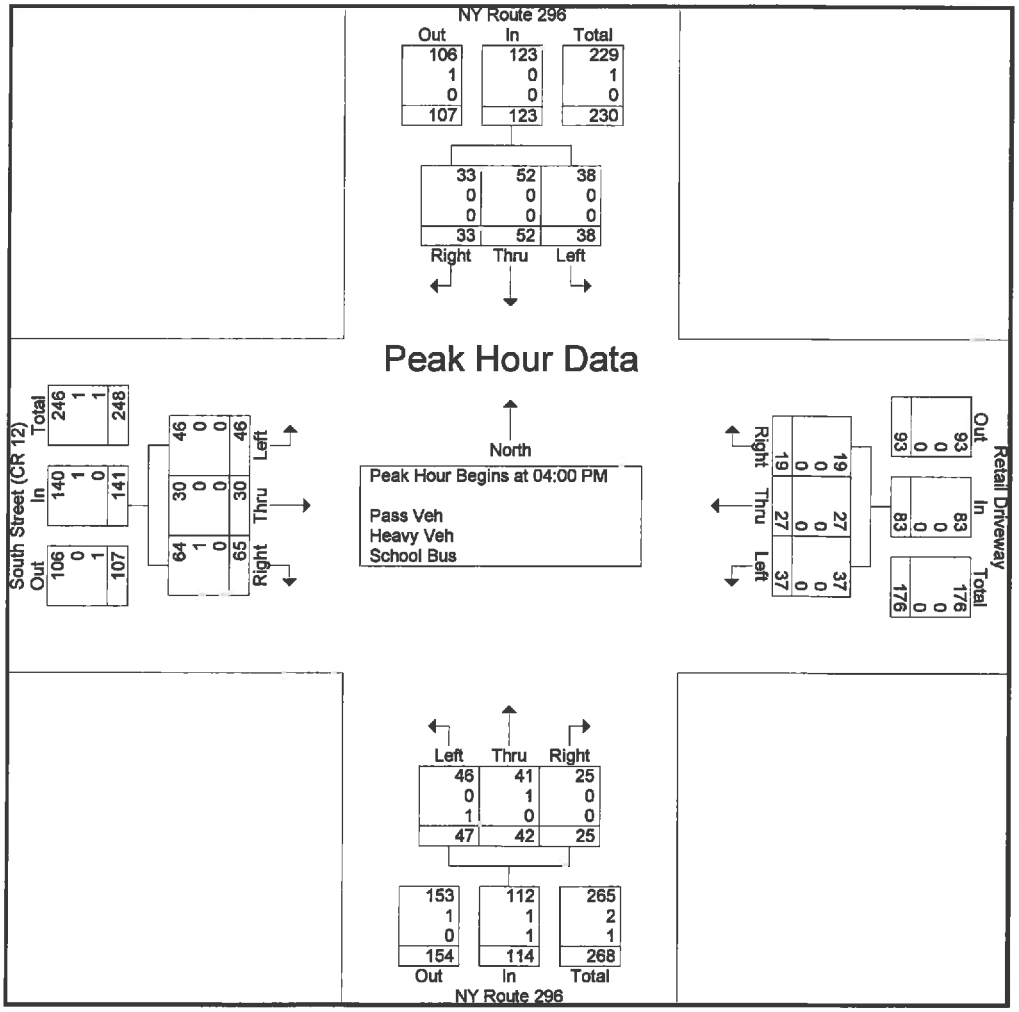
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 296 Southbound				Retail Driveway Westbound				NY Route 296 Northbound				South Street (CR 12) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	12	12	12	36	13	10	6	29	10	8	10	28	6	6	16	28	121
04:15 PM	9	11	8	28	5	4	2	11	21	10	5	36	11	11	20	42	117
04:30 PM	10	12	6	28	8	9	6	23	7	10	4	21	16	7	15	38	110
04:45 PM	7	17	7	31	11	4	5	20	9	14	6	29	13	6	14	33	113
Total	38	52	33	123	37	27	19	83	47	42	25	114	46	30	65	141	461
05:00 PM	4	9	8	21	4	9	8	21	12	12	6	30	12	8	12	32	104
05:15 PM	4	12	11	27	7	5	3	15	12	6	4	22	10	7	16	33	97
05:30 PM	7	18	19	44	5	6	2	13	18	9	7	34	1	7	13	21	112
05:45 PM	11	8	15	34	5	2	5	12	7	7	5	19	4	6	5	15	80
Total	26	47	53	126	21	22	18	61	49	34	22	105	27	28	46	101	393
06:00 PM	8	10	16	34	5	5	4	14	3	17	7	27	6	5	6	17	92
06:15 PM	10	11	10	31	9	7	2	18	4	10	7	21	2	3	6	11	81
06:30 PM	15	9	16	40	5	10	3	18	6	7	8	21	6	7	9	22	101
06:45 PM	11	10	14	35	5	3	10	18	10	9	8	27	5	6	7	18	98
Total	44	40	56	140	24	25	19	68	23	43	30	96	19	21	28	68	372
Grand Total	108	139	142	389	82	74	56	212	119	119	77	315	92	79	139	310	1226
Apprch %	27.8	35.7	36.5		38.7	34.9	26.4		37.8	37.8	24.4		29.7	25.5	44.8		
Total %	8.8	11.3	11.6	31.7	6.7	6	4.6	17.3	9.7	9.7	6.3	25.7	7.5	6.4	11.3	25.3	
Pass Veh	107	138	142	387	82	74	56	212	118	117	77	312	91	79	137	307	1218
% Pass Veh	99.1	99.3	100	99.5	100	100	100	100	99.2	98.3	100	99	98.9	100	98.6	99	99.3
Heavy Veh	1	1	0	2	0	0	0	0	0	2	0	2	1	0	1	2	6
% Heavy Veh	0.9	0.7	0	0.5	0	0	0	0	0	1.7	0	0.6	1.1	0	0.7	0.6	0.5
School Bus	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
% School Bus	0	0	0	0	0	0	0	0	0.8	0	0	0.3	0	0	0.7	0.3	0.2

Project: 08-120d
Counted By: JMK
Location: Windham, NY
Other:

File Name : tm8120f2
Site Code : 08-120-2
Start Date : 1/16/2009
Page No : 2

	NY Route 296 Southbound				Retail Driveway Westbound				NY Route 296 Northbound				South Street (CR 12) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 6:45:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 4:00:00 PM																	
4:00:00 PM	**12**	12	**12**	**36**	**13**	**10**	**6**	**29**	10	8	**10**	28	6	6	16	28	**121**
4:15:00 PM	9	11	8	28	5	4	2	11	**21**	10	5	**36**	11	**11**	**20**	**42**	117
4:30:00 PM	10	12	6	28	8	9	6	23	7	10	4	21	**16**	7	15	38	110
4:45:00 PM	7	**17**	7	31	11	4	5	20	9	**14**	6	29	13	6	14	33	113
Total Volume	38	52	33	123	37	27	19	83	47	42	25	114	46	30	65	141	461
% App. Total	30.9	42.3	26.8		44.6	32.5	22.9		41.2	36.8	21.9		32.6	21.3	46.1		
PHF	.792	.765	.688	.854	.712	.675	.792	.716	.560	.750	.625	.792	.719	.682	.813	.839	.952
Pass Veh	38	52	33	123	37	27	19	83	46	41	25	112	46	30	64	140	458
% Pass Veh	100	100	100	100	100	100	100	100	97.9	97.6	100	98.2	100	100	98.5	99.3	99.3
Heavy Veh	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
% Heavy Veh	0	0	0	0	0	0	0	0	0	2.4	0	0.9	0	0	1.5	0.7	0.4
School Bus	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
% School Bus	0	0	0	0	0	0	0	0	2.1	0	0	0.9	0	0	0	0	0.2



Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120s5
Site Code : 08-120-5
Start Date : 3/28/2010
Page No : 1

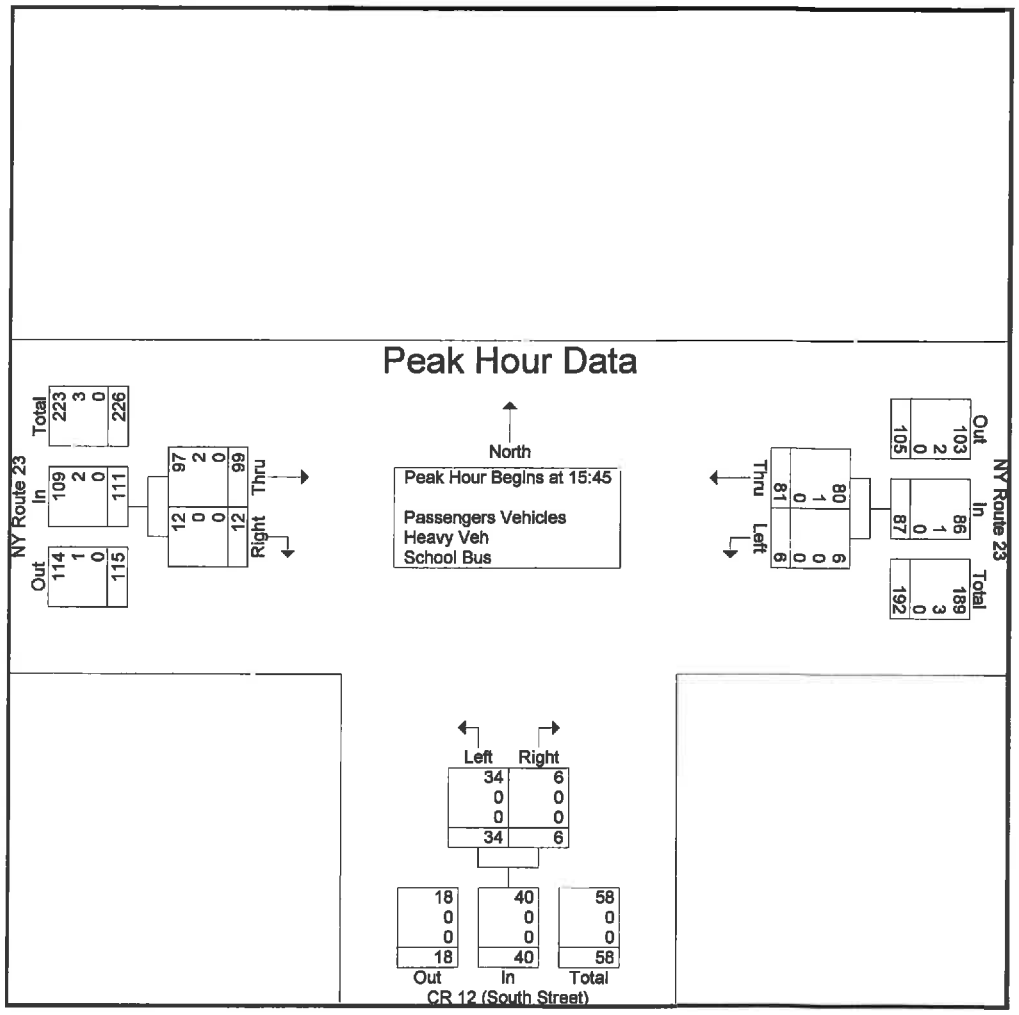
Groups Printed- Passengers Vehicles - Heavy Veh - School Bus

	NY Route 23 Westbound			CR 12 (South Street) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
15:00	0	16	16	8	1	9	22	3	25	50
15:15	0	21	21	6	1	7	21	9	30	58
15:30	0	25	25	7	0	7	16	0	16	48
15:45	2	16	18	7	3	10	31	2	33	61
Total	2	78	80	28	5	33	90	14	104	217
16:00	1	21	22	4	2	6	18	5	23	51
16:15	1	18	19	10	1	11	29	3	32	62
16:30	2	26	28	13	0	13	21	2	23	64
16:45	1	17	18	10	1	11	6	7	13	42
Total	5	82	87	37	4	41	74	17	91	219
17:00	2	14	16	9	0	9	14	3	17	42
17:15	0	22	22	6	1	7	23	3	26	55
17:30	0	17	17	4	3	7	9	4	13	37
17:45	0	19	19	3	1	4	22	2	24	47
Total	2	72	74	22	5	27	68	12	80	181
Grand Total	9	232	241	87	14	101	232	43	275	617
Apprch %	3.7	96.3		86.1	13.9		84.4	15.6		
Total %	1.5	37.6	39.1	14.1	2.3	16.4	37.6	7	44.6	
Passengers Vehicles	9	231	240	87	14	101	229	43	272	613
% Passengers Vehicles	100	99.6	99.6	100	100	100	98.7	100	98.9	99.4
Heavy Veh	0	1	1	0	0	0	2	0	2	3
% Heavy Veh	0	0.4	0.4	0	0	0	0.9	0	0.7	0.5
School Bus	0	0	0	0	0	0	1	0	1	1
% School Bus	0	0	0	0	0	0	0.4	0	0.4	0.2

Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120s5
Site Code : 08-120-5
Start Date : 3/28/2010
Page No : 2

	NY Route 23 Westbound			CR 12 (South Street) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 3:00:00 PM to 5:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 3:45:00 PM										
3:45:00 PM	**2**	16	18	7	**3**	10	**31**	2	**33**	61
4:00:00 PM	1	21	22	4	**2**	6	18	**5**	23	51
4:15:00 PM	1	18	19	10	1	11	29	3	32	62
4:30:00 PM	2	**26**	**28**	**13**	0	**13**	21	2	23	**64**
Total Volume	6	81	87	34	6	40	99	12	111	238
% App. Total	6.9	93.1		85	15		89.2	10.8		
PHF	.750	.779	.777	.654	.500	.769	.798	.600	.841	.930
Passengers Vehicles	6	80	86	34	6	40	97	12	109	235
% Passengers Vehicles	100	98.8	98.9	100	100	100	98.0	100	98.2	98.7
Heavy Veh	0	1	1	0	0	0	2	0	2	3
% Heavy Veh	0	1.2	1.1	0	0	0	2.0	0	1.8	1.3
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120s3
Site Code : 08-120-3
Start Date : 1/18/2009
Page No : 1

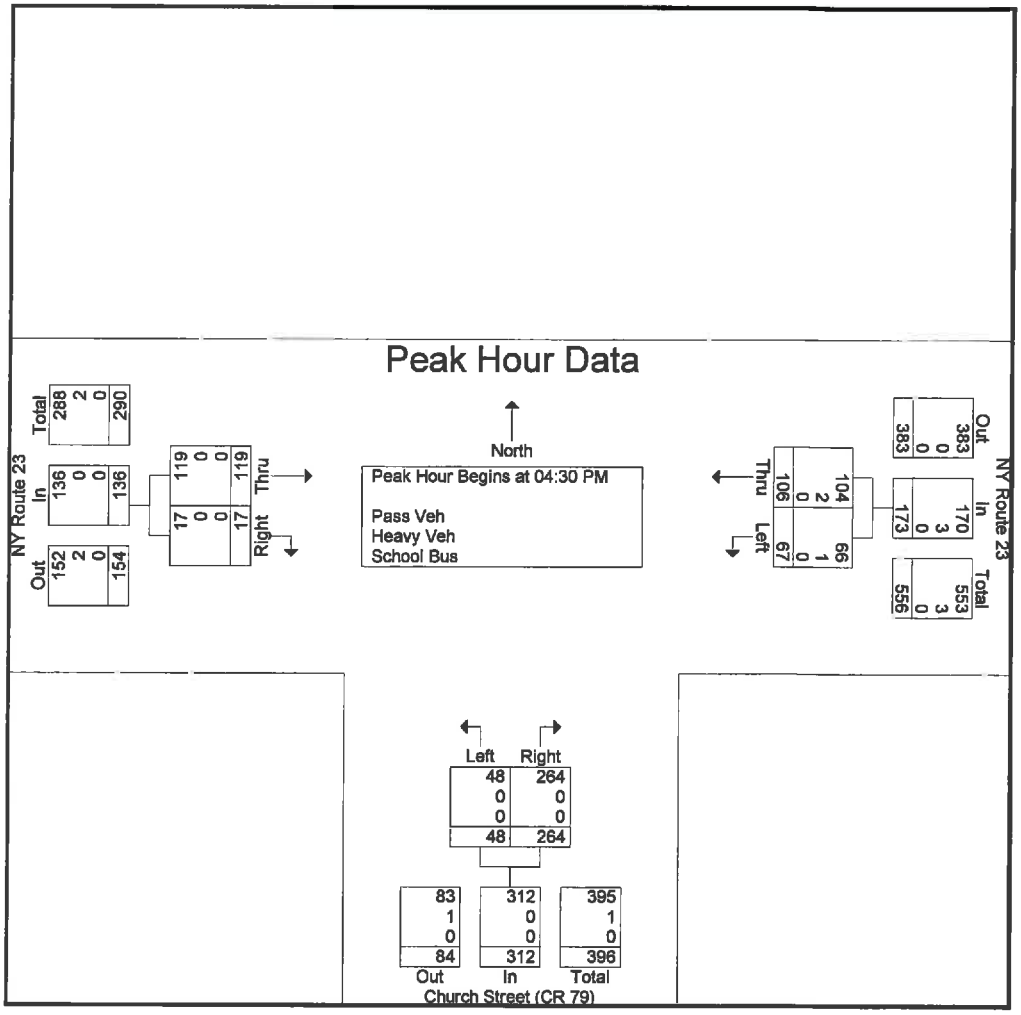
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 23 Westbound			Church Street (CR 79) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
03:00 PM	16	26	42	4	31	35	36	4	40	117
03:15 PM	22	34	56	9	34	43	22	6	28	127
03:30 PM	21	28	49	8	42	50	38	6	44	143
03:45 PM	17	19	36	11	27	38	30	7	37	111
Total	76	107	183	32	134	166	126	23	149	498
04:00 PM	15	21	36	12	30	42	29	5	34	112
04:15 PM	30	34	64	10	43	53	33	6	39	156
04:30 PM	14	28	42	11	59	70	32	1	33	145
04:45 PM	17	25	42	10	74	84	37	6	43	169
Total	76	108	184	43	206	249	131	18	149	582
05:00 PM	19	28	47	15	60	75	25	2	27	149
05:15 PM	17	25	42	12	71	83	25	8	33	158
05:30 PM	14	22	36	17	28	45	20	4	24	105
05:45 PM	6	19	25	14	17	31	20	12	32	88
Total	56	94	150	58	176	234	90	26	116	500
Grand Total	208	309	517	133	516	649	347	67	414	1580
Apprch %	40.2	59.8		20.5	79.5		83.8	16.2		
Total %	13.2	19.6	32.7	8.4	32.7	41.1	22	4.2	26.2	
Pass Veh	207	300	507	133	516	649	343	67	410	1566
% Pass Veh	99.5	97.1	98.1	100	100	100	98.8	100	99	99.1
Heavy Veh	1	9	10	0	0	0	4	0	4	14
% Heavy Veh	0.5	2.9	1.9	0	0	0	1.2	0	1	0.9
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0

Project: 08-120d
Counted By: DPR
Location: Windham, NY
Other:

File Name : tm8120s3
Site Code : 08-120-3
Start Date : 1/18/2009
Page No : 2

	NY Route 23 Westbound			Church Street (CR 79) Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 3:00:00 PM to 5:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:30:00 PM										
4:30:00 PM	14	**28**	42	11	59	70	32	1	33	145
4:45:00 PM	17	25	42	10	**74**	**84**	**37**	6	**43**	**169**
5:00:00 PM	**19**	28	**47**	**15**	60	75	25	2	27	149
5:15:00 PM	17	25	42	12	71	83	25	**8**	33	158
Total Volume	67	106	173	48	264	312	119	17	136	621
% App. Total	38.7	61.3		15.4	84.6		87.5	12.5		
PHF	.882	.946	.920	.800	.892	.929	.804	.531	.791	.919
Pass Veh	66	104	170	48	264	312	119	17	136	618
% Pass Veh	98.5	98.1	98.3	100	100	100	100	100	100	99.5
Heavy Veh	1	2	3	0	0	0	0	0	0	3
% Heavy Veh	1.5	1.9	1.7	0	0	0	0	0	0	0.5
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: DL
Location: Windham, NY
Other:

File Name : tm8120s4
Site Code : 08-120-4
Start Date : 1/18/2009
Page No : 1

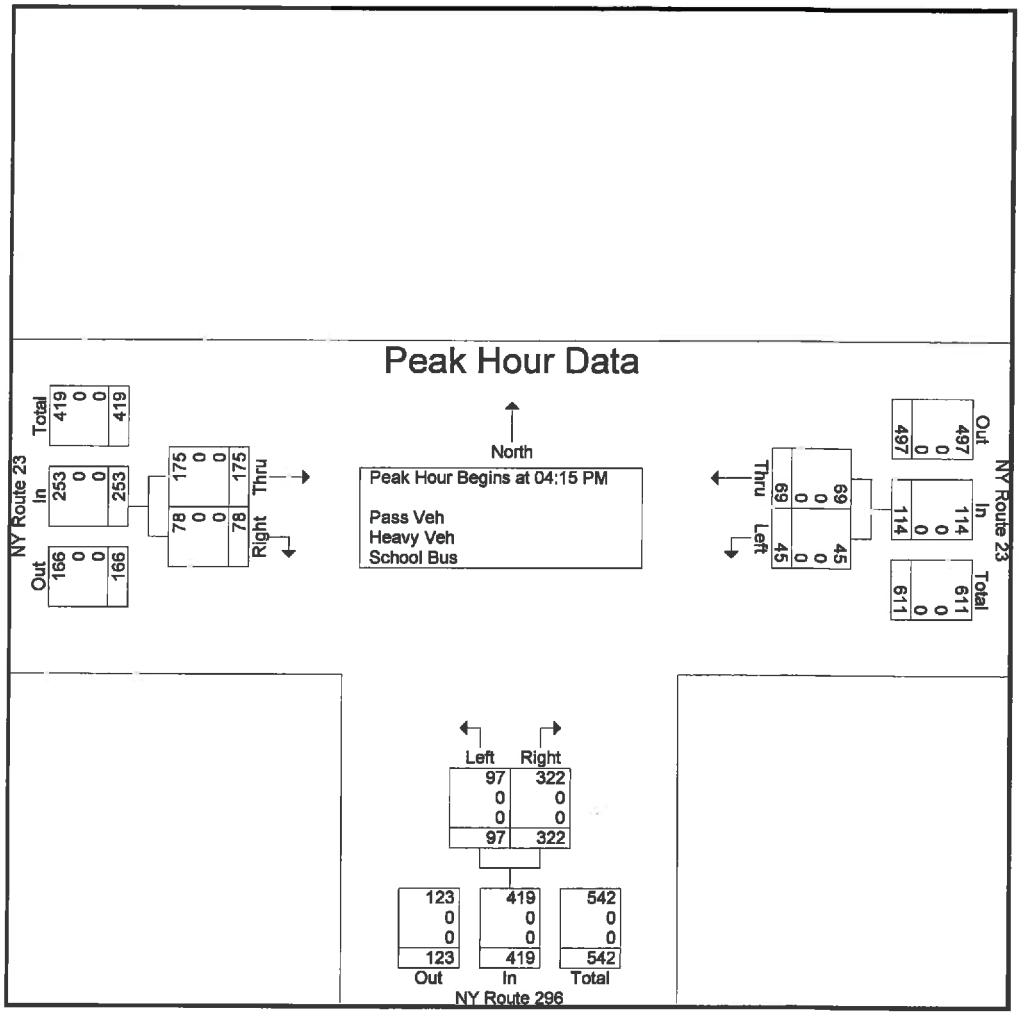
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 23 Westbound			NY Route 296 Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
03:00 PM	11	18	29	20	37	57	28	21	49	135
03:15 PM	11	25	36	18	48	66	32	15	47	149
03:30 PM	20	15	35	16	52	68	29	18	47	150
03:45 PM	10	18	28	22	39	61	17	18	35	124
Total	52	76	128	76	176	252	106	72	178	558
04:00 PM	13	18	31	26	50	76	30	21	51	158
04:15 PM	12	11	23	34	70	104	43	21	64	191
04:30 PM	18	14	32	17	83	100	41	11	52	184
04:45 PM	6	19	25	21	97	118	53	27	80	223
Total	49	62	111	98	300	398	167	80	247	756
05:00 PM	9	25	34	25	72	97	38	19	57	188
05:15 PM	5	17	22	19	65	84	51	19	70	176
05:30 PM	5	16	21	17	38	55	32	18	50	126
05:45 PM	7	12	19	17	37	54	32	14	46	119
Total	26	70	96	78	212	290	153	70	223	609
Grand Total	127	208	335	252	688	940	426	222	648	1923
Apprch %	37.9	62.1		26.8	73.2		65.7	34.3		
Total %	6.6	10.8	17.4	13.1	35.8	48.9	22.2	11.5	33.7	
Pass Veh	127	207	334	252	688	940	426	222	648	1922
% Pass Veh	100	99.5	99.7	100	100	100	100	100	100	99.9
Heavy Veh	0	1	1	0	0	0	0	0	0	1
% Heavy Veh	0	0.5	0.3	0	0	0	0	0	0	0.1
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0

Project: 08-120d
Counted By: DL
Location: Windham, NY
Other:

File Name : tm8120s4
Site Code : 08-120-4
Start Date : 1/18/2009
Page No : 2

	NY Route 23 Westbound			NY Route 296 Northbound			NY Route 23 Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 3:00:00 PM to 5:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:15:00 PM										
4:15:00 PM	12	11	23	**34**	70	104	43	21	64	191
4:30:00 PM	**18**	14	32	17	83	100	41	11	52	184
4:45:00 PM	6	19	25	21	**97**	**118**	**53**	**27**	**80**	**223**
5:00:00 PM	9	**25**	**34**	25	72	97	38	19	57	188
Total Volume	45	69	114	97	322	419	175	78	253	786
% App. Total	39.5	60.5		23.2	76.8		69.2	30.8		
PHF	.625	.690	.838	.713	.830	.888	.825	.722	.791	.881
Pass Veh	45	69	114	97	322	419	175	78	253	786
% Pass Veh	100	100	100	100	100	100	100	100	100	100
Heavy Veh	0	0	0	0	0	0	0	0	0	0
% Heavy Veh	0	0	0	0	0	0	0	0	0	0
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: CF
Location: Windham, NY
Other:

File Name : tm8120s1
Site Code : 08-120-1
Start Date : 1/18/2009
Page No : 1

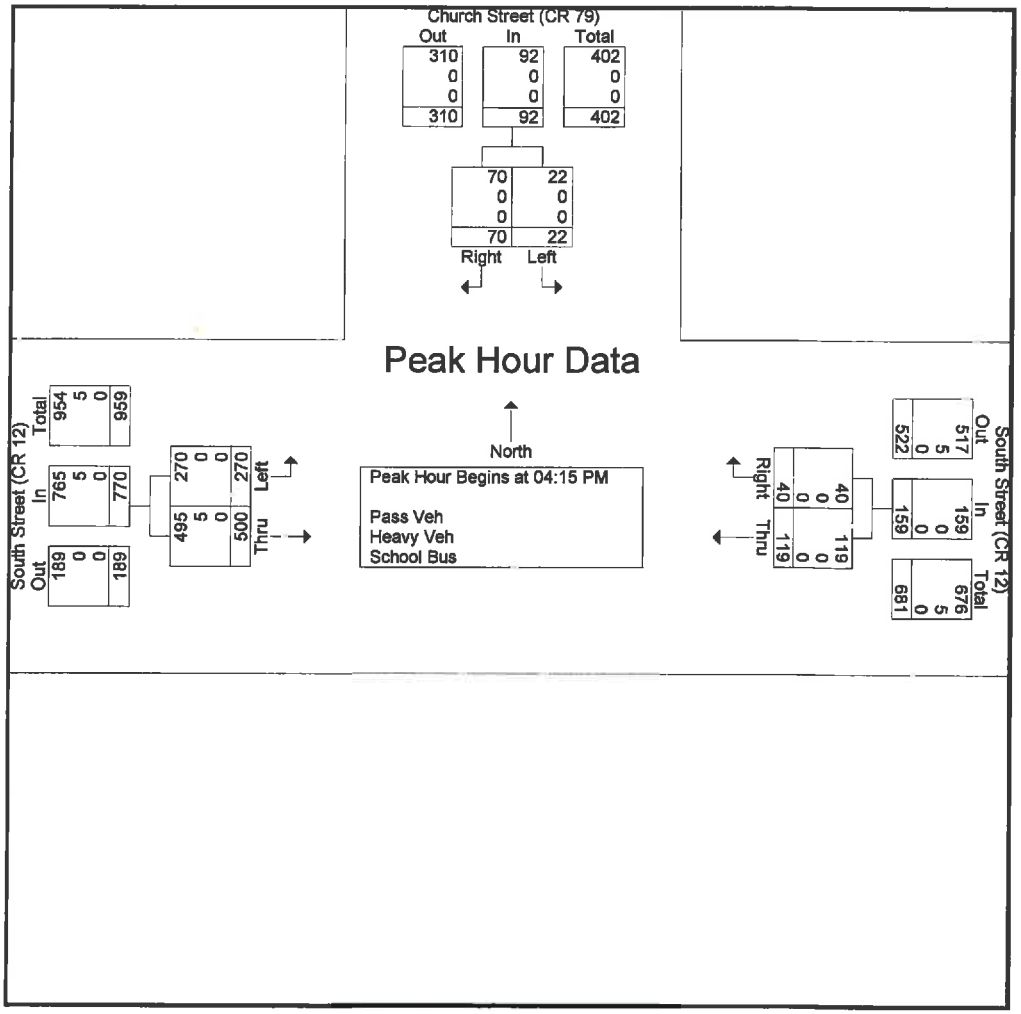
Groups Printed- Pass Veh - Heavy Veh - School Bus

	Church Street (CR 79) Southbound			South Street (CR 12) Westbound			South Street (CR 12) Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Factor	1.0	1.0		1.0	1.0		1.0	1.0		
03:00 PM	5	17	22	27	9	36	35	74	109	167
03:15 PM	3	25	28	28	7	35	46	86	132	195
03:30 PM	5	26	31	36	5	41	45	81	126	198
03:45 PM	5	15	20	29	7	36	41	95	136	192
Total	18	83	101	120	28	148	167	336	503	752
04:00 PM	5	17	22	32	10	42	50	103	153	217
04:15 PM	12	27	39	37	7	44	55	104	159	242
04:30 PM	4	13	17	22	7	29	66	131	197	243
04:45 PM	4	12	16	29	12	41	78	134	212	269
Total	25	69	94	120	36	156	249	472	721	971
05:00 PM	2	18	20	31	14	45	71	131	202	267
05:15 PM	0	21	21	20	9	29	81	78	159	209
05:30 PM	3	16	19	20	6	26	44	81	125	170
05:45 PM	5	13	18	20	11	31	26	50	76	125
Total	10	68	78	91	40	131	222	340	562	771
Grand Total	53	220	273	331	104	435	638	1148	1786	2494
Apprch %	19.4	80.6		76.1	23.9		35.7	64.3		
Total %	2.1	8.8	10.9	13.3	4.2	17.4	25.6	46	71.6	
Pass Veh	53	219	272	324	104	428	638	1138	1776	2476
% Pass Veh	100	99.5	99.6	97.9	100	98.4	100	99.1	99.4	99.3
Heavy Veh	0	1	1	7	0	7	0	10	10	18
% Heavy Veh	0	0.5	0.4	2.1	0	1.6	0	0.9	0.6	0.7
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0

Project: 08-120d
Counted By: CF
Location: Windham, NY
Other:

File Name : tm8120s1
Site Code : 08-120-1
Start Date : 1/18/2009
Page No : 2

	Church Street (CR 79) Southbound			South Street (CR 12) Westbound			South Street (CR 12) Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 3:00:00 PM to 5:45:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 4:15:00 PM										
4:15:00 PM	**12**	**27**	**39**	**37**	7	44	55	104	159	242
4:30:00 PM	4	13	17	22	7	29	66	131	197	243
4:45:00 PM	4	12	16	29	12	41	**78**	**134**	**212**	**269**
5:00:00 PM	2	18	20	31	**14**	**45**	71	131	202	267
Total Volume	22	70	92	119	40	159	270	500	770	1021
% App. Total	23.9	76.1		74.8	25.2		35.1	64.9		
PHF	.458	.648	.590	.804	.714	.883	.865	.933	.908	.949
Pass Veh	22	70	92	119	40	159	270	495	765	1016
% Pass Veh	100	100	100	100	100	100	100	99.0	99.4	99.5
Heavy Veh	0	0	0	0	0	0	0	5	5	5
% Heavy Veh	0	0	0	0	0	0	0	1.0	0.6	0.5
School Bus	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0



Project: 08-120d
Counted By: JMK
Location: Windham, NY
Other:

File Name : tm8120s2
Site Code : 08-120-2
Start Date : 1/18/2009
Page No : 1

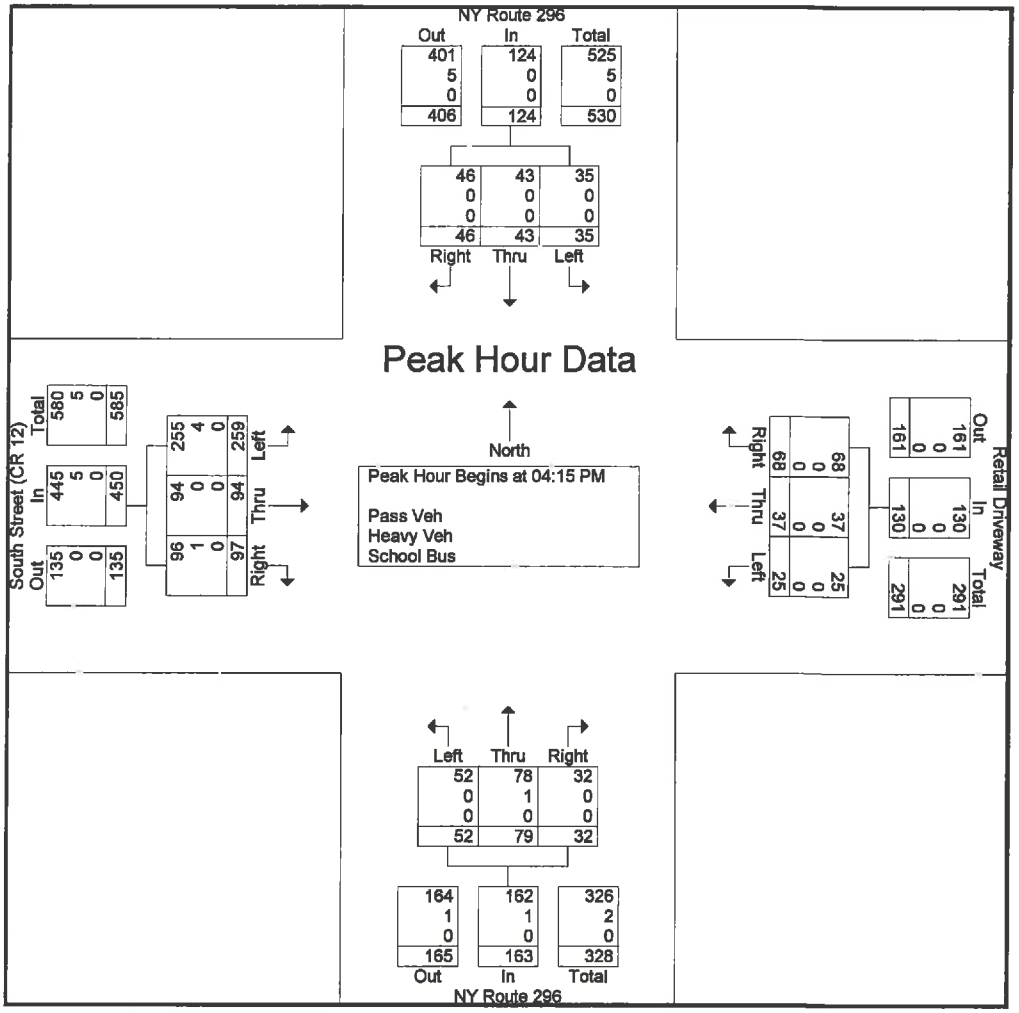
Groups Printed- Pass Veh - Heavy Veh - School Bus

	NY Route 296 Southbound				Retail Driveway Westbound				NY Route 296 Northbound				South Street (CR 12) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
03:00 PM	5	13	15	33	9	3	2	14	10	16	7	33	42	9	30	81	161
03:15 PM	7	6	11	24	4	8	5	17	13	21	6	40	44	14	24	82	163
03:30 PM	8	14	20	42	11	8	7	26	6	10	8	24	39	19	21	79	171
03:45 PM	7	10	10	27	12	7	8	27	18	13	3	34	41	26	23	90	178
Total	27	43	56	126	36	26	22	84	47	60	24	131	166	68	98	332	673
04:00 PM	8	14	13	35	11	14	9	34	11	19	3	33	45	27	27	99	201
04:15 PM	8	10	16	34	11	5	21	37	21	23	10	54	56	25	23	104	229
04:30 PM	4	11	12	27	5	6	14	25	11	10	5	26	71	24	19	114	192
04:45 PM	16	10	8	34	5	16	14	35	12	21	12	45	72	22	28	122	236
Total	36	45	49	130	32	41	58	131	55	73	30	158	244	98	97	439	858
05:00 PM	7	12	10	29	4	10	19	33	8	25	5	38	60	23	27	110	210
05:15 PM	8	10	7	25	6	8	10	24	11	14	3	28	42	17	10	69	146
05:30 PM	4	12	5	21	8	8	9	25	10	8	1	19	35	9	25	69	134
05:45 PM	8	5	8	21	1	4	7	12	10	10	1	21	30	8	21	59	113
Total	27	39	30	96	19	30	45	94	39	57	10	106	167	57	83	307	603
Grand Total	90	127	135	352	87	97	125	309	141	190	64	395	577	223	278	1078	2134
Apprch %	25.6	36.1	38.4		28.2	31.4	40.5		35.7	48.1	16.2		53.5	20.7	25.8		
Total %	4.2	6	6.3	16.5	4.1	4.5	5.9	14.5	6.6	8.9	3	18.5	27	10.4	13	50.5	
Pass Veh	90	127	133	350	87	97	125	309	141	188	64	393	570	223	276	1069	2121
% Pass Veh	100	100	98.5	99.4	100	100	100	100	100	98.9	100	99.5	98.8	100	99.3	99.2	99.4
Heavy Veh	0	0	2	2	0	0	0	0	0	2	0	2	7	0	2	9	13
% Heavy Veh	0	0	1.5	0.6	0	0	0	0	0	1.1	0	0.5	1.2	0	0.7	0.8	0.6
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project: 08-120d
Counted By: JMK
Location: Windham, NY
Other:

File Name : tm8120s2
Site Code : 08-120-2
Start Date : 1/18/2009
Page No : 2

	NY Route 296 Southbound				Retail Driveway Westbound				NY Route 296 Northbound				South Street (CR 12) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 3:00:00 PM to 5:45:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 4:15:00 PM																	
4:15:00 PM	8	10	**16**	**34**	**11**	5	**21**	**37**	**21**	23	10	**54**	56	**25**	23	104	229
4:30:00 PM	4	11	12	27	5	6	14	25	11	10	5	26	71	24	19	114	192
4:45:00 PM	**16**	10	8	34	5	**16**	14	35	12	21	**12**	45	**72**	22	**28**	**122**	**236**
5:00:00 PM	**7**	**12**	10	29	4	10	19	33	8	**25**	5	38	60	23	**27**	110	210
Total Volume	**35**	43	46	124	25	37	68	130	52	79	32	163	259	94	**97**	450	867
% App. Total	28.2	34.7	37.1		19.2	28.5	52.3		31.9	48.5	19.6		57.6	20.9	21.6		
PHF	.547	.896	.719	.912	.568	.578	.810	.878	.619	.790	.667	.755	.899	.940	.866	.922	.918
Pass Veh	35	43	46	124	25	37	68	130	52	78	32	162	255	94	96	445	861
% Pass Veh	100	100	100	100	100	100	100	100	100	98.7	100	99.4	98.5	100	99.0	98.9	99.3
Heavy Veh	0	0	0	0	0	0	0	0	0	1	0	1	4	0	1	5	6
% Heavy Veh	0	0	0	0	0	0	0	0	0	1.3	0	0.6	1.5	0	1.0	1.1	0.7
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

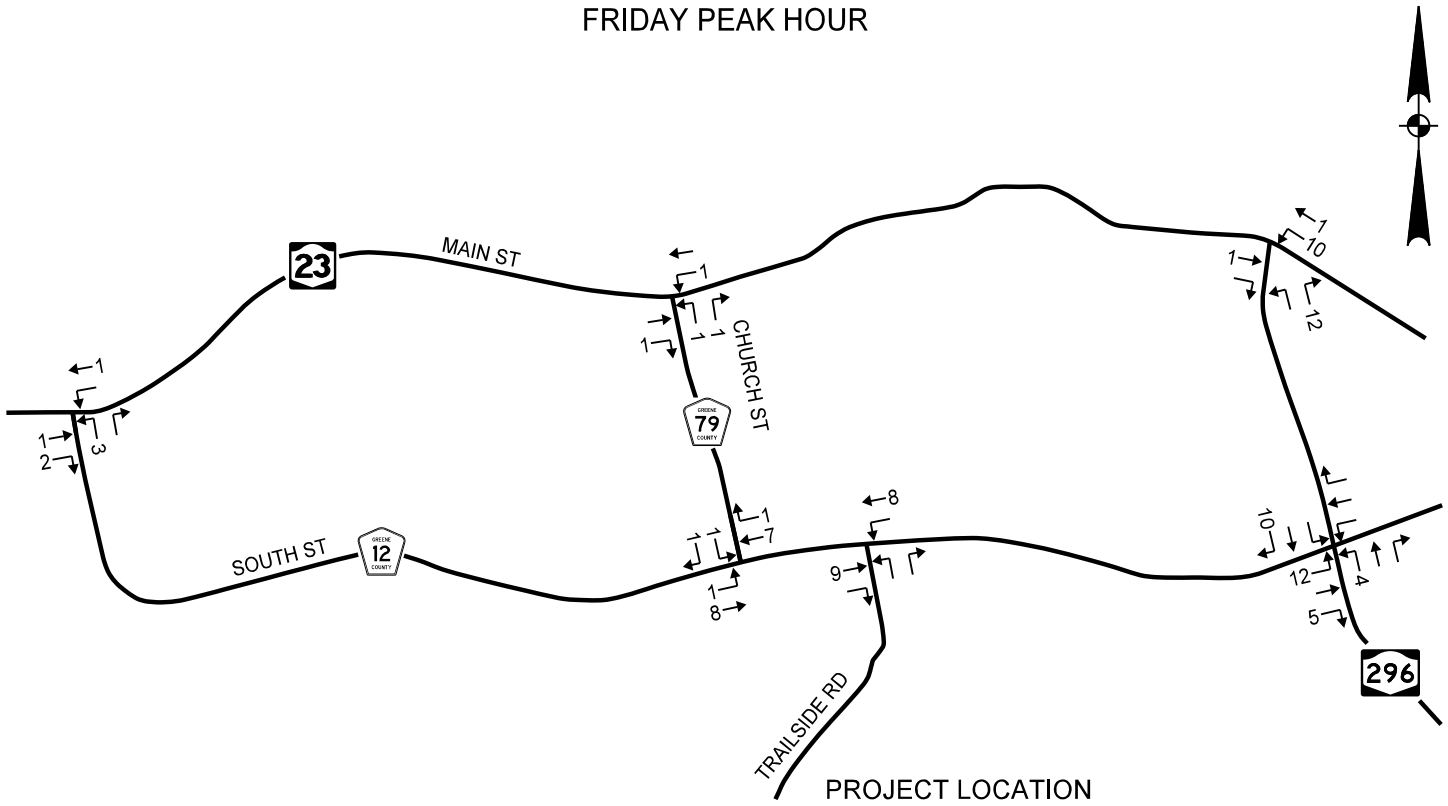


Appendix C

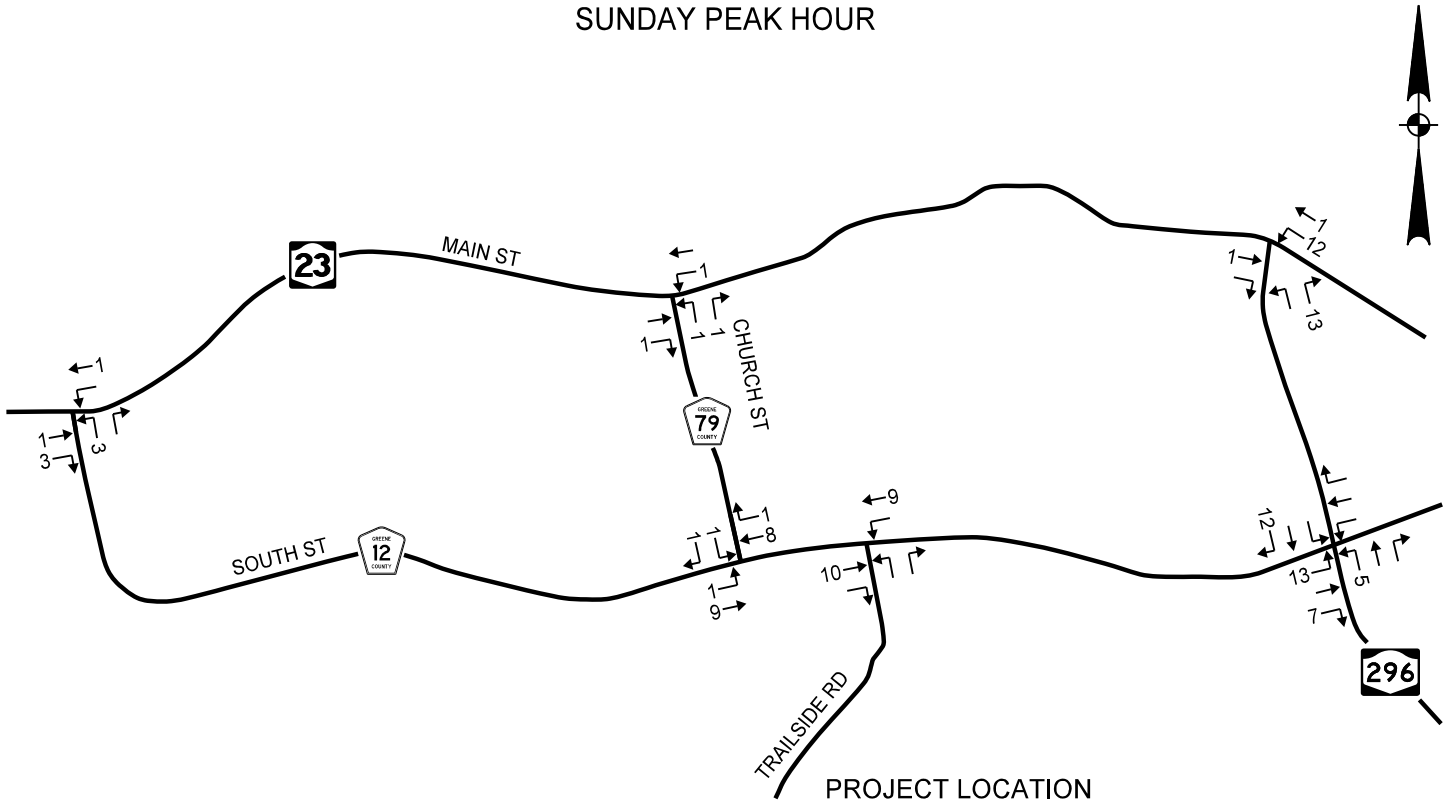
Other Developments

Traffic Impact Study
The Windham Mountain Sporting Club
Town of Windham, New York

FRIDAY PEAK HOUR



SUNDAY PEAK HOUR



OTHER DEVELOPMENTS

THE WINDHAM MOUNTAIN SPORTING CLUB
TOWN OF WINDHAM, NEW YORK

Creighton Manning

PROJECT: 110-216	DATE: 9/2011	FIGURE: C.1

F:\Projects\2008\08-120d Windham\cadd\dgn\miscellaneous\trf fig.dgn

Appendix D

Level of Service Analysis

Traffic Impact Study
The Windham Mountain Sporting Club
Town of Windham, New York

Level of Service Criteria for Unsignalized Intersections

Four measures are used to describe the performance of two-way stop controlled intersections: control delay, delay to major street through vehicles, queue length, and v/c ratio. The primary measure that is used to provide an estimate of LOS is control delay. This measure can be estimated for any movement on the minor (i.e., stop-controlled) street. By summing delay estimates for individual movements, a delay estimate for each minor street movement and minor street approach can be achieved. The level of service criteria is given in Exhibit 17-2/22.

For all-way stop controlled (AWSC) intersections, the average control delay (in seconds per vehicle) is used as the primary measure of performance. Control delay is the increased time of travel for a vehicle approaching and passing through an AWSC intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection.

Exhibit 17-2/22: Level-of-Service Criteria for Stop Controlled Intersections

Level of Service	Control Delay (sec/veh)
A	$\leq$ 10.0
B	>10.0 and $\leq$ 15.0
C	>15.0 and $\leq$ 25.0
D	>25.0 and $\leq$ 35.0
E	>35.0 and $\leq$ 50.0
F	>50.0

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUexfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		174	59	11	269	
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.91	0.91	1.00
Hourly Flow Rate, HFR (veh/h)	0	191	64	12	295	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	109		11			
Peak-Hour Factor, PHF	0.91	1.00	0.91	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	119	0	12	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		12		131				
C (m) (veh/h)		1322		519				
v/c		0.01		0.25				
95% queue length		0.03		0.99				
Control Delay (s/veh)		7.7		14.3				
LOS		A		B				
Approach Delay (s/veh)	--	--	14.3					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUnbfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		189	66	12	292	
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.91	0.91	1.00
Hourly Flow Rate, HFR (veh/h)	0	207	72	13	320	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	121		12			
Peak-Hour Factor, PHF	0.91	1.00	0.91	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	132	0	13	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		13		145				
C (m) (veh/h)		1295		487				
v/c		0.01		0.30				
95% queue length		0.03		1.24				
Control Delay (s/veh)		7.8		15.5				
LOS		A		C				
Approach Delay (s/veh)	--	--	15.5					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUbufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		191	68	12	294	
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.91	0.91	1.00
Hourly Flow Rate, HFR (veh/h)	0	209	74	13	323	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	124		12			
Peak-Hour Factor, PHF	0.91	1.00	0.91	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	136	0	13	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		13		149				
C (m) (veh/h)		1291		483				
v/c		0.01		0.31				
95% queue length		0.03		1.30				
Control Delay (s/veh)		7.8		15.7				
LOS		A		C				
Approach Delay (s/veh)	--	--	15.7					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUexfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		143	36	38	144	
Peak-Hour Factor, PHF	1.00	0.88	0.88	0.88	0.88	1.00
Hourly Flow Rate, HFR (veh/h)	0	162	40	43	163	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	62		37			
Peak-Hour Factor, PHF	0.88	1.00	0.88	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	70	0	42	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		43		112				
C (m) (veh/h)		1382		646				
v/c		0.03		0.17				
95% queue length		0.10		0.62				
Control Delay (s/veh)		7.7		11.7				
LOS		A		B				
Approach Delay (s/veh)	--	--	11.7					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUnbfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		155	40	42	156	
Peak-Hour Factor, PHF	1.00	0.88	0.88	0.88	0.88	1.00
Hourly Flow Rate, HFR (veh/h)	0	176	45	47	177	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	68		41			
Peak-Hour Factor, PHF	0.88	1.00	0.88	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	77	0	46	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		47		123				
C (m) (veh/h)		1360		618				
v/c		0.03		0.20				
95% queue length		0.11		0.74				
Control Delay (s/veh)		7.7		12.3				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.3					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUbufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		155	42	44	156	
Peak-Hour Factor, PHF	1.00	0.88	0.88	0.88	0.88	1.00
Hourly Flow Rate, HFR (veh/h)	0	176	47	50	177	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	70		44			
Peak-Hour Factor, PHF	0.88	1.00	0.88	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	79	0	50	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		50		129				
C (m) (veh/h)		1358		616				
v/c		0.04		0.21				
95% queue length		0.11		0.78				
Control Delay (s/veh)		7.8		12.4				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.4					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

alyst	AMM
gency/Co.	CME, MAI296exfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: NY Rt 296

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		68	73	74	188	
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	76	82	83	211	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	61		34			
Peak-Hour Factor, PHF	0.89	1.00	0.89	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	68	0	38	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		83		106				
C (m) (veh/h)		1434		603				
v/c		0.06		0.18				
95% queue length		0.18		0.63				
Control Delay (s/veh)		7.7		12.2				
LOS		A		B				
proach Delay (s/veh)	--	--	12.2					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAI296nbfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: NY Rt 296

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		75	79	90	205	
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	84	88	101	230	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	66		49			
Peak-Hour Factor, PHF	0.89	1.00	0.89	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	74	0	55	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		101		129				
C (m) (veh/h)		1417		579				
v/c		0.07		0.22				
95% queue length		0.23		0.85				
Control Delay (s/veh)		7.7		13.0				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.0					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAI296bufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	Main St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: NY Rt 296

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		78	79	115	207	
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	87	88	129	232	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	66		81			
Peak-Hour Factor, PHF	0.89	1.00	0.89	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	74	0	91	0	0	0
Percent Heavy Vehicles	3	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		129		165				
C (m) (veh/h)		1414		590				
v/c		0.09		0.28				
95% queue length		0.30		1.14				
Control Delay (s/veh)		7.8		13.5				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.5					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUCHUexfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	62	122			87	34
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	78	154	0	0	110	43
Percent Heavy Vehicles	3	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				32		43
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.79	1.00	0.79
Hourly Flow Rate, HFR (veh/h)	0	0	0	40	0	54
Percent Heavy Vehicles	0	0	0	0	0	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	78						94	
C (m) (veh/h)	1421						708	
v/c	0.05						0.13	
95% queue length	0.17						0.46	
Control Delay (s/veh)	7.7						10.9	
LOS	A						B	
Approach Delay (s/veh)	--	--				10.9		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY

General Information

alyst	AMM
gency/Co.	CME, SOUCHUnbfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	68	140			101	38
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	86	177	0	0	127	48
Percent Heavy Vehicles	3	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
olume (veh/h)				36		48
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.79	1.00	0.79
Hourly Flow Rate, HFR (veh/h)	0	0	0	45	0	60
Percent Heavy Vehicles	0	0	0	0	0	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	86						105	
C (m) (veh/h)	1395						667	
v/c	0.06						0.16	
95% queue length	0.20						0.56	
Control Delay (s/veh)	7.8						11.4	
LOS	A						B	
proach Delay (s/veh)	--	--					11.4	
Approach LOS	--	--					B	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUCHUbufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	68	142			104	43
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	86	179	0	0	131	54
Percent Heavy Vehicles	3	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				40		48
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.79	1.00	0.79
Hourly Flow Rate, HFR (veh/h)	0	0	0	50	0	60
Percent Heavy Vehicles	0	0	0	0	0	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	86						110	
C (m) (veh/h)	1384						650	
v/c	0.06						0.17	
95% queue length	0.20						0.61	
Control Delay (s/veh)	7.8						11.7	
LOS	A						B	
Approach Delay (s/veh)	--	--					11.7	
Approach LOS	--	--					B	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296exfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	47	42	25	38	53	33
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	49	44	26	40	55	34
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	46	30	66	37	27	19
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	48	31	69	38	28	20
Percent Heavy Vehicles	0	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	49	40		86			148	
C (m) (veh/h)	1506	1544		598			705	
v/c	0.03	0.03		0.14			0.21	
95% queue length	0.10	0.08		0.50			0.79	
Control Delay (s/veh)	7.5	7.4		12.0			11.5	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	12.0			11.5		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296nbfr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	55	45	27	41	57	46
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	57	47	28	43	60	48
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	62	32	76	40	29	21
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	65	33	80	42	30	22
Percent Heavy Vehicles	0	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	57	43		94			178	
C (m) (veh/h)	1483	1537		556			663	
v/c	0.04	0.03		0.17			0.27	
95% queue length	0.12	0.09		0.60			1.08	
Control Delay (s/veh)	7.5	7.4		12.8			12.4	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	12.8			12.4		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296bufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	65	45	27	41	57	71
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	68	47	28	43	60	74
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	94	32	89	40	29	21
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	98	33	93	42	30	22
Percent Heavy Vehicles	0	0	2	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	68	43		94			224	
C (m) (veh/h)	1451	1537		517			618	
v/c	0.05	0.03		0.18			0.36	
95% queue length	0.15	0.09		0.66			1.65	
Control Delay (s/veh)	7.6	7.4		13.5			14.1	
LOS	A	A		B			B	
Approach Delay (s/veh)	--	--	13.5			14.1		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUTRAbufr
Date Performed	9/20/2011
Analysis Time Period	Fri Peak of AST

Site Information

Intersection	South St/Trailside Rd
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Trailside Rd

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		177	6	35	139	
Peak-Hour Factor, PHF	1.00	0.79	0.79	0.79	0.79	1.00
Hourly Flow Rate, HFR (veh/h)	0	224	7	44	175	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8		45			
Peak-Hour Factor, PHF	0.79	1.00	0.79	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	10	0	56	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		44		66				
C (m) (veh/h)		1349		752				
v/c		0.03		0.09				
95% queue length		0.10		0.29				
Control Delay (s/veh)		7.8		10.2				
LOS		A		B				
Approach Delay (s/veh)	--	--	10.2					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUexsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		349	42	21	285	
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.93	0.93	1.00
Hourly Flow Rate, HFR (veh/h)	0	375	45	22	306	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	120		21			
Peak-Hour Factor, PHF	0.93	1.00	0.93	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	129	0	22	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		22		151				
C (m) (veh/h)		1150		401				
v/c		0.02		0.38				
95% queue length		0.06		1.72				
Control Delay (s/veh)		8.2		19.3				
LOS		A		C				
Approach Delay (s/veh)	--	--	19.3					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUnbsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		379	48	23	310	
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.93	0.93	1.00
Hourly Flow Rate, HFR (veh/h)	0	407	51	24	333	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	133		23			
Peak-Hour Factor, PHF	0.93	1.00	0.93	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	143	0	24	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		24		167				
C (m) (veh/h)		1114		367				
v/c		0.02		0.46				
95% queue length		0.07		2.29				
Control Delay (s/veh)		8.3		22.7				
LOS		A		C				
Approach Delay (s/veh)	--	--	22.7					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAISOUbusu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/South St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: South St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		381	51	23	313	
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.93	0.93	1.00
Hourly Flow Rate, HFR (veh/h)	0	409	54	24	336	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	136		23			
Peak-Hour Factor, PHF	0.93	1.00	0.93	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	146	0	24	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		24		170				
C (m) (veh/h)		1109		362				
v/c		0.02		0.47				
95% queue length		0.07		2.41				
Control Delay (s/veh)		8.3		23.4				
LOS		A		C				
Approach Delay (s/veh)	--	--	23.4					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUexsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		177	79	45	70	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	192	85	48	76	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	98		325			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	106	0	353	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		48		459				
C (m) (veh/h)		1286		743				
v/c		0.04		0.62				
95% queue length		0.12		4.32				
Control Delay (s/veh)		7.9		17.3				
LOS		A		C				
Approach Delay (s/veh)	--	--	17.3					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUnbsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		192	87	50	76	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	208	94	54	82	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	107		353			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	116	0	383	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		54		499				
C (m) (veh/h)		1259		716				
v/c		0.04		0.70				
95% queue length		0.13		5.70				
Control Delay (s/veh)		8.0		20.7				
LOS		A		C				
Approach Delay (s/veh)	--	--	20.7					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAICHUbusu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		192	89	52	76	
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.92	0.92	1.00
Hourly Flow Rate, HFR (veh/h)	0	208	96	56	82	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	110		356			
Peak-Hour Factor, PHF	0.92	1.00	0.92	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	119	0	386	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		56		505				
C (m) (veh/h)		1257		713				
v/c		0.04		0.71				
95% queue length		0.14		5.93				
Control Delay (s/veh)		8.0		21.3				
LOS		A		C				
Approach Delay (s/veh)	--	--	21.3					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	AMM	Intersection	Main St/NY Rt 296
Agency/Co.	CME, MAI296exsu	Jurisdiction	Town of Windham
Date Performed	9/20/2011	Analysis Year	2011 Existing
Analysis Time Period	Sun Peak of AST		

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: NY Rt 296

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		120	17	68	107	
Peak-Hour Factor, PHF	1.00	0.88	0.88	0.88	0.88	1.00
Hourly Flow Rate, HFR (veh/h)	0	136	19	77	121	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	48		267			
Peak-Hour Factor, PHF	0.88	1.00	0.88	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	54	0	303	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		77		357				
C (m) (veh/h)		1438		829				
v/c		0.05		0.43				
95% queue length		0.17		2.19				
Control Delay (s/veh)		7.6		12.6				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.6					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, MAI296nbsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	Main St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: Main Street | North/South Street: NY Rt 296

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		131	18	86	117	
Peak-Hour Factor, PHF	1.00	0.88	0.88	0.88	0.88	1.00
Hourly Flow Rate, HFR (veh/h)	0	148	20	97	132	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	52		302			
Peak-Hour Factor, PHF	0.88	1.00	0.88	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	59	0	343	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		97		402				
C (m) (veh/h)		1422		804				
v/c		0.07		0.50				
95% queue length		0.22		2.84				
Control Delay (s/veh)		7.7		13.9				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.9					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*AMM*
Agency/Co.	*CME, MAI296busu*
Date Performed	*9/20/2011*
Analysis Time Period	*Sun Peak of AST*

Site Information

Intersection	*Main St/NY Rt 296*
Jurisdiction	*Town of Windham*
Analysis Year	*2027 Build*

Project Description *108-120, Windham Mountain Sporting Club*

East/West Street: *Main Street* | North/South Street: *NY Rt 296*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*134*	*18*	*116*	*119*	
Peak-Hour Factor, PHF	*1.00*	*0.88*	*0.88*	*0.88*	*0.88*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*152*	*20*	*131*	*135*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*52*		*337*			
Peak-Hour Factor, PHF	*0.88*	*1.00*	*0.88*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*59*	*0*	*382*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (veh/h)		*131*		*441*				
C (m) (veh/h)		*1417*		*785*				
v/c		*0.09*		*0.56*				
95% queue length		*0.31*		*3.55*				
Control Delay (s/veh)		*7.8*		*15.3*				
LOS		*A*		*C*				
Approach Delay (s/veh)	--	--		*15.3*				
Approach LOS	--	--		*C*				

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUCHUexsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	273	505			120	40
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	287	531	0	0	126	42
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				22		71
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	23	0	74
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	287						97	
C (m) (veh/h)	1422						418	
v/c	0.20						0.23	
95% queue length	0.75						0.89	
Control Delay (s/veh)	8.2						16.2	
LOS	A						C	
Approach Delay (s/veh)	--	--				16.2		
Approach LOS	--	--				C		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUCHUnbsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	297	556			138	44
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	312	585	0	0	145	46
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				25		78
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	26	0	82
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	312						108	
C (m) (veh/h)	1395						359	
v/c	0.22						0.30	
95% queue length	0.86						1.24	
Control Delay (s/veh)	8.3						19.3	
LOS	A						C	
Approach Delay (s/veh)	--	--					19.3	
Approach LOS	--	--					C	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUCHUbusu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/Church St
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Church St

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	297	559			141	50
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	312	588	0	0	148	52
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				29		78
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	30	0	82
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	312						112	
C (m) (veh/h)	1384						332	
v/c	0.23						0.34	
95% queue length	0.87						1.45	
Control Delay (s/veh)	8.4						21.3	
LOS	A						C	
Approach Delay (s/veh)	--	--					21.3	
Approach LOS	--	--					C	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296exsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2011 Existing

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	53	80	32	35	43	46
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	57	86	34	38	46	49
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	262	95	98	25	37	69
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	284	103	106	27	40	74
Percent Heavy Vehicles	2	0	1	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	57	38		141			493	
C (m) (veh/h)	1512	1480		616			525	
v/c	0.04	0.03		0.23			0.94	
95% queue length	0.12	0.08		0.88			11.74	
Control Delay (s/veh)	7.5	7.5		12.6			53.7	
LOS	A	A		B			F	
Approach Delay (s/veh)	--	--	12.6			53.7		
Approach LOS	--	--	B			F		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296nbsu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 No-Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	62	87	35	38	47	62
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	67	94	38	41	51	67
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	297	103	113	27	40	75
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	322	111	122	29	43	81
Percent Heavy Vehicles	2	0	1	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	67	41		153			555	
C (m) (veh/h)	1483	1466		568			478	
v/c	0.05	0.03		0.27			1.16	
95% queue length	0.14	0.09		1.08			20.02	
Control Delay (s/veh)	7.5	7.5		13.7			121.2	
LOS	A	A		B			F	
Approach Delay (s/veh)	--	--	13.7			121.2		
Approach LOS	--	--	B			F		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOU296busu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/NY Rt 296
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description: 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: NY Rt 296

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	75	87	35	38	47	92
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	81	94	38	41	51	99
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	332	103	128	27	40	75
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	360	111	139	29	43	81
Percent Heavy Vehicles	2	0	1	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	81	41		153			610	
C (m) (veh/h)	1444	1466		526			445	
v/c	0.06	0.03		0.29			1.37	
95% queue length	0.18	0.09		1.20			28.62	
Control Delay (s/veh)	7.6	7.5		14.6			205.8	
LOS	A	A		B			F	
Approach Delay (s/veh)	--	--	14.6			205.8		
Approach LOS	--	--	B			F		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	AMM
Agency/Co.	CME, SOUTRAbusu
Date Performed	9/20/2011
Analysis Time Period	Sun Peak of AST

Site Information

Intersection	South St/Trailside Rd
Jurisdiction	Town of Windham
Analysis Year	2027 Build

Project Description 108-120, Windham Mountain Sporting Club

East/West Street: South Street | North/South Street: Trailside Rd

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		581	7	43	183	
Peak-Hour Factor, PHF	1.00	0.95	0.95	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	611	7	45	192	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	9		50			
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	9	0	52	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		45		61				
C (m) (veh/h)		972		452				
v/c		0.05		0.13				
95% queue length		0.15		0.46				
Control Delay (s/veh)		8.9		14.2				
LOS		A		B				
Approach Delay (s/veh)	--	--	14.2					
Approach LOS	--	--	B					