



Engineers
Planners
Surveyors
Landscape Architects
Environmental Scientists

400 Columbus Avenue, Suite 180E
Valhalla, NY 10595
T: 914.347.7500
F: 914.347.7266
www.maserconsulting.com

January 22, 2019

VIA E-MAIL

Mr. Steve Batista
Dunkin Donuts
28 Eagle Road
Danbury, CT 06810

Re: Dunkin Donuts
NYS Route 22 and NYS Route 312
Town of Southeast, New York
MC Project No. 17001044A

Dear Mr. Batista:

As requested we have conducted an evaluation of the traffic related impacts associated with the proposed Dunkin Donuts development as an update to our prior study for the previously proposed Gasland project dated February 13, 2013. The previously proposed project consisted of a 2,700 s.f. Dunkin Donuts with drive-thru and a gas station with convenience store with 8 positions for vehicle fueling. The current Project has been significantly reduced in size and is now planned to consist of only an approximately 2,400 s.f. Dunkin Donuts with drive-thru. The formerly proposed fueling pumps and convenience store are no longer planned as part of the project. Furthermore, the previously proposed project was planned to have three curb cuts providing access to both NYS Route 22 and NYS Route 312. The site is now proposed to be accessed via a consolidated right-turn entry/right-turn exit only access connection to NYS Route 22 and no access to NYS Route 312 will be provided. The following describes our analysis of the currently proposed development:

1. Site Generated Traffic Volumes (Tables No. 1-R and 1-P)

Estimates of the amount of traffic to be generated by the site were developed based on data published by the Institute of Transportation Engineers (ITE) as contained in their publication entitled, Trip Generation, 10th Edition, dated 2017. Table No. 1-R provides the Hourly Trip Generation Rates and Anticipated Site Generated Traffic Volumes for each of the Peak Hours. The estimates were conducted using data for ITE Land Use 937 – Coffee/Donut Shop with Drive-Through Window. Consistent with our February 2013 analysis, a 40% pass-by trip credit was taken to account for trips that are attracted from the



existing traffic volumes along U.S. Route 22 as “pass-by” or “diverted link” trips, which are not new to the roadway network. It should be noted that based on the current ITE data, the pass-by credit for this type of facility can be as high as 60%, therefore the analysis is considered to be somewhat conservative.

A comparison of the site generated traffic volume estimates for the currently proposed Dunkin Donuts (Table 1-R) to the formerly proposed Gasland development (Table 1-P) indicates a significant reduction in total new trips during each of the peak hours. During both the AM and PM Peak Hours, a reduction in total project generated new trips of approximately 52 trips is anticipated. See attached Table No. 1-P for project trip generation for the prior Gasland proposal evaluated in our February 2013 traffic study.

2. Analysis of Future Traffic Conditions (Table No. 2-R)

Utilizing the above updated traffic generation estimates, capacity analyses were conducted for the intersection of NYS Route 22 and NYS Route 312 and for the site access intersection for the Weekday Peak AM and PM Peak Hours using the procedures of the current Highway Capacity Manual, 6th Edition, dated 2016 and the background traffic volume information from our original study in order to evaluate current and future operating conditions. The existing, no-build, site generated and build traffic volumes are provided on Figures No. 2 through 11 as contained in Appendix “A”. The results of these analyses, which are summarized in Table No. 2-R, indicate that the intersection of NYS Route 22 and NYS Route 312 currently operates at an overall Level of Service “C” during the AM Peak Hour and at an overall Level of Service “E” during the PM Peak Hour under Existing, No-Build and Build conditions. Similar Levels of Service are expected to be maintained at the intersection in the future both with and without the proposed development. It should be noted that longer delays are experienced on the eastbound Route 312 approach, with this approach operating at a Level of Service “F” during each of the peak hours. The proposed project is not expected to significantly increase the delays on this approach.

In order to improve delays on the eastbound Route 312 approach, signal timing modifications could be considered to give additional green time to the eastbound approach. Capacity analysis conducted with these modifications indicate that the intersection is expected to operate at an overall Level of Service “C” during the AM Peak Hour and at an overall Level of Service “D” during the PM Peak Hour with a 5-10 second increase in green time on the eastbound Route 312 approach. Furthermore, the eastbound approach will operate more efficiently with reduced queues and a Level of Service “E” during each of the peak hours. These traffic signal timing modifications, which could be made without



detriment to the other approaches to the signal, would be subject to review and approval by the New York State Department of Transportation (NYSDOT) and should be considered regardless of the proposed project.

The capacity analysis results also indicate that the right-turn entry/right-turn exit site access driveway intersection to NYS Route 22 can be expected to operate at a Level of Service "C" or better during each of the peak hours. The final configuration of the proposed access driveway connections to NYS Route 22, including any channelization islands, will be subject to review and approval by the NYSDOT. Proper signage to restrict turning movements will be required and a permit will have to be obtained from NYSDOT for the construction of the driveways.

Finally, it is recommended that the previously initiated permanent easement dedication process to the NYSDOT be completed by the project for property along NYS Route 312. This would allow for the potential of further improvements to the Route 22/312 intersection in the future by NYSDOT if required.

Very truly yours,

MASER CONSULTING P.A.

A handwritten signature in blue ink, appearing to read 'Philip J. Grealy', written over a horizontal line.

Philip J. Grealy, Ph.D., P.E.
NYS License No. 59858
Principal/Department Manager

A handwritten signature in blue ink, appearing to read 'Richard G. D'Andrea', written over a horizontal line.

Richard G. D'Andrea, P.E., PTOE
NYS License No. 090241
Principal Associate/Project Manager

PJG/rgd
Enclosures
cc:



DUNKIN DONUTS

APPENDIX A

FIGURES



NOTE: LINE DIAGRAM NOT TO SCALE



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11 Bradhurst Avenue
 Hawthorne, NY 10532
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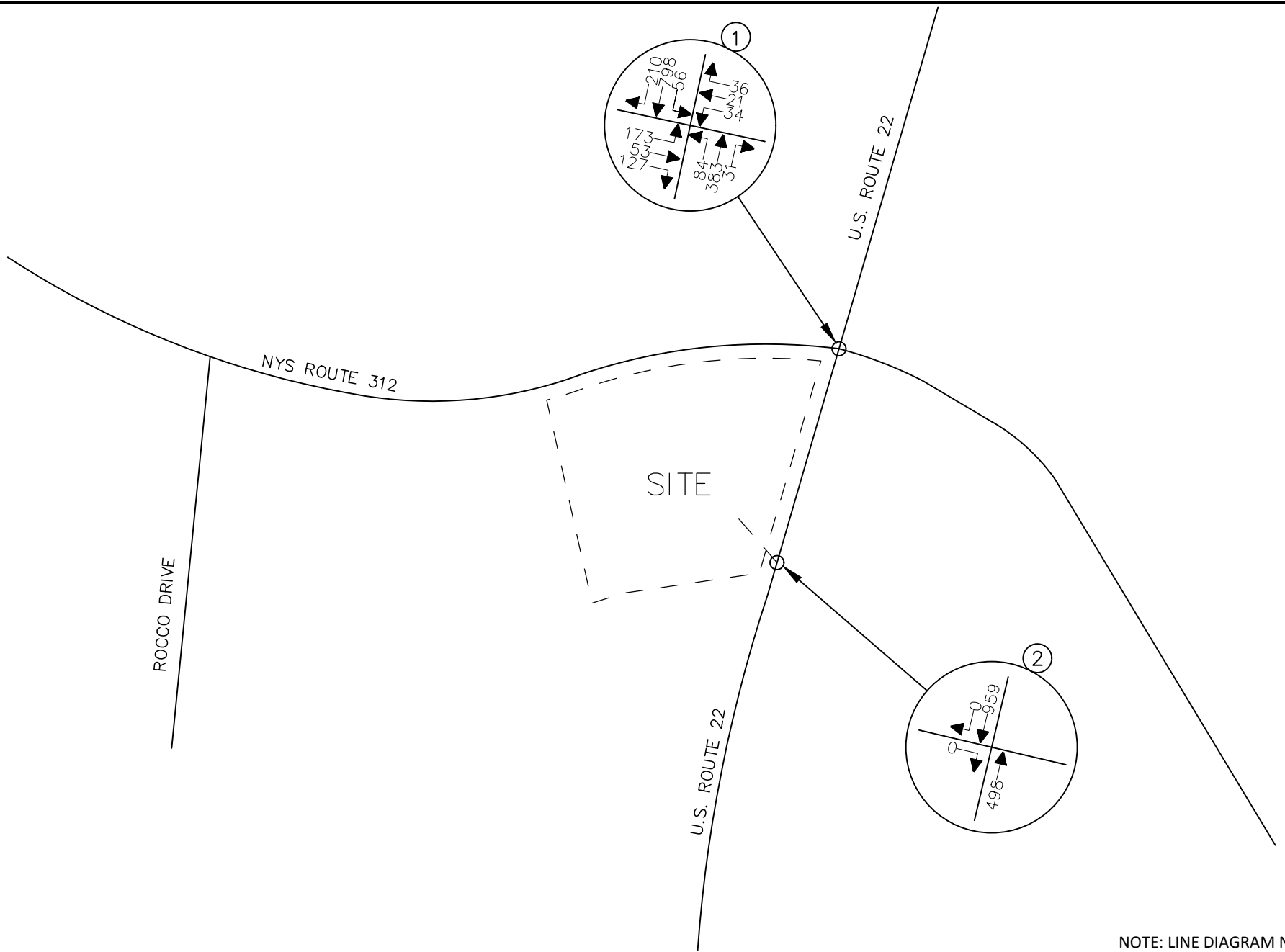
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

SITE LOCATION MAP



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



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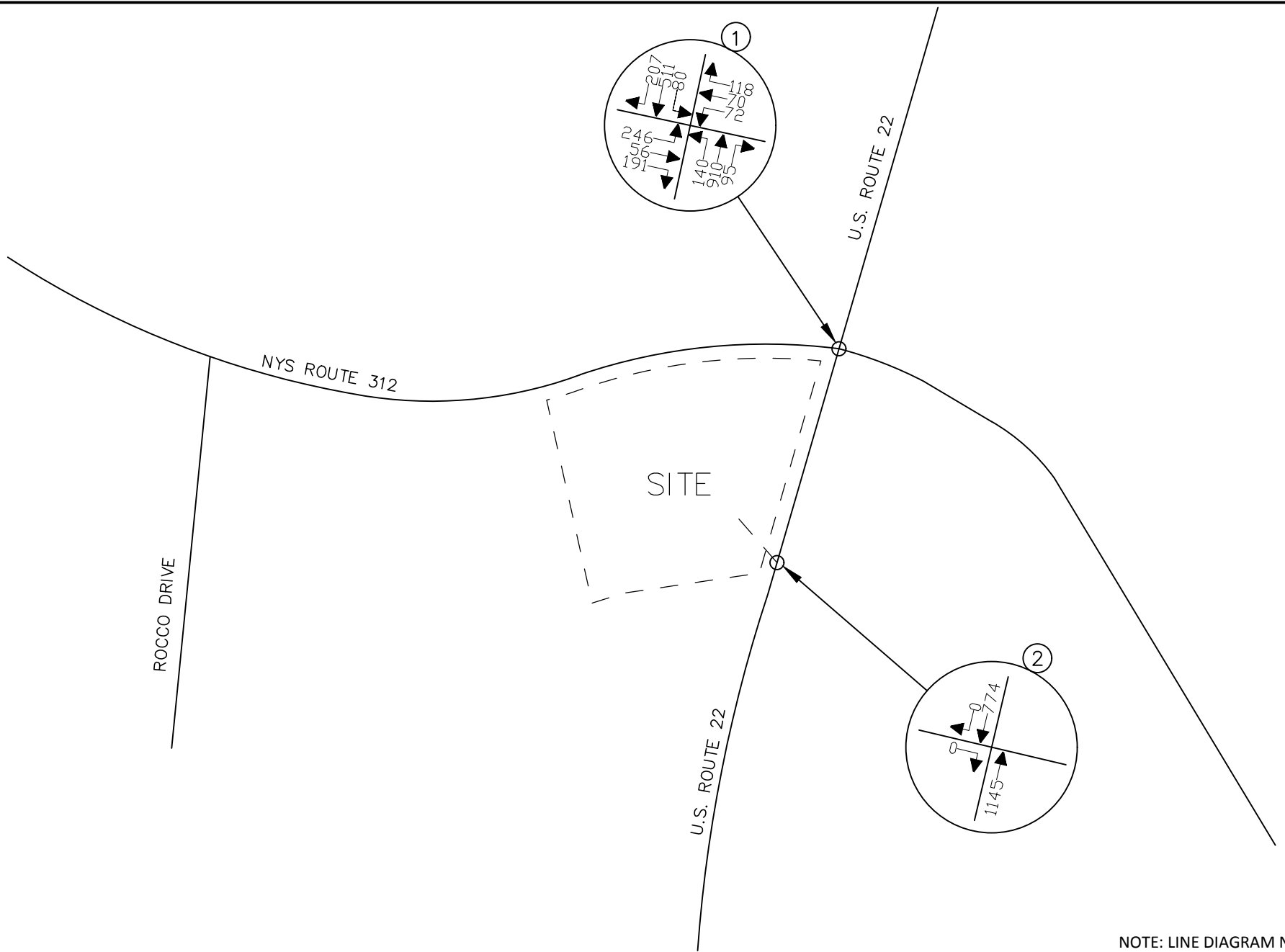
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2019 EXISTING TRAFFIC VOLUMES
 WEEKDAY PEAK AM HOUR



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



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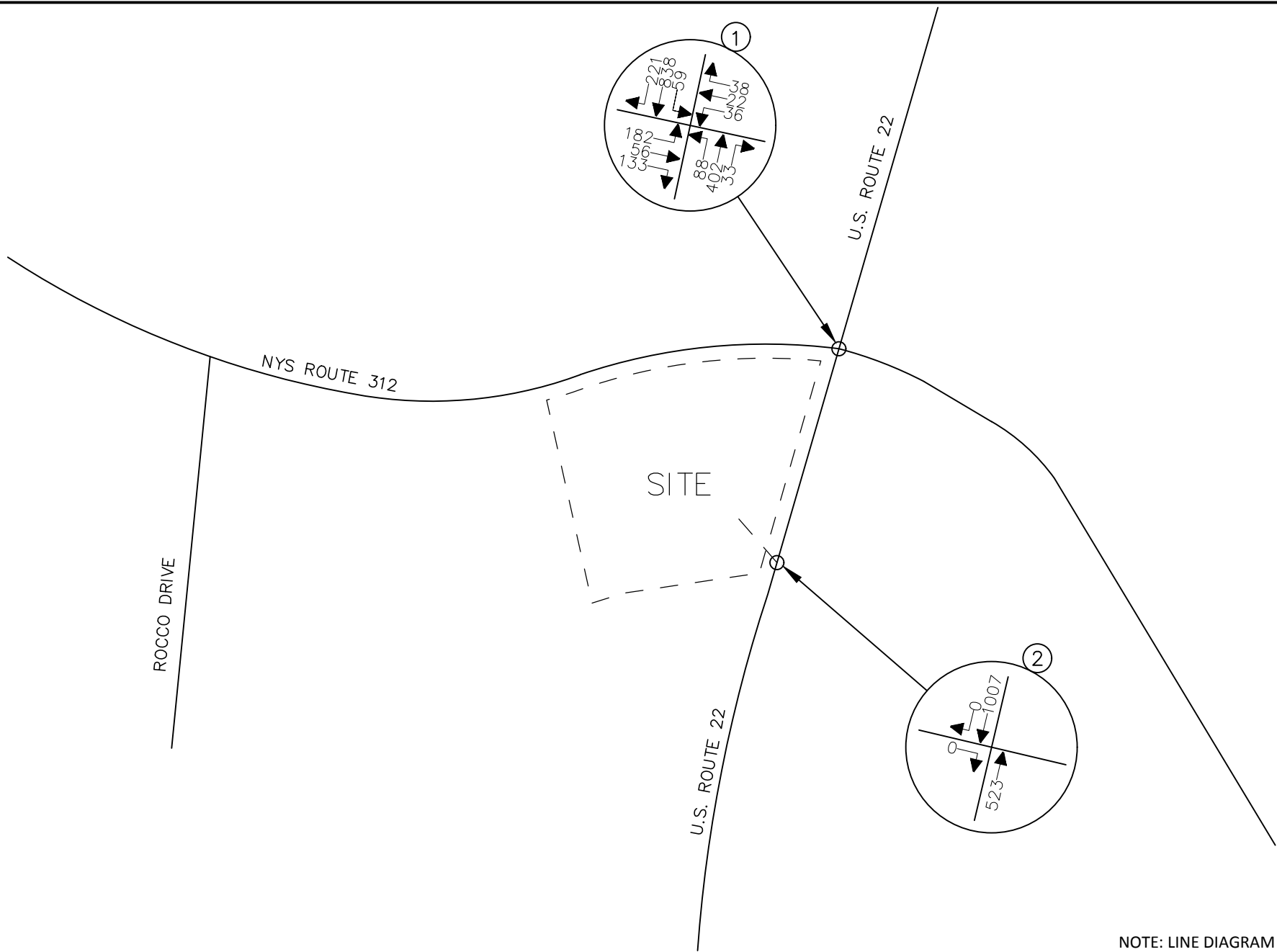
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2019 EXISTING TRAFFIC VOLUMES
 WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
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FIGURE NUMBER:	



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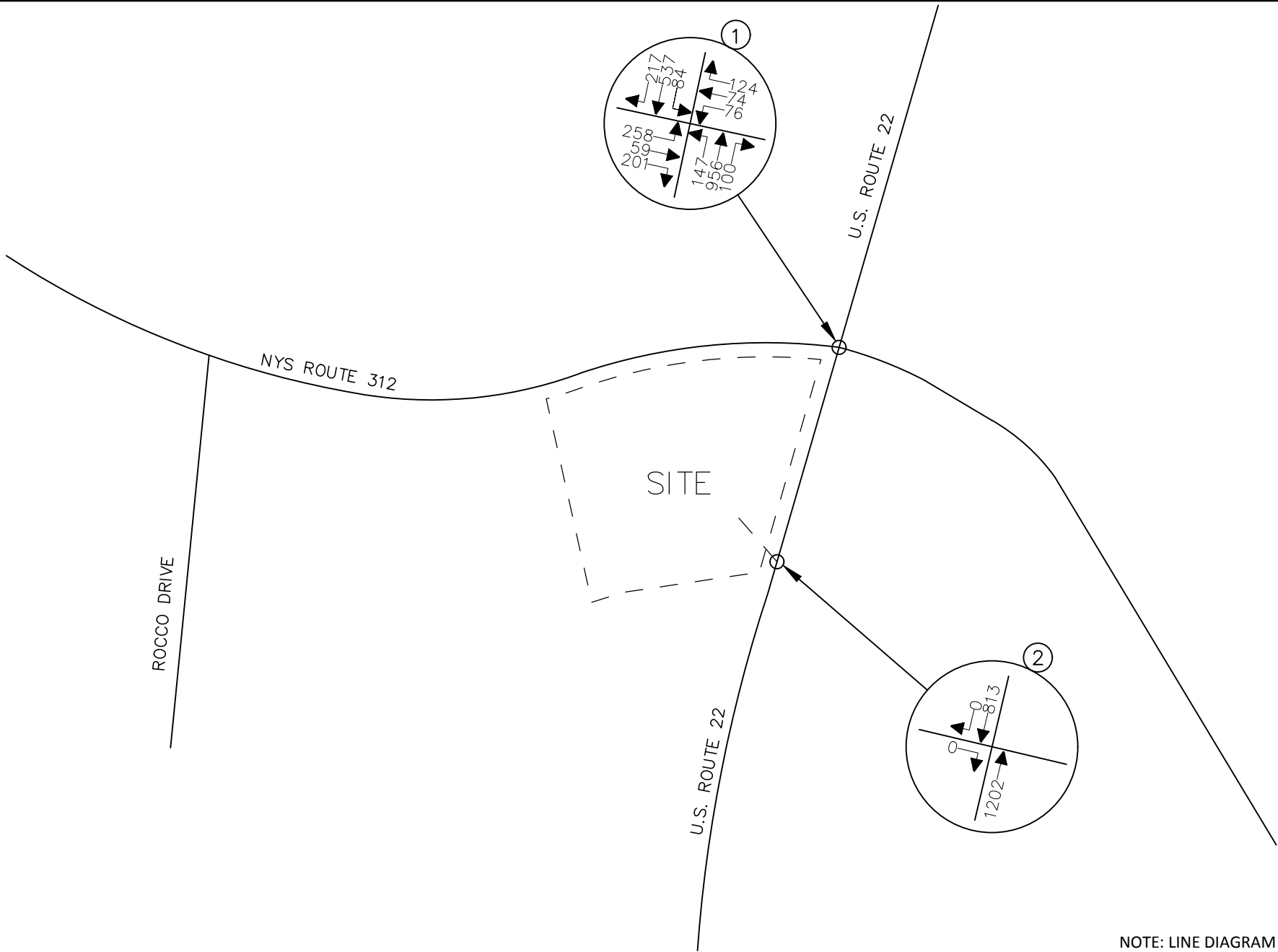
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2024 NO-BUILD TRAFFIC VOLUMES
 WEEKDAY PEAK AM HOUR



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



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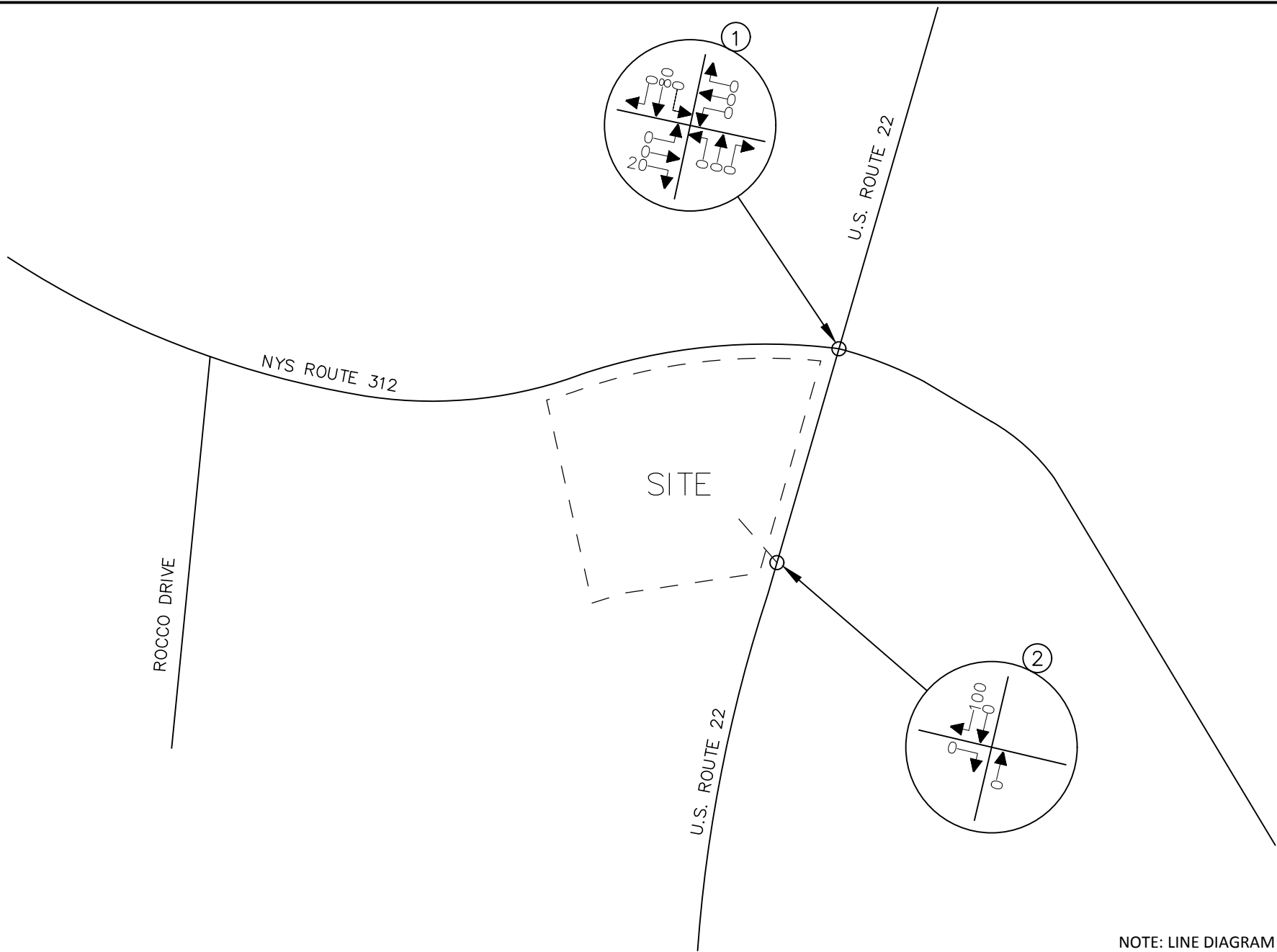
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2024 NO-BUILD TRAFFIC VOLUMES
 WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



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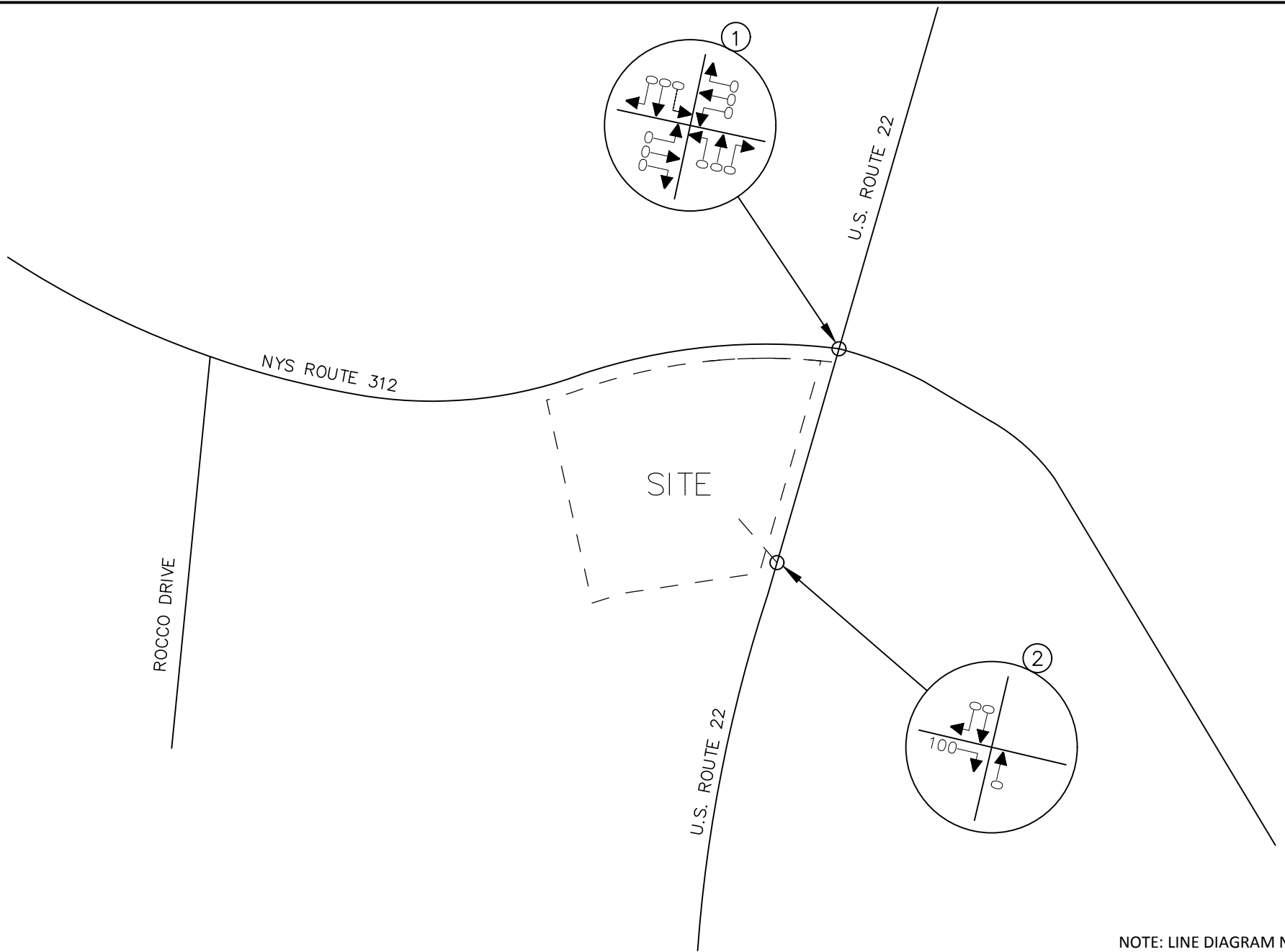
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

ARRIVAL DISTRIBUTION
 (EXPRESSED AS A %)



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 Fax: 914.347.7266

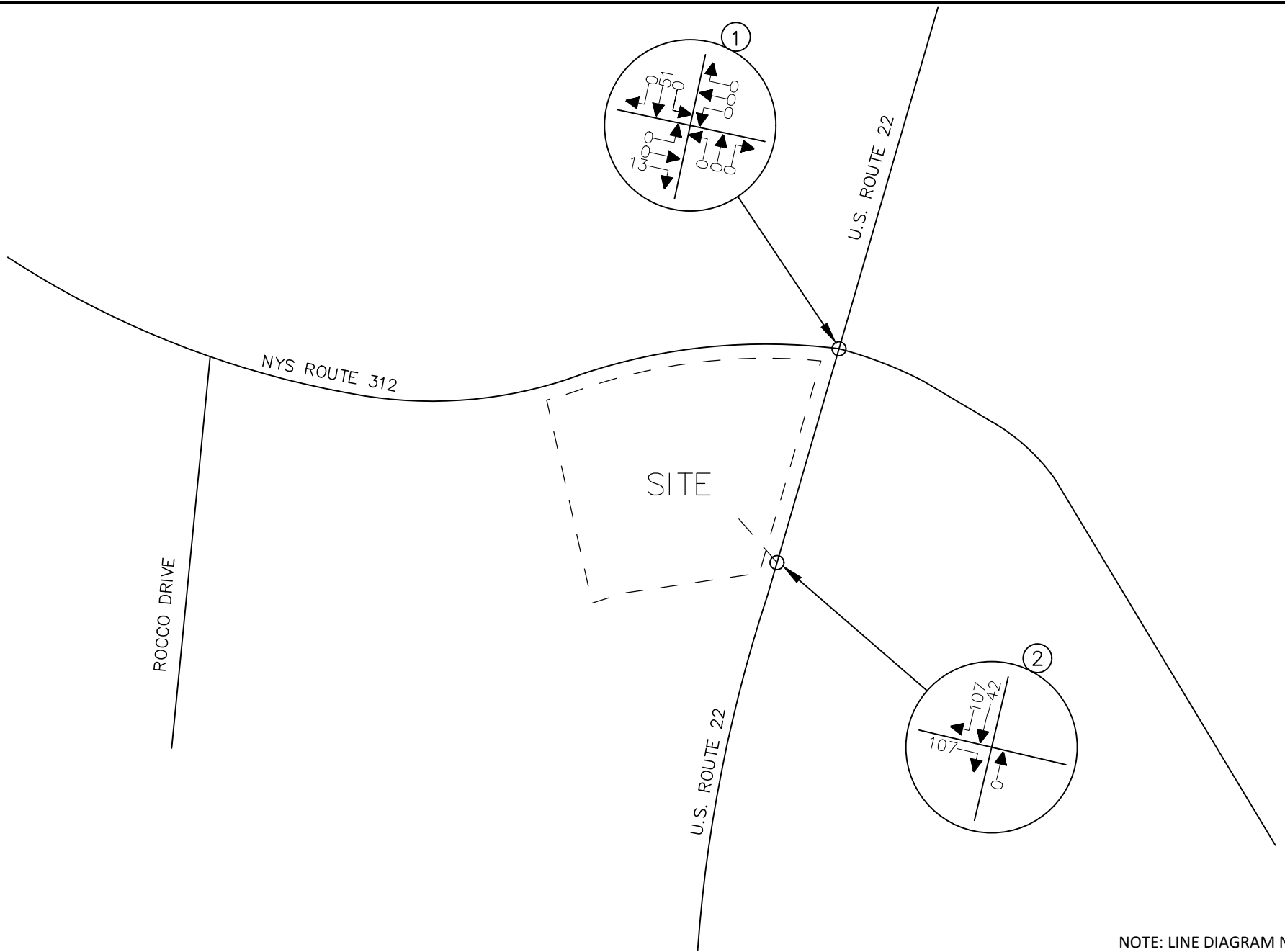
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

DEPARTURE DISTRIBUTION
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 Fax: 914.347.7266

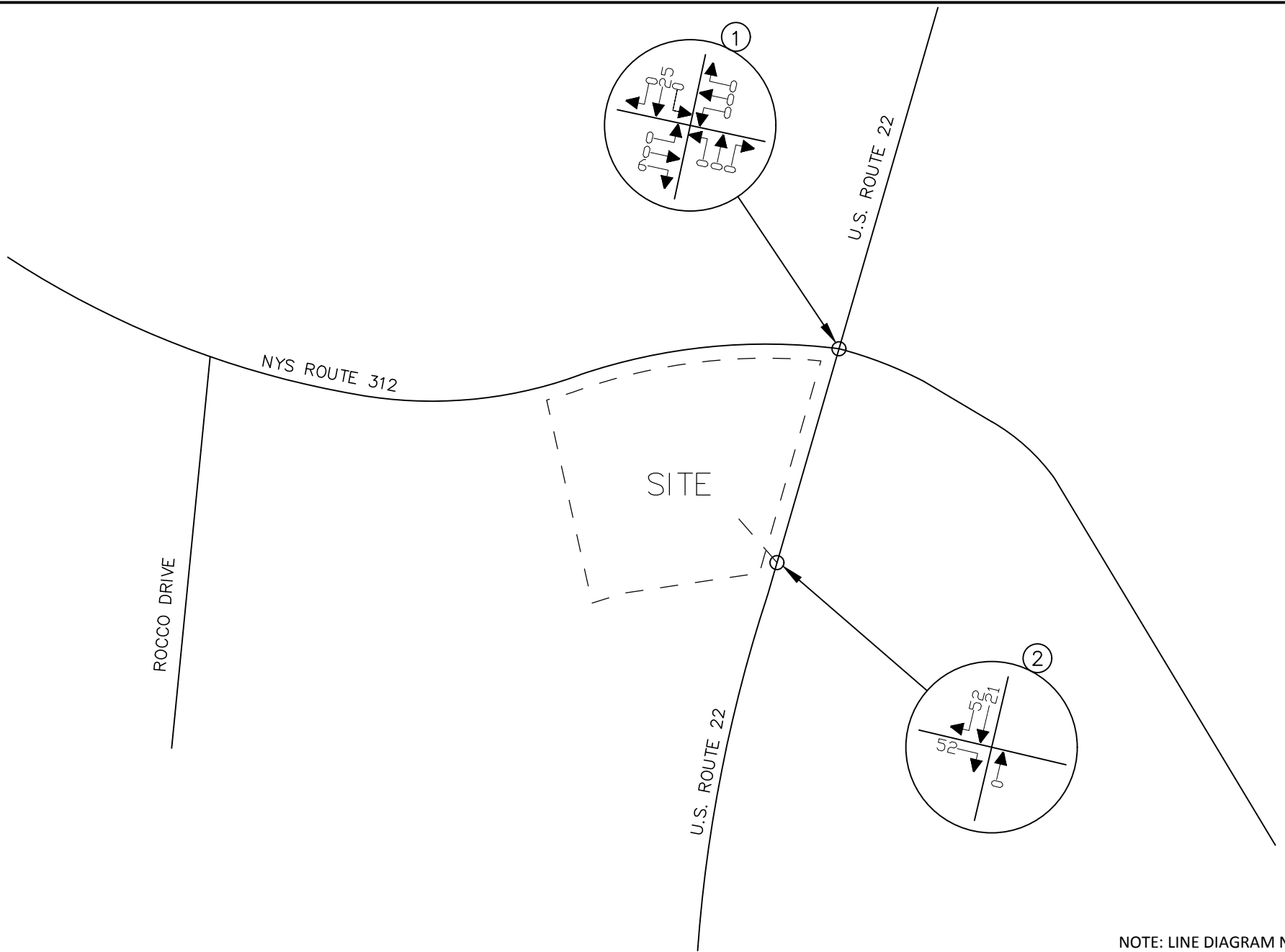
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

SITE GENERATED TRAFFIC VOLUMES
 WEEKDAY PEAK AM HOUR



JOB NUMBER:	DATE:
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FIGURE NUMBER:	



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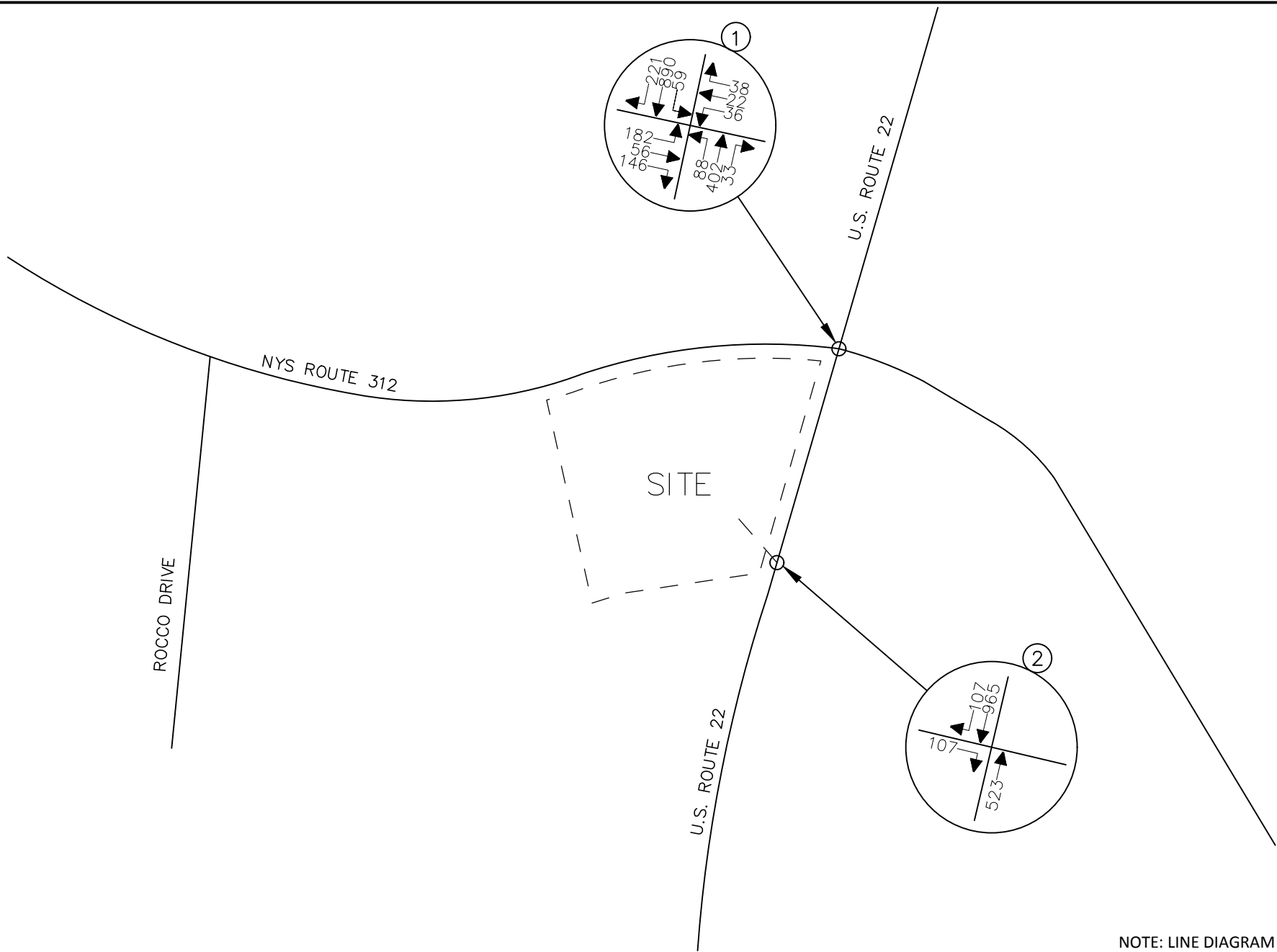
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BATISTA SOUTHEAST DUNKIN DONUTS
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SITE GENERATED TRAFFIC VOLUMES
 WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
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FIGURE NUMBER:	



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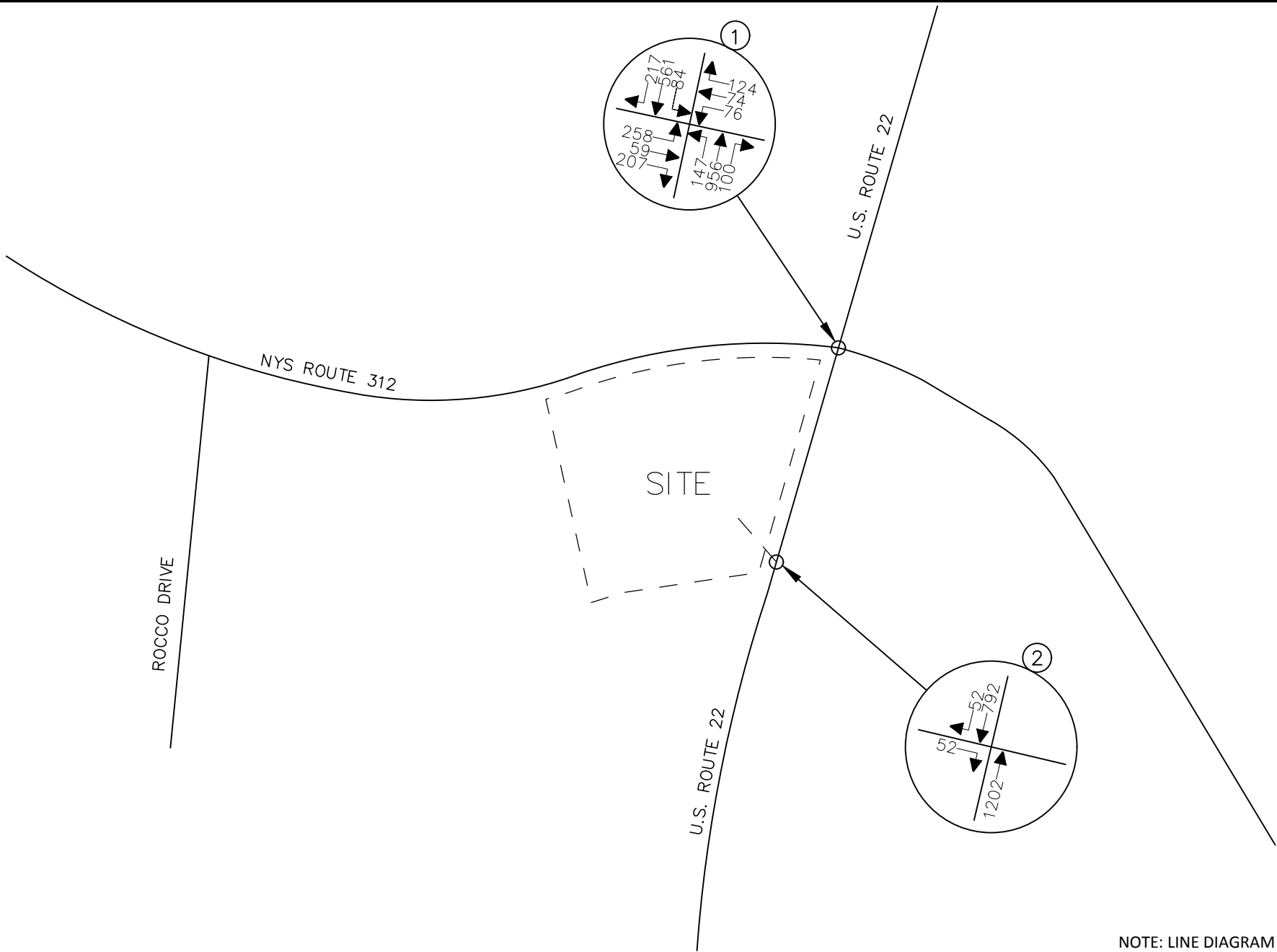
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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2024 BUILD TRAFFIC VOLUMES
 WEEKDAY PEAK AM HOUR



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



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11 Bradhurst Avenue
 Hawthorne, NY 10532
 Phone: 914.347.7500
 Fax: 914.347.7266

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BATISTA SOUTHEAST DUNKIN DONUTS
 SOUTHEAST, NEW YORK

2024 BUILD TRAFFIC VOLUMES
 WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
17001044A	1/18/19
FIGURE NUMBER:	



DUNKIN DONUTS

APPENDIX B

TABLES

TABLE NO. 1-P
HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES
(PRIOR PROPOSAL)

GASLAND SOUTHEAST, NEW YORK	ENTRY				EXIT			
	HTGR ¹	VOLUME	EXTERNAL TRIPS ²	NEW TRIPS ³	HTGR ¹	VOLUME	EXTERNAL TRIPS ²	NEW TRIPS ³
DUNKIN DONUTS (2,700 S.F.)								
PEAK AM HOUR	50.29	136	115	69	50.29	136	115	69
PEAK PM HOUR	21.40	58	49	29	21.40	58	49	29
GAS STATION (8 FUELING POSITIONS)								
PEAK AM HOUR	5.08	41	35	21	5.08	41	35	21
PEAK PM HOUR	6.76	54	46	28	6.76	54	46	28
TOTAL								
PEAK AM HOUR	-	-	150	90	-	-	150	90
PEAK PM HOUR	-	-	95	57	-	-	95	57

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 9TH EDITION, 2012. ITE LAND USE CODE - 937 - COFFEE/DONUT SHOP WITH DRIVE-THROUGH WINDOW AND ITE LAND USE CODE - 945 - GASOLINE/SERVICE STATION WITH CONVENIENCE MARKET.

2) EXTERNAL TRIPS INCLUDE A 15% INTERNAL/CROSS TRIP CREDIT TO ACCOUNT FOR TRIPS USING BOTH THE FUELING FACILITIES AND THE DUNKIN DONUTS/CONVENIENCE STORE.

3) NEW TRIPS INCLUDE A 40% PASS-BY TRIP CREDIT TO ACCOUNT FOR TRIPS ATTRACTED FROM THE EXISTING TRAFFIC VOLUMES ALONG U.S. ROUTE 22 AND NYS ROUTE 312.

TABLE NO. 1-R
HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES
(CURRENT PROPOSAL)

DUNKIN DONUTS SOUTHEAST, NEW YORK	ENTRY			EXIT		
	HTGR ¹	VOLUME	NEW TRIPS ³	HTGR ¹	VOLUME	NEW TRIPS ³
DUNKIN DONUTS (2,400 S.F.)						
PEAK AM HOUR	44.58	107	64	44.58	107	64
PEAK PM HOUR	21.67	52	31	21.67	52	31

NOTES:

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10TH EDITION, 2017. ITE LAND USE CODE - 937 - COFFEE/DONUT SHOP WITH DRIVE-THROUGH WINDOW.
- 2) NEW TRIPS INCLUDE A 40% PASS-BY TRIP CREDIT TO ACCOUNT FOR TRIPS ATTRACTED FROM THE EXISTING TRAFFIC VOLUMES ALONG U.S. ROUTE 22.



DUNKIN DONUTS

APPENDIX C

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 18-4 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 18-4

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤1.0	v/c >1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.

LEVEL OF SERVICE CRITERIA

FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 19-1 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 19-1

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤1.0	v/c >1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 19-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

LEVEL OF SERVICE CRITERIA

FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 20-2. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 20-2 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 20-2

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤1.0	v/c >1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.



DUNKIN DONUTS

APPENDIX D

CAPACITY ANALYSIS

2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	53	127	34	21	36	84	383	31	56	798	210
Future Volume (vph)	173	53	127	34	21	36	84	383	31	56	798	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	180		0	115		115	215		215	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.894				0.850			0.850		0.969	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1642	0	1745	1837	1561	1762	3524	1577	1728	3348	0
Fl _t Permitted	0.950			0.950			0.154			0.495		
Satd. Flow (perm)	1745	1642	0	1745	1837	1561	286	3524	1577	900	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		82				109			109			32
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		503			508			603			352	
Travel Time (s)		7.6			11.5			9.1			5.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	197	60	144	39	24	41	95	435	35	64	907	239
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	204	0	39	24	41	95	435	35	64	1146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.67	0.60		0.32	0.19	0.14	0.34	0.22	0.04	0.11	0.62	
Control Delay	58.5	34.2		59.5	55.1	1.1	12.6	15.3	0.1	10.0	22.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	58.5	34.2		59.5	55.1	1.1	12.6	15.3	0.1	10.0	22.1	
Stops (vph)	159	100		32	21	0	33	189	0	23	679	
Fuel Used(gal)	5	3		1	0	0	1	5	0	1	15	
CO Emissions (g/hr)	322	216		51	30	11	67	352	9	37	1069	
NOx Emissions (g/hr)	63	42		10	6	2	13	69	2	7	208	
VOC Emissions (g/hr)	75	50		12	7	2	15	82	2	9	248	
Dilemma Vehicles (#)	0	7		0	0	0	0	16	0	0	42	
Queue Length 50th (ft)	144	86		29	18	0	27	91	0	18	314	
Queue Length 95th (ft)	212	157		63	44	0	54	138	0	39	445	
Internal Link Dist (ft)		423			428			523			272	
Turn Bay Length (ft)	180			115		115	215		215	140		
Base Capacity (vph)	293	344		290	306	316	433	2013	948	634	1839	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.59		0.13	0.08	0.13	0.22	0.22	0.04	0.10	0.62	

Intersection Summary
 Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
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























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	197	204	39	24	41	95	435	35	64	1146
v/c Ratio	0.67	0.60	0.32	0.19	0.14	0.34	0.22	0.04	0.11	0.62
Control Delay	58.5	34.2	59.5	55.1	1.1	12.6	15.3	0.1	10.0	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	34.2	59.5	55.1	1.1	12.6	15.3	0.1	10.0	22.1
Queue Length 50th (ft)	144	86	29	18	0	27	91	0	18	314
Queue Length 95th (ft)	212	157	63	44	0	54	138	0	39	445
Internal Link Dist (ft)		423		428			523			272
Turn Bay Length (ft)	180		115		115	215		215	140	
Base Capacity (vph)	293	344	290	306	316	433	2013	948	634	1839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.59	0.13	0.08	0.13	0.22	0.22	0.04	0.10	0.62

Intersection Summary

2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	53	127	34	21	36	84	383	31	56	798	210
Future Volume (veh/h)	173	53	127	34	21	36	84	383	31	56	798	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	197	60	144	39	24	41	95	435	35	64	907	239
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	63	152	90	94	152	377	2365	1055	660	1698	447
Arrive On Green	0.13	0.13	0.13	0.05	0.05	0.05	0.05	0.62	0.62	0.04	0.61	0.61
Sat Flow, veh/h	1850	507	1217	1850	1943	1647	1925	3841	1713	1776	2774	730
Grp Volume(v), veh/h	197	0	204	39	24	41	95	435	35	64	579	567
Grp Sat Flow(s),veh/h/ln	1850	0	1724	1850	1943	1647	1925	1921	1713	1776	1771	1733
Q Serve(g_s), s	12.5	0.0	14.1	2.5	1.4	2.8	2.1	5.9	1.0	1.5	22.6	22.7
Cycle Q Clear(g_c), s	12.5	0.0	14.1	2.5	1.4	2.8	2.1	5.9	1.0	1.5	22.6	22.7
Prop In Lane	1.00		0.71	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	231	0	215	90	94	152	377	2365	1055	660	1084	1061
V/C Ratio(X)	0.85	0.00	0.95	0.44	0.26	0.27	0.25	0.18	0.03	0.10	0.53	0.54
Avail Cap(c_a), veh/h	231	0	215	308	324	347	605	2365	1055	730	1084	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	0.0	52.1	55.5	55.0	50.7	9.9	10.0	9.0	7.5	13.4	13.4
Incr Delay (d2), s/veh	25.0	0.0	46.4	3.3	1.4	0.9	0.3	0.2	0.1	0.1	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	0.0	8.7	1.2	0.7	1.2	0.8	2.3	0.3	0.5	8.6	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.4	0.0	98.5	58.8	56.4	51.6	10.3	10.2	9.1	7.6	15.3	15.4
LnGrp LOS	E	A	F	E	E	D	B	B	A	A	B	B
Approach Vol, veh/h		401			104			565			1210	
Approach Delay, s/veh		87.6			55.4			10.1			14.9	
Approach LOS		F			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	78.4		10.8	10.3	78.9		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	40.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1), s	4.1	24.7		4.8	3.5	7.9		16.1				
Green Ext Time (p_c), s	0.3	4.9		0.4	0.1	1.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th LOS			C									

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	56	133	36	22	38	88	402	33	59	838	221
Future Volume (vph)	182	56	133	36	22	38	88	402	33	59	838	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	180		0	115		115	215		215	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.895				0.850			0.850		0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1644	0	1745	1837	1561	1762	3524	1577	1728	3348	0
Flt Permitted	0.950			0.950			0.133			0.480		
Satd. Flow (perm)	1745	1644	0	1745	1837	1561	247	3524	1577	873	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		81				109			109			32
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		503			508			603			352	
Travel Time (s)		7.6			11.5			9.1			5.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	207	64	151	41	25	43	100	457	38	67	952	251
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	215	0	41	25	43	100	457	38	67	1203	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

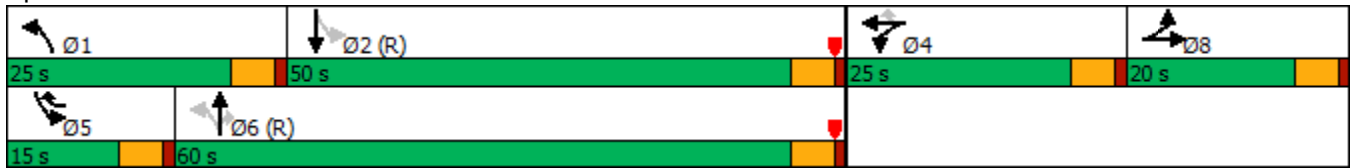


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.67	0.60		0.34	0.19	0.15	0.38	0.23	0.04	0.12	0.67	
Control Delay	57.3	35.1		59.8	55.0	1.1	14.0	15.9	0.1	10.4	24.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.3	35.1		59.8	55.0	1.1	14.0	15.9	0.1	10.4	24.1	
Stops (vph)	167	108		34	22	0	35	205	0	25	753	
Fuel Used(gal)	5	3		1	0	0	1	5	0	1	17	
CO Emissions (g/hr)	335	231		54	32	11	72	379	9	40	1186	
NOx Emissions (g/hr)	65	45		10	6	2	14	74	2	8	231	
VOC Emissions (g/hr)	78	54		12	7	3	17	88	2	9	275	
Dilemma Vehicles (#)	0	7		0	0	0	0	17	0	0	44	
Queue Length 50th (ft)	150	95		31	19	0	29	98	0	19	350	
Queue Length 95th (ft)	225	169		65	46	0	56	145	0	41	483	
Internal Link Dist (ft)		423			428			523			272	
Turn Bay Length (ft)	180			115		115	215		215	140		
Base Capacity (vph)	307	356		290	306	317	412	1975	931	609	1800	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.60		0.14	0.08	0.14	0.24	0.23	0.04	0.11	0.67	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	207	215	41	25	43	100	457	38	67	1203
v/c Ratio	0.67	0.60	0.34	0.19	0.15	0.38	0.23	0.04	0.12	0.67
Control Delay	57.3	35.1	59.8	55.0	1.1	14.0	15.9	0.1	10.4	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	35.1	59.8	55.0	1.1	14.0	15.9	0.1	10.4	24.1
Queue Length 50th (ft)	150	95	31	19	0	29	98	0	19	350
Queue Length 95th (ft)	225	169	65	46	0	56	145	0	41	483
Internal Link Dist (ft)		423		428			523			272
Turn Bay Length (ft)	180		115		115	215		215	140	
Base Capacity (vph)	307	356	290	306	317	412	1975	931	609	1800
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.60	0.14	0.08	0.14	0.24	0.23	0.04	0.11	0.67

Intersection Summary

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	56	133	36	22	38	88	402	33	59	838	221
Future Volume (veh/h)	182	56	133	36	22	38	88	402	33	59	838	221
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	207	64	151	41	25	43	100	457	38	67	952	251
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	64	151	90	95	154	358	2362	1054	646	1696	446
Arrive On Green	0.13	0.13	0.13	0.05	0.05	0.05	0.05	0.62	0.62	0.04	0.61	0.61
Sat Flow, veh/h	1850	513	1211	1850	1943	1647	1925	3841	1713	1776	2774	730
Grp Volume(v), veh/h	207	0	215	41	25	43	100	457	38	67	607	596
Grp Sat Flow(s),veh/h/ln	1850	0	1725	1850	1943	1647	1925	1921	1713	1776	1771	1733
Q Serve(g_s), s	13.2	0.0	15.0	2.6	1.5	2.9	2.2	6.2	1.0	1.6	24.3	24.5
Cycle Q Clear(g_c), s	13.2	0.0	15.0	2.6	1.5	2.9	2.2	6.2	1.0	1.6	24.3	24.5
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	231	0	216	90	95	154	358	2362	1054	646	1083	1060
V/C Ratio(X)	0.89	0.00	1.00	0.46	0.26	0.28	0.28	0.19	0.04	0.10	0.56	0.56
Avail Cap(c_a), veh/h	231	0	216	308	324	348	586	2362	1054	714	1083	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	52.5	55.5	55.0	50.6	10.4	10.1	9.1	7.5	13.8	13.8
Incr Delay (d2), s/veh	32.7	0.0	60.4	3.6	1.5	1.0	0.4	0.2	0.1	0.1	2.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	9.9	1.3	0.8	1.2	0.9	2.5	0.4	0.6	9.3	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.4	0.0	112.9	59.1	56.5	51.6	10.9	10.3	9.2	7.6	15.9	16.0
LnGrp LOS	F	A	F	E	E	D	B	B	A	A	B	B
Approach Vol, veh/h		422			109			595			1270	
Approach Delay, s/veh		98.9			55.5			10.3			15.5	
Approach LOS		F			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	78.4		10.8	10.4	78.8		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	20.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1), s	4.2	26.5		4.9	3.6	8.2		17.0				
Green Ext Time (p_c), s	0.3	5.1		0.4	0.1	1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			30.7									
HCM 6th LOS			C									

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗↗	↗	↖	↗↗	
Traffic Volume (vph)	182	56	146	36	22	38	88	402	33	59	890	221
Future Volume (vph)	182	56	146	36	22	38	88	402	33	59	890	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	0		0	115		115	0		0	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.892				0.850			0.850		0.970	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1638	0	1745	1837	1561	1762	3524	1577	1728	3352	0
Fl _t Permitted	0.950			0.950			0.117			0.480		
Satd. Flow (perm)	1745	1638	0	1745	1837	1561	217	3524	1577	873	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		89				109			109			29
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		181			508			208			352	
Travel Time (s)		2.7			11.5			3.2			5.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	207	64	166	41	25	43	100	457	38	67	1011	251
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	230	0	41	25	43	100	457	38	67	1262	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

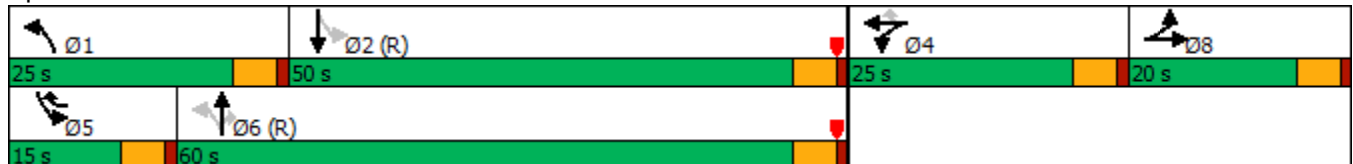


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.67	0.64		0.34	0.19	0.15	0.41	0.23	0.04	0.12	0.70	
Control Delay	57.3	35.7		59.8	55.0	1.1	14.7	15.9	0.1	10.4	25.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.3	35.7		59.8	55.0	1.1	14.7	15.9	0.1	10.4	25.1	
Queue Length 50th (ft)	150	101		31	19	0	29	98	0	19	378	
Queue Length 95th (ft)	225	178		65	46	0	56	145	0	41	520	
Internal Link Dist (ft)		101			428			128			272	
Turn Bay Length (ft)				115		115				140		
Base Capacity (vph)	307	362		290	306	317	397	1975	931	609	1800	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.64		0.14	0.08	0.14	0.25	0.23	0.04	0.11	0.70	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER




























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	207	230	41	25	43	100	457	38	67	1262
v/c Ratio	0.67	0.64	0.34	0.19	0.15	0.41	0.23	0.04	0.12	0.70
Control Delay	57.3	35.7	59.8	55.0	1.1	14.7	15.9	0.1	10.4	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	35.7	59.8	55.0	1.1	14.7	15.9	0.1	10.4	25.1
Queue Length 50th (ft)	150	101	31	19	0	29	98	0	19	378
Queue Length 95th (ft)	225	178	65	46	0	56	145	0	41	520
Internal Link Dist (ft)		101		428			128			272
Turn Bay Length (ft)			115		115				140	
Base Capacity (vph)	307	362	290	306	317	397	1975	931	609	1800
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.64	0.14	0.08	0.14	0.25	0.23	0.04	0.11	0.70
Intersection Summary										

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	56	146	36	22	38	88	402	33	59	890	221
Future Volume (veh/h)	182	56	146	36	22	38	88	402	33	59	890	221
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	207	64	166	41	25	43	100	457	38	67	1011	251
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	60	155	90	95	154	339	2362	1054	646	1721	426
Arrive On Green	0.13	0.13	0.13	0.05	0.05	0.05	0.05	0.62	0.62	0.04	0.61	0.61
Sat Flow, veh/h	1850	478	1241	1850	1943	1647	1925	3841	1713	1776	2814	696
Grp Volume(v), veh/h	207	0	230	41	25	43	100	457	38	67	635	627
Grp Sat Flow(s),veh/h/ln	1850	0	1720	1850	1943	1647	1925	1921	1713	1776	1771	1739
Q Serve(g_s), s	13.2	0.0	15.0	2.6	1.5	2.9	2.2	6.2	1.0	1.6	26.1	26.3
Cycle Q Clear(g_c), s	13.2	0.0	15.0	2.6	1.5	2.9	2.2	6.2	1.0	1.6	26.1	26.3
Prop In Lane	1.00		0.72	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	231	0	215	90	95	154	339	2362	1054	646	1083	1063
V/C Ratio(X)	0.89	0.00	1.07	0.46	0.26	0.28	0.29	0.19	0.04	0.10	0.59	0.59
Avail Cap(c_a), veh/h	231	0	215	308	324	348	567	2362	1054	714	1083	1063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	52.5	55.5	55.0	50.6	11.0	10.1	9.1	7.5	14.1	14.2
Incr Delay (d2), s/veh	32.7	0.0	81.2	3.6	1.5	1.0	0.5	0.2	0.1	0.1	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	11.1	1.3	0.8	1.2	0.9	2.5	0.4	0.6	10.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.4	0.0	133.7	59.1	56.5	51.6	11.5	10.3	9.2	7.6	16.4	16.6
LnGrp LOS	F	A	F	E	E	D	B	B	A	A	B	B
Approach Vol, veh/h		437			109			595			1329	
Approach Delay, s/veh		110.4			55.5			10.4			16.1	
Approach LOS		F			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	78.4		10.8	10.4	78.8		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	20.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1), s	4.2	28.3		4.9	3.6	8.2		17.0				
Green Ext Time (p_c), s	0.3	5.2		0.4	0.1	1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			33.1									
HCM 6th LOS			C									

2024 Build Traffic Volumes
 2: U.S. ROUTE 22 & SITE ACCESS

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑	
Traffic Volume (vph)	0	107	0	523	965	107
Future Volume (vph)	0	107	0	523	965	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			-5%	5%	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.95
Fr _t		0.865			0.985	
Fl _t Protected						
Satd. Flow (prot)	0	1565	0	5064	3302	0
Fl _t Permitted						
Satd. Flow (perm)	0	1565	0	5064	3302	0
Link Speed (mph)	30			45	30	
Link Distance (ft)	91			73	208	
Travel Time (s)	2.1			1.1	4.7	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	122	0	594	1097	122
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	122	0	594	1219	0
Enter Blocked Intersection	No	No	Yes	Yes	Yes	Yes
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.97	0.97	1.03	1.03
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Vol, veh/h	0	107	0	523	965	107
Future Vol, veh/h	0	107	0	523	965	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	-	0	-	-	-	-
Veh in Median Storage#	-	-	0	0	-	-
Grade, %	0	-	-	-5	5	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	122	0	594	1097	122

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	610	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.35	-	-	-	-
Pot Cap-1 Maneuver	0	430	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	430	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NB	EBLn1	SBT	SBR
Capacity (veh/h)	-	430	-	-
HCM Lane V/C Ratio	-	0.283	-	-
HCM Control Delay (s)	-	16.6	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	1.1	-	-

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗↗	↗	↖	↗↗	
Traffic Volume (vph)	182	56	146	36	22	38	88	402	33	59	890	221
Future Volume (vph)	182	56	146	36	22	38	88	402	33	59	890	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	0		0	115		115	0		0	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.892				0.850			0.850		0.970	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1638	0	1745	1837	1561	1762	3524	1577	1728	3352	0
Fl _t Permitted	0.950			0.950			0.123			0.481		
Satd. Flow (perm)	1745	1638	0	1745	1837	1561	228	3524	1577	875	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		93				109			109			27
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		181			508			208			352	
Travel Time (s)		2.7			11.5			3.2			5.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	207	64	166	41	25	43	100	457	38	67	1011	251
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	230	0	41	25	43	100	457	38	67	1262	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

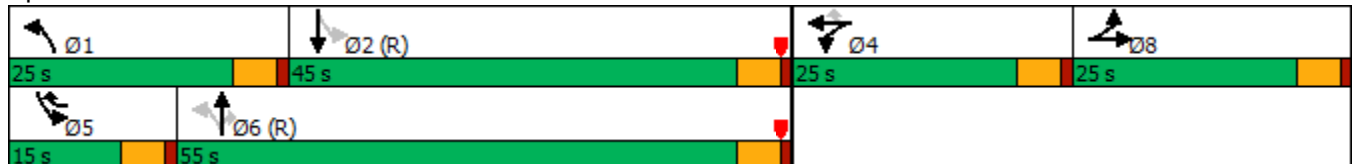


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	25.0	25.0		25.0	25.0	15.0	25.0	55.0	55.0	15.0	45.0	
Total Split (%)	20.8%	20.8%		20.8%	20.8%	12.5%	20.8%	45.8%	45.8%	12.5%	37.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0	10.0	20.0	50.0	50.0	10.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.72	0.66		0.34	0.19	0.15	0.40	0.23	0.04	0.11	0.68	
Control Delay	61.6	36.5		59.8	55.0	1.1	14.3	15.7	0.1	10.4	24.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	61.6	36.5		59.8	55.0	1.1	14.3	15.7	0.1	10.4	24.3	
Queue Length 50th (ft)	154	100		31	19	0	27	94	0	18	361	
Queue Length 95th (ft)	217	169		65	46	0	60	153	0	44	545	
Internal Link Dist (ft)		101			428			128			272	
Turn Bay Length (ft)				115		115				140		
Base Capacity (vph)	316	373		290	306	317	405	2019	950	622	1844	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.62		0.14	0.08	0.14	0.25	0.23	0.04	0.11	0.68	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER
























Weekday Peak AM Hour
 01/21/2019



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	207	230	41	25	43	100	457	38	67	1262
v/c Ratio	0.72	0.66	0.34	0.19	0.15	0.40	0.23	0.04	0.11	0.68
Control Delay	61.6	36.5	59.8	55.0	1.1	14.3	15.7	0.1	10.4	24.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	36.5	59.8	55.0	1.1	14.3	15.7	0.1	10.4	24.3
Queue Length 50th (ft)	154	100	31	19	0	27	94	0	18	361
Queue Length 95th (ft)	217	169	65	46	0	60	153	0	44	545
Internal Link Dist (ft)		101		428			128			272
Turn Bay Length (ft)			115		115				140	
Base Capacity (vph)	316	373	290	306	317	405	2019	950	622	1844
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.62	0.14	0.08	0.14	0.25	0.23	0.04	0.11	0.68
Intersection Summary										

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak AM Hour
 01/21/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	56	146	36	22	38	88	402	33	59	890	221
Future Volume (veh/h)	182	56	146	36	22	38	88	402	33	59	890	221
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	207	64	166	41	25	43	100	457	38	67	1011	251
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	281	73	189	90	95	154	319	2259	1008	618	1645	407
Arrive On Green	0.15	0.15	0.15	0.05	0.05	0.05	0.05	0.59	0.59	0.04	0.58	0.58
Sat Flow, veh/h	1850	478	1241	1850	1943	1647	1925	3841	1713	1776	2814	696
Grp Volume(v), veh/h	207	0	230	41	25	43	100	457	38	67	635	627
Grp Sat Flow(s),veh/h/ln	1850	0	1720	1850	1943	1647	1925	1921	1713	1776	1771	1739
Q Serve(g_s), s	12.8	0.0	15.7	2.6	1.5	2.9	2.4	6.7	1.1	1.7	27.9	28.1
Cycle Q Clear(g_c), s	12.8	0.0	15.7	2.6	1.5	2.9	2.4	6.7	1.1	1.7	27.9	28.1
Prop In Lane	1.00		0.72	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	281	0	261	90	95	154	319	2259	1008	618	1035	1016
V/C Ratio(X)	0.74	0.00	0.88	0.46	0.26	0.28	0.31	0.20	0.04	0.11	0.61	0.62
Avail Cap(c_a), veh/h	308	0	287	308	324	348	547	2259	1008	687	1035	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	49.8	55.5	55.0	50.6	12.7	11.6	10.4	8.8	16.1	16.2
Incr Delay (d2), s/veh	8.1	0.0	24.2	3.6	1.5	1.0	0.6	0.2	0.1	0.1	2.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	8.3	1.3	0.8	1.2	1.0	2.7	0.4	0.6	11.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	0.0	74.0	59.1	56.5	51.6	13.3	11.8	10.5	8.8	18.9	19.0
LnGrp LOS	E	A	E	E	E	D	B	B	B	A	B	B
Approach Vol, veh/h		437			109			595			1329	
Approach Delay, s/veh		65.8			55.5			11.9			18.4	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	75.1		10.8	10.4	75.6		23.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax),s	40.0	40.0		20.0	10.0	50.0		20.0				
Max Q Clear Time (g_c+I1),s	4.4	30.1		4.9	3.7	8.7		17.7				
Green Ext Time (p_c), s	0.3	4.1		0.4	0.1	1.8		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			26.9									
HCM 6th LOS			C									

2024 Build Traffic Volumes
2: U.S. ROUTE 22 & SITE ACCESS

Weekday Peak AM Hour
01/21/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Volume (vph)	0	107	0	523	965	107
Future Volume (vph)	0	107	0	523	965	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			-5%	5%	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.95
Frt		0.865			0.985	
Flt Protected						
Satd. Flow (prot)	0	1565	0	5064	3302	0
Flt Permitted						
Satd. Flow (perm)	0	1565	0	5064	3302	0
Link Speed (mph)	30			45	30	
Link Distance (ft)	91			73	208	
Travel Time (s)	2.1			1.1	4.7	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	122	0	594	1097	122
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	122	0	594	1219	0
Enter Blocked Intersection	No	No	Yes	Yes	Yes	Yes
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.97	0.97	1.03	1.03
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Vol, veh/h	0	107	0	523	965	107
Future Vol, veh/h	0	107	0	523	965	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	-	0	-	-	-	-
Veh in Median Storage#	-	-	0	0	-	-
Grade, %	0	-	-	-5	5	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	122	0	594	1097	122

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	610	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.35	-	-	-	-
Pot Cap-1 Maneuver	0	430	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	430	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NB	EBLn1	SBT	SBR
Capacity (veh/h)	-	430	-	-
HCM Lane V/C Ratio	-	0.283	-	-
HCM Control Delay (s)	-	16.6	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	1.1	-	-

2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↕	↗	↖	↗	↖
Traffic Volume (vph)	246	56	191	72	70	118	140	910	95	80	511	207
Future Volume (vph)	246	56	191	72	70	118	140	910	95	80	511	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	180		0	115		115	215		215	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.884				0.850			0.850		0.957	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1624	0	1745	1837	1561	1762	3524	1577	1728	3307	0
Fl _t Permitted	0.950			0.950			0.184			0.122		
Satd. Flow (perm)	1745	1624	0	1745	1837	1561	341	3524	1577	222	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		116				109			109		58	
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		503			508			603			352	
Travel Time (s)		7.6			11.5			9.1			5.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	293	67	227	86	83	140	167	1083	113	95	608	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	294	0	86	83	140	167	1083	113	95	854	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

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 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.66	0.59		0.52	0.48	0.40	0.55	0.75	0.16	0.45	0.65	
Control Delay	50.6	31.0		62.4	59.9	10.2	21.0	33.2	4.4	20.8	29.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.6	31.0		62.4	59.9	10.2	21.0	33.2	4.4	20.8	29.8	
Stops (vph)	197	129		67	65	30	69	741	11	40	526	
Fuel Used(gal)	6	4		2	1	1	2	19	1	1	13	
CO Emissions (g/hr)	405	278		110	104	61	140	1323	41	71	876	
NOx Emissions (g/hr)	79	54		21	20	12	27	257	8	14	170	
VOC Emissions (g/hr)	94	64		25	24	14	32	307	10	17	203	
Dilemma Vehicles (#)	0	9		0	0	0	0	38	0	0	30	
Queue Length 50th (ft)	205	121		65	62	12	64	366	2	35	259	
Queue Length 95th (ft)	#378	#236		106	103	43	84	372	29	52	281	
Internal Link Dist (ft)		423			428			523			272	
Turn Bay Length (ft)	180			115		115	215		215	140		
Base Capacity (vph)	446	501		290	306	366	415	1615	781	230	1356	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.59		0.30	0.27	0.38	0.40	0.67	0.14	0.41	0.63	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
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





















Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	293	294	86	83	140	167	1083	113	95	854
v/c Ratio	0.66	0.59	0.52	0.48	0.40	0.55	0.75	0.16	0.45	0.65
Control Delay	50.6	31.0	62.4	59.9	10.2	21.0	33.2	4.4	20.8	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	31.0	62.4	59.9	10.2	21.0	33.2	4.4	20.8	29.8
Queue Length 50th (ft)	205	121	65	62	12	64	366	2	35	259
Queue Length 95th (ft)	#378	#236	106	103	43	84	372	29	52	281
Internal Link Dist (ft)		423		428			523			272
Turn Bay Length (ft)	180		115		115	215		215	140	
Base Capacity (vph)	446	501	290	306	366	415	1615	781	230	1356
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.59	0.30	0.27	0.38	0.40	0.67	0.14	0.41	0.63

Intersection Summary

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
























2019 Existing Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	56	191	72	70	118	140	910	95	80	511	207
Future Volume (veh/h)	246	56	191	72	70	118	140	910	95	80	511	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	293	67	227	86	83	140	167	1083	113	95	608	246
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	49	165	192	202	250	450	2137	953	323	1343	543
Arrive On Green	0.13	0.13	0.13	0.10	0.10	0.10	0.06	0.56	0.56	0.05	0.55	0.55
Sat Flow, veh/h	1850	389	1317	1850	1943	1647	1925	3841	1713	1776	2461	995
Grp Volume(v), veh/h	293	0	294	86	83	140	167	1083	113	95	437	417
Grp Sat Flow(s),veh/h/ln	1850	0	1706	1850	1943	1647	1925	1921	1713	1776	1771	1685
Q Serve(g_s), s	15.0	0.0	15.0	5.2	4.8	9.5	4.5	20.9	3.8	2.8	17.9	17.9
Cycle Q Clear(g_c), s	15.0	0.0	15.0	5.2	4.8	9.5	4.5	20.9	3.8	2.8	17.9	17.9
Prop In Lane	1.00		0.77	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	231	0	213	192	202	250	450	2137	953	323	967	920
V/C Ratio(X)	1.27	0.00	1.38	0.45	0.41	0.56	0.37	0.51	0.12	0.29	0.45	0.45
Avail Cap(c_a), veh/h	231	0	213	308	324	353	658	2137	953	386	967	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	52.5	50.5	50.3	47.2	12.0	16.4	12.6	12.5	16.4	16.4
Incr Delay (d2), s/veh	149.7	0.0	197.0	1.6	1.3	2.0	0.5	0.9	0.3	0.5	1.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.4	0.0	17.9	2.5	2.4	3.9	1.8	8.7	1.4	1.0	7.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	202.2	0.0	249.5	52.1	51.7	49.1	12.6	17.3	12.9	13.0	18.0	18.1
LnGrp LOS	F	A	F	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		587			309			1363			949	
Approach Delay, s/veh		225.9			50.6			16.4			17.5	
Approach LOS		F			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	70.5		17.5	10.7	71.8		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax),s	20.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1),s	6.5	19.9		11.5	4.8	22.9		17.0				
Green Ext Time (p_c), s	0.6	3.5		1.0	0.1	5.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			58.3									
HCM 6th LOS			E									

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	59	201	76	74	124	147	956	100	84	537	217
Future Volume (vph)	258	59	201	76	74	124	147	956	100	84	537	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	180		0	115		115	215		215	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.884				0.850			0.850		0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1624	0	1745	1837	1561	1762	3524	1577	1728	3307	0
Flt Permitted	0.950			0.950			0.171			0.111		
Satd. Flow (perm)	1745	1624	0	1745	1837	1561	317	3524	1577	202	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		117				109			109		58	
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		503			508			603			352	
Travel Time (s)		7.6			11.5			9.1			5.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	307	70	239	90	88	148	175	1138	119	100	639	258
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	309	0	90	88	148	175	1138	119	100	897	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.73	0.64		0.54	0.50	0.42	0.58	0.76	0.16	0.49	0.66	
Control Delay	55.6	34.2		62.5	60.2	11.1	21.4	33.0	4.8	21.9	29.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	55.6	34.2		62.5	60.2	11.1	21.4	33.0	4.8	21.9	29.7	
Stops (vph)	200	140		71	67	33	71	782	13	41	557	
Fuel Used(gal)	6	4		2	2	1	2	20	1	1	13	
CO Emissions (g/hr)	437	308		116	110	67	147	1390	45	75	922	
NOx Emissions (g/hr)	85	60		23	21	13	29	270	9	15	179	
VOC Emissions (g/hr)	101	71		27	25	15	34	322	11	17	214	
Dilemma Vehicles (#)	0	10		0	0	0	0	40	0	0	31	
Queue Length 50th (ft)	223	136		67	66	16	65	382	4	36	270	
Queue Length 95th (ft)	#409	#265		109	107	48	88	398	31	54	303	
Internal Link Dist (ft)		423			428			523			272	
Turn Bay Length (ft)	180			115		115	215		215	140		
Base Capacity (vph)	420	480		290	306	370	411	1617	782	224	1376	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.73	0.64		0.31	0.29	0.40	0.43	0.70	0.15	0.45	0.65	

Intersection Summary
 Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	307	309	90	88	148	175	1138	119	100	897
v/c Ratio	0.73	0.64	0.54	0.50	0.42	0.58	0.76	0.16	0.49	0.66
Control Delay	55.6	34.2	62.5	60.2	11.1	21.4	33.0	4.8	21.9	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	34.2	62.5	60.2	11.1	21.4	33.0	4.8	21.9	29.7
Queue Length 50th (ft)	223	136	67	66	16	65	382	4	36	270
Queue Length 95th (ft)	#409	#265	109	107	48	88	398	31	54	303
Internal Link Dist (ft)		423		428			523			272
Turn Bay Length (ft)	180		115		115	215		215	140	
Base Capacity (vph)	420	480	290	306	370	411	1617	782	224	1376
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.64	0.31	0.29	0.40	0.43	0.70	0.15	0.45	0.65

Intersection Summary

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

2024 No-Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	59	201	76	74	124	147	956	100	84	537	217
Future Volume (veh/h)	258	59	201	76	74	124	147	956	100	84	537	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	307	70	239	90	88	148	175	1138	119	100	639	258
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	48	165	201	211	258	431	2118	945	305	1326	535
Arrive On Green	0.13	0.13	0.13	0.11	0.11	0.11	0.06	0.55	0.55	0.05	0.54	0.54
Sat Flow, veh/h	1850	386	1319	1850	1943	1647	1925	3841	1713	1776	2463	994
Grp Volume(v), veh/h	307	0	309	90	88	148	175	1138	119	100	459	438
Grp Sat Flow(s),veh/h/ln	1850	0	1705	1850	1943	1647	1925	1921	1713	1776	1771	1685
Q Serve(g_s), s	15.0	0.0	15.0	5.5	5.1	10.0	4.8	22.7	4.0	3.0	19.4	19.4
Cycle Q Clear(g_c), s	15.0	0.0	15.0	5.5	5.1	10.0	4.8	22.7	4.0	3.0	19.4	19.4
Prop In Lane	1.00		0.77	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	231	0	213	201	211	258	431	2118	945	305	953	907
V/C Ratio(X)	1.33	0.00	1.45	0.45	0.42	0.57	0.41	0.54	0.13	0.33	0.48	0.48
Avail Cap(c_a), veh/h	231	0	213	308	324	354	633	2118	945	368	953	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	52.5	50.1	49.9	46.9	12.7	17.2	13.0	13.3	17.3	17.3
Incr Delay (d2), s/veh	174.0	0.0	226.6	1.6	1.3	2.0	0.6	1.0	0.3	0.6	1.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.9	0.0	19.6	2.6	2.5	4.1	2.0	9.5	1.5	1.1	7.8	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	226.5	0.0	279.1	51.7	51.2	48.9	13.3	18.1	13.2	13.9	19.0	19.1
LnGrp LOS	F	A	F	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		616			326			1432			997	
Approach Delay, s/veh		252.9			50.3			17.1			18.5	
Approach LOS		F			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	69.6		18.0	10.8	71.2		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	40.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1), s	6.8	21.4		12.0	5.0	24.7		17.0				
Green Ext Time (p_c), s	0.6	3.7		1.0	0.1	5.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			63.8									
HCM 6th LOS			E									

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	59	207	76	74	124	147	956	100	84	561	217
Future Volume (vph)	258	59	207	76	74	124	147	956	100	84	561	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	0		0	115		115	0		0	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.883				0.850			0.850		0.958	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1622	0	1745	1837	1561	1762	3524	1577	1728	3310	0
Fl _t Permitted	0.950			0.950			0.158			0.110		
Satd. Flow (perm)	1745	1622	0	1745	1837	1561	293	3524	1577	200	3310	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		120				109			119		54	
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		181			508			208			352	
Travel Time (s)		2.7			11.5			3.2			5.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	307	70	246	90	88	148	175	1138	119	100	668	258
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	316	0	90	88	148	175	1138	119	100	926	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	20.0	20.0		25.0	25.0	15.0	25.0	60.0	60.0	15.0	50.0	
Total Split (%)	16.7%	16.7%		20.8%	20.8%	12.5%	20.8%	50.0%	50.0%	12.5%	41.7%	
Maximum Green (s)	15.0	15.0		20.0	20.0	10.0	20.0	55.0	55.0	10.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag							Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.73	0.65		0.54	0.50	0.42	0.60	0.77	0.16	0.49	0.69	
Control Delay	55.1	34.4		62.5	60.2	11.1	22.3	33.2	3.8	22.5	30.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	55.1	34.4		62.5	60.2	11.1	22.3	33.2	3.8	22.5	30.8	
Queue Length 50th (ft)	223	140		67	66	16	65	383	0	36	285	
Queue Length 95th (ft)	#409	#274		109	107	48	88	398	27	54	321	
Internal Link Dist (ft)		101			428			128			272	
Turn Bay Length (ft)				115		115				140		
Base Capacity (vph)	423	484		290	306	370	401	1617	788	223	1367	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.73	0.65		0.31	0.29	0.40	0.44	0.70	0.15	0.45	0.68	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER




























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	307	316	90	88	148	175	1138	119	100	926
v/c Ratio	0.73	0.65	0.54	0.50	0.42	0.60	0.77	0.16	0.49	0.69
Control Delay	55.1	34.4	62.5	60.2	11.1	22.3	33.2	3.8	22.5	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	34.4	62.5	60.2	11.1	22.3	33.2	3.8	22.5	30.8
Queue Length 50th (ft)	223	140	67	66	16	65	383	0	36	285
Queue Length 95th (ft)	#409	#274	109	107	48	88	398	27	54	321
Internal Link Dist (ft)		101		428			128			272
Turn Bay Length (ft)			115		115				140	
Base Capacity (vph)	423	484	290	306	370	401	1617	788	223	1367
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.65	0.31	0.29	0.40	0.44	0.70	0.15	0.45	0.68

Intersection Summary

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

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

Weekday Peak PM Hour
 01/21/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	59	207	76	74	124	147	956	100	84	561	217
Future Volume (veh/h)	258	59	207	76	74	124	147	956	100	84	561	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	307	70	246	90	88	148	175	1138	119	100	668	258
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	231	47	166	201	211	258	419	2118	945	305	1344	519
Arrive On Green	0.13	0.13	0.13	0.11	0.11	0.11	0.06	0.55	0.55	0.05	0.54	0.54
Sat Flow, veh/h	1850	378	1327	1850	1943	1647	1925	3841	1713	1776	2497	964
Grp Volume(v), veh/h	307	0	316	90	88	148	175	1138	119	100	474	452
Grp Sat Flow(s),veh/h/ln	1850	0	1704	1850	1943	1647	1925	1921	1713	1776	1771	1691
Q Serve(g_s), s	15.0	0.0	15.0	5.5	5.1	10.0	4.8	22.7	4.0	3.0	20.2	20.2
Cycle Q Clear(g_c), s	15.0	0.0	15.0	5.5	5.1	10.0	4.8	22.7	4.0	3.0	20.2	20.2
Prop In Lane	1.00		0.78	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	231	0	213	201	211	258	419	2118	945	305	953	910
V/C Ratio(X)	1.33	0.00	1.48	0.45	0.42	0.57	0.42	0.54	0.13	0.33	0.50	0.50
Avail Cap(c_a), veh/h	231	0	213	308	324	354	622	2118	945	368	953	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	52.5	50.1	49.9	46.9	12.9	17.2	13.0	13.3	17.5	17.5
Incr Delay (d2), s/veh	174.0	0.0	241.0	1.6	1.3	2.0	0.7	1.0	0.3	0.6	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.9	0.0	20.5	2.6	2.5	4.1	2.0	9.5	1.5	1.1	8.1	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	226.5	0.0	293.5	51.7	51.2	48.9	13.6	18.1	13.2	13.9	19.3	19.4
LnGrp LOS	F	A	F	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		623			326			1432			1026	
Approach Delay, s/veh		260.5			50.3			17.2			18.8	
Approach LOS		F			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	69.6		18.0	10.8	71.2		20.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	40.0	45.0		20.0	10.0	55.0		15.0				
Max Q Clear Time (g_c+I1), s	6.8	22.2		12.0	5.0	24.7		17.0				
Green Ext Time (p_c), s	0.6	3.8		1.0	0.1	5.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			65.3									
HCM 6th LOS			E									



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↓	
Traffic Volume (vph)	0	52	0	1202	792	52
Future Volume (vph)	0	52	0	1202	792	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			-5%	5%	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.95
Fr _t		0.865			0.991	
Fl _t Protected						
Satd. Flow (prot)	0	1565	0	5064	3322	0
Fl _t Permitted						
Satd. Flow (perm)	0	1565	0	5064	3322	0
Link Speed (mph)	30			45	30	
Link Distance (ft)	91			73	208	
Travel Time (s)	2.1			1.1	4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	62	0	1431	943	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	62	0	1431	1005	0
Enter Blocked Intersection	No	No	Yes	Yes	Yes	Yes
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.97	0.97	1.03	1.03
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Vol, veh/h	0	52	0	1202	792	52
Future Vol, veh/h	0	52	0	1202	792	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	-	0	-	-	-	-
Veh in Median Storage#	-	-	0	0	-	-
Grade, %	0	-	-	-5	5	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	62	0	1431	943	62

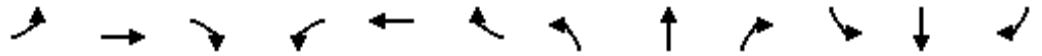
Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 503	-	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	- 7	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	- 3.35	-	-
Pot Cap-1 Maneuver	0 506	0	-
Stage 1	0	- 0	-
Stage 2	0	- 0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	- 506	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NB	EBLn1	SBT	SBR
Capacity (veh/h)	-	506	-	-
HCM Lane V/C Ratio	-	0.122	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	59	207	76	74	124	147	956	100	84	561	217
Future Volume (vph)	258	59	207	76	74	124	147	956	100	84	561	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-3%			-3%			-5%			-1%	
Storage Length (ft)	0		0	115		115	0		0	140		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.883				0.850			0.850		0.958	
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1745	1622	0	1745	1837	1561	1762	3524	1577	1728	3310	0
Fl _t Permitted	0.950			0.950			0.162			0.128		
Satd. Flow (perm)	1745	1622	0	1745	1837	1561	300	3524	1577	233	3310	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		133				109			109			48
Link Speed (mph)		45			30			45			45	
Link Distance (ft)		181			508			208			352	
Travel Time (s)		2.7			11.5			3.2			5.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	307	70	246	90	88	148	175	1138	119	100	668	258
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	316	0	90	88	148	175	1138	119	100	926	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2	2	2	1	0	2	1	
Detector Template												
Leading Detector (ft)	83	83		83	83	83	83	48	0	83	48	
Trailing Detector (ft)	-5	-5		-5	-5	-5	-5	42	0	-5	42	
Detector 1 Position(ft)	-5	-5		-5	-5	-5	-5	42	-5	-5	42	
Detector 1 Size(ft)	40	40		40	40	40	40	6	40	40	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	43	43		43	43	43	43			43		
Detector 2 Size(ft)	40	40		40	40	40	40			40		
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			0.0		
Turn Type	Split	NA		Split	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	

2024 Build Traffic Volumes
 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER

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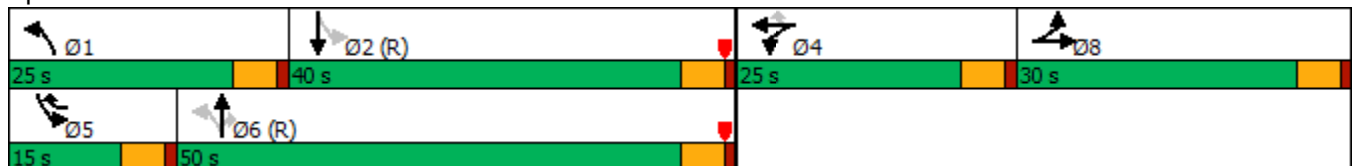


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4	5	1	6		5	2	
Permitted Phases						4	6		6	2		
Detector Phase	8	8		4	4	5	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0	6.0	15.0	
Minimum Split (s)	11.0	11.0		21.0	21.0	11.0	11.0	21.0	21.0	11.0	21.0	
Total Split (s)	30.0	30.0		25.0	25.0	15.0	25.0	50.0	50.0	15.0	40.0	
Total Split (%)	25.0%	25.0%		20.8%	20.8%	12.5%	20.8%	41.7%	41.7%	12.5%	33.3%	
Maximum Green (s)	25.0	25.0		20.0	20.0	10.0	20.0	45.0	45.0	10.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag						Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	None		None	None	None	None	C-Min	C-Min	None	C-Min	
v/c Ratio	0.80	0.69		0.54	0.50	0.42	0.55	0.73	0.16	0.45	0.67	
Control Delay	60.5	32.2		62.5	60.2	10.5	21.3	32.4	6.1	22.4	32.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.5	32.2		62.5	60.2	10.5	21.3	32.4	6.1	22.4	32.3	
Queue Length 50th (ft)	222	129		67	66	15	66	384	4	36	293	
Queue Length 95th (ft)	298	202		109	107	40	108	465	37	66	391	
Internal Link Dist (ft)		101			428			128			272	
Turn Bay Length (ft)				115		115				140		
Base Capacity (vph)	401	475		290	306	371	411	1569	762	241	1389	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.77	0.67		0.31	0.29	0.40	0.43	0.73	0.16	0.41	0.67	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 118 (98%), Referenced to phase 2:SBTL and 6:NBTL, Start of Red
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 1: U.S. ROUTE 22 & NYS ROUTE 312/SHOPPING CENTER



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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	307	316	90	88	148	175	1138	119	100	926
v/c Ratio	0.80	0.69	0.54	0.50	0.42	0.55	0.73	0.16	0.45	0.67
Control Delay	60.5	32.2	62.5	60.2	10.5	21.3	32.4	6.1	22.4	32.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	32.2	62.5	60.2	10.5	21.3	32.4	6.1	22.4	32.3
Queue Length 50th (ft)	222	129	67	66	15	66	384	4	36	293
Queue Length 95th (ft)	298	202	109	107	40	108	465	37	66	391
Internal Link Dist (ft)		101		428			128			272
Turn Bay Length (ft)			115		115				140	
Base Capacity (vph)	401	475	290	306	371	411	1569	762	241	1389
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.67	0.31	0.29	0.40	0.43	0.73	0.16	0.41	0.67
Intersection Summary										

2024 Build Traffic Volumes
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	59	207	76	74	124	147	956	100	84	561	217
Future Volume (veh/h)	258	59	207	76	74	124	147	956	100	84	561	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1943	1943	1943	1943	1943	1943	2022	2022	2022	1864	1864	1864
Adj Flow Rate, veh/h	307	70	246	90	88	148	175	1138	119	100	668	258
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	374	76	268	201	211	258	359	1823	813	257	1134	438
Arrive On Green	0.20	0.20	0.20	0.11	0.11	0.11	0.07	0.47	0.47	0.05	0.45	0.45
Sat Flow, veh/h	1850	378	1327	1850	1943	1647	1925	3841	1713	1776	2497	964
Grp Volume(v), veh/h	307	0	316	90	88	148	175	1138	119	100	474	452
Grp Sat Flow(s),veh/h/ln	1850	0	1704	1850	1943	1647	1925	1921	1713	1776	1771	1691
Q Serve(g_s), s	19.0	0.0	21.8	5.5	5.1	10.0	5.7	26.5	4.7	3.6	23.9	23.9
Cycle Q Clear(g_c), s	19.0	0.0	21.8	5.5	5.1	10.0	5.7	26.5	4.7	3.6	23.9	23.9
Prop In Lane	1.00		0.78	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	374	0	344	201	211	258	359	1823	813	257	804	767
V/C Ratio(X)	0.82	0.00	0.92	0.45	0.42	0.57	0.49	0.62	0.15	0.39	0.59	0.59
Avail Cap(c_a), veh/h	386	0	355	308	324	354	547	1823	813	319	804	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	0.0	46.9	50.1	49.9	46.9	18.3	23.5	17.8	18.9	24.4	24.4
Incr Delay (d2), s/veh	13.0	0.0	27.7	1.6	1.3	2.0	1.0	1.6	0.4	1.0	3.2	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	11.6	2.6	2.5	4.1	2.5	11.7	1.9	1.4	10.2	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	0.0	74.6	51.7	51.2	48.9	19.3	25.2	18.2	19.8	27.6	27.7
LnGrp LOS	E	A	E	D	D	D	B	C	B	B	C	C
Approach Vol, veh/h		623			326			1432			1026	
Approach Delay, s/veh		66.8			50.3			23.9			26.9	
Approach LOS		E			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	59.5		18.0	10.8	61.9		29.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	20.0	35.0		20.0	10.0	45.0		25.0				
Max Q Clear Time (g_c+l1), s	7.7	25.9		12.0	5.6	28.5		23.8				
Green Ext Time (p_c), s	0.6	2.7		1.0	0.1	4.6		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			35.2									
HCM 6th LOS			D									



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↓	
Traffic Volume (vph)	0	52	0	1202	792	52
Future Volume (vph)	0	52	0	1202	792	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			-5%	5%	
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.95
Fr _t		0.865			0.991	
Fl _t Protected						
Satd. Flow (prot)	0	1565	0	5064	3322	0
Fl _t Permitted						
Satd. Flow (perm)	0	1565	0	5064	3322	0
Link Speed (mph)	30			45	30	
Link Distance (ft)	91			73	208	
Travel Time (s)	2.1			1.1	4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	62	0	1431	943	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	62	0	1431	1005	0
Enter Blocked Intersection	No	No	Yes	Yes	Yes	Yes
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	0.97	0.97	1.03	1.03
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑↑	↑↑	
Traffic Vol, veh/h	0	52	0	1202	792	52
Future Vol, veh/h	0	52	0	1202	792	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- None		- None		- None	
Storage Length	-	0	-	-	-	-
Veh in Median Storage#	-	-	0	0	-	-
Grade, %	0	-	-	-5	5	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	62	0	1431	943	62

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 503	-	0 - 0
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	- 7	-	- - -
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	- 3.35	-	- - -
Pot Cap-1 Maneuver	0 506	0	- - -
Stage 1	0 -	0	- - -
Stage 2	0 -	0	- - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	- 506	-	- - -
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NB	EBLn1	SBT	SBR
Capacity (veh/h)	-	506	-	-
HCM Lane V/C Ratio	-	0.122	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-