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F: 914.347.7266  
www.maserconsulting.com

January 22, 2021

**VIA EMAIL**

Mr. Chris Brand, Chairman  
Town of Marlborough Planning Board  
Town Hall  
21 Milton Turnpike  
Milton, NY 12547

Re: Proposed Dollar General  
Town of Marlborough, Ulster County, New York  
MC Project No. 20006148A

Dear Chairman Brand and Members of the Planning Board:

Based on comment received from Mr. James Garofalo, AICP, CTP (Planning Board Member), we are enclosing the following additional information relative to the Dollar General application. The information enclosed includes the following:

1. Copies of the traffic count data from December 8, 2020 collected at the intersection of U.S. Route 9W and Mahoney Road south of the Dollar General site.
2. Copies of New York State Department of Transportation (NYSDOT) historical data for the U.S. Route 9W corridor.
3. The December 8, 2020 traffic counts were adjusted to reflect the historical flows along the U.S. Route 9W corridor, which were higher than during the count collected during COVID-19 pandemic conditions.
4. The traffic study includes a background growth of 1% per year plus traffic included from other major developments including the Hudson Valley Wine Village, which is proposed in the Town of Lloyd north of this area. Copies of the site generated traffic for that development are attached.
5. Page 2, Item 4 of the traffic report references a 25% pass-by anticipated with respect to the generation of this site and that not all trips would be new trips to the roadway network. However, note that no credit for this was applied in the analysis to be conservative.



6. The peak site trip generation for Saturday is expected to be similar to the PM peak volumes. However, the PM Peak Hour was the critical time period in terms of total traffic volumes in the corridor.
7. The traffic analysis (Table 2 of December 2020 Report) indicates a Level of Service “D” for left turns exiting the site driveway. Note that the Level of Service and average vehicle delay of 34.5 seconds shown in Table No. 2 of the study is approaching the border of a Level of Service “E” (see attached excerpt from the report summarizing the Level of Service criteria for unsignalized intersections). Also note that a Level of Service “E” at a driveway on a corridor such as U.S. Route 9W due to the heavy through traffic volumes, is not unusual during peak periods.
8. As part of the preparation of the traffic study, the U.S. Route 9W management plan was reviewed as noted on Item 11 of our December report. The link to that master plan is as follows:  
[https://www.townofmarlboroughny.org/DocumentCenter/View/2139/AppendixF\\_AccessManagementPlan](https://www.townofmarlboroughny.org/DocumentCenter/View/2139/AppendixF_AccessManagementPlan)

This section of U.S. Route 9W was not identified as high accident location.

We trust the enclosed information will be helpful to the Board as part of their review and if you have any questions, please do not hesitate to contact us.

Very truly yours,

MASER CONSULTING CONNECTICUT, P.C.

  
Philip J. Greal, Ph.D., P.E.  
Principal/Department Manager

PJG/ces  
Enclosures  
cc: K. Fioretti

LOCATION: U.S. ROUTE 9W & MAHONEY ROAD PROJECT: DOLLAR GENERAL  
 DATE OF COUNT: 12/08/20 DAY: TUESDAY JCE JOB #: 20006148A START TIME: 15:30 **PM**

**ENTER 15-MINUTE COUNT VOLUMES BY MOVEMENT**

PM PEAK HOUR	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			total		
	1	2	3	4	5	6	7	8	9	10	11	12			
03:30 PM 03:45 PM	0	0	2	0	1	2	1	167	1	2	154	1	331	A	
03:45 PM 04:00 PM	1	0	0	1	0	2	0	146	1	1	164	2	318	A	
04:00 PM 04:15 PM	0	0	2	3	0	2	0	173	2	0	181	0	363	A	
04:15 PM 04:30 PM	0	0	0	2	0	2	0	170	1	1	222	0	398	X	1410
04:30 PM 04:45 PM	1	0	0	2	0	0	0	144	0	0	155	3	305	X	1384
04:45 PM 05:00 PM	1	0	1	2	1	0	3	135	1	2	198	0	344	X	1410
05:00 PM 05:15 PM	0	0	1	1	0	1	2	180	1	2	192	5	385	X	1432
05:15 PM 05:30 PM	0	0	0	2	0	3	0	138	0	0	229	2	374	A	1408
05:30 PM 05:45 PM	1	1	0	0	0	0	3	124	1	2	164	0	296	A	1399
05:45 PM 06:00 PM	1	1	1	1	0	1	1	112	0	0	148	0	266	A	1321
06:00 PM 06:15 PM	0	0	0	0	0	0	1	123	0	1	117	0	242	A	1178
06:15 PM 06:30 PM	0	0	0	1	0	0	2	76	2	2	100	1	184	A	988
06:30 PM 06:45 PM													0	A	692
06:45 PM 07:00 PM													0	A	426
07:00 PM 07:15 PM													0	A	184
07:15 PM 07:30 PM													0	A	0

**CALCULATED PEAK 15-MINUTE VOLUMES**

03:30 PM 03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM 04:30 PM	0	0	0	2	0	2	0	170	1	1	222	0	398		
04:30 PM 04:45 PM	1	0	0	2	0	0	0	144	0	0	155	3	305		
04:45 PM 05:00 PM	1	0	1	2	1	0	3	135	1	2	198	0	344		
05:00 PM 05:15 PM	0	0	1	1	0	1	2	180	1	2	192	5	385		
05:15 PM 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**CALCULATED PEAK HOUR VOLUMES**

PM PEAK HOUR	1	2	3	4	5	6	7	8	9	10	11	12	total	PHF
04:15 PM 05:15 PM	2	0	2	7	1	3	5	629	3	5	767	8	1432	0.899497
PHF BY MOVEMENT	0.50	#DIV/0!	0.50	0.88	0.25	0.38	0.42	0.87	0.75	0.63	0.86	0.40		
PHF BY APPROACH	0.50			0.69			0.87			0.87				

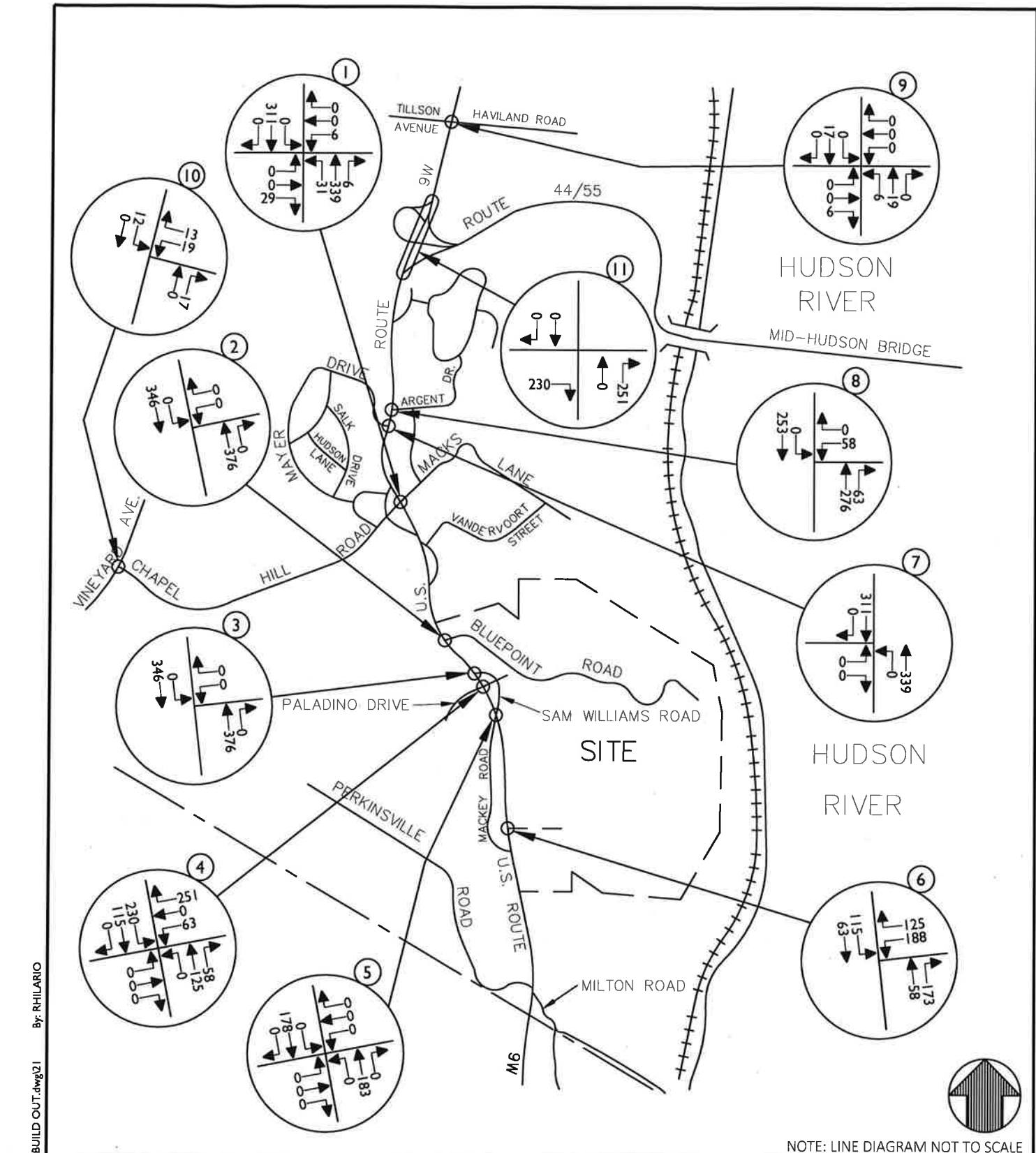
8	767	5	^	6	3
12	11	10	<	5	1
<	v	>	v	4	7
2	1	^	<	^	>
0	2	>	7	8	9
2	3	v	5	629	3

**NYS DOT**

COUNT_ID	860040_10032017	COUNT_ID	860040_10032017	COUNT_ID	860040_10032017
REGION	8	REGION	8	REGION	8
REGION_CODE	8	REGION_CODE	8	REGION_CODE	8
COUNTY_CODE	6	COUNTY_CODE	6	COUNTY_CODE	6
STATION	40	STATION	40	STATION	40
RCSTA	860040	RCSTA	860040	RCSTA	860040
FUNCTIONAL_CLASSES	14	FUNCTIONAL_CLASSES	14	FUNCTIONAL_CLASSES	14
FACTOR_GROUP	30	FACTOR_GROUP	30	FACTOR_GROUP	30
LATITUDE	41.6924	LATITUDE	41.6924	LATITUDE	41.6924
LONGITUDE	-73.9656	LONGITUDE	-73.9656	LONGITUDE	-73.9656
SPECIFIC_RECORD	365' S OF MARIE RD	SPECIFIC_RECORD	365' S OF MARIE RD	SPECIFIC_RECORD	365' S OF MARIE RD
ER_PLACEMENT	RD	ER_PLACEMENT	RD	ER_PLACEMENT	RD
CHANNEL_NOTES	NB Travel Lane	CHANNEL_NOTES	SB Travel Lane	CHANNEL_NOTES	
DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics
VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1
YEAR	2017	YEAR	2017	YEAR	2017
MONTH	10	MONTH	10	MONTH	10
DAY_OF_FIRST_DATE	3	DAY_OF_FIRST_DATE	3	DAY_OF_FIRST_DATE	3
FEDERAL_DIRECTION	Northbound	FEDERAL_DIRECTION	Southbound	FEDERAL_DIRECTION	Combined Total
FULL_COUNT		FULL_COUNT		FULL_COUNT	
AVG_WKDAY_INTE		AVG_WKDAY_INTE		AVG_WKDAY_INTE	
RVAL_1	50	RVAL_1	50	RVAL_1	100
RVAL_2	40	RVAL_2	35	RVAL_2	75
RVAL_3	29	RVAL_3	34	RVAL_3	63
RVAL_4	34	RVAL_4	36	RVAL_4	70
RVAL_5	62	RVAL_5	66	RVAL_5	128
RVAL_6	179	RVAL_6	220	RVAL_6	399
RVAL_7	538	RVAL_7	444	RVAL_7	982
RVAL_8	911	RVAL_8	564	RVAL_8	1475
RVAL_9	782	RVAL_9	545	RVAL_9	1327
RVAL_10	596	RVAL_10	454	RVAL_10	1050
RVAL_11	544	RVAL_11	468	RVAL_11	1012
RVAL_12	535	RVAL_12	478	RVAL_12	1013
RVAL_13	543	RVAL_13	546	RVAL_13	1089
RVAL_14	548	RVAL_14	551	RVAL_14	1099
RVAL_15	566	RVAL_15	607	RVAL_15	1173
RVAL_16	696	RVAL_16	804	RVAL_16	1500
RVAL_17	728	RVAL_17	878	RVAL_17	1606
RVAL_18	720	RVAL_18	954	RVAL_18	1674
RVAL_19	572	RVAL_19	652	RVAL_19	1224
RVAL_20	384	RVAL_20	456	RVAL_20	840
RVAL_21	272	RVAL_21	332	RVAL_21	604
RVAL_22	215	RVAL_22	279	RVAL_22	494
RVAL_23	182	RVAL_23	192	RVAL_23	374
RVAL_24	95	RVAL_24	107	RVAL_24	202
AVG_WKDAY_DAILY_TRAFFIC	9821	AVG_WKDAY_DAILY_TRAFFIC	9752	AVG_WKDAY_DAILY_TRAFFIC	19573
SEASONAL_FACTOR	1.078	SEASONAL_FACTOR	1.078	SEASONAL_FACTOR	1.078
AXLE_FACTOR	1	AXLE_FACTOR	1	AXLE_FACTOR	1
AADT	9110	AADT	9046	AADT	18156
HIGH_HOUR_VALUE	911	HIGH_HOUR_VALUE	954	HIGH_HOUR_VALUE	1674
HIGH_HOUR_INTE	8	HIGH_HOUR_INTE	18	HIGH_HOUR_INTE	18
K_FACTOR		K_FACTOR		K_FACTOR	9
D_FACTOR		D_FACTOR		D_FACTOR	57
FLAG_FIELD		FLAG_FIELD		FLAG_FIELD	
BATCH_ID	256635	BATCH_ID	256635	BATCH_ID	256635

**2017**  
**U.S. ROUTE 9W**  
**365' S OF MARIE ROAD**

Station	County	Order	End Mile Point	Section Length	Road Name	Beginning Description	End Description	2019 Estimate			Previous Counts							
								AAADT	% Trucks	YEAR	AAADT	YEAR	AAADT	YEAR	AAADT	YEAR	AAADT	
83_0660	14	02	1673	0092	ROBINSON AVE	RT 94	START 9W/32 OLAP BROADWAY	10843	6.5	2017	10922	2011	10374	2007	10535	2004	11517	
83_0239	14	02	1793	0120	ROBINSON AVE	START 9W/32 OLAP BROADWAY	NEWBURGH CL / NEWBURGH TL	11552	7.9	2016	11678	2013	11453	2007	12034	2004	13455	
83_0037	14	02	1802	0009		NEWBURGH CL / NEWBURGH TL	ACC RTS 84I & 52	45358	4.7	2014	46189	2011	36396	2006	28083	2001	30263	
83_0039	14	02	1808	0006		ACC RTS 84I & 52	END 9W/32 OLAP	43152	4.7	2017	43465	2009	39564	2003	35471	2000	32745	
83_0662	14	02	2018	0210		END 9W/32 OLAP	LESLIE RD	15545	6.7	2018	15601	2014	22684	2011	18817	2008	23017	
83_0124	14	02	2328	0310		LESLIE RD	Orange/Ulster Co Line	19169	8.4	2018	19238	2015	19515	2009	17984	2006	18460	
Route US9W		County 111 Ulster			Region 08													
86_0036	14	03	0532	0532		Orange/Ulster Co Line	MILTON TURNPIKE	15994	7.9	2018	16052	2014	20711	2011	16423	2007	17944	
86_0040	14	03	0790	0258	US 9W	MILTON TURNPIKE	MACKS LA	18025	5.5	2017	18156	2011	15922	2008	15124	2005	16979	
86_0001	14	03	0885	0095	US 9W	MACKS LA	START 9W/44/55 OLAP	23780	4.7	2010	24576	2007	26955	2004	22992	2001	20312	
86_0276	14	03	0935	0050		START 9W/44/55 OLAP	MILTON AVE	30225	4.7	2017	30444	2010	27971	2007	26957	2004	32108	
86_0111	14	03	1117	0182		MILTON AVE	RT 299	26808	5.4	2017	27002	2011	25884	2008	23804	2005	26744	
86_0018	4	03	1937	0820	US 9W	RT 299	ULSTER AVE	11089	5.1	2018	11114	2015	10717	2012	10704	2009	10330	
86_0002	14	03	2318	0381		ULSTER AVE	OLD RT 9W RT 984D	12293	6.5	2019	12293	2014	13229	2011	12887	2008	11606	
86_0031	14	03	2430	0112		OLD RT 9W RT 984D	DELAWARE AVE	15871	5.6	2017	15986	2011	14989	2008	15198	2003	17636	
86_0032	14	03	2555	0125		DELAWARE AVE	START 9W/32 OLAP	15687	4.1	2017	15801	2012	16696	2009	15704	2006	15223	
86_0034	14	03	2582	0027		START 9W/32 OLAP	E CHESTER/FLATBUSH	13025	4.7	2019	13025	2015	11262	2009	13449	2006	13442	
86_0035	16	03	2720	0138	EAST CHESTER ST	E CHESTER/FLATBUSH	RT 981M ULSTER AVE	12117	4.2	2018	12134	2014	12241	2011	12197	2008	12289	
86_0021	16	03	2735	0015		RT 981M ULSTER AVE	BOICES LN	24116	4.5	2010	24426	2007	32623	2003	27359	2000	25214	
86_0666	14	03	2796	0061	ULSTER AVE US 9	BOICES LN	FRANK SOTTILE BLVD	24805	2.6	2019	24805	2016	26305	2010	22967	2007	34053	
86_0057	16	03	2856	0060	US 9W	FRANK SOTTILE BLVD	GRANT AVE	22575	3.5	2017	22639	2011	38970					
86_0022	16	03	2926	0070		GRANT AVE	CR 31 LEGGS MILL RD	16579	4.1	2018	16602	2014	15375	2008	16482	2003	21334	
86_0667	16	03	3271	0345	ULSTER AVE US 9	CR 31 LEGGS MILL RD	CR 32/GLASCO TPKE	12291	3.3	2015	12361	2011	12942	2008	11367	2005	13902	
86_0668	16	03	3391	0120		CR 32/GLASCO TPKE	START US 9W/NY 32 OLAP / RIO	10183	3.6	2018	10197	2014	9839	2011	10178	2008	10050	
86_0109	16	03	3610	0219	US 9W/NY 32	START US 9W/NY 32 OLAP / RIO	END US 9W/NY 32 OLAP/JOHN ST	12436	2.5	2018	12454	2014	13762	2011	14112	2008	14071	
86_0037	16	03	3721	0111		END US 9W/NY 32 OLAP/JOHN ST	CR 34 MALDEN TURNPIKE	3153	7.4	2016	3166	2013	3403	2010	3949	2007	4187	
86_0038	16	03	4038	0317		CR 34 MALDEN TURNPIKE	Ulster/Greene Co Line	2669	6.5	2017	2677	2012	2854	2009	2779	2006	3098	
Route US9W		County 039 Greene			Region 01													
13_0030	6	04	0609	0609		Ulster/Greene Co Line	RT 23A JCT LEFT CATSKILL	2406	11.9	2016	2390	2010	2429	2007	2834	2004	3269	
13_0015	16	04	0664	0055		RT 23A JCT LEFT CATSKILL	NY 385	11886	6.3	2017	11929	2008	13810	2006	15491			
13_0036	16	04	0791	0127		NY 385	RT 910P JCT RIGHT	13690	6	2016	13764	2010	11581	2007	12017	2004	12855	



NOTE: LINE DIAGRAM NOT TO SCALE



00992A\FIGURE200417RH\_FIGURE-FULL BUILD OUT.dwg21 By: RHILARIO



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#### TRAFFIC IMPACT STUDY

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	4/17/20	R.H.	P.J.G.
PROJECT NUMBER: 20000992A		DRAWING NAME: 200417RH_FIGURE-FULL BUILD OUT	
SHEET TITLE: FUTURE CONTEMPLATED PHASES SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR			
SHEET NUMBER:			21



**WESTCHESTER OFFICE**  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

**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 20-2 from the *Highway Capacity Manual, 6<sup>th</sup> 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

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 20-2 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.

**TABLE NO. 2**  
**LEVEL OF SERVICE SUMMARY TABLE**

				2020 BUILD		
				V/C	LOS	DELAY
1	U.S. ROUTE 9W & SITE ACCESS DRIVEWAY		<b>UNSIGNALIZED</b>			
			WB      LR	0.22	D	34.5
			SB      LT	0.02	A	9.3

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.