

**TIM
MILLER
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October 9, 2015

Ms. Ingrid M. Richards, Chair
Town of Ossining Planning Board
101 Route 9A
P.O. Box 1166
Ossining, NY 10562

RE: Transportation Study for a Multi-Family Development
Project: Parth Knolls, LLC
Location: 87 Hawkes Avenue,
Ossining, NY 10562
Section: 80.20, Block 1, Lot 15

Dear Chair and Board Members:

This letter reviews the basic transportation situation as maybe affected by the development of the subject site as 53 apartment dwelling units. It describes below how volumes have declined on NYS Route 9A and how the anticipated trip generation of the proposed project is below the threshold for conducting a capacity analysis.

Parking is proposed to meet the zoning requirements. It is suggested that all of the underground parking be assigned to project residents. Two full site access points are currently proposed, which provides appropriate emergency access.

Site Location

The Applicant is proposing to construct 53 rental apartment units at Hawkes Avenue north of NYS Route 9A. Two full points accesses are proposed to Hawkes Avenue. As with the neighboring sites, the project site could function with one full access however a secondary access to Hawkes Avenue even if used for emergencies only is recommended.

Capacity Analysis Threshold

The New York State Department of Environmental Conservation (NYS DEC) guidelines suggest use of a threshold of 100 peak hour trips increase in traffic (above No Build Conditions) to be substantial enough to warrant full evaluation of traffic impacts (a capacity analysis) for uncongested locations¹. The purpose of this threshold is to avoid unnecessary traffic impact studies where the traffic models are not going to show substantial changes in traffic operations.

¹ The NYS DEC workbook guidelines revised the environmental assessment forms, effective October 7th of 2013 (NYS DEC, SEQR Full Environmental Assessment Forms workbook threshold Question 13).

Trip generation rates for the proposed apartments are shown in Table 1. Trip generation for the 53 apartments peaks at 46 trips (See Table 2). For the proposed project, the estimated traffic generated will be slightly less than 50 percent of the threshold for a capacity study.

Table 1 Trip Generation Rates							
Land Use {ITE Code}	Trip Rates *						
	Weekday				Weekend		Weekday
	A.M. Peak Hour		P.M. Peak Hour		Saturday Peak Hour		Daily
	In	Out	In	Out	In	Out	Total
Apartments 53 dwelling Units {220}	0.112	0.448	0.574	0.309	0.386	0.386	8.391
* Hourly Trip Generation Rates from Institute of Transportation Engineers Trip Generation 9th edition, 2012.							
Saturday distribution estimated at 50% in and 50% out.							

Table 2 Site Trip Generation										
Land Use {ITE Code}	Trip Generated *									
	Weekday						Weekend			Weekday
	A.M. Peak Hour			P.M. Peak Hour			Saturday Peak Hour			Daily
	In	Out	Total	In	Out	Total	In	Out	Total	Total
Apartments 53 dwelling Units {220}	6	24	30	30	16	46	20	20	40	445
* See Table 1 for trip generation rates.										

Area Improvements

Although the Route 9A corridor sees a heavy traffic, no major improvements are being considered by the State at this time. No major improvements are programmed in the Transportation Improvement Program through 2018 (New York Metropolitan Transportation Council, http://www.nymtc.org/files/TIP_listing_oct2015/MHS_Oct15.pdf, October 2, 2015). Also the NYMTC's 2014-2040 Regional Transportation Plan, entitled *A Shared Vision for a Sustainable Region*, adopted on September 4, 2013 shows no major improvements on this section of the Route 9A corridor.

Improvements in the US Route 9 Community Emphasis Corridor identified in the Regional Transportation Plan paralleling NYS Route 9A may provide some relief to NYS Route 9A in this area.

Area Traffic Growth

Table 3 shows the Route 9A traffic has been declining since about 2003. Even if all the daily site generated trips were destined for NYS Route 9A and distributed in one direction on NYS Route 9A they would comprise less than ten percent of the decline in traffic that has occurred.

Table 3 Average Annual Daily Traffic	
Year	Route 9A Traffic Volumes (Station 87_ 0624)
2003	39870
2007	35710
2011 ²	34034
2014	33903*
* New York State Department of Transportation (NYS DOT) forecast. Source: New York State Department of Transportation (NYS DOT) Historical Average Annual Daily Traffic https://www.dot.ny.gov/highway-data-services	
² See Attachment A for 2011 traffic volumes.	

Construction Routing

There are no posted bridges in the immediate area that would cause problems for construction at the Hawkes Avenue site at this time. (NYS DOT, <http://gis3.dot.ny.gov/html5viewer/?viewer=postedbridges>, as viewed October 7, 2015). Prior to construction weight postings on bridges and height restrictions on underpasses need to be reviewed by the site construction manager to properly route construction equipment.

Parking Availability

The proposed 53 apartments have a zoning requirement of 106 spaces. The site has a proposed 108 parking spaces (105 standard spaces and three accessible spaces) meeting the zoning requirement (Site Design Consults, Parking Schedule, Drawing #C-101, September 25 2015).

The Institute of Transportation Engineers' Parking Generation² indicates for low/mid-rise apartments in suburban locations during peak (12 to 5 a.m.) parking demand based on 21 surveys, 0.68 to 1.94 vehicles per dwelling unit with a 95 percent confidence level of peak parking demand of 1.10 to 1.37 vehicles per dwelling unit. This is well within the zoning code. The 1.15 vehicles available average from the US Census Bureau shown in Table 4 for the Town of Ossining fits in the low range of 95 percent confidence level found in Parking Generation for peak parking demand and is also below the Town code for this site of two vehicles per dwelling unit. During the period of peak parking, vehicles on site should be nearly all the renter vehicles and few visitors.

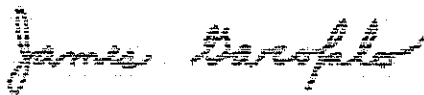
² Institute of Transportation Engineers' Parking Generation, 4th edition, Washington DC, 2010, page 53, and posted errata Nov. 2, 2011.

Table 4 Vehicles Available-Town of Ossining*	
Vehicles Available	Number of Renter Occupied Units
No Vehicle Available	1159
One Vehicle Available	2108
Two Vehicle Available	916
Three Vehicle Available	306
Four Vehicle Available	80
Five or more Vehicles Available **	15
Average 1.15 Vehicles Available **	4584
* Source: US Census Bureau, 2009-2013 5 Year American Community Survey Tenure By Vehicles Table B25044.	
• For Estimate of average number of vehicles, six vehicles was used for available with five or more vehicles	

It is recommended that the underground parking be assigned parking to eliminate the need for visitors or owners to circulate through underground parking facility looking for spaces. Signage should direct visitors to areas of unassigned surface parking.

Please feel to contact me or have Mr. Stolman contact me directly on this matter if there are any questions.

Sincerely,



James A. Garofalo, AICP CTP
Director of Transportation Division
TIM MILLER ASSOCIATES, INC.

C: David H. Stolman, AICP of Frederick P. Clark Associates, Inc.

ATTACHMENT A
Traffic Volumes Route 9A

STATION 70624

New York State Department of Transportation
Traffic Count Hourly Report

F 1 of 2

ROUTE #: NY 9A ROAD NAME: FROM: ACC RT 133 OSSINING TO: RT 134
DIRECTION: Northbound FACTOR GROUP: 30 REC. SERIAL #: 0044
STATE DIR CODE: 1 WK OF YR: 43
DATE OF COUNT: 10/24/2011 @ REF MARKER: 9A87032161
NOTES LANE 0: NB TRAVEL AND PASSING LANES 2 LANES TOTAL NB DDL DATA: JURIS: NYSDOT
COUNT TYPE: AXLE PAIRS CC Sln: 1006190
COUNT TAKEN BY: ORG CODE: TST INITIALS: AJW
PROCESSED BY: ORG CODE: DOT INITIALS: Jh
COUNT TYPE: AXLE PAIRS
BATCH ID: DOT-R08CWMV44BV01 HPMS SAMPLE:

DATE	DAY	AM												PM												DAILY HIGH	DAILY HIGH	DAILY HIGH	TOTAL COUNT	HOUR
		12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
1	S																													
2	S																													
3	M																													
4	T																													
5	W																													
6	T																													
7	F																													
8	S																													
9	S																													
10	M																													
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25	T																													
26	W																													
27	T																													
28	F																													
29	S																													
30	S																													
31	M																													

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)																ADT		ESTIMATED (one way)								
DAYS	Counted	HOURS	Counted	WEEKDAYS		AVERAGE WEEKDAY				Axle Adj.		Seasonal/Weekday		AADT	16857											
				Counted	Hours	High Hour	% of day			Factor	Adjustment Factor															
163	70	48	67	97	188	527	854	797	689	653	755	766	834	1091	1680	1952	1918	1699	1108	713	619	408	307	18003		
5	93	93	5	93	5	93	1952	11%	0.979	1.068																

ROUTE # NY 9A ROAD NAME: FROM: ACC RT 133 OSSINING TO: RT 134
STATION: 870624 STATE DIR CODE: 1
COUNTY: Westchester
DATE OF COUNT: 10/24/2011

STATION: 870624

New York State Department of Transportation
Traffic Count Hourly Report

ROUTE #: NY 9A ROAD NAME: Southbound
DIRECTION: Southbound
STATE DIR CODE: 2
DATE OF COUNT: 10/24/2011
NOTES LANE 0: SB TRAVEL AND PASSING LANES 2 LANES TOTAL SADDL DATA:
COUNT TYPE: AXLE PAIRS
COUNT TAKEN BY: ORG CODE: TST INITIALS: AJW
FROM: ACC RT 133 OSSINING
REC. SERIAL #: 0038
PLACEMENT: 1.12 MI N OF RT 133
@ REF MARKER: 9A87032161
TO: RT 134
FUNC. CLASS: 14
NHS: yes
JURIS: NYSDOT
CC Sin:
BATCH ID: DOT-R08CWMW44bVol HPMS SAMPLE:
COUNTY: Westchester
TOWN: OSSINING
BIN: 1006190
RR CROSSING:

COUNT TAKEN BY: ORG CODE: TST INITIALS: AJW		PROCESSED BY: ORG CODE: DOT INITIALS: jh												TOTAL	
DATE	DAY	1	2	3	4	5	6	7	8	9	10	11	12	1	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
		1	2	3	4	5	6	7	8	9	10	11	12	1	2
		AM												PM	

DATE	DAY	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	DAILY HIGH	DAILY COUNT	HOUR
1	S																											
2	S																											
3	M																											
4	T																											
5	W																											
6	T																											
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29	S																											
30	S																											
31	M																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)																	ADT							
73	33	50	86	235	774	1948	2175	2017	1540	1010	909	845	867	954	960	1004	940	701	482	374	296	241	166	18680
<u>DAYS</u> Counted		<u>HOURS</u> Counted		<u>WEEKDAYS</u> Counted		<u>WEEKDAY</u> Hours		<u>AVERAGE WEEKDAY</u> High Hour		<u>% of day</u>		<u>Axle Adj.</u> Factor		<u>Seasonal/Weekday</u> Adjustment Factor		<u>ESTIMATED (one way)</u>						<u>AADT</u> 17491		
5		93		5	93		2175		12%		0.979		1.068											

ROUTE # NY 9A ROAD NAME: Southbound
STATION: 870624 STATE DIR CODE: 2
FROM: ACC RT 133 OSSINING
PLACEMENT: 1.12 MI N OF RT 133
COUNTY: Westchester
DATE OF COUNT: 10/24/2011