

April 3, 2020
Via FedEx

Building/Planning/Zoning Board Secretary
Borough of South Plainfield
2480 Plainfield Avenue
South Plainfield, NJ 07080

Attn: Joanne Broderick

**Re: Supplemental Traffic Assessment
1335 Associates, LLC
1335 West 7th Street
Block 3 – Lot 29
Borough of South Plainfield
Middlesex County, NJ
DT # 2688-99-001T**

Dear Ms. Broderick:

Dynamic Traffic has prepared the following supplemental analyses to address comments and concerns raised by Narajian Associates in their March 4, 2020 review letter. Specifically, we have prepared revised trip generation projections and shared parking analyses to reflect the reduction in development yield. These analyses are designed to supplement the information contained within the previously submitted Traffic Impact Study (TIS), prepared by Dynamic Traffic and dated July 7, 2018. The following summarizes the methodologies and findings of these analyses.

Traffic Generation

Consistent with the methodologies contained in the original TIS, projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition* for Land Use Code (LUC) 221 – Multifamily Housing (Mid-Rise) Apartments and LUC 820 - Shopping Center. Table I provides a comparison to the original development proposal analyzed in the July 7, 2018 TIS which consisted of 12 residential units and 4,246 SF of retail space and the currently proposed development utilizing the ITE data.

As was noted in the original analysis, no credit was taken for trips generated by the existing car wash on-site. Further, the applicant to limit the retail space to a low intensity neighborhood-type retail use and exclude such high traffic generators as convenience stores, coffee/bagel/donut shops, restaurants or similar type uses.

**Table I
 Trip Generation Comparison**

Land Use	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
12 Residential Units	1	3	4	4	2	6
4,246 Square Feet of Retail	2	2	4	8	8	16
Total Trips	3	5	8	12	10	22
11 Residential Units	1	3	4	3	2	5
1,726 SF Retail	1	1	2	3	4	7
Total Trips	2	4	6	6	6	12
Difference	-1	-1	-2	-6	-4	-10

The proposed 11 residential units and 1,726 SF of retail space generate a total of 6 AM trips and 12 PM trips, which in itself is insignificant in considering potential impacts, and when considering factors such as internal capture between the residential and retail components, pass-by trips of the retail component, and the net difference between the existing car wash use and the proposed use, the potentiality of any impact is even further reduced. In terms of impacts to the intersection of W. 7th Street and Clinton Avenue, the trip dispersion beyond the site in combination of the aforementioned factors would result in site trips onto that intersection on the order of 2 trips during the AM peak hour and 4 trips during the PM peak hour. When considering the removal of the car wash trips, the net increase is nil or a decrease at the intersection. Therefore, no additional intersections should require evaluation.

It is further noted that the results of the capacity analyses for the studied intersection of W. 7th Street and Trinity Place are “C” or better during the AM peak hour and “D” or better during the PM peak hour. There can be no dispute that the more critical PM peak hour (LOS “D”) will result in a reduction of trip generation due to the proposed change of use. When there is more reserve capacity along the W. 7th Street corridor, i.e.; during the AM peak hour, the proposed change of use may potentially have a negligible increase in site trips that can be accommodated by that reserve capacity.

An updated shared parking analysis was prepared for the mixed-use development during the weekday and Saturday periods. The updated analysis reflects the reduction in development yield as well as the increase in parking supply from 22 stalls to 34 stalls. As was previously indicated by the applicant, the retail space will be restricted to a low intensity retail user and a restaurant use will not be proposed. Enclosed Tables II and III summarize the shared parking analysis for the weekday and Saturday periods based on data published by the ITE in the 5th Edition of *Parking Generation*. The analysis indicates a maximum calculated peak parking demand of 22 vehicles or 65% occupancy of the proposed 34 parking stalls. As such, the proposed parking supply will be sufficient to accommodate the needs of the proposed mixed-use development.

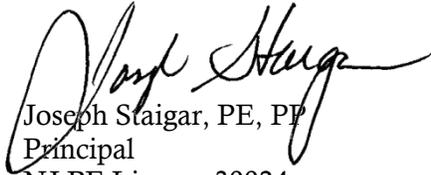
Based upon the information contained in the originally submitted Traffic Impact Study and within this supplement, it is the professional opinion of Dynamic Traffic that driveways as designed provide for a safe and efficient design for access to and from the site. The updated shared parking analysis indicates there will be more than sufficient parking on-site to accommodate the mixed-use development. Further, as the development yield has been reduced, the overall findings and conclusions remain valid. If you have any questions on the above, please do not hesitate to contact our office.

Sincerely,

Dynamic Traffic, LLC



Corey Chase, PE
Principal
NJ PE License 47470



Joseph Staigar, PE, PP
Principal
NJ PE License 30024

Enclosures

c: Joe Villani (via email w/encl.)
Walter Abrams (via email w/encl.)
Stephen Parker (via email w/encl.)

Table II
Weekday Shared Parking Analysis



Hour Beginning	1,726 SF Retail		11 Residential Units		Total Parking Demand	Available Parking Stalls	Percent Occupancy
	Percent of Peak Period	Parking Demand	Percent of Peak Period	Parking Demand			
7:00 AM	0%	0	71%	12	12	34	36%
8:00 AM	15%	1	61%	10	11	34	34%
9:00 AM	32%	2	55%	9	12	34	34%
10:00 AM	54%	4	54%	9	13	34	38%
11:00 AM	71%	5	53%	9	14	34	41%
12:00 PM	99%	7	50%	9	15	34	45%
1:00 PM	100%	7	49%	8	15	34	45%
2:00 PM	90%	6	49%	8	15	34	43%
3:00 PM	83%	6	50%	9	14	34	42%
4:00 PM	81%	6	58%	10	16	34	46%
5:00 PM	84%	6	64%	11	17	34	49%
6:00 PM	86%	6	67%	11	17	34	51%
7:00 PM	80%	6	70%	12	18	34	51%
8:00 PM	63%	4	76%	13	17	34	51%
9:00 PM	42%	3	83%	14	17	34	50%
10:00 PM	15%	1	90%	15	16	34	48%
11:00 PM	0%	0	93%	16	16	34	47%

Notes

1. Percent of peak period parking demand for the retail and residential uses based on data published by the ITE in Parking Generation, 5th Edition.
2. Retail peak parking demand based on ITE 85th percentile peak data for a Shopping Center on a Friday.
3. Residential parking demand based on ITE 85th percentile peak data for Multifamily Housing (Mid-Rise).

**Table III
Saturday Shared Parking Analysis**

Hour Beginning	1,726 SF Retail		11 Residential Units		Total Parking Demand	Available Parking Stalls	Percent Occupancy
	Percent of Peak Period	Parking Demand	Percent of Peak Period	Parking Demand			
7:00 AM	0%	0	95%	14	14	34	42%
8:00 AM	27%	2	88%	13	15	34	44%
9:00 AM	46%	3	83%	12	16	34	46%
10:00 AM	67%	5	75%	11	16	34	47%
11:00 AM	85%	6	71%	11	17	34	49%
12:00 PM	95%	7	68%	10	21	34	62%
1:00 PM	100%	7	66%	10	17	34	50%
2:00 PM	98%	7	70%	10	22	34	65%
3:00 PM	92%	6	69%	10	17	34	49%
4:00 PM	86%	6	72%	11	17	34	49%
5:00 PM	79%	6	74%	11	17	34	49%
6:00 PM	71%	5	74%	11	16	34	47%
7:00 PM	69%	5	73%	11	16	34	46%
8:00 PM	60%	4	75%	11	15	34	45%
9:00 PM	51%	4	78%	12	15	34	45%
10:00 PM	38%	3	82%	12	15	34	44%
11:00 PM	0%	0	88%	13	13	34	39%

Notes

1. Percent of peak period parking demand for the retail and residential uses based on data published by the ITE in Parking Generation, 5th Edition.
2. Retail peak parking demand based on ITE 85th percentile peak data for a Shopping Center on a Friday.
3. Residential parking demand based on ITE 85th percentile peak data for Multifamily Housing (Mid-Rise).