
April 15, 2021
Via Fed-Ex

Township of Franklin Zoning Board of Adjustment
475 DeMott Lane
Somerset, NJ 08873

Attn: Christine Woodbury, Zoning Board Secretary

**Re: Traffic Impact and Parking Assessment
Proposed Pharmacy Tenant
Block 88.02 – Lot 73
49 Veronica Avenue
Township of Franklin, Somerset County, NJ
DT # 3808-99-001TE**

Dear Zoning Board Members:

Dynamic Traffic has prepared the following assessment to determine the traffic impact and adequacy of access, circulation, and parking associated with re-occupancy of a tenant space within the 22,400 SF medical office building located at 49 Veronica Avenue in the Township of Franklin, Somerset County, New Jersey (see Figure 1). The site is designated as Block 88.02 – Lot 73 on the Township of Franklin Tax Maps. The applicant proposes to occupy 1,067 SF, inclusive of common areas, with a pharmacy use to sell pharmaceutical drugs and other ancillary medical inventory (The Project). Access to the site is currently provided via a full movement driveway connection to Veronica Avenue and there are no proposed modifications to the driveway.

This assessment documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.
- The site driveway and internal circulation aisles were inspected for adequacy of geometric design and conformance with accepted design standards.
- The parking layout and supply was assessed based on accepted design standards and demand experienced at similar developments.

Existing Conditions

Veronica Avenue is an Urban Minor Arterial roadway under Franklin Township jurisdiction with a general east/west orientation along the site frontage. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides one travel lane in each direction. On-street parking is not permitted. Curbing is provided along both sides of the roadway, while no sidewalk is provided. Veronica Avenue provides a straight horizontal alignment and a flat vertical alignment along the site frontage. The land uses along Veronica Avenue in the vicinity of The Project are primarily commercial.

Site Generated Traffic

Trip generation projections for the existing medical office use and The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 720 – Medical/Dental Office Building and LUC 880 – Pharmacy/Drugstore without Drive-Through Window in the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation, Tenth Edition*. This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country. The following table details the trip generation associated with the existing use of the property and compares them to the trip generation of the proposed use.

**Table I
 Trip Generation Comparison**

Use	AM PSH			PM PSH			Sat PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing 1,067 SF Medical Office	3	1	4	2	4	6	5	4	9
Proposed 1,067 SF Pharmacy	2	1	3	4	5	9	5	6	11
Difference	-1	0	-1	2	1	3	0	2	2

As can be seen above, the proposed use will generate 1 less trip during the morning peak hour, 3 more trips during the evening peak hour, and 2 more trips during the Saturday peak hour. It should be noted that the proposed pharmacy is intended to provide services for the other medical practices within building and as such will likely have a lesser impact than predicted above, however in order to provide conservative analyses no credit was take for this.

The number of new trips falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE “it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways’ peak hour or the development’s peak hour.” Additionally, NJDOT has determined that the same 100 vehicle threshold is considered a “significant increase in traffic,” hence, it is not anticipated that the change in use have any perceptible impact on the traffic operation of the adjacent roadway network.

Site Access and Parking

As previously noted, access to the site is currently provided via a full movement driveway connection to Veronica Avenue and there are no proposed modifications to the driveway. Additionally, there are no proposed modifications to the existing parking and circulation aisles. The original site was approved for 96 parking spaces in support of the 22,400 SF building. The Ordinance does not set forth any specific parking requirement for pharmacy uses, and as such the ITE publication *Parking Generation, 5th Edition* was reviewed to determine the parking impact of the proposed change in use.

For medical office buildings, ITE sets forth a parking demand of 3.23 spaces per 1,000 SF of gross floor area. ITE also sets forth a parking demand of 2.19 spaces per 1,000 SF of gross floor area for pharmacies. Based upon the current ITE data, the parking demand generated by the proposed pharmacy will be less than the permitted medical office use. Consequently, the conversion of the medical office space will not negatively impact the previously granted approval for the site.

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed occupancy of 1,067 SF of the medical office building with a pharmacy use will generate 1 less trip during the morning peak hour, 3 more trips during the evening peak hour, and 2 more trips during the Saturday peak hour.
- Access to the site will continue to be provided via the existing driveway connection to Veronica Avenue.
- As proposed, The Project's site driveways and internal circulation will continue to provide for safe and efficient movement of automobiles.
- The proposed pharmacy will generate a lower parking demand than the permitted medical office use and will not negatively impact the previous approval granted for the property.

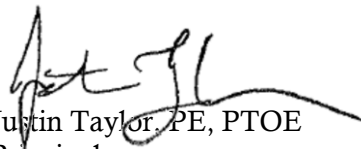
Conclusion

Based upon our Traffic Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the Township of Franklin will not experience any significant degradation in operating conditions with the introduction of the pharmacy tenant. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan will continue to provide for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

If you have any questions on the above, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC



Justin Taylor, PE, PTOE
Principal
NJ PE License 45988



Nick Verderese, PE
Senior Principal
NJ PE License 38991

JPT
Enclosures

c: Amar Patel (via email w/encl.)
Pete Wagner (via email w/encl.)



Proposed Pharmacy
Traffic Assessment
3808-99-001TE
4/15/2021

Figure 1

Site Location Map

Trip Generation Worksheet, ITE Trip Generation 10th Edition



Land Use Code: 720 Medical-Dental Office Building (ksf)
 Size: 1.067 ksf
 Prepared By: JPT
 Date: 4/13/2021
 Job #: 3808-99-001TE

ITE Study Information

Peak Hour	# Studies	Avg. Variable	Distribution	
			In	Out
Weekday	28	24	50%	50%
AM Peak Street Hour	44	32	78%	22%
PM Peak Street Hour	65	28	28%	72%
AM Generator	36	27	62%	38%
PM Generator	42	26	39%	61%
Saturday	6	41	50%	50%
Saturday Generator	4	28	57%	43%
Sunday	5	44	50%	50%
Sunday Generator	3	31	52%	48%

Trip Generation using ITE Average Rates

Peak Hour	Rate				Trip Generation		
	Min.	Avg.	Max.	S.D.	In	Out	Total
Weekday	9.14	34.80	100.75	9.79	19	18	37
AM Peak Street Hour	0.85	2.78	14.30	1.28	2	1	3
PM Peak Street Hour	0.25	3.46	8.86	1.58	1	3	4
AM Generator	1.21	3.53	19.28	1.55	2	2	4
PM Generator	1.49	4.10	15.55	1.44	2	2	4
Saturday	1.10	8.57	21.93	9.07	5	4	9
Saturday Generator	1.33	3.10	4.02	1.20	2	1	3
Sunday	0.39	1.42	5.11	1.44	1	1	2
Sunday Generator	0.12	0.32	0.63	0.49	0	0	0

Trip Generation using ITE Equations

Peak Hour	Equation	R ² value	Effective Rate	Trip Generation		
				In	Out	Total
Weekday	$T = 38.42(X) - 87.62$	0.95	-44.05	-24	-23	-47
AM Peak Street Hour	$\ln(T) = 0.89 \ln(X) + 1.31$	0.80	3.75	3	1	4
PM Peak Street Hour	$T = 3.39(X) + 2.02$	0.73	5.62	2	4	6
AM Generator	$T = 3.43(X) + 2.57$	0.90	5.62	4	2	6
PM Generator	$T = 4.27(X) - 4.63$	0.91	0.00	0	0	0
<i>Saturday</i>	<i>Not Given</i>		-	-	-	-
Saturday Generator	$T = 4.94(X) - 50.78$	0.78	-43.11	-26	-20	-46
<i>Sunday</i>	<i>Not Given</i>		-	-	-	-
<i>Sunday Generator</i>	<i>Not Given</i>		-	-	-	-

DTraffic Comments: For SAT Peak Generator Hour, use Rates for < 28 KSF and use Equations for >= 28 KSF.

Trip Generation Worksheet, ITE Trip Generation 10th Edition



Land Use Code: 880 Pharmacy/Drugstore without Drive-Through Window (KSF)
 Size: 1.067 KSF
 Prepared By: JPT
 Date: 4/13/2021
 Job #: 3808-99-001TE

ITE Study Information

Peak Hour	# Studies	Avg. Variable	Distribution	
			In	Out
Weekday	6	11	50%	50%
AM Peak Street Hour	7	10	65%	35%
PM Peak Street Hour	13	11	49%	51%
AM Generator	8	11	50%	50%
PM Generator	7	11	50%	50%
Saturday	0			
Saturday Generator	3	10	49%	51%
Sunday	0			
Sunday Generator	0			

Trip Generation using ITE Average Rates

Peak Hour	Rate				Trip Generation			
	Min.	Avg.	Max.	S.D.	In	Out	Total	
Weekday	81.00	90.08	106.50	8.90	48	48	96	x
AM Peak Street Hour	1.17	2.94	4.30	1.25	2	1	3	
PM Peak Street Hour	5.11	8.51	11.70	2.16	4	5	9	x
AM Generator	6.03	7.71	8.83	0.97	4	4	8	
PM Generator	7.47	11.07	24.00	6.23	6	6	12	x
Saturday					-	-	-	x
Saturday Generator	9.27	10.68	13.09	13.16	5	6	11	x
Sunday					-	-	-	x
Sunday Generator					-	-	-	x

Trip Generation using ITE Equations

Peak Hour	Equation	R ² value	Effective Rate	Trip Generation			
				In	Out	Total	
Weekday	$\ln(T) = 0.99 \ln(X) + 4.51$	0.73	90.91	49	48	97	
AM Peak Street Hour	$T = 10.22(X) - 75.70$	0.89	-60.92	-42	-23	-65	x
PM Peak Street Hour	Not Given		-	-	-	-	
AM Generator	$T = 12.04(X) - 46.13$	0.89	-30.93	-17	-16	-33	x
PM Generator	Not Given		-	-	-	-	
Saturday	Not Given		-	-	-	-	
Saturday Generator	Not Given		-	-	-	-	
Sunday	Not Given		-	-	-	-	
Sunday Generator	Not Given		-	-	-	-	

DTraffic Comments:

Medical-Dental Office Building (720)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

Peak Period of Parking Demand: 9:00 a.m. - 4:00 p.m.

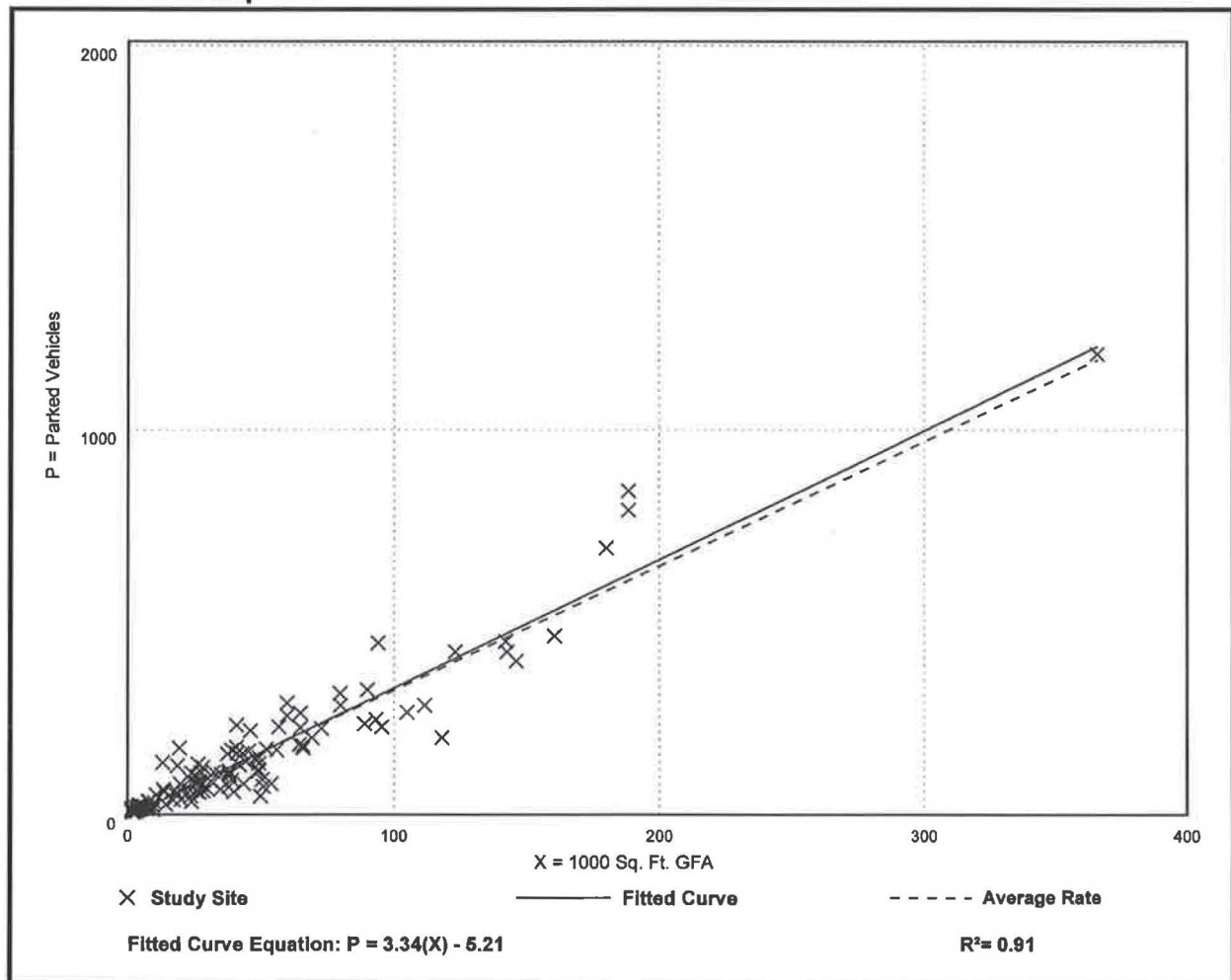
Number of Studies: 117

Avg. 1000 Sq. Ft. GFA: 46

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
3.23	0.96 - 10.27	2.73 / 4.59	3.04 - 3.42	1.05 (33%)

Data Plot and Equation



Pharmacy/Drugstore without Drive-Through Window (880)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

Peak Period of Parking Demand: 2:00 - 6:00 p.m.

Number of Studies: 4

Avg. 1000 Sq. Ft. GFA: 12

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.19	1.47 - 3.58	1.74 / 3.58	***	0.96 (44%)

Data Plot and Equation

Caution – Small Sample Size

