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April 15, 2020  
Via Hand Delivery

Township of Lawrence Zoning Board of Adjustment  
2207 Lawrence Road, P.O. Box 6006  
Township of Lawrence, NJ 08648

Attn: Brenda Kraemer, Secretary to the Zoning Board

**Re: Traffic Impact and Parking Assessment  
Proposed Residential Development  
Block 2001 – Lots 3, 60-66 & 68  
2495 Brunswick Pike (Route 1 Alt)  
Township of Lawrence, Mercer County, NJ  
DT # 1279-99-010T**

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 the development of a site located along the eastbound side of Texas Avenue in the Township of Lawrence, Mercer County, New Jersey. The site is designated as Block 2001 – Lots 3, 60-66, & 68 on the Township of Lawrence Tax Maps. The site is currently developed with an 339,676 SF shopping center. It is proposed to subdivide approximately 3.9 acres of undeveloped land from the northern portion of the property along Texas Avenue and construct 70 multifamily units (The Project). Access to the subdivided property will be provided via an enter only driveway and an exit only driveway along Texas Avenue. It should be noted that it is proposed to provide interconnecting sidewalks to the adjacent property on the south side of the site.

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 proposed site driveway was inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, 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**

Brunswick Pike (Route 1 Business) is an Urban Principal Arterial roadway under New Jersey Department of Transportation (NJDOT) jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 45 MPH and the roadway provides two travel lanes and a shoulder in each direction separated by a concrete jersey barrier. On-street parking is not permitted. Curb and sidewalk are provided along both sides of the roadway. US Route 1B provides a straight horizontal alignment along the site frontage and a relatively flat vertical alignment. The land uses along US Route 1B in the vicinity of The Project are mixed commercial and residential.

Texas Avenue is urban major collector roadway under Lawrence Township jurisdiction with a general east/west alignment and a 25 MPH posted speed limit. Along the site frontage, Texas Avenue provides one travel lane in both directions of travel. On-street parking is not permitted. Curb and sidewalk are provided along both sides of the roadway. In the vicinity of the site, the roadway alignment is straight and relatively flat. The land uses along Texas Avenue are predominantly residential with several commercial developments in the vicinity of Brunswick Pike.

**Site Generated Traffic**

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 220 – Multifamily Housing (Low-Rise) 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 shows the anticipated trip generation for The Project.

**Table I  
 Trip Generation**

Use	AM PSH			PM PSH			Sat PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
70 Multifamily Units	8	26	34	27	16	43	21	21	42

It should be noted that 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 proposed development will have any perceptible impact on the traffic operation of the adjacent roadway network.

It should also be noted that there is access to New Jersey Transit bus lines 603, 606, and 613 in close proximity to the site. Routes 603 and 613 provide a bus stop directly in front of The Project and Route 606 is within three quarters of a mile of the site. This mass transit availability will likely result in trip generation even lower than that which is projected by the ITE data, shown in Table I.

### Site Access, Parking and Circulation

As previously noted, access to the site will be provided via an enter only driveway and an exit only driveway along Texas Avenue. The internal roadways and parking lot aisles are proposed as 24 feet wide for two-way traffic and 18 feet wide for one-way traffic. This meets the Residential Site Improvement Standards (RSIS) requirements, as well as that of the Ordinance, for 90-degree parking. The driveways have been designed to meet the spacing and location requirements of the Ordinance and will provide safe and efficient access to the site. The proposed parking stalls are 9'x18' which meets the Ordinance and RSIS requirements of 9'x18' for the use proposed.

It is proposed to provide 56 parking spaces (including 4 handicap spaces) on the site, as well as 23 new on-street parking spaces along Texas Avenue in support of The Project. The RSIS sets forth a requirement of 1.8 parking spaces per 1-bedroom unit, 2.0 parking spaces per 2-bedroom unit, and 2.1 parking spaces per 3-bedroom unit. With 8 1-bedroom units, 37 2-bedroom units, and 25 3-bedroom units this equates to a parking requirement of 141 (140.9) parking spaces for The Project. Consequently, a de minimis exception will be required for the proposed number of parking spaces. However, the RSIS states:

*“Alternative parking standards to those shown in ... shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.”*

According to U.S. Census data for the Census Tract 32.02, which the subject property falls within, the vehicle availability per rental household equates to 1.08 vehicles per unit which further equates to 76 parking spaces. This lower demand is a function of the fact that rental units typically have lower vehicle ownership than owned units, as well as the location of the site and its proximity to mass transportation. As previously indicated, there is availability of convenient, diverse and desirable mass transit service available to the site. New Jersey Transit Bus Route 603 and 613 provide a bus stop directly in front of The Project and Route 606 is within three quarters of a mile of the site. These bus lines provide access to many municipalities between Princeton and Hamilton.

Finally, the household characteristics of the proposed apartments differ from a typical residential development, as they will have income controls. Existing parking demand counts have been performed at similar family affordable apartment developments throughout New Jersey by the applicant. Most of these counts reveal a parking demand of between 0.9 and 1.1 spaces per unit, which is similar to the rate of 1.13 spaces per unit that is being proposed for The Project. Consequently, it is our professional opinion that the proposed 79 parking spaces will adequately meet the peak parking demands for the site. It should be noted that the purchaser of the subject property has been in contact with the owners of the adjacent shopping center that the lot is being subdivided from with regards to the potential of overflow parking utilizing the existing spaces behind the shopping center. The Project is proposing pedestrian connections between the residential and retail lots for ease of travel between the two uses, thus reducing the reliance on automobiles.

## Findings

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

- The proposed 70 multifamily units will generate 8 entering trip and 26 exiting trips during the morning peak hour, 27 entering trips and 16 exiting trips during the evening peak hour, and 21 entering trips and 21 exiting trips during the Saturday peak hour.
- Access to the site will be provided via an enter only driveway and an exit only driveway along Texas Avenue.
- As proposed, The Project's site driveways and internal circulation have been designed to provide for safe and efficient movement of automobiles and meet the RSIS requirements.
- The proposed parking supply and design is sufficient to support the projected demand.

## 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 Lawrence and NJDOT will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides 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, LEED AP  
Principal  
NJ PE License 45988



Nick Verderese, PE  
Senior Principal  
NJ PE License 38991

JPT  
Enclosures

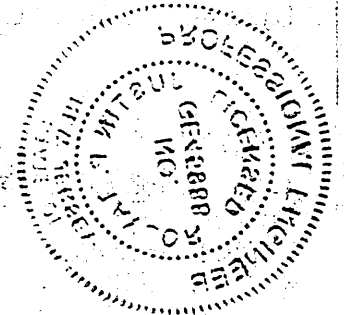
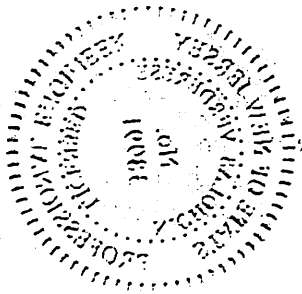
c: Kevin Kavanaugh (via email w/encl.)  
Ryan Kennedy (via email w/encl.)  
Tom Muller/Ryan McDermott/Luiza Guazzelli (via email w/encl.)

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