
September 24, 2021
Via FedEx

Township of North Brunswick Planning Board
710 Hermann Road
North Brunswick Township, NJ 08902-0728

Attn: Janice Larkin, Board Secretary

**Re: Traffic Impact and Parking Assessment
Proposed Warehouse Building
Block 30 – Lot 26
1202 Airport Road
North Brunswick Twp., Middlesex Co., NJ
DT # 3537-99-001T**

Dear Planning 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 on the north side of Airport Road at its cul-de-sac just west of Jersey Avenue in the Township of North Brunswick, Middlesex County, New Jersey. The site is designated as Block 30 – Lot 26 on the Township of North Brunswick Tax Maps. The site is currently undeveloped and it is proposed to construct a 25,962 SF warehouse (The Project). It is proposed to provide access to The Project via two full movement driveways along Airport Road.

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

Airport Road is a local roadway under North Brunswick Township jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one travel lane in each direction. On-street parking is not permitted along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is not provided along either side of the roadway. Airport Road provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Airport Road in the vicinity of The Project are primarily industrial.

Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 150 – Warehousing 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 anticipated trip generation for The Project.

**Table I
 Trip Generation**

Trip Type	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
Trucks	3	1	4	1	4	5
Cars	19	5	24	7	19	26
Total (25,962 SF Warehouse)	22	6	28	8	23	31

As seen above, The Project is anticipated to generate a maximum of 31 total peak hour trips. 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.

Site Access, Parking and Circulation

As previously mentioned, access to the site will be provided via two full movement driveways along Airport Road. The western driveway will be restricted for passenger vehicles only, while the eastern driveway will provide access to the loading docks for trucks as well as secondary access to the passenger vehicle parking area.

The site will be served by a parking aisle with a width of 25’, which meets the Ordinance minimum requirement of 25’. This aisle will allow for two-way circulation and 90-degree parking. Review of the site plan design indicates that the site can sufficiently allow, within paved areas, a large wheel base vehicle such as a WB-67 Design Vehicle along with the passenger vehicles anticipated for the site.

It is proposed to provide 30 parking spaces, inclusive of 2 electric vehicle charging spaces and 2 handicap spaces in support of The Project. The Ordinance sets forth a requirement of 1 parking space

per 2,500 SF for storage, distribution, and shipping uses, which equates to a parking requirement of 10 spaces for the proposed 25,962 SF warehouse. As stated, the site as proposed provides 30 parking spaces and as such, the Ordinance parking requirement is exceeded.

The site as proposed provides parking stalls with dimensions of 9' x 18', which meet the Ordinance minimum requirement of 9' x 18'. Additionally, it is proposed to provide 4 loading stalls with dimensions of 12' x 60', which satisfy the Ordinance minimum requirement of 12' x 35'.

Findings

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

- The proposed 25,962 SF warehouse will generate 22 entering trips and 6 exiting trips during the morning peak hour and 8 entering trips and 23 exiting trips during the evening peak hour.
- Access to the site will be provided via two full movement driveways along Airport Road.
- As proposed, The Project's site driveways and internal circulation have been designed to provide for safe and efficient movement of automobiles.
- The proposed parking supply and design is sufficient to support the projected demand and meets the Ordinance requirements.

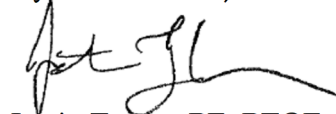
Conclusion

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 North Brunswick will not experience any significant degradation in operating conditions with the development of the site. The site driveway is 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 our office.

Sincerely,

Dynamic Traffic, LLC



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Principal
NJ PE License 45988



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Senior Principal
NJ PE License 38991

JPT;ned

c: Barry Zankel (via email w/encl.)
Robert Freud/Jackie Giordano (via email w/encl.)