

April 12, 2022

Township of Franklin Planning Board  
Franklin Township Municipal Complex  
475 De Mott Lane  
Somerset, NJ 08873

**Re: Traffic Assessment  
400 & 600 Atrium Drive, Block 468.01, Lot 21.06 & 21.14  
Township of Franklin, Somerset County, NJ  
Langan Project No.: 130176101**

Dear Planning Board Members:

Langan Engineering and Environmental Services, Inc has prepared this traffic assessment of the proposed redevelopment of 400 & 600 Atrium Drive in Franklin Township, NJ. The property is currently developed with an office building providing 349,445 s.f. of office space supported by 1,200 +/- parking spaces. It is proposed to raze the existing office building and develop Block 468.01, Lots 21.06 and 21.14 with two warehouse buildings, one providing 294,400 s.f and the other providing 132,000 sf. Building 1 will be supported by 151 parking spaces (121 required) and Building 2 will be supported by approximately 103 parking spaces (56 required). The adjacent property, Block 468.01, Lot 21.11 is being developed with a hotel and is under construction by others. The project is located in the B-1, Business and Industry Zone.

### **Access and Circulation**

Access to the property is provided via Atrium Drive, an existing approximate 40-foot wide private roadway that provides one 20' travel lane per direction. Atrium Drive extends to the northwest of the site and intersects with Davidson Avenue, Davidson Avenue is approximately 40 feet wide, provides one travel lane per direction and is under the jurisdiction of Franklin Township. Davidson Avenue extends from Easton Avenue (CR 527) in the north to New Brunswick Road in the south. The posted speed limit on Davidson Avenue is 45 MPH. Davidson Avenue provides direct access to a mix of office, hospitality, and other commercial properties along its length. The Atrium Drive approach to Davidson Avenue is striped with separate left and right turn lanes and is "stop" sign controlled.

Atrium Drive connects with Pierce Street to the southwest. Pierce Street is approximately 40 feet wide, provides one travel lane per direction and is under the jurisdiction of Franklin Township. Pierce Street extends from Randolph Road in the west to Cedar Grove Lane in the east. The posted speed limit on Pierce Street is 40 MPH. Pierce Street provides direct access to a mix of

office, hospitality, industrial/commercial properties and residential properties along its length. The Atrium Drive approach to Pierce Street is “stop” sign controlled.

Regional access to the property from I-287 is provided via Easton Avenue. Cars and trucks exiting I-287 can travel to the site utilizing Easton Avenue to Davison Avenue to Atrium Drive. Traffic returning to I-287 would utilize Atrium Drive to Davidson Avenue to Easton Avenue.

Employees traveling to and from the warehouses have good regional connectivity via Pierce Street, Cedar Grove Lane, Elizabeth Avenue, Amwell Road, among others, providing the ability for employee generated traffic to dissipate and minimize impacts on any one singular route.

The buildings are designed with passenger car parking along the north face of each building and truck courts along the south faces. The passenger car parking area is designed with 9’ by 18’ foot parking spaces with a 24’ wide parking aisle providing for safe circulation and parking maneuvers. The truck courts are designed to accommodate the maneuvering of large vehicles typical to warehouse operations.

**Traffic Generation**

The site is currently developed with a multi-story office building which, when occupied generated significant peak hour and daily traffic flow on the adjacent roadway system. We prepared peak hour and daily trip generation estimates for the proposed warehouse buildings and the existing office building utilizing data published by the Institute of transportation Engineers in the publication “Trip generation, 11<sup>th</sup> Edition”. The following table summarizes the weekday peak hour and weekday daily traffic generation by the existing office buildings. The table also shows the projected weekday daily and peak hour traffic generation from the proposed two warehouse buildings. Based on a comparison of the traffic generation between the proposed warehouses and the existing office buildings, it is calculated that the proposed warehouses will generate approximately 2,734 less vehicles per day on the surrounding roadway network, and between 401 to 371 less vehicles per hour during the morning and evening weekday peak commute hours on the adjacent roadway system.

**Table 1 – Trip Generation Summary**

Use		AM Peak Hour			PM Peak Hour			Weekday		
		In	Out	Total	In	Out	Total	In	Out	Total
426,400 s.f. Warehouse	Cars	50	13	63	9	63	72	237	237	474
	Trucks	9	18	27	14	12	26	119	119	238
	<b>Total</b>	<b>59</b>	<b>31</b>	<b>90</b>	<b>23</b>	<b>75</b>	<b>98</b>	<b>356</b>	<b>356</b>	<b>712</b>
349,445 s.f. Office	Cars	430	58	489	79	387	466	1,713	1,713	3,426
	Delivery Trucks	2	1	3	1	2	3	10	10	20
	<b>Total</b>	<b>432</b>	<b>59</b>	<b>491</b>	<b>80</b>	<b>389</b>	<b>469</b>	<b>1,723</b>	<b>1,723</b>	<b>3,446</b>
<b>Difference</b>		<b>- 373</b>	<b>-28</b>	<b>-401</b>	<b>-57</b>	<b>-314</b>	<b>-371</b>	<b>-1,367</b>	<b>-1,367</b>	<b>-2,734</b>

### **Findings and Conclusions**

Based upon the peak hour and daily trip generation as summarized above, the proposed redevelopment of the property with warehouses will result in a reduced traffic impact on the surrounding roadway network. While the warehouse use will introduce truck trips to the road network, the significant reduction in employee traffic and overall traffic will offset the impact associated with the influence of the larger vehicles. The site is designed to provide safe and efficient space for vehicle maneuvering with passenger car parking separated from the truck court areas. Access to the property from Atrium drive will operate safely and efficiently.

Sincerely,

**Langan Engineering and Environmental Services, Inc.**



Karl A. Pehnke, P.E., PTOE  
Vice President

KAP:kap

cc: Kris F. Bauman  
Craig W. Stires, P.E.