

August 12, 2021

Township of Franklin
Planning Board
Municipal Building
475 DeMott Lane
Somerset, New Jersey 08873

Re: Traffic Statement for

Rutgers Plaza (Cosmopolitan at Somerset Town Center) 940 Easton Avenue, Block 385, Lot 2.07 Township of Franklin, Somerset County, New Jersey Langan Project No.: 130173901

### Dear Board Members:

Langan Engineering & Environmental Services has prepared this traffic statement for the proposed redevelopment of the existing K-Mart building located in the Rutgers Plaza in the Township of Franklin, Somerset County, New Jersey. The "Project" upon completion, will replace the existing K-Mart building with 200 residential units. Specifically, we performed the following tasks:

- Reviewed the development proposal;
- Calculated site trip generation;
- Qualitatively assessed traffic impact; and,
- Reviewed the site plan.

We have concluded that the proposed residential development will generate less peak hour and daily traffic as compared to the prior K-Mart store. The reduction in site generated trips associated with the proposed development program will result in less traffic demand and better traffic operations on the driveways and the surrounding intersections, when compared to continued use of the K-Mart building by a retailer. Moreover, the proposed site design is consistent with current standards and will provide adequate access, circulation and parking.

### **DEVELOPMENT PROPOSAL**

The project site is identified on the Township of Franklin tax map as Block 385, Lot 2.07. The site is located at 940 Easton Avenue, and is bordered by John F. Kennedy Boulevard to the north, existing retail development to the south, and existing residential development to the west.

The project site is currently occupied by a 106,480 square foot (sf) K-Mart retail store. The existing retail store is part of the Rutgers Plaza consisting of 268,224 s.f of retail space, which is supported by 1,257 parking spaces. Access to Rutgers Plaza is provided via one un-signalized

right-in/right-out driveway along Easton Avenue and one un-signalized driveway along John. F Kennedy Boulevard, which provides right-in ingress only and left-out/right-out egress.

The proposed residential development will replace the existing K-Mart building and provide 200 multifamily residential units. The residential building will share the two existing Rutgers Plaza driveways.

The site is designed to continue to provide efficient circulation for all design vehicles (passenger cars, trucks and emergency vehicles). 1,105 passenger car parking spaces are proposed to serve the entire Rutgers Plaza, inclusive of the proposed residential development.

### **DESCRIPTION OF EXISTING CONDITIONS**

This section describes the roads, intersections and traffic volumes in the area of the proposed warehouse development located in the Township of Franklin, Somerset County, New Jersey.

### Roads

## Easton Avenue (County Road (CR) 527)

Easton Avenue (CR 527) is classified as an urban principal arterial and is under Somerset County jurisdiction. The roadway has a general east - west directional orientation, generally provides two travel lanes in each direction, and is separated by a concrete median within the study area. A third eastbound Auxiliary lane is provided along the frontage of Rutgers Plaza. The posted speed limit in the immediate study area is 45 mph.

### John F. Kennedy Boulevard

John F. Kennedy Boulevard is classified as an urban minor arterial and is under the Township of Franklin jurisdiction. The roadway has a general east-west directional orientation, generally provides three travel lanes in the southbound direction and 2 travel lanes in the northbound direction, and is separated by a concrete median. The posted speed limit in the immediate study area is 40 mph.

#### Intersections

### East Avenue (CR 527) and John F. Kennedy Boulevard / Jug-handle

The intersection of Easton Avenue (CR 527) and John F. Kennedy Boulevard / jug-handle is a four-leg intersection under signal control and Somerset County jurisdiction. It is located approximately 300 feet north of the Rutgers Plaza driveway along Easton Avenue (CR 527) and approximately 350 feet east of the Rutgers Plaza driveway along John F. Kennedy Boulevard. The northbound John F. Kennedy approach provides two left-turn lanes and one right-turn lane. The southbound jug-handle approach provides a shared left-turn/through lane and an exclusive through lane. The westbound East Avenue (CR 527) approach provides a two through lane. All westbound left-turns and U-turns are made via the nearside jug-handle. The eastbound Easton Avenue (CR 527) approach provides two through lane. All eastbound right-turns and U-turns are made via the near side jug-handle.



# Easton Avenue (CR 527) and Site Driveway

The intersection of Easton Avenue (CR 527) and site driveway is a T-shaped intersection under stop-control. The northbound site driveway approach provides one channelized right-turn lane and is stop-controlled. The eastbound Easton Avenue (CR 527) approach provides one shared through/channelized right-turn lane and two exclusive through lanes.

# John F. Kennedy Boulevard and Site Driveway / Jug-handle

The intersection of John F. Kennedy Boulevard and site driveway / jug-handle is a T-shaped intersection under stop-control. The northbound John F. Kennedy Boulevard approach provides two through lanes and a right-turn lane. The southbound John F. Kennedy Boulevard approach provides two through lanes. The westbound site driveway approach provides one left-turn lane, one channelized right-turn lane, and is stop-controlled. The eastbound jug-handle approach provides one left-turn lane, one right-turn lane, and is stop-controlled.

#### TRIP GENERATION

We prepared trip generation estimates for the proposed residential development using data compiled for Land Use Code 220 (Multifamily Housing – Low-Rise) by the Institute of Transportation Engineers (ITE) as contained in <u>Trip Generation</u>, 10th Edition. Table 1 summarizes the future weekday morning and evening, Saturday midday peak hours, and total Weekday and Saturday trip generation estimates for the proposed residential development.

**Table 1 - Trip Generation Estimates** 

Time Period	Land Use Code 220			
Weekday Morning Peak Hour				
Enter	21			
Exit	71			
Total	92			
Weekday Evening Peak Hour				
Enter	69			
Exit	40			
Total	109			
Saturday Midday Peak Hour				
Enter	99			
Exit	84			
Total	183			
Daily Trips				
Total	1471			
Saturday Trips				
Total	2280			

The trip generation numbers shown in Table 1 represent the single highest peak hours anticipated for a typical weekday and Saturday during typical commuting periods.



We also estimated the trip generation of the existing 106,480 sf K-Mart retail store.

Table 2 shows the estimated trip generation comparison for the weekday morning and evening, Saturday midday peak hours, and total Weekday and Saturday. We prepared trip generation estimates for the existing retail use using data compiled for Land Use Code 820 (Shopping Center) by the Institute of Transportation Engineers (ITE) as contained in Trip Generation, 10th Edition. We note that ITE also publishes data under Land Use Code 815 (Free Standing Discount Store). The data under LU Code 815 results in similar but higher peak hour calculations during the AM Peak Hour and Saturday Peak hour, which would not reflect the impact of internal interaction with the other retailers on-site. Accordingly, we believe the below table provides a reasonable estimate of the prior K-Mart Building traffic generation for comparison purposes.

**Table 2 - Trip Generation Comparison** 

Time Period	Existing K-Mart Retail Store	Proposed Residential Dev.	Trip Difference	
Weekday Morning Peak Hour				
Enter	62	21	-41	
Exit	38	71	+33	
Total	100	92	-8	
Weekday Evening Peak Hour				
Enter	273	69	-204	
Exit	296	40	-256	
Total	569	109	-460	
Saturday Midday Peak Hour				
Enter	338	99	-239	
Exit	312	84	-228	
Total	650	183	-467	
Daily Trips				
Total	6274	1471	-4803	
Saturday Trips				
Total	9266	2280	-6986	

As shown in Table 2, there is a decrease in site trip generation during weekday peak hours between the proposed residential development and the existing K-Mart retail store. We anticipate that the proposed residential development will generate approximately 8 less trips during the weekday morning peak hour, and over 400 less trips during the weekday evening peak and Saturday Mid-day peak hour. Lastly, the residential building will generate several thousand less trips during a weekday and a Saturday. We expect the traffic that will be generated by the proposed residential development will have significantly less of a traffic impact on the surrounding roadway system as compared to the prior occupancy of the Plaza by K-Mart. Further, the existing driveways are designed to accommodate the higher peak hour traffic volumes previously generated by Rutgers Plaza when K-Mart was in operation.



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### SITE PLAN REVIEW

We have reviewed the site plan for the proposed residential development. In particular, we focused on access, circulation and parking supply, which the following items address:

- Site access is provided via one un-signalized right-in/right-out driveway along Easton Avenue and one signalized driveway along John. F Kennedy Boulevard, which provides right-in ingress only and left-out/right-out egress.
- The passenger car parking provides 9 feet wide and 18 feet long perpendicular parking spaces served by 24 foot or greater wide drive aisles. These parking space dimensions are consistent with current parking design standards.
- 1,105 passenger car parking spaces are proposed to serve the Rutgers Plaza, inclusive of the proposed residential development, which meets the required parking supply of 1,105 parking spaces, by Ordinance. Accordingly, we anticipate that the parking supply will adequately accommodate the site parking demands.

Based on our review, we believe convenient access, efficient circulation and adequate parking will be provided for the site.

#### **CONCLUSION**

We have concluded that the proposed residential development will generate less peak hour and daily traffic as compared to the prior 106,480 s.f K-Mart. The reduction in site-generated trips associated with the proposed development program will result in an improvement to the operations of the surrounding intersections, when compared to the retail store traffic impacts. In addition, the site design is in accordance with current standards and will provide adequate access, circulation and parking supply.

Should you have any questions or comments concerning this traffic statement, please do not hesitate to contact our office.

Sincerely,

Langan Engineering and Environmental Services, Inc.

Karl A. Pehnke, P.E., PTOE

Senior Associate / Vice President