## TRAFFIC ENGINEERING EVALUATION

# PROPOSED RESIDENTIAL DEVELOPMENT 191-193 ACADEMY STREET BLOCK 12308, LOTS 6 & 7 CITY OF JERSEY CITY HUDSON COUNTY, NEW JERSEY

# Prepared for:

MYK Builders LLC 78 John Miller Way, #447 Kearny, NJ 07032

# Prepared by:

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### INTRODUCTION

The purpose of this Traffic Engineering Evaluation is to assess the traffic impacts associated with the residential development of the subject property known as Lots 6 and 7 in Block 12308 located at 191-193 Academy Street in the City of Jersey City, Hudson County. Lots 6 and 7 have a total of 50 feet of frontage along the south side of Academy Street.

The subject properties are in the <u>Journal Square 2060 Redevelopment Plan – Zone 4:</u>
<u>Neighborhood Mixed Use.</u> Lots 6 and 7 are currently occupied by approximately five dwelling units with no on-site parking. The proposal is to demolish the existing structures and construct a new five-story building with 23-units of multifamily housing(mid-rise) with zero on-site parking spaces.

### **EXISTING CONDITIONS**

The site is located on the block of Academy Street between Summit Avenue and Baldwin Avenue. The surrounding properties generally consist of a mix of residential land uses, with commercial establishments and personal services on Summit Avenue and Bergen Avenue. The adjacent roadways of Academy Street, Baldwin Avenue, and Summit Avenue serving the subject site are described as follows:

Academy Street is a local street under the jurisdiction of the City of Jersey City. Magnolia Avenue is a one-way street, eastbound from Summit Avenue to Baldwin Avenue. There are sidewalks on both sides of the street. Parking is permitted on the south side of the street. Signs are posted "No Parking 3 PM – 5 PM, Tuesday & Friday", "2 Hour Parking, 8 AM – 5 PM, Monday – Friday", and "Tow-Away Zone, Any Vehicles Without Zone 2 Permit Parked Over 2 Hours". There is on-street parking capacity for approximately 12 cars. The posted speed limit is 25 miles per hour (MPH). The land uses along Academy Street are primarily residential.

**Summit Avenue** is categorized as an urban principal arterial and is under the jurisdiction of the City of Jersey City. Summit Avenue is oriented in a north-south direction, extending between  $32^{nd}$  Street in Union City in the north and Baldwin Avenue in Jersey City in the south. Near Academy Street, Summit Avenue provides a two-lane cartway with parking on both sides of the street and there are sidewalks on both sides of the street. Parking restrictions are posted on both sides of the street for "No Stopping or Standing,  $7 \, \text{AM} - 9 \, \text{AM}$  and  $4 \, \text{PM} - 6 \, \text{PM}$ ". The posted speed limit is 25 MPH. Summit Avenue consists of one or two travel lanes in each direction with some parking, and services a few NJ Transit bus routes. Summit Avenue is characterized primarily by retail and mixed-use developments with some parking facilities.

Baldwin Avenue is a local street under the jurisdiction of the City of Jersey City. Baldwin Avenue connects Paterson Plank Road in the north, changing names to Webster Avenue at Prospect Street, and merges with Summit Avenue at its southern terminus. There is one travel lane in each direction. The posted speed limit is 25 MPH. There are sidewalks on both sides of the street. Parking is permitted on both sides of the street. Signs are posted "No Parking 8 AM – 10 AM, Monday & Thursday" on the east side of the street and "No Parking 8 AM – 10 AM, Tuesday & Friday" on the west side of the street and, "2 Hour Parking, 8 AM – 5 PM, Monday – Friday", and "Tow-Away Zone, Any Vehicles Without Zone 2 Permit Parked Over 2 Hours" on both sides of the street. There is on-street parking capacity for approximately 14 cars on both sides of the street between Rock Street and Vroom Street. The land uses along Baldwin Avenue are primarily residential.

### Mass Transportation Options

Within a 0.5-mile/10-minute walk of the subject site, is the Journal Square Transportation Center. Within a 600-foot walk of the subject site, buses stop on Summit Avenue just north of Academy Street for the number 6 bus route and on Bergen Avenue for the 80 and 87 bus routes with service between Gates Avenue, Bayonne, Hoboken, Exchange Place, and Journal Square. With frequent and convenient mass transportation services during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location is an attractive location for not owning a car. The route that pedestrians would take between the subject site and the bus stops on Bergen Avenue and on Summit Avenue would be along Academy Street.

### **Bicycle Master Plan 2019**

Near the subject site, as of 9/30/2019, the <u>Let's Ride JC Bicycle Master Plan</u> shows protected bicycle lanes or shared bicycle lanes on Baldwin Avenue, Summit Avenue, and Vroom Street. There is a Citi Bike: Bergen Ave & Sip Ave bicycle coral approximately 0.4-miles/7-minute walk from the subject site at the intersection of Bergen Avenue with Sip Avenue. The walking route to this Citi Bike location would be Academy Street to Bergen Avenue. There is also a Citi Bike: Baldwin at Montgomery and a Citi Bike: McGinley Square.

### Pedestrian Enhancement Plan 2018

Near the subject site, Summit Avenue and Bergen Avenue were identified by the public as key streets that need improvement for walkability. There was a reported pedestrian crash at the intersection of Academy Street with Baldwin Avenue and a reported bicycle crash at the intersections of Academy Street with Summit Avenue near the subject site. Baldwin Avenue and Summit Avenue were key streets identified by the TAC and the public.

### School Travel Plan 2019

Near the subject site, as of July 2019, the Jersey City School Travel Plan shows there are crossing guards at the intersections Academy Street with Bergen Avenue and Academy Street with Tuers Avenue. The area near the subject site was not identified in the Jersey City Priority Area Map.

### Crashes (2012 to 2016)

Between the years 2012 and 2016, the <u>School Travel Plan</u> identified crashes involving a bicycle at Academy Street with Summit Avenue and crashes involving pedestrians at Academy Street with Summit Avenue.

### <u>Vision Zero Action Plan</u>

The <u>Vision Zero Action Plan</u>, February 2019 shows Academy Street, Bergen Avenue, and Summit Avenue as being in the "All Roads High Injury Network" but does not show Academy Street in the "City Street High Injury Network". There were no fatal crashes along Academy Street identified in the Vision Zero Action Plan.

### **DEVELOPMENT PROPOSAL**

The proposal consists of reconstructing the existing three-story building on lot 24 and demolishing the existing residential buildings on lots 6 and 7 and constructing 23 units of multifamily housing (mid-rise) in five floors. Zero on-site parking spaces are proposed.

### TRIP GENERATION

According to the Trip Generation Manual, 11th Edition published by the Institute of Transportation Engineers, "Multifamily Housing (Mid-Rise)" are located in rental buildings that have between three and ten levels (floors). Therefore, trip generation for the proposed 23unit, mid-rise, residential building was calculated using the current Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition for the land use "Multifamily Housing (Mid-Rise)". Table 1, Trip Generation Summary, tabulates the trip generation for the proposed 23 mid-rise multifamily housing dwelling units and shows the proposed redevelopment would generate 10 more person trips during the AM peak hour and 12 more person trips during the PM peak hour than the existing multifamily housing. During the weekday AM peak hour and during the weekday PM peak hour the number of vehicle trips generated by the proposed 23units of multifamily housing would be approximately 5 more vehicle trips than the existing multifamily dwellings. The proposed redevelopment of the subject property is expected to generate a negligible increase in the number of pedestrian trips and in the number of vehicular trips over the existing multifamily dwellings. Therefore, in my professional opinion, the increase in pedestrian trips along the existing sidewalks and crosswalks at the existing intersections would have no negative impact on operations along the sidewalks and at the adjacent intersections.

According to <u>Transportation Impact Analysis for Site Development</u>, published by the Institute of Transportation Engineers (ITE), an increase of less than 100 vehicle trips would not change the level of service of the local street network nor appreciably increase the volume-to-capacity ratio of an intersection approach. Also, NJDOT Access Management Code considers a significant increase in trips greater than 100 peak hour trips AND greater than a 10 percent increase in previously anticipated daily trips. Therefore, the proposed development is not anticipated to significantly impact the operations of the local streets.

### SITE PLAN REVIEW

The parking requirement is zero parking spaces within the Journal Square 2060 Redevelopment Plan Area; therefore, zero on-site parking spaces are proposed.

### **CONCLUSIONS**

Based upon our trip generation evaluation, it is our professional opinion that during the weekday AM and PM peak hour the proposed 23-unit, Multifamily Housing (Mid-Rise) building with zero on-site parking spaces would generate an insignificant number of new vehicle trips as compared to the existing multifamily dwellings with no parking and would have no impact on traffic conditions on the surrounding intersections during the weekday AM and PM peak commuter traffic hours.

The change from 5 multifamily housing units to a 23-unit multifamily housing (mid-rise) building with zero on-site parking spaces would generate an insignificant increase in pedestrian trips along the local streets. The route that pedestrians could take between the subject site and the bus stops on Bergen Avenue or on Summit Avenue would be approximately 600 feet along Academy Street. The proposed redevelopment is expected to generate 10 and 12 additional pedestrian trips during the weekday AM and PM peak hours, respectively. Therefore, in my professional opinion, the increase in pedestrian trips along the existing sidewalks and crossing the existing intersections would not have a significant impact and would continue to operate the same as with the existing multifamily dwellings, with no significant impact on pedestrian operations.

In conclusion, the development of this project would have no significant impact on the traffic operations of area roadways and intersections and would not have a negative impact on local on-street parking conditions.

The foregoing is a true representation of my findings.

LEE D. KLEIN, P.E., PTOE

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Professional Traffic Operations Engineer 1627

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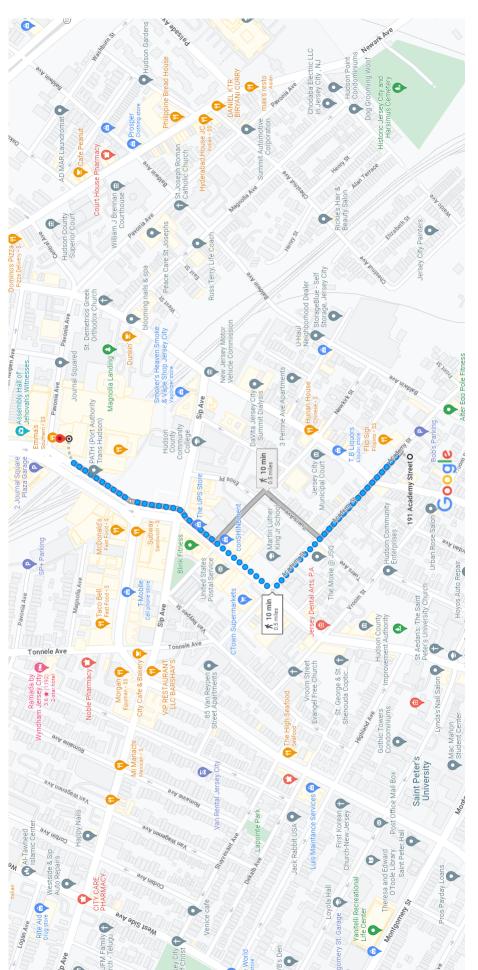
Table 1 - Trip Generation Summary 191-193 Academy Street, Jersey City, Hudson County, NJ

					WEEKDAY	ΑY		
			ΑV	<b>AM PEAK HOUR</b>	)UR	PM	PM PEAK HOUR	UR
CODE	LAND USE	<b>AMOUNT</b>	Z	OUT	TOTAL	Z	OUT	TOTAL
<b>EXISTING USE</b>	IG USE							
VEHICLE TRIPS	ETRIPS							
215	Single-Family Attached (Avg Rate)	5 units	1	2	2	2	1	3
<b>PERSON TRIPS</b>	V TRIPS							
215	Single-Family Attached (Avg Rate)	5 units	1	7	3	2	2	4
PROPO!	PROPOSED USE							
VEHICLE TRIPS	ETRIPS							
221	221 Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	23 units	1	9	7	4	1	9
<b>PERSON TRIPS</b>	V TRIPS							
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	23 units	7	11	13	11	2	16
	INCREASE IN VEHICLE TRIPS		0	2	2	3	0	3
	INCREASE IN PEDESTRIAN TRIPS		1	6	10	6	3	12

Source: Trip Generation, 11th Edition, published by the Institute of Transportation Engineers (ITE)

# 191 Academy St, Jersey City, NJ 07306 to Journal Square, 1 Path Plaza, Jersey City, NJ 07306

Walk 0.5 mile, 10 min



Map data ©2023 Google 200 ft