TRAFFIC ENGINEERING EVALUATION

PROPOSED RESIDENTIAL REDEVELOPMENT 394 SUMMIT AVENUE BLOCK 10802, LOT 8 CITY OF JERSEY CITY HUDSON COUNTY, NEW JERSEY

Prepared for:

394 Summit Ave LLC PO Box 6080 Monroe Township, NJ 08831

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 Lot 8 in Block 10802 located at 394 Newkirk Street in the City of Jersey City, Hudson County. Lot 8 has 25 feet of frontage along the south side of Summit Avenue and 100 feet of frontage on the west side of High Street.

The subject properties are in the <u>Journal Square 2060 Redevelopment Plan – Zone 4:</u>
<u>Neighborhood Mixed Use.</u> Lot 8 is currently occupied by five residential dwelling units and a vacant lot used for parking cars and other vehicles. The proposal is to demolish the existing structures and construct a new five-story building with 17 units of multifamily housing (midrise) and 1,212 square feet of commercial space.

EXISTING CONDITIONS

The subject properties are located on the southwest corner of High Street with Summit 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 Newkirk Street and Baldwin Avenue serving the subject site are described as follows:

High Street is categorized as an urban principal arterial and is under the jurisdiction of the City of Jersey City. High Street is oriented in a westbound direction, extending between Baldwin Avenue and Summit Avenue. There is one travel lane with parking on both sides of the street. The posted/statutory speed limit is 25 miles per hour (MPH). There are sidewalks on both sides of the street. Parking restrictions are posted on the south side of the street for "No Parking, 3 PM – 5 PM, Tuesday & Friday", "2 Hour Parking, 8 AM – 5 PM, Monday – Friday", "Tow-Away Zone, Any Vehicle Without Zone 2 Permit Parked Over 2 Hours". There is no parking at any time on the north side of the street. High Street is characterized primarily by multifamily residential uses.

Summit Avenue is an urban principal arterial and is under the jurisdiction of the City of Jersey City. There are sidewalks on both sides of the street. Parking is prohibited on the east side of the street north of High Street and parking is prohibited on the west south of High Street. Parking restrictions are posted on the west side of the street north of High Street and on the east side south of High Street for "2-Hour Parking, 8 AM- 5 PM, Mon – Fri", Tow-Away Zone, Any Vehicle without Zone 2 Permit Parked Over 2 Hours", and "No Parking 8 AM – 10 AM, Tuesday & Friday". There are approximately 10 on-street parking spaces on the block of Summit Avenue within 200 feet of High Street. A Zone Parking Permit is required to park on Summit Avenue to park longer than 2 hours, Monday through Friday. Summit Avenue is oriented in a north-south direction, extending between 32nd Street in Union City in the north and Baldwin Avenue in Jersey City in the south. The posted or statutory speed limit is 25 MPH.

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 32 cars on both sides of the street between High Street and Rock Street. The land uses along Baldwin Avenue are primarily residential.

Mass Transportation Options

Within a 0.3-mile/7-minute walk of the subject site, there is the Journal Square Transportation Center. Within a 500-foot walk of the subject site, buses stop on Summit Avenue at Newkirk Street for the number 6 bus route. On Bergen Avenue at Newkirk Street there are bus stops 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 Journal Square Transportation Center would be Summit Avenue to Si[p Avenue.

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: Baldwin Avenue at Montgomery Avenue bicycle coral approximately 0.5-miles/9-minute walk from the subject site. The walking route to this Citi Bike location would be High Street to Baldwin Avenue.

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 Newkirk Street with Baldwin Avenue and a reported bicycle crash and a reported pedestrian crash at the intersection of Academy Street with Baldwin Avenue near the subject site.

School Travel Plan 2019

Near the subject site, as of July 2019, the Jersey City School Travel Plan shows there are no crossing guards at the intersections of High Street with Baldwin Avenue or High Street with Summit 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 the intersections of Sip Avenue with Summit Avenue, High Street with Summit Avenue, Newkirk Street with Summit Avenue, Academy Street with Summit Avenue, and crashes involving pedestrians at Academy Street with Summit Avenue.

Vision Zero Action Plan

The <u>Vision Zero Action Plan</u>, February 2019 shows Academy Street, Baldwin 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 was a fatal crash at the intersection of Newkirk Street with Summit Avenue identified in the Vision Zero Action Plan.

DEVELOPMENT PROPOSAL

The proposal consists of demolishing the existing structures and constructing 17 units of multifamily housing (mid-rise) in a five-story building with 1,212 square feet of commercial space.

TRIP GENERATION

According to the Trip Generation Manual, 11th Edition published by the Institute of Transportation Engineers (ITE), Multifamily Housing (Mid-Rise) "Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways." Therefore, trip generation for the proposed 17-unit, mid-rise, residential building was calculated using the current 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 17 mid-rise multifamily housing dwelling units and shows the proposed redevelopment would generate 7 more persontrips during the AM peak hour and 8 more person trips during the PM peak hour than the existing two-family house. During the weekday AM peak hour and during the weekday PM peak hour the number of vehicle trips generated by the proposed 17-units of multifamily housing would be 3 and 4, respectively. The proposed redevelopment of the subject property is expected to generate an insignificant increase in the number of pedestrian trips and the number of vehicular trips over the existing 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.

Based on the size of the retail space, the percentage of trips associated with the retail space would be primarily pass-by trips, which is reflected in the PM peak hour pass-by rate of 100 percent, which was calculated based on ITE standards and is also shown in Table 1. Pass-by trips are trips that are already on the roadway network and are not new trips to the studied intersections. The 1,212 square feet of retail space would generate 3 trips during the weekday AM peak hour and would generate 8 trips during the PM peak hour. Due to the high pedestrian activity in the area, all those trips to and from the retail space are expected to be pedestrians.

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 minimum 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 17-unit, Multifamily Housing (Mid-Rise) building and 1,212 square feet of commercial space would generate 3 and 4 more vehicle trips during a weekday AM and weekday PM peak hour, respectively, an insignificant increase in the number of new vehicle trips 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 one single-family residence to a 17-unit multifamily housing (mid-rise) building with 1,212 square feet of commercial space would generate an insignificant increase in pedestrian trips along the local streets. The subject site is a 0.3-mile/7-minute walk from the Journal Square Transportation Center. The proposed redevelopment is expected to generate 11 and 17 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 single-family dwelling, with no significant impact on pedestrian operations.

In conclusion, the redevelopment of the subject property 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 394 Summit Avenue, Jersey City, Hudson County, NJ

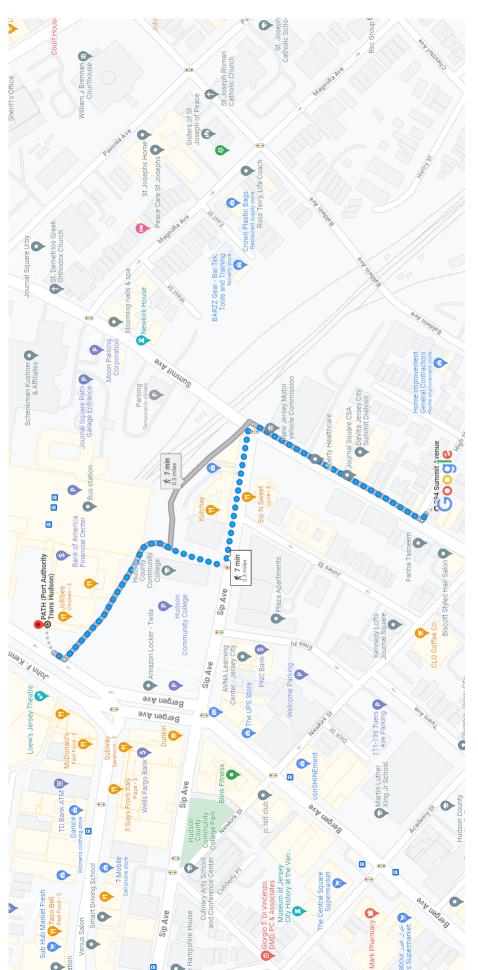
WEEKDAY

			ΑA	AM PEAK HOUR	OUR	B ■	PM PEAK HOUR	UR
CODE	LAND USE	AMOUNT	Z	OUT	TOTAL	Z	OUT	TOTAL
EXISTING USE	3 USE							
VEHICLE TRIPS	TRIPS							
215	215 Single-Family Attached (Avg Rate)	1 units	0	1	1	1	0	1
PERSON TRIPS	TRIPS							
215	Single-Family Attached (Avg Rate)	1 units	1	0	1	0	1	1
PROPOSED USE	ED USE							
VEHICLE TRIPS	TRIPS							
221	Multifamily Housing (Mid-Rise)(Average)(Dense Multi-Use Urban)	17 units	0	4	4	3	2	4
WALK + I	WALK + BIKE + TRANSIT							
221	Multifamily Housing (Mid-Rise)(Average Rate-Dense Multi-Use Urban)	17 units	1	7	8	9	3	6
822	Strip Retail Plaza (<40KSF)	1,212 SF	2	1	3	4	4	8
	Pass By Percentage (PM)	-100%				-4	-4	8-
	NEW TRIPS (Subtotals)		2	1	3	0	0	0
	INCREASE IN VEHICLE TRIPS		0	3	3	2	2	4
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	INCREASE IN PEDESTRIAN TRIPS		0	7	7	9	2	8
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Source: Trip Generation, 11th Edition, published by the Institute of Transportation Engineers (ITE)

394 Summit Ave, Jersey City, NJ 07306 to PATH (Port Authority Trans Hudson), 1 Path Plaza, Jersey City, NJ 07306

Walk 0.3 mile, 7 min



Map data ©2023 Google 100 ft∎