

TRAFFIC ENGINEERING EVALUATION

PROPOSED RESIDENTIAL DEVELOPMENT

158 OAKLAND AVENUE

BLOCK 5804, LOT 29

CITY OF JERSEY CITY

HUDSON COUNTY, NEW JERSEY

Prepared for:

GN Management
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Prepared by:

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INTRODUCTION

The purpose of this Traffic Engineering Evaluation is to assess the traffic impacts associated with the redevelopment of the subject property known as Lot 29 in Block 5804 located at 158 Oakland Avenue in the City of Jersey City, Hudson County. The site has approximately 50 feet of frontage along the east side of Oakland Avenue, and approximately 80 feet of frontage on the north side of Jefferson Avenue. The site is in the R-1 One & Two Family Housing district and is currently occupied by a two-family residence with garage. The proposal is to demolish the existing building and construct a new building to include a total of 10 dwelling units of multifamily housing (mid-rise) in four stories, with 4 proposed on-site parking spaces.

EXISTING CONDITIONS

The site is located on northeast corner of the intersection of Oakland Avenue with Jefferson Avenue. The site is currently occupied by a two-family residence with a 3-car garage. The surrounding properties generally consist of a mix of residential uses. The streets that serve the subject site are described as follows:

Oakland Avenue is categorized as a local street under the jurisdiction of the City of Jersey City. Oakland Avenue is oriented in a north-south direction and connects from Prospect Street to Newark Avenue. Near the project site, Oakland Avenue provides one travel lane in each direction. There are sidewalks on both sides of the street. Parking is permitted on both sides of the street. There is a parking restriction for street cleaning posted “No Parking, 10 AM – Noon, Tuesday & Friday” on the east side and “No Parking, 10 AM – Noon, Monday & Thursday” on the west side. Zone Permit Parking is required on the north side of the street for parking over 4 hours, Monday through Saturday. There is capacity for approximately 14 on-street parking spaces on the block of Oakland Avenue between Jefferson Avenue and Waverly Street and approximately 16 parking spaces between Jefferson Avenue and Laidlaw Avenue. The statutory speed limit is 25 miles per hour (MPH).

Jefferson Avenue is a local street under the jurisdiction of the City of Jersey City, oriented in a westbound direction. There are sidewalks on both sides of the street. Parking is permitted on both sides of the street. There is a parking restriction for street cleaning posted “No Parking, 1 PM – 3 PM, Tuesday & Friday” on the south side and “Monday & Thursday” on the north side. Zone 16 Permit Parking is required on both sides of the street for parking over 4 hours, Monday through Saturday. There is capacity for approximately 21 on-street parking spaces on the block of Jefferson Avenue between Oakland Avenue and Baldwin Avenue and approximately 32 on-street parking spaces on the block between Oakland Avenue and Central Avenue. The statutory speed limit is 25 MPH.

Mass Transportation Options

The 2nd Street Light Rail Station is a 18-minute/0.9-mile walk from the subject site. The number 84, 86, and 123 bus lines run along Palisade Avenue with stops at Jefferson Avenue two blocks east and the 87, 88, and 119 bus lines run along Central Avenue with stops at Waverly Street, one and a half block to the west. These mass transportation options provide service between the subject site and Journal Square, Hoboken PATH, New York City, Christ Hospital, Newport Mall, Union City, stop on Palisade Avenue at Hutton Street. With the variety and frequency of mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location provides adequate transportation infrastructure to afford a resident of 158 Oakland Avenue to not own a personal vehicle.

Bicycle Master Plan 2019

Near the subject site, as of 9/30/2019, the Let's Ride JC Bicycle Master Plan shows bicycle lanes or shared bike paths on Jefferson Avenue, Central Avenue, and Laidlaw Avenue, which surround the subject site. There is a Citi Bike coral on Jefferson Avenue.

Pedestrian Enhancement Plan 2018

Along Central Avenue, one block to the west and three to four blocks north of the subject site, there are intersections identified to be improved for walkability with signalization, crosswalk improvements, intersection treatments, curb extensions, bicycle facilities, transit connections, and streetscape treatments. There was no mention of such improvements along Oakland Avenue or Jefferson Avenue near the subject site. However, Baldwin Avenue, one block east of the subject site was shown as one of the "Key streets identified by the public" and "Key streets identified by the TAC".

School Travel Plan 2019

At the intersection of Oakland Avenue with Jefferson Avenue, as of July 2019, the Jersey City School Travel Plan shows a crash involving a pedestrian, as well as a fatal crash involving a pedestrian at the intersection of Central Avenue with Jefferson Avenue.

Crashes (2012 to 2016)

Between the years 2012 and 2016, the School Travel Plan identified a crash involving pedestrians at the intersections of Oakland Avenue with Jefferson Avenue and a fatal crash involving a pedestrian at the intersection of Central Avenue with Jefferson Avenue.

Vision Zero Action Plan

The Vision Zero Action Plan, February 2019 shows Central Avenue and Baldwin Avenue near the subject property as being in the High Injury Network.

DEVELOPMENT PROPOSAL

The proposed development consists of the construction of 10 units of multifamily housing (mid-rise) with 4 on-site parking spaces, including 1 ADA compliant parking space.

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 10 units of multifamily housing (mid-rise) was calculated using the current Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* for the land use “Multifamily Housing (Mid-Rise)” in a dense multi-use urban setting/location not within one-half mile of rail transit was used. Table 1, Trip Generation Summary, tabulates the trip generation for the proposed 10 units of multifamily housing (mid-rise).

The existing two-family residence generates some vehicular and pedestrian trips. Table 1 summarizes the vehicular and person trips generated by the existing two-family residence, as well as the overall increase in trips by the redevelopment of the subject site with 10 dwelling units.

The route that pedestrians could take between the subject site and the 2nd Street Light Rail Station would be via Oakland Avenue to Prospect Street to Baldwin Avenue/Webster Avenue to Franklin Street to the 100 Steps, then cross Paterson Plank Road at the traffic signal. The route for pedestrians to access the bus stops on Central Avenue would be from Oakland Avenue to Jefferson Avenue to Central Avenue. To access the bus stops on Palisade Avenue, a pedestrian would walk to Jefferson Avenue to Palisade Avenue. The proposed redevelopment is expected to generate 5 pedestrian trips during the AM and the PM peak hour. The proposed development is expected to generate 3 vehicular trips during the AM peak hour and 3 vehicular trips during the PM peak hour. The previous use of the subject site was a two-family residence, which generated a certain number of pedestrian and vehicular trips. Therefore, in my professional opinion, the number of new pedestrian trips along the existing sidewalks and crossing the existing intersections and the new vehicular trips on the nearby street would not have a significant impact on traffic operations in the area.

According to *Transportation Impact Analysis for Site Development*, 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 per unit, where the site is proposed with 4 parking spaces, which would be assigned to the 4 tenants of the proposed multifamily housing (mid-rise) building that require a parking space. There is access to robust mass transportation services, shared bicycles, and bicycle lanes, as well as local shopping, dining, and entertainment options; therefore, residents would not need to own a vehicle.

Rideshare vehicles, such as Uber or Lyft, would park in an available, on-street, parking space to pick-up or drop-off a passenger associated with the proposed multifamily housing.

CONCLUSIONS

Based upon our trip generation evaluation, it is our professional opinion that the proposed 10-unit, multifamily housing (mid-rise) with 4 on-site parking spaces would generate an insignificant number of vehicle trips and would not have a significant impact on traffic conditions during the weekday AM and PM peak commuter traffic hours.

The subject site is located within 0.9-mile/18-minute walk of the 2nd Street Light Rail Station and within 2 blocks of bus service on Central Avenue and Palisade Avenue. The proposed development is expected to generate 5 pedestrian trips during the weekday AM or PM peak hours. The project is expected to generate 3 vehicular trips during each of the weekday AM peak hour and 3 vehicle trips during the PM peak hour. 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.

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 significant impact on local parking conditions.

The foregoing is a true representation of my findings.



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Table 1 - Trip Generation Summary
158 Oakland Avenue, Jersey City, Hudson County, NJ

CODE	LAND USE	AMOUNT	WEEKDAY					
			AM PEAK HOUR			PM PEAK HOUR		
			IN	OUT	TOTAL	IN	OUT	TOTAL
EXISTING VEHICLE TRIPS								
221	Multifamily Housing (Low-Rise)(Average)(Dense Urban)	2 units	0	1	1	1	0	1
EXISTING PERSON TRIPS								
221	Multifamily Housing (Low-Rise)(Average)(Dense Urban)	2 units	0	1	1	1	0	1
PROPOSED VEHICLE TRIPS								
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	10 units	0	3	3	2	1	3
PROPOSED PERSON TRIPS								
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	10 units	1	4	5	3	2	5
CHANGE (INCREASE) IN VEHICLE TRIPS			0	2	3	1	1	2
CHANGE (INCREASE) IN PERSON TRIPS			1	3	4	2	1	4

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

Google Maps 158 Oakland Ave, Jersey City, NJ 07306 to 2nd Street Light Rail Station, Jersey City, NJ 07030 Walk 0.9 mile, 18 min

