

TRAFFIC ENGINEERING EVALUATION

PROPOSED REDEVELOPMENT

221 Liberty Avenue
BLOCK 4601, LOT 17
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY

Prepared for:

GN Management Inc.
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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 17 in Block 4601 located at 221 Liberty Avenue in the City of Jersey City, Hudson County. The site has approximately 30 feet of frontage along the west side of Romaine Avenue.

The site is in the *R-1 Multi-Family Mid-Rise District* and is currently occupied by a three-family house. The proposal is to construct a residential building to include a total of 3 dwelling units of multifamily housing (mid-rise) in three floors plus a partial basement with garage parking for 2 cars.

EXISTING CONDITIONS

The site is located on the block of Liberty Avenue between Lake Street and Carlton Avenue. The site is occupied by a three-family house. The surrounding properties generally consist of a mix of residential land uses, with commercial establishments such as grocery stores, a day care center, and other personal services on Kennedy Boulevard. The adjacent roadways of Liberty Avenue and Lake Street serving the subject site are described as follows:

Liberty Avenue is a local street under the jurisdiction of the City of Jersey City, oriented in a northbound direction from Lake Street to Manhattan Avenue and in a southbound direction between Lake Street and Spruce Street. There are sidewalks on both sides of the street. Parking is permitted on both side of the street. Signs are posted for “4 Hour Parking, All Times, Monday to Saturday”, “Tow-Away Zone, Any Vehicle Without Zone 16 Permit Parked over 4 Hours”, and “No Parking, 1 PM – 3 PM, Monday and Thursday” on the west side of the street and “No Parking, 1 PM – 3 PM, Tuesday and Friday” on the east side of the street. There are approximately 9 parking spaces on the west side and 13 parking spaces on the east side of Liberty Avenue between Carlton Avenue and Cliff Street. The statutory speed limit is 25 MPH.

Lake Street 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 side of the street. Signs are posted “4 Hour Parking, All Times, Monday to Saturday”, Tow-Away Zone, Any Vehicle Without Zone 16 Permit Parked over 4 Hours”, “No Parking Tuesday and Friday from 8 AM to 10 AM” on the south side of the street and “No Parking Monday and Thursday from 8 AM to 10 AM” on the north side of the street. There are approximately 13 parking spaces on the north side and 15 parking spaces on the south side of Lake Street between Liberty Avenue and Kennedy Boulevard. The statutory speed limit is 25 MPH.

Bicycle Master Plan 2019

Near the subject site, as of 9/30/2019, the Let's Ride JC Bicycle Master Plan shows protected bicycle lanes or shared bicycle lanes on Liberty Avenue, Lake Street, Kennedy Boulevard, Spruce Street, and Manhattan Avenue.

Pedestrian Enhancement Plan 2018

Near the subject site, Liberty Avenue was not identified by the public as a key street that needs improvement for walkability. There were no crashes involving pedestrians or bicycles on Liberty 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 crossing guards at the intersections of Kennedy Boulevard with Spruce Street, and Kennedy Boulevard with Manhattan 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 School Travel Plan identified 1 crash involving a pedestrian at Liberty Avenue with Carlton Avenue.

Mass Transportation Options

Within 700 feet of the subject site, there are bus stops on Kennedy Boulevard for the 2, the 88, and the 125-bus routes with service between Journal Square, Secaucus, North Bergen, New York City. With frequent and convenient mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location is an attractive alternative to owning a car.

DEVELOPMENT PROPOSAL

The proposed development consists of the construction of a 3-unit, multifamily housing (mid-rise) in three floors with a partial basement with garage parking for 2 cars. Tenants of the proposed residential units would access the site via the doors on Liberty Avenue. The route that pedestrians could take between the subject site and the bus stops on Kennedy Boulevard would be via Lake Street.

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 3-unit, 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)". A dense multi-use urban setting/location was used to account for the proximity of the Journal Square Transportation Center. Table 1, Trip Generation Summary, tabulates the trip

generation for the proposed 3 mid-rise multifamily housing dwelling units and shows the proposed redevelopment would generate the same number of person trips during the AM peak hour and during the PM peak hour as the existing three-family house. During the weekday AM peak hour and during the weekday PM peak hour the number of vehicle trips generated by the proposed 3-units of multifamily housing would be the same as the existing three-family house. However, the existing three-family house does not have a driveway to accommodate parked vehicles; therefore, the impact to the on-street parking supply would be positive, by removing 2 cars from the on-street parking demand. The proposed redevelopment of the subject property is expected to generate the same number of pedestrian trips as the existing three-family house. Therefore, in my professional opinion, with no increase in pedestrian trips along the existing sidewalks and crosswalks at the existing intersections there would be no negative impact.

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 City's parking requirement is zero parking spaces per dwelling unit, where the site is proposed with 2 parking spaces for 3 units. Since on-site parking for 2 cars is proposed the potential residents of this proposed multifamily housing (mid-rise) building would not each own a vehicle. There is also on-street parking. There is access to robust mass transportation services, as well as local shopping, dining, and entertainment options; therefore, residents would not need to own a vehicle.

The bicycle parking requirement is 0.5 bicycle spaces per unit or 2 bicycle parking spaces, where parking for bicycles can be accommodated within the garage on the ground floor with direct access to the street.

CONCLUSIONS

Based upon our trip generation evaluation, it is our professional opinion that the proposed 3-unit, Multifamily Housing (Mid-Rise) building with on-site parking for 2 cars would generate the same number of vehicle trips as the existing three-family house during the weekday AM and PM peak hour and would not have any impact on traffic conditions during the weekday AM and PM peak commuter traffic hours. The existing three-family home generated 1 new vehicle trips during the AM and PM peak hours.

The route that pedestrians could take between the subject site and the bus stops on Kennedy Boulevard is approximately 700 feet. The proposed redevelopment is expected to generate 1 or 2 additional pedestrian trips during the weekday AM or PM peak hours. Therefore, in my professional opinion, the pedestrian trips along the existing sidewalks and crossing the existing intersections would be the same as with the existing three-family house and 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 have positive impact on local on-street parking conditions.

The foregoing is a true representation of my findings.



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Table 1 - Trip Generation Summary
221 Liberty Avenue, Jersey City, Hudson County, NJ

CODE	LAND USE	AMOUNT	WEEKDAY						
			AM PEAK HOUR		TOTAL		PM PEAK HOUR		
			IN	OUT	TOTAL	IN	OUT	TOTAL	
EXISTING USES									
215	Single-Family Attached (Avg Rate)	3 units	0	1	1	1	1	1	2
VEHICLE TRIPS									
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	3 units	0	1	1	1	1	1	1
PERSON TRIPS									
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	3 units	0	1	1	1	1	1	2

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

