
January 24, 2022
Via FedEx

City of Bayonne Planning Board
630 Avenue C
Bayonne, NJ 07002

Attn: Alicia K. Losonczy, Land Use Administrator

**Re: Traffic Impact and Parking Assessment
Da Noi Redevelopment
Block 34 – Lots 26, 27, 28, 29, & 30
1099-1105 Avenue C
City of Bayonne, Hudson County, NJ
DT # 4149-99-001TE**

Dear Planning Board Members:

Dynamic Traffic has prepared the following assessment to determine the traffic impact and adequacy of access, circulation, and parking associated with redevelopment of a site located on the southwest corner of Avenue C and West 54th Street in the City of Bayonne, Hudson County, New Jersey (see Figure 1). The site is designated as Block 34 – Lots 26, 27, 28, 29, and 30 on the City of Bayonne Tax Maps. The site is currently developed with a restaurant known as “Da Noi”, a liquor store known as “Irv’s Wines and Liquors” and three (3) residential structures. It is proposed to raze the existing buildings and construct a 6-story mixed-use building consisting of 47 residential dwelling units and 1,695 SF of ground floor commercial space (The Project). Access to the site is currently provided via one (1) right turn ingress/right turn egress driveway along West 54th Street. It is proposed to close the existing access point and construct one (1) new right turn ingress/right turn egress driveway along West 54th Street. It is proposed to provide parking via fifty-nine (59) on-site parking spaces within a parking garage on the two lower levels of the building.

This assessment documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.
- The proposed site driveway was inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The parking layout and supply was assessed based on accepted design standards and demand experienced at similar developments.

Existing Conditions

Avenue C is an Urban Minor Arterial roadway under City of Bayonne jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides two (2) travel lanes in each direction. Curb and sidewalk are provided along both sides of the roadway. Avenue C provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Avenue C in the vicinity of The Project are a mix of commercial and residential.

West 54th Street is a local roadway under City of Bayonne jurisdiction with a general east/west orientation. The speed limit is unposted in the vicinity of the site and the roadway provides one travel lane for one-way travel in the eastbound direction. Curb and sidewalk are provided along both sides of the roadway. West 54th Street provides a straight horizontal alignment and a downhill vertical alignment in the westbound direction. The land uses along West 54th Street in the vicinity of The Project are primarily residential.

Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 231 – Mid-Rise Residential with 1st-Floor Commercial in the Institute of Transportation Engineers’ (ITE) publication, *Trip Generation, 11th Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites. The following table shows the anticipated trip generation for The Project utilizing the ITE data.

**Table I
 Trip Generation**

Land Use	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
Proposed 47 Residential Units with 1 st -Floor Commercial	4	5	9	6	7	13

It should also be noted that within half a mile of the site there is access to New Jersey Transit Bus lines 6, 10, 81, 119, and 120. This mass transit availability will likely result in trip generation even lower than that which is projected by the ITE data, shown in Table I.

As mentioned previously, the site is currently developed with a restaurant, liquor store, and numerous residential structures, all of which have an associated trip generation. Therefore, ITE data for LUC – 899 – Liquor Store and LUC 932 – High-Turnover (Sit-Down) Restaurant were utilized to project the trip generation associated with the existing uses. It is not certain how many residential dwelling units currently exist on the property; therefore, the residential uses were conservatively not considered for trip generation purposes. The following Table II compares the trips associated with the proposed use to existing trip generation of the site.

Table II
Trip Generation Comparison

Land Use	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
Existing 3,560 SF Restaurant	19	15	34	20	12	32
Existing 1,050 SF Liquor Store	1	0	1	9	8	17
Existing Total	20	15	35	29	20	49
Proposed Development	4	5	9	6	7	13
Difference	-16	-10	-26	-23	-13	-36

As shown in Table II above, it is anticipated that 26 fewer trips during the weekday morning peak hour and 36 fewer trips during the weekday evening peak hour are anticipated to access the site with the proposed redevelopment.

It should also be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE “it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways’ peak hour or the development’s peak hour.” Additionally, NJDOT has determined that the same 100 vehicle threshold is considered a “significant increase in traffic,” hence, it is not anticipated that the change in use have any perceptible impact on the traffic operation of the adjacent roadway network.

Site Access, Parking and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As previously noted, access to the site will be provided via one (1) right turn ingress/right turn egress driveway along West 54th Street.

The newly constructed parking garage will be serviced by aisles with minimum widths of 12’ for one-way circulation and 22’ for two-way circulation, which meets the Da Noi Redevelopment Plan requirement. This access configuration is sufficient to accommodate the minimal, low-turnover traffic volumes anticipated for The Project, particularly considering that they will primarily be utilized by residents of the building who will be familiar with the operations and circulation patterns of the garage.

The Da Noi Redevelopment Plan sets forth a requirement of 1.2 parking spaces per dwelling unit for residential uses and 1 parking space per 500 SF for commercial uses. With 47 dwelling units and 1,695 SF of commercial space proposed, this equates requirement of 59 parking spaces. The site as proposed provides 59 parking spaces and as such the Redevelopment Plan parking requirements are met.

It is proposed to provide parking stalls with dimensions of 8’x18’ for standard spaces, 7’4”x16’ for compact spaces, 8’x18’ for parallel spaces, and 9’x36’ for tandem spaces, all of which meet the Redevelopment Plan requirements. Therefore, these dimensions will adequately accommodate the anticipated site traffic.

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 47 residential units and 1,695 SF of ground floor commercial space are projected to generate 4 entering trips and 5 exiting trips during the morning peak hour and 6 entering trips and 7 exiting trips during the evening peak hour.
- Access to the site will be provided via one (1) right turn ingress/right turn egress driveway along West 54th Street.
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles.
- The proposed parking supply and design is sufficient to support the projected demand and meets the Redevelopment Plan requirements.

Conclusion

Based upon our Traffic Impact and Parking Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the City of Bayonne will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

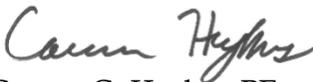
If you have any questions on the above, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC



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CGH;jmm
Enclosures

c: Edward Gomez (via email w/encl.)

