

April 10, 2019

Borough of Allenhurst
Municipal Hall
125 Corlies Avenue
Allenhurst, NJ 07711

Attn: Mayor David McLaughlin

**RE: Traffic & Parking Evaluation
Main Street Redevelopment Plan
Borough of Allenhurst, Monmouth Co., NJ
DT# 2503-99-004TE**

Dear Mayor McLaughlin:

The Main Street Redevelopment Plan presents a tremendous opportunity for the Borough to repurpose and redevelop the JCP&L facility and adjacent properties with a vibrant mixed use development program. The mixed use program will span a gap of approximately 2 blocks along Main Street and serve to revitalize the southern end of the corridor within the Borough.

We are pleased to be able to assist the Borough by conducting this evaluation of the traffic and parking aspects of the Main Street Redevelopment Plan. This evaluation is not considered to be a traffic impact study per se but more of an overall assessment of the traffic generation potential of the redevelopment program, an assessment of the parking requirements set forth in the Plan and inclusion of general comment regarding traffic/parking specific design aspects that the Borough may wish to consider as the design progresses.

TRAFFIC VOLUMES

Traffic congestion is a seasonal issue in the Borough of Allenhurst. Historically, peak traffic conditions and the potential for congestion occur in the summer months of June, July and August (particularly on the weekends). Although the calendar does not allow us to conduct peak period traffic recordings at this time, we have obtained historical traffic data from the NJDOT in order to provide some reference of typical weekday traffic volumes and the difference during the peak months. Attached please find Table I which provides the NJDOT recorded traffic volumes and provides the comparison between the typical and peak season traffic volumes.

Table I
Traffic Volume Comparison

Location	Average Weekday		
	8-9 AM	4-6 PM	Daily (24 hrs)
<u>Main Street</u>			
May 2015	1,096	1,252	16,095
August 2012	1,230	1,463	19,919
Difference	+12%	+17%	+24%
<u>Corlies Avenue</u>			
October 2016	77	92	1,139
August 2013	113	210	2,345
Difference	+47%	+128%	+106%

A review of the above table confirms the seasonal nature of the traffic conditions in the Borough. The volumes on Main Street could vary by as much as 24% during the weekdays and the volumes on Corlies Avenue could more than double. It is expected that the difference in traffic volume on the weekends could be even more dramatic. Even though the difference between the typical volumes and peak season volumes appears dramatic, the traffic volumes are not excessively high for a two lane road such as Main Street (which is designated as a Major Collector roadway) and are adequately accommodated by the existing geometry. Note; however, that the intersection capacity analyses have not been conducted due to lack of complete data at this point in time.

It is our understanding that NJ Transit may have conducted traffic volume recordings at Allen Avenue during their evaluation of the railroad crossing. We would suggest the Borough request this traffic information for possible future use/consideration. Additionally, the Borough should consider conducting traffic volume recordings this summer (July or August) in order to have a current recording of peak traffic conditions for future use/consideration.

TRIP GENERATION COMPARISON

JCP&L was a significant employer in the Borough for many decades with some of the buildings dating back 100 years. It is our understanding that the buildings and properties included in the Main Street Redevelopment Plan used to house the Central Region Headquarters (inclusive of a multitude of activities including a significant amount of office space, material storage, vehicle storage and maintenance operations). In order to provide a complete picture of the redevelopment plan it is prudent to conduct a traffic generation comparison between the JCP&L uses and the proposed redevelopment vision. Industry standard practice is to utilize the Institute of Transportation Engineers (ITE) publication, *Trip Generation, 10th Edition* to estimate the traffic generation potential of the prior JCP&L uses and the proposed redevelopment uses. Please note that we have made our best attempt at replicating the JCP&L property and activities for comparison purposes as contained in the following table. Additionally, note that the trip generation projections for the proposed condition takes into account passby traffic and the anticipated interaction associated with the proposed combination of complementary uses. Any additional clarification on the uses and/or square footage at the facility would be appreciated and would allow us to further refine the following table.

Table II
Trip Generation Comparison

Land Use	Weekday			Weekend	
	AM Peak Hour	PM Peak Hour	Daily (24 hrs)	Mid-day Peak Hour	Daily (24 hrs)
<u>East Side</u>					
<i>Previous Use</i> 37,000 SF Light Industrial	21	19	198	15	74
<i>Proposed Use</i> 31 Condos	11	14	167	20	152
Difference	-10 (-48%)	-5 (-26%)	-31 (-16%)	+5 (+33%)	+78 (+105%)
<u>West Side</u>					
<i>Previous Uses</i> 25,000 SF Light Industrial	16	14	153	10	50
65,000 SF Office	75	75	699	34	144
Total	91	89	852	44	194
<i>Proposed Uses</i> 80 Apartments	28	22	290	33	193
3,000 SF Retail	26	12	223	18	468
8,000 SF Restaurant	-	31	369	49	404
Total	54	65	882	100	1065
Difference	-37 (-41%)	-24 (-27%)	+30 (+4%)	+56 (+127%)	+871 (+449%)
<u>Total</u>					
Previous Uses	112	108	1050	59	268
Proposed Uses	65	79	1049	120	1217
Difference	-47 (-42%)	-29 (-27%)	-1 (-0%)	+61 (+103%)	+949 (+354%)

A review of the above table illustrates the potential traffic generation similarities between the previous JCP&L facility and the proposed redevelopment plan particularly during the weekday. The proposed redevelopment plan will likely generate more traffic than was projected for the JCP&L facility during the weekends. The JCP&L activity consisted of a constant mix of employees, work vehicles and maintenance trucks, whereas, the proposed development will be residents, guests, employees and patrons. While it is acknowledged that the weekend traffic projections of the redevelopment plan may be higher than the JCP&L traffic, it should be noted that the traffic associated with the redevelopment plan is much more compatible and similar to the traffic already being generated by the existing land uses along Main Street and within the Borough.

It should also be noted that a percentage of the condos and apartments are anticipated to be utilized as vacation/weekend homes and; therefore, would generate even less traffic than anticipated on a typical weekday or off-season day. Further, there will be significant interaction and trip credits between the residences, the retail and the restaurant which will decrease the amount of new vehicle trips destined to/from the redevelopment area.

PARKING STANDARDS

The redevelopment plan contains parking requirements for the uses contemplated.

For the residential uses (townhouses and apartments) we concur that the Residential Site Improvement Standards (RSIS) apply. [RSIS 5:21-4.14 and Table 4.4] It should be noted that the RSIS parking requirements contain a provision for 0.5 guest parking spaces per unit as long as the guest parking is provided “on-street or in common parking areas”. As an example, the guest parking is already considered in the 1.8 space requirement for 1 bedroom apartment units. In addition, the RSIS states that “alternative parking standards to those shown in Table 4.4 shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.” In this case the Borough should consider whether “household characteristics” such as the fact that a portion of these uses could be used seasonally and/or as second homes for weekends and vacations is pertinent. Additionally, the Borough should consider whether “availability of mass transit” is pertinent due to the proximity of the Allenhurst NJ Transit rail station which is located approximately 1,000 feet away.

For the commercial uses (restaurant and retail) the redevelopment plan indicates that “there shall be no minimum parking requirement for non-residential uses, but at the time of Site Plan application, a demonstration of shared parking calculations shall be provided for review by the Board”. We would suggest that the shared parking calculation be completed utilizing the Borough parking requirements as a starting input using the methodology and guidance as contained within the Urban Land Institute (ULI) publication, *Shared Parking*.

Townhouse Residential District

The townhouse residential district is currently contemplated to contain 31 townhouse units. The bedroom mix has not been identified; however, it is anticipated that the units will provide a minimum of 3 bedrooms. The RSIS requires the following parking supply for townhouse units (per RSIS Table 4.4):

Table III
RSIS Parking Rates - Townhomes

# of Bedrooms	Spaces per Unit
1	1.8
2	2.3
3	2.4

It is envisioned that this development will be self-sufficient with regards to parking – meaning that the parking supply will satisfy the RSIS and be adequate to accommodate the parking demand anticipated. The following are a few items that the Borough should consider when determining the parking demand:

- Garage usability – the RSIS indicates that a 2 car garage and driveway combination shall count as 3.5 parking spaces. I believe this reduction from 4 spaces to 3.5 spaces is attempting to account for the fact that a portion of the townhouse owners will utilize the garage for storage of personal belongings and not parking for their vehicle. Depending on the ownership characteristics we have found that the use of the garage for vehicle parking varies significantly. A general statement based on our experience is that empty nesters and seniors oftentimes use the garage for vehicle parking whereas families oftentimes do not.
- Seasonal Use and Guests – the RSIS indicates that the per unit parking requirement includes a provision for 0.5 guest parking spaces per unit as long as the guest parking is provided “on-street or in common parking areas”. The 31 units would require a total of 16 parking spaces for guests “on-street or in common areas”. The concept plan provides a total of 10 parking spaces at the south end of the development in a common area (not in a driveway or garage). The Borough may wish to consider utilization of the east side drive aisle for additional common space parking especially considering the potential for this development to be heavily utilized during the summer weekends.

Adaptive Re-use District

The adaptive re-use district is currently contemplated to contain 80 apartment units plus restaurant and retail space. The bedroom mix and resulting RSIS parking requirement for the apartments are as follows (per RSIS Table 4.4):

Table IV
RSIS Parking Requirements

# of Units	# of Bedrooms	RSIS Requirements	
		Spaces per Unit	Spaces Required
27	1	1.8	48.6
50	2	2.0	100.0
3	3	2.1	6.3
Total			155

The commercial space is currently contemplated as a fairly significant size restaurant use 8,000+ SF as well as approximately 3,000 SF of retail space. The Redevelopment Plan does not provide specific parking standards for the commercial uses but does reference the requirement to provide a shared parking study and the ability to consider utilization of other creative parking practices (stacking, tandem, valet, etc.) We would recommend utilizing the Borough parking standards as the basis and starting point for the shared parking calculation. We agree that mixed use commercial space,

especially when combined with residential apartments, definitely exhibits shared parking characteristics. Shared parking is when two or more land uses share the same parking spaces. By taking into account different peak parking demands, shared parking areas reduce the total number of parking spaces required as compared to simply adding together the parking requirements of each individual use.

It is envisioned that the parking for the adaptive re-use district will be accommodated within a parking structure at the north end of the property. We concur with this plan and have conducted a preliminary evaluation of the parking structure simply based on lot size and building height. It appears that the parking structure could be approximately 150 feet in length by 130 feet in width which could potentially accommodate approximately 60 parking spaces per floor.

We would recommend that the Borough explore the potential to provide vehicular access to the parking structure from the north end of the building. The access could function as a shared access driveway with the Public Utility District. The creation of a shared access driveway will focus the vehicular movements directly opposite the intersection with Elberon Avenue. We feel that the north end of the building is the proper location for the parking structure access as opposed to a mid-block driveway opening(s) along Main Street.

It is our understanding that the Redevelopment Plan has a provision in the Adaptive Re-use District for deviating from the RSIS parking calculation by 5% without need for a waiver or deviation. We concur that a deviation from the strict adherence to the RSIS could be justified when considering the shared parking principles, the interaction between the commercial uses and the apartment uses, the proximity of the Allenhurst train station and the proliferation of Transportation Network Companies (TNC's) such as Uber, Lyft etc., which tend to reduce vehicle dependency.

DESIGN CONSIDERATIONS

The Redevelopment Plan provides preliminary designs and concept renderings of the Townhouse Residential District and Adaptive Re-Use District. The Borough may wish to consider the following items as the designs are advanced:

Townhouse Residential District

The townhouse residential district currently provides 3 access points (1 on Elberon Avenue and 2 on Hume Street) which are relocations and/or re-use of existing access points. We concur that an access location should not be provided along Main Street. We believe that the 3 access points are acceptable; however, any future redesigns could consider a different internal circulation layout which could then allow the site to be designed with a single access point along each of the roads (2 access points total). To note is that, if redesigned, it is preferable to not have dead end aisles within this development.

The drive aisle widths need to be at least 24 feet in width. This width is important to allow safe and efficient turning movements into and out of the driveways.

The parking supply would benefit from providing parking along the east side of the east drive aisle for additional common space parking especially considering the potential for this development to have significantly high occupancy during the summer weekends.

The concept plan illustrates angle parking along the east side of Main Street (adjacent to the townhouse development). Main Street would need to be widened in order to accommodate the angle parking. We concur that development of this parcel would allow Main Street to be widened to accommodate the angle parking design; however, the alignment of northbound Main Street through this block should be maintained. The Borough should consider whether the provision of angle parking would be more beneficial on the west side of Main Street since it would be consistent and a continuation of the angle parking on the block to the north of Elberon Avenue. Angle parking on the west side would provide an increased parking supply in front of the mixed use building, where the demand will exist.

Adaptive Re-Use District

The adaptive re-use district should consider providing vehicular access to the parking structure from the north end of the building. The access could function as a shared access driveway with the Public Utility District and would form a 4-way intersection with Elberon Avenue. In the future this intersection could be considered as a location for traffic signalization to further enhance the safety and efficiency of vehicular movements and provide a primary pedestrian crossing location.

We concur that the plaza area in the middle of the block should not provide vehicular access. This plaza should maintain a pedestrian focus and the Main Street sidewalk should not be interrupted with vehicular access drive(s). We believe that approximately 100 feet of parking in front of the plaza should be designated a drop-off/pick-up area for use by personal vehicles, cabs, TNC vehicles (Uber, Lyft, etc.). The mixed use building would benefit from having a designated area to safely and efficiently accommodate this activity.

The Borough may wish to consider intersection bumpouts to serve as traffic calming and pedestrian safety improvements at the intersections of Main Street with both Hume Street and with Elberon Avenue. The provision of adequate (or oversized) sidewalks and pedestrian spaces are important to the streetscape and vibrancy of the redevelopment.

FINDINGS

Below please find a summary of the major aspects of our evaluation (detailed discussion is contained in the body of the report)

- Increased traffic volumes and traffic congestion is primarily a seasonal condition in the Borough during the summer months and particularly during the summer weekends.
- The JCP&L property was previously the Central Region Headquarters (inclusive of more than 100,000 SF of space which included office space, material storage, vehicle storage and maintenance operations. This facility generated constant and rather significant traffic and parking activity.
- The weekday traffic associated with the proposed redevelopment plan is anticipated to be less than that of the previous JCP&L facility. The weekend traffic associated with the proposed redevelopment plan is anticipated to be somewhat similar during the morning and afternoon hours; however, over the course of the entire weekend day the commercial and residential activity will be higher.
- Traffic associated with proposed redevelopment plan is much more compatible and similar to the type of traffic already being generated by the existing land uses along Main Street and within the Borough than was the JCP&L activity.
- Provision of mixed use development and residences along Main Street will fill an existing gap and continue the streetscape and downtown vibrancy that exists to the north and south.
- The concept plans anticipate accommodating the parking demand for each redevelopment parcel on their respective site.
- The parking requirements of the Townhouse Residential District are governed by RSIS. Additional “common space” parking should be considered to accommodate the seasonal demand anticipated.
- The parking requirements of the Adaptive Re-Use District are governed by a combination of RSIS and shared parking requirements which utilize the Borough parking requirements as a starting point along with the methodology and guidance as provided by the Urban Land Institute (ULI).
- Shared Parking principles will apply to the residential and commercial land uses included in the redevelopment. Additionally, alternative parking designs and parking practices could be considered for implementation.
- The Adaptive Re-Use District should accommodate the required parking in the parking structure and access to this parking structure should be provided from the

north end via a shared access drive with the public utility district. It appears that the parking structure could accommodate approximately 60 parking spaces per floor.

- The plaza contained within the Adaptive Re-Use District should be pedestrian focused and a drop-off/pick-up zone should be created adjacent to the plaza in lieu of approximately 100 feet of on-street parking along the west side of Main Street.
- On-street parking can be created along Main Street via angle parking (on one side or the other). This additional on-street parking would help to alleviate the Main Street parking demand concerns during peak summer season.
- Intersection bump outs, which provide traffic calming and pedestrian safety benefits, should be considered at the intersections of Main Street with both Elberon Avenue and with Hume Street.
- South Gateway District and Public Park District have not been specifically reviewed in this evaluation. We would be happy to conduct a similar evaluation once more information is available for those districts.

We understand the importance of this redevelopment plan and are pleased to be able to assist the Borough by conducting this evaluation of the traffic and parking aspects of the Main Street Redevelopment Plan. This report discusses our evaluation and sets forth recommendations regarding traffic and parking aspects that the Borough may wish to consider as the redevelopment plan is advanced.

We would be happy to have continued discussions and provide technical input as requested.

Sincerely,

Dynamic Traffic, LLC



John McCormack, PE, PTOE
Principal

c: David Laughlin, Borough Attorney
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