

TRAFFIC AND PARKING ASSESSMENT

For

**Iglesia Rehobeth NJ
Proposed Change of Use**

Property Located at:

**416 Avenue C
Block 231 – Lot 55
City of Bayonne, Hudson County, NJ**

Prepared by:



**1904 Main Street | 245 Main Street, Suite 110
Lake Como, NJ 07719 | Chester, NJ 07930
(732) 681-0760**

A handwritten signature in black ink, appearing to read 'C. Peregoy', written over a horizontal line.

**Craig Peregoy, PE
NJ PE License #45880**

A handwritten signature in black ink, appearing to read 'Connor Hughes', written over a horizontal line.

**Connor Hughes, PE
NJ PE License #57245**

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4618-22-02780

INTRODUCTION

It is proposed to convert an existing 1,000 SF ground floor retail space into a house of worship with 41 seats (The Project) on a parcel of land located within the northeast quadrant of the intersection of Avenue C and Andrew Street in the City of Bayonne, Hudson County, New Jersey as shown on Figure 1 contained in the Technical Appendix of this report. The site is designated as Block 231 – Lot 55 on the City Tax Maps. Vehicular access to the site is not currently provided, and this condition will remain. As such, no on-site parking is provided.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic and parking impact associated with the construction of The Project on the adjacent roadway network. This study 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 and location and geometry of existing driveways and intersections.
- Parking accumulation counts were conducted during the Friday evening and Sunday late morning time periods along the streets surrounding the site within a 1,000-foot radius.
- Projections of traffic to be generated by the proposed development was prepared utilizing trip generation data as published by the Institute of Transportation Engineers.

EXISTING CONDITIONS

A review of the existing roadway conditions near the subject site was conducted to provide the basis for assessing the parking impact of the development.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

Avenue C is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides two travel lanes in each direction with a general north/south orientation. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted 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.

Andrew Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction with a general east/west orientation. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted along both sides of the roadway. Andrew Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Andrew Street in the vicinity of The Project are primarily residential.

JFK Boulevard is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides two travel lanes in each direction with a general north/south orientation. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted along both sides of the roadway. JFK Boulevard provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along JFK Boulevard in the vicinity of The Project are a mix of commercial and residential.

West 16th Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the speed limit is not posted and the roadway provides one travel lane for one-way travel in the westbound direction. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted along both sides of the roadway. West 16th Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along West 16th Street in the vicinity of The Project are primarily residential.

West 17th Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the speed limit is not posted 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 while on-street parking is permitted along both sides of the roadway. West 17th Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along West 16th Street in the vicinity of The Project are primarily residential.

West 18th Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the speed limit is not posted and the roadway provides one travel lane for one-way travel in the westbound direction. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted along both sides of the roadway. West 18th Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along West 18th Street in the vicinity of The Project are primarily residential.

West 19th Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the speed limit is not posted 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 while on-street parking is permitted along both sides of the roadway. West 19th Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along West 19th Street in the vicinity of The Project are primarily residential.

West 20th Street is a local roadway under the jurisdiction of the City of Bayonne. In the vicinity of the site the speed limit is not posted and the roadway provides one travel lane for one-way travel in the westbound direction. Curb and sidewalk are provided along both sides of the roadway while on-street parking is permitted along both sides of the roadway. West 20th Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along West 20th Street in the vicinity of The Project are primarily residential.

Parking Counts

Parking accumulation counts were conducted on Friday, January 20, 2023 from 7:00 – 9:00 PM and on Sunday, January 22, 2023 from 10:00 AM – 12:00 PM. These study periods were selected to coincide with the peak parking demand of the proposed house of worship based on the religious service times. Specifically, through consultation with the Applicant, the proposed service times are as follows:

- Religious services will be held on Fridays from 7:00 – 9:00 PM and on Sundays from 10:00 – 3:00 PM.
- Bible study will be held on Wednesdays from 7:00 – 9:00 PM and on Sundays from 10:00 AM – 12:00 PM.
- A social will be held once a month on Saturdays from 10:00 AM – 12:00 PM.

The following are descriptions of the locations of the parking counts:

- Avenue C from West 15th Street to West 21st Street can park 112 cars.
- JFK Boulevard from West 16th Street to West 19th Street can park 61 cars.
- Andrew Street from Broadway to JFK Boulevard can park 90 cars.
- West 16th Street from Broadway to JFK Boulevard can park 78 cars.
- West 17th Street from Broadway to JFK Boulevard can park 90 cars.
- West 18th Street from Broadway to JFK Boulevard can park 88 cars.
- West 19th Street from Broadway to JFK Boulevard can park 94 cars.
- West 20th Street from Broadway to JFK Boulevard can park 83 cars.

The following are descriptions of the existing parking regulations of the adjacent roads.

- **Avenue C:**
 - East side: No Parking during Street Sweeping on Monday, Wednesday and Friday 7:00 – 9:00 AM; Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit; No Parking in front of NJ Transit bus stops; No Parking in front of Wallace Temple AME Zion Church; No Parking Drop-Off Only in front of Smile of a Child Day Care Center from Monday to Friday
 - West side: No Parking during Street Sweeping on Tuesday, Thursday and Saturday 7:00 – 9:00 AM; Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit; No Parking in front of NJ Transit bus stops.
- **JFK Boulevard:**
 - East side: No Parking 8:00 AM – 10:00 AM on Monday and Thursday; Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit; No Parking in front of NJ Transit bus stops.
 - West side: No Parking 10:00 AM – 12 Noon on Tuesday and Friday; Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit; No Parking in front of NJ Transit bus stops.
- **Andrew Street:**
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
- **West 16th Street:**
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
- **West 17th Street:**
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit; No Parking Sunday 9:00 AM – 2:30 PM and Monday, Tuesday, and Wednesday 6:30 – 8:00 PM in front of Wallace Temple AME Zion Church.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
- **West 18th Street:**
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
- **West 19th Street:**
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.

- West 20^h Street:
 - North side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.
 - South side: Residential Permit Parking Monday to Friday 8:00 AM – 9:00 PM, All Others 1 Hour Limit.

The parking accumulation counts identified the amount of available on-street parking on the roads surrounding The Project during the study periods described above. The number of vacant parking spaces was recorded each day and the average number of available parking spaces was calculated to be 9 spaces. The detailed summary of the parking availability is contained in the Technical Appendix.

FUTURE CONDITIONS

Traffic Generation

Projections of the future traffic volumes were developed utilizing data published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 560 – Church. Table I summarizes the projected trips generated by the proposed development utilizing the ITE data.

Table I
Trip Generation

Land Use	PM PSH			Sunday PSH		
	In	Out	Total	In	Out	Total
41-Seat House of Worship	4	3	7	10	11	21

As mentioned previously, the existing space is currently utilized as a retail use which has an existing trip generation potential. Therefore, trips associated with the existing use were developed utilizing the ITE data for LUC 822 – Strip Retail Plaza (<40k). The following Table II compares the proposed use to the existing use utilizing the ITE trip generation. Note that for the weekend trip generation, the Saturday peak hour was utilized for the retail use.

Table II
Trip Generation Comparison

Land Use	PM PSH			Weekend PSH		
	In	Out	Total	In	Out	Total
Existing 1,000 SF of Retail	7	6	13	4	3	7
Proposed 41-Seat House of Worship	4	3	7	10	11	21
Difference	-3	-3	-6	+6	+8	+14

As shown above, the redevelopment of the property is projected to result in 6 fewer trips during the weekday afternoon peak period and 14 additional trips during the weekend peak period.

It should also be noted that within half a mile of the site there is access to New Jersey Transit bus lines 10, 81, 119, 120 as well as the 22nd Street Hudson Bergen Light Rail (HBLR) station. This mass transit availability will likely result in trip generation even lower than that which is projected by the ITE data.

Since no appreciable increase in trip generation is projected to be generated by the site, the operational conditions of the surrounding roadway network is not anticipated to change. The delays and queues in the area will remain as existing and it is likely that there will be no perceptible change in the traffic conditions with the construction of the proposed project. In fact, both ITE and NJDOT define a “significant” increase in traffic as 100 or more peak hour trips. As shown in Table II, the subject property is projected to generate approximately 20% of this threshold even without consideration of a portion of vehicular trips being replaced by pedestrian and mass transit trips.

PARKING

The City of Bayonne sets forth a parking requirement of 1 parking space per 10 seats for places of worship. This equates to a requirement of 10 parking spaces for the proposed 41 seats. The site as proposed provides 0 parking spaces, and as such a variance is required.

It should be noted that the characteristics of the City of Bayonne and specifically the surrounding area of the site are very much different than rural and very suburban communities. The area surrounding the site is of a dense population nature and the neighborhood is very walkable and conducive to pedestrians. The surrounding neighborhood is interconnected with sidewalks. Opportunities for carpooling, utilization of Uber and Lyft services in addition to mass transit and other alternate means of travel are conveniently available; all which will reduce the trip and parking generation of the proposed development.

National parking demand data has been collected by the ITE within their publication *Parking Generation, 5th Edition*. This publication establishes peak parking demands for multiple land uses upon different independent variables, such as GFA and employees. For LUC 560 – Church, ITE sets forth an average peak demand of 0.22 vehicles per seat. This equates to a demand of 9 parking spaces without the consideration of mass transit, pedestrian trips, and other factors associated with a dense urban area such as the one surrounding the site.

As mentioned previously, on-street parking accumulation surveys were conducted during the Friday evening and Sunday late morning time periods to establish the current on-street parking availability within a reasonably convenient walking distance from the site. A map of the surveyed streets as well as tabulated data detailing parking availability are included in the Technical Appendix of this report. The results showed an average of 9 on-street available parking spaces. Additionally, as noted previously, the start times for religious services (which will draw the most patrons) will be 7:00 PM on Fridays and 10:00 AM on Sundays. The collected count data revealed that there were 11 on-street available parking spaces at 7:00 PM on Friday and 10 on-street available parking spaces at 10:00 AM on Sunday.

Furthermore, the existing retail space generates an existing parking demand which was counted during aforementioned parking surveys. Since the proposed house of worship will effectively replace some of the existing spaces currently being utilized by retail customers, the average availability of 9 on-street parking spaces would only need to serve the difference in demand resulting in the change of use from retail to the house of worship.

Therefore, based on the various outlined factors above, the local on-street parking availability will be sufficient to accommodate the peak parking demands of the proposed development.

FINDINGS & CONCLUSIONS

Findings

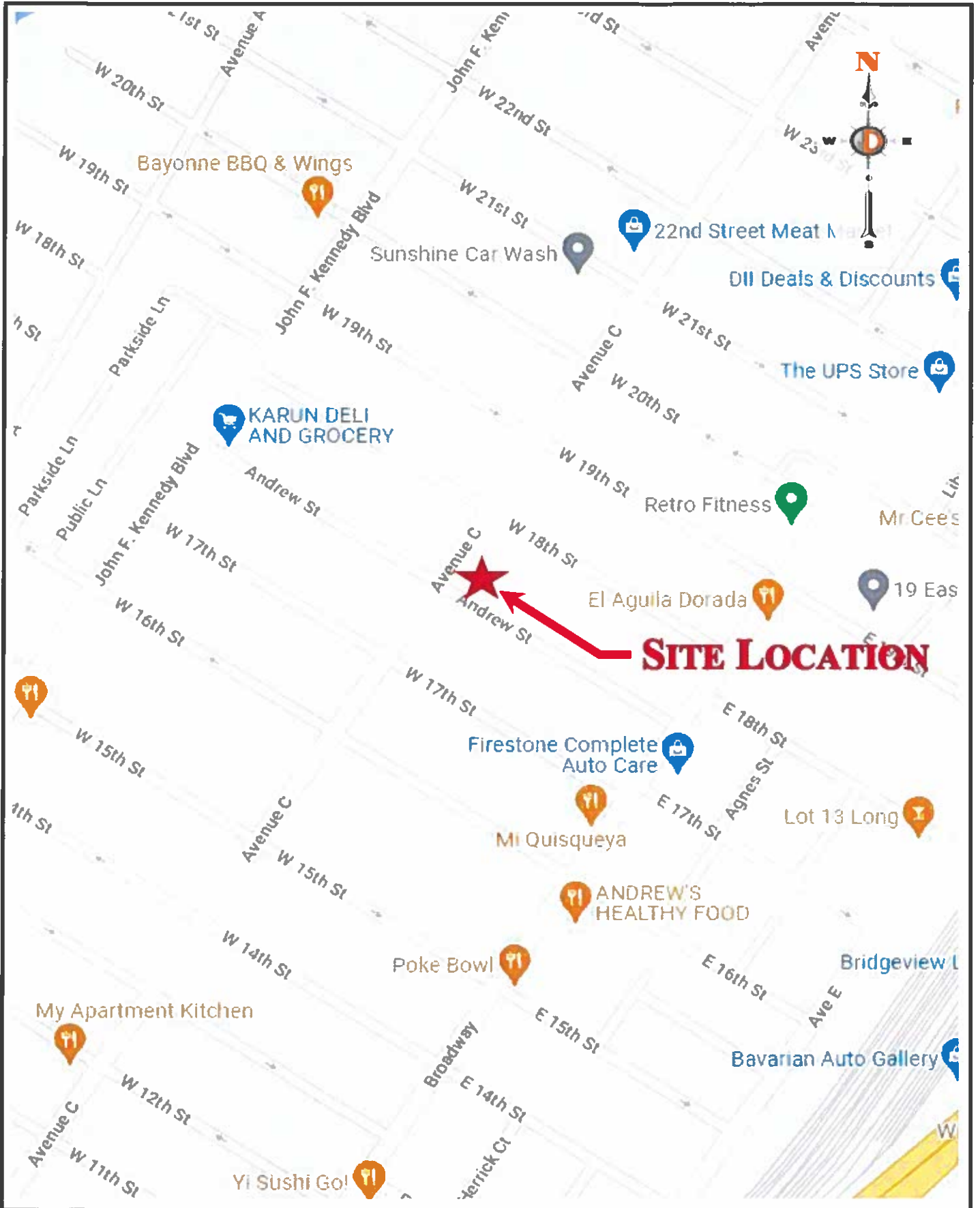
Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 41-seat house of worship is projected to generate 4 entering trips and 3 exiting trips during the weekday evening peak hour and 10 entering trips and 11 exiting trips during the Sunday peak hour without the consideration of mass transit availability, pedestrian trips, or other alternate modes of transportation.
- Within ½ of a mile of the site, there is access to New Jersey Transit bus lines 10, 81, 119, 120 as well as the 22nd Street HBLR station.
- According to thresholds set forth by both NJDOT and ITE, the increase in trip generation to be generated by the site is not considered “significant”, and therefore the delays and queues in the area will remain as existing and it is likely that there will be no perceptible change in the traffic conditions with the construction of the proposed project.
- The local on-street parking supply is expected to be sufficient to support the maximum anticipated demand.

Conclusions

Based upon our Traffic and Parking Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the City of Bayonne will not experience any significant degradation in operating conditions with the construction of The Project. The local on-street parking availability is adequate to accommodate The Project’s needs.

Technical Appendix



Proposed Change of Use
 Traffic and Parking Assessment
 4618-22-02780

Figure 1

Site Location Map



Location: 416 Avenue C
Bayonne, Hudson County, NJ



