# TRAFFIC IMPACT STUDY

## PROPOSED 7-ELEVEN CONVENIENCE MARKET

Proposed 7-Eleven
Convenience Market
73 Cedar Swamp Road
City of Glen Cove,
Nassau County, New York

Prepared For:
7-Eleven, Inc.

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Andrew Villari, PE
Project Manager
NY P.E. License #100729

Matthew J. Seckler PE, PP, PTOE
Principal
NY P.E. License #092725

STONEFIELD

584 Broadway, Suite 310, New York, NY 10012

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## INTRODUCTION

This Traffic Impact Study has been prepared to investigate the potential impacts of the proposed 7-Eleven convenience market on the adjacent roadway network. The subject property is located at the northeast quadrant of the intersection of Cedar Swamp Road and 4th Street in the City of Glen Cove, Nassau County, New York. The site location is shown on appended **Figure 1**.

The subject property is designated as District 100, Section 22, Block 20, Lots 6 and 7. The site has approximately 100 feet of frontage along Cedar Swamp Road and approximately 115 feet of frontage along 4th Street. The existing site contains an automobile service station. The existing access is provided via one (1) full-movement driveway on Cedar Swamp Road and two (2) full movement driveways on 4th Street. Under the proposed development program, a 2,500-square-foot 7-Eleven convenience market would be constructed. Access is proposed via one (1) left-in/right-in/right-out driveway on Cedar Swamp Road and one (1) right-in/right-out driveway on 4th Street.

## METHODOLOGY

Stonefield Engineering & Design, LLC ("Stonefield") prepared this Traffic Impact Study in accordance with the recommended guidelines and practices outlined by the Institute of Transportation Engineers (ITE) within Transportation Impact Analyses for Site Development. A detailed field investigation was performed to assess the existing conditions of the adjacent roadway network. A data collection effort was completed to identify the existing traffic volumes at the study intersections to serve as a base for the traffic analyses. Capacity analysis, a procedure used to estimate the traffic-carrying ability of roadway facilities over a range of defined operating conditions, was performed using the Highway Capacity Manual, 6th Edition (HCM) and Synchro 10 Software for all study conditions to assess the roadway operations.

For an unsignalized intersection, Level of Service (LOS) A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 80 seconds per vehicle. The Technical Appendix contains the Highway Capacity Analysis Detail Sheets for the study intersections analyzed in this assessment. The traffic signal timing utilized within the signalized analysis is based on timing directives and as-built plans provided by Nassau County Department of Public Works (NCDPW).

## NCDPW 239-F APPROVAL

Given the jurisdiction of Cedar Swamp Road as a Nassau County roadway, the allowable turning movements at the proposed Cedar Swamp Road driveway were reviewed by the NCDPW. It was determined that left-turn egress at the subject driveway would not be acceptable and that left-turn ingress would be acceptable if the median along the roadway was adequately modified. Additionally, both right-turn ingress and egress movements were determined to be acceptable. On May 28, 2019, a 239-f approval was granted for the proposed modifications to the median on Cedar Swamp Road presented in the Site Plan prepared by Stonefield Engineering & Design, LLC., dated January 29, 2020. Therefore, the 7-Eleven site development plan and associated traffic analysis are based on a left-in/right-in/right-out driveway configuration on Cedar Swamp Road.

## 2019 EXISTING CONDITION

### EXISTING ROADWAY CONDITIONS

The proposed 7-Eleven convenience market is located at the northeast quadrant of the intersection of Cedar Swamp Road and 4th Street in the City of Glen Cove, Nassau County, New York. The subject property is designated as District 100, Section 22, Block 20, Lots 6 and 7. The site has approximately 100 feet of frontage along Cedar Swamp Road and approximately 115 feet of frontage along 4th Street. Land uses in the area are a mix of commercial and residential.

Cedar Swamp Road is classified as an urban minor arterial with a general north-south orientation and is under the jurisdiction of the NCDPW. The posted speed limit is 30 mph. Along the site frontage, the roadway provides two (2) lanes in each direction; to the north, there is an intermittent raised median dividing the northbound and southbound traffic flows. Sidewalks and curbs are provided along both sides of the roadway and a full-width shoulder is provided along the easterly side of the roadway. On-street parking is not permitted along the site frontage. Cedar Swamp Road provides access to New York State Route 107 to the south and the center of Glen Cove to the north.

4th Street is classified as an urban major collector with a general east-west orientation and is under the jurisdiction of the City of Glen Cove. The posted speed limit is 30 mph. The roadway generally provides one (1) lane in each direction. Curbs are provided along both sides of the roadway and sidewalk is provided on the north side of the roadway. On-street parking is not permitted along the site frontage. 4th Street begins at Cedar Swamp Road and provides access to Piping Rock Road and the Village of Old Brookville to the east. 4th Street is designated as Frost Pond Road in the Village of Old Brookville.

Cedar Swamp Road intersects 4th Street to form a three (3) legged T-intersection controlled by a two (2)-phase traffic signal, operating on a 70-second cycle during the peak hours. The northbound approach of Cedar

Swamp Road provides two (2) exclusive through lanes and one (1) exclusive right-turn lane. The southbound approach of Cedar Swamp Road provides one (1) exclusive left-turn lane and two (2) exclusive through lanes. The westbound approach of 4th Street provides one (1) exclusive left-turn lane and one (1) exclusive right-turn lane. Right turns on red are permitted at this intersection. A crosswalk and pedestrian signals are provided across the northerly leg of the intersection.

## EXISTING TRAFFIC VOLUMES

Manual turning movement counts were collected during the typical weekday morning and weekday evening time periods to evaluate existing traffic conditions and identify the specific hours when traffic activity on the adjacent roadways is at a maximum and could be potentially impacted by the development of the site. Specifically, turning movement counts were collected at the intersection of Cedar Swamp Road and 4th Street on Thursday, December 12, 2019, from 7:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:30 p.m. Additionally, detailed vehicle queue counts on the westbound 4th Street approach to Cedar Swamp Road were observed every signal cycle during the study peak hours.

The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and ITE guidelines. The study time periods were chosen as they are representative of the peak periods of both the adjacent roadway network and the proposed 7-Eleven convenience market. Based on the review of the count data, the weekday morning peak hour occurred from 7:45 a.m. to 8:45 a.m. and the weekday evening peak hour occurred from 4:00 p.m. to 5:00 p.m. The 2019 Existing weekday morning and evening peak hour volumes are summarized on appended **Figure 2**.

## EXISTING LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the 2019 Existing Condition for the weekday morning and weekday evening peak hours at the study intersection. The signalized intersection of Cedar Swamp Road and 4th Street is calculated to operate at overall Level of Service B during both the weekday morning and weekday evening peak hours. Please note that the drone footage collected on December 12, 2019 during the study peak periods was reviewed in order to verify the results of the Synchro Model of the existing traffic patterns at the study intersection. As such, the northbound and southbound Cedar Swamp Road approaches and the westbound 4th Street approach were calibrated accordingly to accurately portray the observed queue lengths during the weekday morning and weekday evening peak hours. Please note that the queues at each approach were observed to clear each cycle.

## EXISTING VEHICULAR GAP ANALYSIS

In addition to the manual turning movement counts, Stonefield conducted an analysis of the total vehicular capacity of the left-turn ingress movements in terms of available gaps in traffic along Cedar Swamp Road. Vehicular gaps in northbound traffic along Cedar Swamp Road were recorded during the weekday morning and weekday evening peak periods to evaluate the existing vehicular headway conditions along the subject roadway. Vehicular gaps were recorded coincidently with the supplemental manual turning movement counts.

The data was analyzed using minimum gap acceptance rates as specified within Highway Capacity Manual 2010 (HCM). An available gap, or critical headway, represents the minimum time interval between oncoming vehicles that a motorist will accept in order to execute a turning movement. Note that because of the limited number of vehicles expected to queue while waiting for a gap, Stonefield assumed that a maximum of two (2) vehicles could perform a left-turn ingress movement during any single gap. However, several gaps of a duration that would otherwise allow for more than two (2) vehicles to complete left turns were observed.

The total number and duration of the existing gaps in traffic on Cedar Swamp Road were evaluated in terms of the minimum gap acceptance and follow-up times. The existing gaps were summarized over the course of the weekday morning and evening peak hours, as provided in **Table 1**.

**TABLE 1 – CEDAR SWAMP ROAD – TOTAL CAPACITY**

| Movement | Peak Hour | Total Vehicular Capacity (HCM Base Critical Gap) |
|---|---|---|
| Cedar Swamp Road Left-Turn Ingress (Main Line, 2 lanes) | AM Peak Hour (7:45 a.m. to 8:45 a.m.) | 295 (4.1 sec) |
| | PM Peak Hour (4:00 p.m. to 5:00 p.m.) | 332 (4.1 sec) |

## ACCIDENT ANALYSIS

In order to assess the safety of the subject intersection and the surrounding corridor, the four (4) most recent years of available motor vehicle collision data were obtained from the New York State Department of Transportation (NYSDOT). The study time spans from January 2016 to December 2019. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions in the study network. **Table 2** provides a summary of the manner and severity of the motor vehicle collisions reported at the intersections of Cedar Swamp Road and Fourth Street, Cedar Swamp Road and Sea Cliff Avenue, Cedar Swamp Road and Carney Street, Fourth Street and Gabriel Place, and the connecting corridors.

**TABLE 2 – MOTOR VEHICLE COLLISION DATA SUMMARY**

| Intersection | Collision Type | Number of Collisions | Collisions Resulting in Injury | Collisions Resulting in Fatalities |
|---|---|---|---|---|
| Cedar Swamp Road & Fourth Street | Rear End | 3 | 1 | 0 |
| | Left Turn (With Other Car) | 1 | 1 | 0 |
| | Right Angle | 1 | 1 | 0 |
| | Left Turn (Against Other Car) | 1 | 0 | 0 |
| | **Total** | **6** | **3** | **0** |
| Cedar Swamp Road & Sea Cliff Avenue | Collision with Pedestrian | 4 | 4 | 0 |
| | Overtaking | 3 | 0 | 0 |
| | Left Turn (Against Other Car) | 2 | 1 | 0 |
| | Right Angle | 2 | 2 | 0 |
| | Rear End | 2 | 1 | 0 |
| | Left Turn (With Other Car) | 1 | 0 | 0 |
| | Right Turn | 1 | 0 | 0 |
| | **Total** | **15** | **8** | **0** |
| Cedar Swamp Road & Carney Street | Left Turn (Against Other Car) | 3 | 3 | 0 |
| | Collision with Fixed Object | 1 | 1 | 0 |
| | Overtaking | 1 | 1 | 0 |
| | Rear End | 1 | 1 | 0 |
| | **Total** | **6** | **5** | **0** |
| Fourth Street & Gabriel Place | Right Angle | 1 | 1 | 0 |
| | Collision with Fixed Object | 1 | 0 | 0 |
| | Collision with Parked Car | 1 | 0 | 0 |
| | **Total** | **3** | **1** | **0** |
| Cedar Swamp Road between Fourth Street and Sea Cliff Avenue | Overtaking | 1 | 0 | 0 |
| | Collision with Parked Car | 1 | 0 | 0 |
| | Collision with Fixed Object | 1 | 0 | 0 |
| | **Total** | **3** | **0** | **0** |
| Cedar Swamp Road between Fourth Street and Carney Street | Overtaking | 2 | 0 | 0 |
| | Collision with Curbing | 1 | 1 | 0 |
| | **Total** | **3** | **1** | **0** |
| **Network Total** | | **36** | **18** | **0** |

As shown in **Table 2**, a total of 36 collisions were reported at the study intersections and corridors over the 48-month period; this equates to less than one (1) collision every month. It should be noted that the accident rate of the study intersection of Cedar Swamp Road and Fourth Street was calculated using NYSDOT annual average daily traffic counts to be 0.184 accidents per million entering vehicles. This rate is lower than

the state average, as reported by NYSDOT, of 0.32 accidents per million entering vehicles for urban three (3)-legged signalized intersections with one (1) to four (4) lanes.

## 2022 NO-BUILD CONDITION

### BACKGROUND GROWTH

Please note that manual turning movement counts were previously collected at the intersection of Cedar Swamp Road and 4th Street on Tuesday, March 24, 2015 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 7:00 p.m. From 2015 to 2019, traffic volumes through the intersection have been generally consistent, with an annual growth rate of 0.2% calculated. Therefore, the applied 2.0% growth rate is a conservative value, as recent historic traffic volumes for the adjacent roadway network exhibit minimal growth. The 2015 Existing weekday morning and evening peak hour volumes are summarized on appended **Figure 3**.

The 2019 traffic volume data was grown to a future horizon year of 2022, when the proposed 7-Eleven convenience market is expected to be fully constructed. In accordance with industry guidelines, the existing traffic volumes at the study intersections were increased by 2.0% for three (3) years to generate the 2022 Base Traffic Volumes. The background growth information was obtained from the NYSDOT Highway Data Services Bureau and the rate applied is a conservative value since recent historic traffic volumes for the proximate roadways do not exhibit growth. These volumes are summarized on appended **Figure 4.**

### OTHER PLANNED DEVELOPMENT PROJECTS

To evaluate the future traffic conditions, it is important to consider the potential site-generated traffic of site-specific projects that could further influence the traffic volume at the study intersections. Other planned development projects include those that are in the entitlement process or have recently been approved for building permits in proximity to the proposed development. Based on consultations with the City of Glen Cove's Planning Commission and Zoning Board, the following developments are anticipated to impact traffic volumes within the study area:

- Village Square Plaza – 146-unit apartment building, 15,600-square-foot retail space located at the intersection of Glen Street and Bridge Street, 1.1-miles northwest of the study site
- Villas at Glen Cove – 176-unit residential development located on Glen Cove Avenue, 1.2-miles west of the study site
- Breton Hills – 86-unit residential development located on Hill Street, 1.6-miles northwest of the study site
- Garvies Point Mixed-Use Waterfront Development – 250-suite luxury hotel, 50,000-square-foot office building, 25,000-square-foot retail space, and 860-dwelling condominium with outdoor

recreation amenities is located on the Herb Hill Road and the waterfront area, 1.5-miles northwest of the study site

Stonefield has reviewed the available associated traffic reports to determine the trip generation volumes. For the developments that a traffic study has not been provided, trip generation volumes have been generated utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. **Table 3** shows the trip generation volumes associated with the planned projects.

**TABLE 3 – OTHER PLANNED PROJECTS TRIP GENERATION VOLUMES**

| Land Use | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | |
|---|---|---|---|---|---|---|
| | Enter | Exit | Total | Enter | Exit | Total |
| **Village Square** *ITE Land Use 231* "Mid-Rise Residential with 1st-Floor Commercial" | 17 | 45 | 62 | 50 | 22 | 72 |
| **Villas at Glen Cove** *ITE Land Use 221* "Multifamily Housing (Mid-Rise)" | 15 | 45 | 60 | 46 | 30 | 76 |
| **Breton Hills** (Values from traffic report submitted to the city) | 8 | 38 | 46 | 44 | 24 | 68 |
| **Garvies Point** (Values from traffic report submitted to the city - trip volumes after transit credits) | 266 | 339 | 605 | 455 | 409 | 864 |
| **TOTAL** | **306** | **467** | **773** | **595** | **485** | **1080** |

Based on the locations of these projects, and the study scope of the associated traffic reports, Stonefield has determined that only a small percentage of these trips would travel on Cedar Swamp Road. For a conservative analysis, a portion of these trips have been routed passed the subject site. The appended **Figure 5** illustrates the project-generated traffic associated with the approved developments assigned to the study network.

## 2022 NO-BUILD TRAFFIC VOLUMES

The site-generated trips associated with the approved developments were added to the 2022 Base Traffic Volumes to calculate the 2022 No-Build Traffic Volumes for the weekday morning peak hour and the weekday evening peak hour. These volumes are summarized on appended **Figure 6**.

## 2022 NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2022 No-Build Condition for the weekday morning and weekday evening peak hours at the study intersection. Under the 2022 No-Build Conditions, the signalized intersection of Cedar Swamp Road and 4th Street is calculated to operate generally

consistently with the findings of the 2019 Existing Condition during the weekday morning and weekday evening peak hours. During the weekday morning and weekday evening periods, the southbound movements at the intersection were degraded to Level of Service B but does not exceed the letter-to-letter thresholds by more than one (1) second.

NO-BUILD VEHICULAR GAP ANALYSIS

As traffic would be added to northbound Cedar Swamp Road due to the projected growth in traffic and nearby planned developments, the total number of available gaps in traffic would be expected to decrease. Therefore, the existing gaps in traffic were decreased proportionately to the growth in volumes from the 2019 Existing Condition to the 2022 No-Build Condition. The expected gaps over the course of the 2022 No-Build Condition weekday morning and evening peak hours are provided in **Table 4**.

**TABLE 4 – CEDAR SWAMP ROAD INGRESS – PROJECTED CAPACITY**

| Movement | Peak Hour | Total Projected Vehicular Capacity (HCM Base Critical Gap) |
|---|---|---|
| Cedar Swamp Road Left-turn Ingress (Main Line, 2 lanes) | AM Peak Hour (7:45 a.m. to 8:45 a.m.) | 260 (4.1 sec) |
| | PM Peak Hour (4:00 p.m. to 5:00 p.m.) | 291 (4.1 sec) |

## 2022 BUILD CONDITION

The site-generated traffic volume of the proposed 7-Eleven development was estimated to identify the potential impacts of the project. For the purpose of this analysis, a complete project "build out" is assumed by 2022.

## TRIP GENERATION

Trip generation projections for the proposed 7-Eleven convenience store were prepared utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The appropriate Land Use 851 "Convenience Market (Open 24 hours)" for the 2,500-square-foot convenience market was used for analysis purposes. **Table 5** provides the peak hour trip generation volumes associated with the proposed development.

**TABLE 5 – PROJECTED TRIP GENERATION**

| Land Use | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | |
|---|---|---|---|---|---|---|
| | Enter | Exit | Total | Enter | Exit | Total |
| 2,500 SF Convenience Market *Land Use 851* | 78 | 78 | 156 | 63 | 60 | 123 |

As stated within Chapter 5 of ITE's Trip Generation Handbook, 3rd Edition, there are instances when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. Convenience markets are specifically located on or adjacent to busy streets to attract motorists already on the roadway. Therefore, the proposed site would be expected to attract a portion of its trips from the traffic passing the site on the way from an origin to an ultimate destination. These trips do not add new traffic to the adjacent roadway system and are referred to as pass-by trips.

Based upon the published ITE data for Land Use 851 "Convenience Market," approximately 51% of site generated traffic during the weekday evening peak hour is expected to be comprised of pass-by traffic. ITE does not publish pass-by data for Land Use 851 "Convenience Market" during morning peak hour; however, it is expected that a portion of the morning peak hour trips generated by the proposed convenience store would be comprised of pass-by trips. Therefore, the pass-by rates for similar Land Use 853 "Convenience Market with Gasoline Pumps" were utilized to estimate the anticipated pass-by traffic of the proposed site. Based upon the published ITE data for Land Use 853, 48% of the site-generated traffic during the weekday morning peak hour will be comprised of pass-by traffic. **Table 6** summarizes the trip generation of the proposed 7-Eleven in terms of newly generated and pass-by traffic.

**TABLE 6 – PROJECTED TRIP GENERATION – NEW AND PASS-BY TRIPS**

| | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | |
|---|---|---|---|---|---|---|
| | Enter | Exit | Total | Enter | Exit | Total |
| "New" Trips | 41 | 41 | 82 | 33 | 30 | 63 |
| "Pass-By" Trips | 37 | 37 | 74 | 30 | 30 | 60 |
| **Total Trips** | 78 | 78 | 156 | 63 | 60 | 123 |

At the site driveways, the calculated number of pass-by trips is shown as a negative number at the through movement since these the vehicles are temporarily diverted from the through travel stream via the site access point.

## TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by the proposed development were distributed according to existing traffic volumes, the location of residential properties and major arterial roadways in the surrounding area, the location of other convenience-type uses, and the proposed access management plan. The "New" Site-Generated Traffic Volumes and the "Pass-By" Site-Generated Traffic Volumes are illustrated on appended **Figure 7** and **Figure 8**, respectively**.**

## 2022 BUILD TRAFFIC VOLUMES

The site-generated trips were added to the 2022 No-Build Volumes to calculate the 2022 Build Volumes and are shown on appended **Figure 9**.

## 2022 BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2022 Build Condition for the weekday morning and weekday evening peak hours at the study intersection and proposed site driveways. **Tables 7** through **10** compare the 2019 Existing, 2022 No Build, and 2022 Build Conditions Level of Service and delay values.

The signalized intersection of Cedar Swamp Road and 4th Street is calculated to operate generally consistently with the findings of the 2022 No-Build Condition. Please note that during the weekday morning study period, the westbound left-turn movement degrades to Level of Service E, but only exceeds the letter-to-letter threshold by 0.1 seconds. Under the 2022 Build Condition, movements at each of the site driveways are calculated to operate at acceptable Level of Service B or better during the study peak hours.

Based on the expected volume of trips generated by the proposed use and the proposed access management plan of the site, 31 and 25 vehicles would be added to westbound 4th Street approach in the weekday morning peak hour and weekday evening peak hour, respectively. This equates to approximately one (1) additional vehicle every two (2) signal cycles during each peak hour, based on the signal cycle length of 70 seconds. There is adequate capacity on the westbound approach to accommodate this minor increase in traffic.

COMPARATIVE LEVEL OF SERVICE (DELAY) TABLES

## CEDAR SWAMP ROAD & 4TH STREET

NB (Northbound) and SB (Southbound) approaches are the Cedar Swamp Road approaches
WB (Westbound) approach is the 4th Street approach
X (n) = Level of Service (seconds of delay)

### TABLE 7 – WEEKDAY MORNING PEAK HOUR

| Lane Group | 2019 Existing | 2022 No-Build | 2022 Build |
|---|---|---|---|
| WB Left | D (53.5) | D (54.0) | E (55.1) |
| WB Right | C (26.1) | C (25.4) | C (24.2) |
| NB Through | A (7.4) | A (8.0) | A (8.9) |
| NB Right | A (6.8) | A (7.2) | A (7.9) |
| SB Left | A (9.4) | B (10.7) | B (11.9) |
| SB Through | A (9.3) | B (10.1) | B (10.8) |
| **Intersection** | **B (17.4)** | **B (17.6)** | **B (19.1)** |

### TABLE 8 – WEEKDAY EVENING PEAK HOUR

| Lane Group | 2019 Existing | 2022 No-Build | 2022 Build |
|---|---|---|---|
| WB Left | D (48.3) | D (46.9) | C (32.8) |
| WB Right | C (27.4) | C (26.9) | C (24.3) |
| NB Through | A (7.9) | A (8.6) | A (8.6) |
| NB Right | A (5.5) | A (5.9) | A (5.9) |
| SB Left | A (9.1) | B (10.9) | B (11.0) |
| SB Through | A (5.2) | A (5.7) | A (5.6) |
| **Intersection** | **B (11.9)** | **B (12.0)** | **B (10.6)** |

## CEDAR SWAMP ROAD & SITE DRIVEWAY

SB (Southbound) approach is the Cedar Swamp Road approach
WB (Westbound) approach is the site driveway approach
X (n) = Level of Service (seconds of delay)

### TABLE 9 – 2022 BUILD CONDITION

| Lane Group | Weekday Morning Peak Hour | Weekday Evening Peak Hour |
|---|---|---|
| SB Left | A (9.1) | A (9.7) |
| WB Right | B (10.9) | B (11.6) |

## 4TH STREET & SITE DRIVEWAY

SB (Southbound) approach is the site driveway approach
X (n) = Level of Service (seconds of delay)

### TABLE 10 – 2022 BUILD CONDITION

| Lane Group | Weekday Morning Peak Hour | Weekday Evening Peak Hour |
|---|---|---|
| SB Right | B (10.6) | A (9.8) |

BUILD VEHICULAR GAP ANALYSIS

To determine if the projected left-turning traffic volumes from Cedar Swamp Road into the site would be accommodated by the expected gaps in traffic, the expected vehicular capacity of projected gaps was compared to the projected left-turning volumes. This comparison, over the course of the weekday morning and evening peak hours, is provided in **Table 11**.

**TABLE 11 – CEDAR SWAMP ROAD – PROJECTED CAPACITY**

| Movement | Peak Hour | Total Projected Vehicular Capacity | Total Projected Left-Turn Traffic Volumes |
|---|---|---|---|
| Cedar Swamp Road Left-turn Ingress (Main Line, 2 lanes) | AM Peak Hour (7:45 a.m. to 8:45 a.m.) | 260 | 27 |
| | PM Peak Hour (4:00 p.m. to 5:00 p.m.) | 291 | 24 |

Based on a review of available gaps in traffic, adequate gaps in traffic are expected to be present over the duration of the peak hours to accommodate the projected left-turning volumes.

## PROPOSED OFF-SITE IMPROVEMENTS

Modifications to the existing median along Cedar Swamp Road will be made to provide a southbound storage lane for vehicles turning left into the subject site from Cedar Swamp Road. The proposed modifications to the existing median received a 239-f approval from the NCDPW on May 28, 2019. Please refer to the Site Plan (C-2) prepared by Stonefield Engineering & Design, LLC., dated January 20, 2020, for the proposed modifications.

## SITE CIRCULATION/PARKING SUPPLY

A review was conducted of the proposed development using the Site Plan prepared by Stonefield Engineering & Design, LLC., dated January 20, 2020, for the proposed 7-Eleven convenience store. In completing this plan, particular attention was focused on the site access, circulation, and parking supply.

Access is proposed via one (1) left-in/right-in/right-out driveway on Cedar Swamp Road and one (1) right-in/right-out driveway on 4th Street. Under the current development program, a 2,500-square-foot 7-Eleven convenience market would be located in the eastern extent of the site and oriented towards Cedar Swamp Road. Parking stalls and a 25-foot drive aisle would be located on the western portion of the site. A dedicated 12-foot-wide loading zone would be located in the northeast quadrant of the site.

The City of Glen Cove Ordinance requires one (1) parking stall for every 250-square-foot of retail space. For the proposed 2,500-square-foot 7-Eleven convenience market, this equates to ten (10) required spaces.

The site would provide ten (10) total parking spaces, inclusive of one (1) handicap parking stall, which meets the parking requirement and would be sufficient to support this project's parking demand. The stalls would be nine (9) feet wide by 20 feet deep in accordance with industry standards.

## CONCLUSION

This report was prepared to examine the potential traffic impact of the proposed 7-Eleven convenience market. The analysis findings, which have been based on industry-standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. The site driveways and on-site layout have been designed to provide for effective access to and from the subject property, and the off-street parking supply satisfies the city's zoning requirement.

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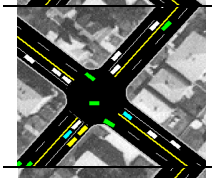
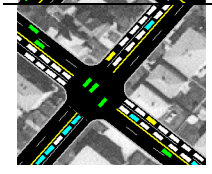
# TECHNICAL APPENDIX

## LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

## LEVEL OF SERVICE /AVERAGE CONTROL DELAY CRITERIA

The ability of a roadway to effectively accommodate traffic demand is determined through an assessment of the volume-to-capacity ratio, delay and Level of Service of the lane group and/or intersection. The volume-to-capacity ratio is the ratio of traffic flow rate to capacity for a given transportation facility. As defined within the Highway Capacity Manual 2010 (HCM 2010), intersection delay is the total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility. Level of service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

For an unsignalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle and LOS F denotes operations with delay in excess of 80 seconds per vehicle.

| | Level Of Service (LOS) | Signalized Delay Range (average control delay in sec/veh) | Unsignalized Delay Range (average control delay in sec/veh) |
|---|---|---|---|
|  | A | <=10 | <=10 |
|  | B | >10 and <=20 | >10 and <=15 |
|  | C | >20 and <=35 | >15 and <=25 |
|  | D | >35 and <=55 | >25 and <=35 |
|  | E | >55 and <=80 | >35 and <=50 |
|  | F | >80 | >50 |

Source: Highway Capacity Manual 2010

# TURNING MOVEMENT COUNT DATA

# Stonefield Engineering & Design, LLC

584 Broadway, Suite 310, New York, NY 10012
718.606.8305 t.

Intersection of 4th Street (E/W)
and Cedar Swamp Road (N/S)
Glen Cove, Nassau County, New York
Thursday, December 12, 2019

File Name : S-14174_4th Street and Cedar Swamp Road
Site Code : 00014174
Start Date : 12/12/2019
Page No : 1

**Groups Printed- Auto - HV - B/SB**

| | 4th Street Westbound | | | | | Cedar Swamp Road Northbound | | | | | Cedar Swamp Road Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM | 71 | 0 | 3 | 2 | 76 | 0 | 110 | 10 | 7 | 127 | 4 | 109 | 0 | 0 | 113 | 316 |
| 07:15 AM | 49 | 0 | 6 | 3 | 58 | 0 | 99 | 16 | 16 | 131 | 11 | 84 | 0 | 0 | 95 | 284 |
| 07:30 AM | 74 | 0 | 0 | 6 | 80 | 0 | 162 | 22 | 8 | 192 | 16 | 96 | 1 | 0 | 113 | 385 |
| 07:45 AM | 61 | 0 | 4 | 5 | 70 | 0 | 130 | 33 | 19 | 182 | 14 | 114 | 0 | 0 | 128 | 380 |
| Total | 255 | 0 | 13 | 16 | 284 | 0 | 501 | 81 | 50 | 632 | 45 | 403 | 1 | 0 | 449 | 1365 |
| 08:00 AM | 63 | 0 | 10 | 8 | 81 | 0 | 84 | 18 | 17 | 119 | 7 | 103 | 0 | 0 | 110 | 310 |
| 08:15 AM | 74 | 0 | 4 | 6 | 84 | 0 | 111 | 15 | 9 | 135 | 12 | 90 | 0 | 0 | 102 | 321 |
| 08:30 AM | 64 | 0 | 6 | 17 | 87 | 0 | 169 | 37 | 4 | 210 | 9 | 101 | 0 | 0 | 110 | 407 |
| 08:45 AM | 43 | 0 | 2 | 16 | 61 | 0 | 137 | 26 | 4 | 167 | 11 | 79 | 0 | 0 | 90 | 318 |
| Total | 244 | 0 | 22 | 47 | 313 | 0 | 501 | 96 | 34 | 631 | 39 | 373 | 0 | 0 | 412 | 1356 |
| *** BREAK *** | | | | | | | | | | | | | | | | |
| 03:30 PM | 54 | 0 | 7 | 3 | 64 | 0 | 153 | 49 | 13 | 215 | 10 | 98 | 0 | 0 | 108 | 387 |
| 03:45 PM | 37 | 0 | 4 | 9 | 50 | 0 | 134 | 45 | 18 | 197 | 15 | 107 | 1 | 0 | 123 | 370 |
| Total | 91 | 0 | 11 | 12 | 114 | 0 | 287 | 94 | 31 | 412 | 25 | 205 | 1 | 0 | 231 | 757 |
| 04:00 PM | 44 | 0 | 5 | 5 | 54 | 0 | 158 | 56 | 11 | 225 | 18 | 159 | 0 | 0 | 177 | 456 |
| 04:15 PM | 59 | 0 | 8 | 7 | 74 | 0 | 179 | 42 | 21 | 242 | 13 | 152 | 0 | 0 | 165 | 481 |
| 04:30 PM | 44 | 0 | 6 | 4 | 54 | 0 | 178 | 69 | 8 | 255 | 22 | 124 | 1 | 0 | 147 | 456 |
| 04:45 PM | 58 | 0 | 8 | 9 | 75 | 0 | 155 | 62 | 3 | 220 | 15 | 104 | 0 | 0 | 119 | 414 |
| Total | 205 | 0 | 27 | 25 | 257 | 0 | 670 | 229 | 43 | 942 | 68 | 539 | 1 | 0 | 608 | 1807 |
| 05:00 PM | 62 | 0 | 13 | 2 | 77 | 0 | 148 | 73 | 1 | 222 | 18 | 137 | 0 | 0 | 155 | 454 |
| 05:15 PM | 37 | 0 | 9 | 2 | 48 | 1 | 137 | 59 | 10 | 207 | 21 | 105 | 0 | 0 | 126 | 381 |
| 05:30 PM | 49 | 0 | 5 | 8 | 62 | 0 | 143 | 73 | 10 | 226 | 14 | 86 | 0 | 0 | 100 | 388 |
| 05:45 PM | 28 | 2 | 11 | 9 | 50 | 0 | 132 | 45 | 3 | 180 | 7 | 80 | 2 | 0 | 89 | 319 |
| Total | 176 | 2 | 38 | 21 | 237 | 1 | 560 | 250 | 24 | 835 | 60 | 408 | 2 | 0 | 470 | 1542 |
| 06:00 PM | 45 | 0 | 0 | 4 | 49 | 0 | 125 | 76 | 17 | 218 | 13 | 96 | 0 | 0 | 109 | 376 |
| 06:15 PM | 41 | 0 | 3 | 5 | 49 | 0 | 179 | 57 | 8 | 244 | 13 | 112 | 0 | 0 | 125 | 418 |
| Grand Total | 1057 | 2 | 114 | 130 | 1303 | 1 | 2823 | 883 | 207 | 3914 | 263 | 2136 | 5 | 0 | 2404 | 7621 |
| Apprch % | 81.1 | 0.2 | 8.7 | 10 | | 0 | 72.1 | 22.6 | 5.3 | | 10.9 | 88.9 | 0.2 | 0 | | |
| Total % | 13.9 | 0 | 1.5 | 1.7 | 17.1 | 0 | 37 | 11.6 | 2.7 | 51.4 | 3.5 | 28 | 0.1 | 0 | 31.5 | |
| Auto | 1033 | 2 | 111 | 130 | 1276 | 1 | 2748 | 868 | 207 | 3824 | 255 | 2054 | 5 | 0 | 2314 | 7414 |
| % Auto | 97.7 | 100 | 97.4 | 100 | 97.9 | 100 | 97.3 | 98.3 | 100 | 97.7 | 97 | 96.2 | 100 | 0 | 96.3 | 97.3 |
| HV | 2 | 0 | 0 | 0 | 2 | 0 | 17 | 2 | 0 | 19 | 0 | 13 | 0 | 0 | 13 | 34 |
| % HV | 0.2 | 0 | 0 | 0 | 0.2 | 0 | 0.6 | 0.2 | 0 | 0.5 | 0 | 0.6 | 0 | 0 | 0.5 | 0.4 |
| B/SB | 22 | 0 | 3 | 0 | 25 | 0 | 58 | 13 | 0 | 71 | 8 | 69 | 0 | 0 | 77 | 173 |
| % B/SB | 2.1 | 0 | 2.6 | 0 | 1.9 | 0 | 2.1 | 1.5 | 0 | 1.8 | 3 | 3.2 | 0 | 0 | 3.2 | 2.3 |

# Stonefield Engineering & Design, LLC

584 Broadway, Suite 310, New York, NY 10012
718.606.8305 t.

Intersection of 4th Street (E/W)
and Cedar Swamp Road (N/S)
Glen Cove, Nassau County, New York
Thursday, December 12, 2019

File Name : S-14174_4th Street and Cedar Swamp Road
Site Code : 00014174
Start Date : 12/12/2019
Page No : 2

| | 4th Street Westbound | | | | | Cedar Swamp Road Northbound | | | | | Cedar Swamp Road Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | |
| 07:45 AM | 61 | 0 | 4 | 5 | 70 | 0 | 130 | 33 | 19 | 182 | 14 | 114 | 0 | 0 | 128 | 380 |
| 08:00 AM | 63 | 0 | 10 | 8 | 81 | 0 | 84 | 18 | 17 | 119 | 7 | 103 | 0 | 0 | 110 | 310 |
| 08:15 AM | 74 | 0 | 4 | 6 | 84 | 0 | 111 | 15 | 9 | 135 | 12 | 90 | 0 | 0 | 102 | 321 |
| 08:30 AM | 64 | 0 | 6 | 17 | 87 | 0 | 169 | 37 | 4 | 210 | 9 | 101 | 0 | 0 | 110 | 407 |
| Total Volume | 262 | 0 | 24 | 36 | 322 | 0 | 494 | 103 | 49 | 646 | 42 | 408 | 0 | 0 | 450 | 1418 |
| % App. Total | 81.4 | 0 | 7.5 | 11.2 | | 0 | 76.5 | 15.9 | 7.6 | | 9.3 | 90.7 | 0 | 0 | | |
| PHF | .885 | .000 | .600 | .529 | .925 | .000 | .731 | .696 | .645 | .769 | .750 | .895 | .000 | .000 | .879 | .871 |
| Auto | 253 | 0 | 23 | 36 | 312 | 0 | 475 | 99 | 49 | 623 | 40 | 382 | 0 | 0 | 422 | 1357 |
| % Auto | 96.6 | 0 | 95.8 | 100 | 96.9 | 0 | 96.2 | 96.1 | 100 | 96.4 | 95.2 | 93.6 | 0 | 0 | 93.8 | 95.7 |
| HV | 1 | 0 | 0 | 0 | 1 | 0 | 6 | 1 | 0 | 7 | 0 | 3 | 0 | 0 | 3 | 11 |
| % HV | 0.4 | 0 | 0 | 0 | 0.3 | 0 | 1.2 | 1.0 | 0 | 1.1 | 0 | 0.7 | 0 | 0 | 0.7 | 0.8 |
| B/SB | 8 | 0 | 1 | 0 | 9 | 0 | 13 | 3 | 0 | 16 | 2 | 23 | 0 | 0 | 25 | 50 |
| % B/SB | 3.1 | 0 | 4.2 | 0 | 2.8 | 0 | 2.6 | 2.9 | 0 | 2.5 | 4.8 | 5.6 | 0 | 0 | 5.6 | 3.5 |
| Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:00 PM | | | | | | | | | | | | | | | | |
| 04:00 PM | 44 | 0 | 5 | 5 | 54 | 0 | 158 | 56 | 11 | 225 | 18 | 159 | 0 | 0 | 177 | 456 |
| 04:15 PM | 59 | 0 | 8 | 7 | 74 | 0 | 179 | 42 | 21 | 242 | 13 | 152 | 0 | 0 | 165 | 481 |
| 04:30 PM | 44 | 0 | 6 | 4 | 54 | 0 | 178 | 69 | 8 | 255 | 22 | 124 | 1 | 0 | 147 | 456 |
| 04:45 PM | 58 | 0 | 8 | 9 | 75 | 0 | 155 | 62 | 3 | 220 | 15 | 104 | 0 | 0 | 119 | 414 |
| Total Volume | 205 | 0 | 27 | 25 | 257 | 0 | 670 | 229 | 43 | 942 | 68 | 539 | 1 | 0 | 608 | 1807 |
| % App. Total | 79.8 | 0 | 10.5 | 9.7 | | 0 | 71.1 | 24.3 | 4.6 | | 11.2 | 88.7 | 0.2 | 0 | | |
| PHF | .869 | .000 | .844 | .694 | .857 | .000 | .936 | .830 | .512 | .924 | .773 | .847 | .250 | .000 | .859 | .939 |
| Auto | 201 | 0 | 26 | 25 | 252 | 0 | 662 | 229 | 43 | 934 | 68 | 502 | 1 | 0 | 571 | 1757 |
| % Auto | 98.0 | 0 | 96.3 | 100 | 98.1 | 0 | 98.8 | 100 | 100 | 99.2 | 100 | 93.1 | 100 | 0 | 93.9 | 97.2 |
| HV | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 5 | 7 |
| % HV | 0.5 | 0 | 0 | 0 | 0.4 | 0 | 0.1 | 0 | 0 | 0.1 | 0 | 0.9 | 0 | 0 | 0.8 | 0.4 |
| B/SB | 3 | 0 | 1 | 0 | 4 | 0 | 7 | 0 | 0 | 7 | 0 | 32 | 0 | 0 | 32 | 43 |
| % B/SB | 1.5 | 0 | 3.7 | 0 | 1.6 | 0 | 1.0 | 0 | 0 | 0.7 | 0 | 5.9 | 0 | 0 | 5.3 | 2.4 |

# Stonefield Engineering & Design, LLC

75 Orient Way, Suite 303, Rutherford, NJ 07070
201.340.4468 t. 201.340.4472 f.

Intersection of 4th Street (EB/WB) and
Cedar Swamp Road (NB/SB)
Glen Cove, Nassau County, New York
Tuesday, March 24, 2015

File Name : S-14174_VV
Site Code : 00014174 Start
Date : 3/24/2015 Page
No : 1

**Groups Printed- Autos - HV - B/SB**

| | Cedar Swamp Rd Southbound | | | | | 4th Street Westbound | | | | | Cedar Swamp Rd Northbound | | | | | Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM | 8 | 98 | 0 | 0 | 106 | 39 | 0 | 2 | 5 | 46 | 5 | 74 | 11 | 2 | 92 | 0 | 0 | 0 | 0 | 0 | 244 |
| 07:15 AM | 8 | 101 | 0 | 0 | 109 | 86 | 0 | 2 | 2 | 90 | 0 | 85 | 19 | 10 | 114 | 0 | 0 | 0 | 0 | 0 | 313 |
| 07:30 AM | 11 | 123 | 0 | 0 | 134 | 63 | 0 | 9 | 4 | 76 | 0 | 104 | 37 | 5 | 146 | 0 | 0 | 0 | 0 | 0 | 356 |
| 07:45 AM | 10 | 116 | 0 | 0 | 126 | 68 | 1 | 6 | 2 | 77 | 6 | 110 | 32 | 4 | 152 | 0 | 0 | 0 | 1 | 1 | 356 |
| Total | 37 | 438 | 0 | 0 | 475 | 256 | 1 | 19 | 13 | 289 | 11 | 373 | 99 | 21 | 504 | 0 | 0 | 0 | 1 | 1 | 1269 |
| 08:00 AM | 21 | 105 | 0 | 0 | 126 | 68 | 0 | 6 | 8 | 82 | 0 | 100 | 38 | 4 | 142 | 0 | 0 | 0 | 0 | 0 | 350 |
| 08:15 AM | 7 | 85 | 0 | 0 | 92 | 63 | 0 | 4 | 9 | 76 | 0 | 110 | 30 | 4 | 144 | 0 | 0 | 0 | 0 | 0 | 312 |
| 08:30 AM | 10 | 88 | 0 | 0 | 98 | 63 | 0 | 7 | 2 | 72 | 0 | 87 | 37 | 3 | 127 | 0 | 0 | 0 | 0 | 0 | 297 |
| 08:45 AM | 13 | 101 | 0 | 0 | 114 | 70 | 2 | 10 | 5 | 87 | 0 | 135 | 37 | 1 | 173 | 0 | 0 | 0 | 0 | 0 | 374 |
| Total | 51 | 379 | 0 | 0 | 430 | 264 | 2 | 27 | 24 | 317 | 0 | 432 | 142 | 12 | 586 | 0 | 0 | 0 | 0 | 0 | 1333 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 14 | 104 | 0 | 0 | 118 | 37 | 0 | 5 | 4 | 46 | 0 | 161 | 56 | 2 | 219 | 0 | 0 | 0 | 0 | 0 | 383 |
| 04:15 PM | 3 | 98 | 0 | 0 | 101 | 31 | 0 | 1 | 2 | 34 | 0 | 145 | 63 | 3 | 211 | 0 | 0 | 0 | 0 | 0 | 346 |
| 04:30 PM | 7 | 98 | 0 | 0 | 105 | 38 | 0 | 3 | 6 | 47 | 0 | 164 | 72 | 3 | 239 | 0 | 0 | 0 | 0 | 0 | 391 |
| 04:45 PM | 14 | 106 | 0 | 0 | 120 | 37 | 0 | 5 | 2 | 44 | 0 | 143 | 62 | 2 | 207 | 0 | 0 | 0 | 0 | 0 | 371 |
| Total | 38 | 406 | 0 | 0 | 444 | 143 | 0 | 14 | 14 | 171 | 0 | 613 | 253 | 10 | 876 | 0 | 0 | 0 | 0 | 0 | 1491 |
| 05:00 PM | 9 | 176 | 0 | 0 | 185 | 45 | 0 | 5 | 3 | 53 | 0 | 178 | 71 | 6 | 255 | 0 | 0 | 0 | 0 | 0 | 493 |
| 05:15 PM | 19 | 109 | 0 | 0 | 128 | 45 | 0 | 6 | 4 | 55 | 0 | 134 | 57 | 7 | 198 | 0 | 0 | 0 | 0 | 0 | 381 |
| 05:30 PM | 15 | 130 | 0 | 0 | 145 | 57 | 0 | 4 | 6 | 67 | 0 | 148 | 59 | 5 | 212 | 0 | 0 | 0 | 0 | 0 | 424 |
| 05:45 PM | 9 | 82 | 0 | 0 | 91 | 43 | 0 | 7 | 7 | 57 | 0 | 128 | 70 | 2 | 200 | 0 | 0 | 0 | 0 | 0 | 348 |
| Total | 52 | 497 | 0 | 0 | 549 | 190 | 0 | 22 | 20 | 232 | 0 | 588 | 257 | 20 | 865 | 0 | 0 | 0 | 0 | 0 | 1646 |
| 06:00 PM | 6 | 97 | 0 | 0 | 103 | 47 | 1 | 6 | 4 | 58 | 0 | 132 | 53 | 11 | 196 | 0 | 1 | 0 | 0 | 1 | 358 |
| 06:15 PM | 8 | 92 | 0 | 0 | 100 | 36 | 1 | 7 | 2 | 46 | 0 | 143 | 46 | 2 | 191 | 0 | 0 | 4 | 0 | 4 | 341 |
| 06:30 PM | 12 | 102 | 0 | 0 | 114 | 36 | 0 | 3 | 2 | 41 | 0 | 148 | 38 | 5 | 191 | 0 | 0 | 0 | 0 | 0 | 346 |
| 06:45 PM | 15 | 73 | 0 | 0 | 88 | 39 | 0 | 3 | 3 | 45 | 0 | 122 | 52 | 4 | 178 | 0 | 0 | 0 | 0 | 0 | 311 |
| Total | 41 | 364 | 0 | 0 | 405 | 158 | 2 | 19 | 11 | 190 | 0 | 545 | 189 | 22 | 756 | 0 | 1 | 4 | 0 | 5 | 1356 |
| Grand Total | 219 | 2084 | 0 | 0 | 2303 | 1011 | 5 | 101 | 82 | 1199 | 11 | 2553 | 941 | 85 | 3590 | 0 | 1 | 4 | 1 | 6 | 7098 |
| Apprch % | 9.5 | 90.5 | 0 | 0 | | 84.3 | 0.4 | 8.4 | 6.8 | | 0.3 | 71.1 | 26.2 | 2.4 | | 0 | 16.7 | 66.7 | 16.7 | | |
| Total % | 3.1 | 29.4 | 0 | 0 | 32.4 | 14.2 | 0.1 | 1.4 | 1.2 | 16.9 | 0.2 | 36 | 13.3 | 1.2 | 50.6 | 0 | 0 | 0.1 | 0 | 0.1 | |
| Autos | 213 | 2043 | 0 | 0 | 2256 | 1003 | 5 | 99 | 82 | 1189 | 11 | 2525 | 936 | 85 | 3557 | 0 | 1 | 4 | 1 | 6 | 7008 |
| % Autos | 97.3 | 98 | 0 | 0 | 98 | 99.2 | 100 | 98 | 100 | 99.2 | 100 | 98.9 | 99.5 | 100 | 99.1 | 0 | 100 | 100 | 100 | 100 | 98.7 |
| HV | 0 | 17 | 0 | 0 | 17 | 4 | 0 | 0 | 0 | 4 | 0 | 19 | 2 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 42 |
| % HV | 0 | 0.8 | 0 | 0 | 0.7 | 0.4 | 0 | 0 | 0 | 0.3 | 0 | 0.7 | 0.2 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0.6 |
| B/SB | 6 | 24 | 0 | 0 | 30 | 4 | 0 | 2 | 0 | 6 | 0 | 9 | 3 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 48 |
| % B/SB | 2.7 | 1.2 | 0 | 0 | 1.3 | 0.4 | 0 | 2 | 0 | 0.5 | 0 | 0.4 | 0.3 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.7 |

# Stonefield Engineering & Design, LLC

75 Orient Way, Suite 303, Rutherford, NJ 07070

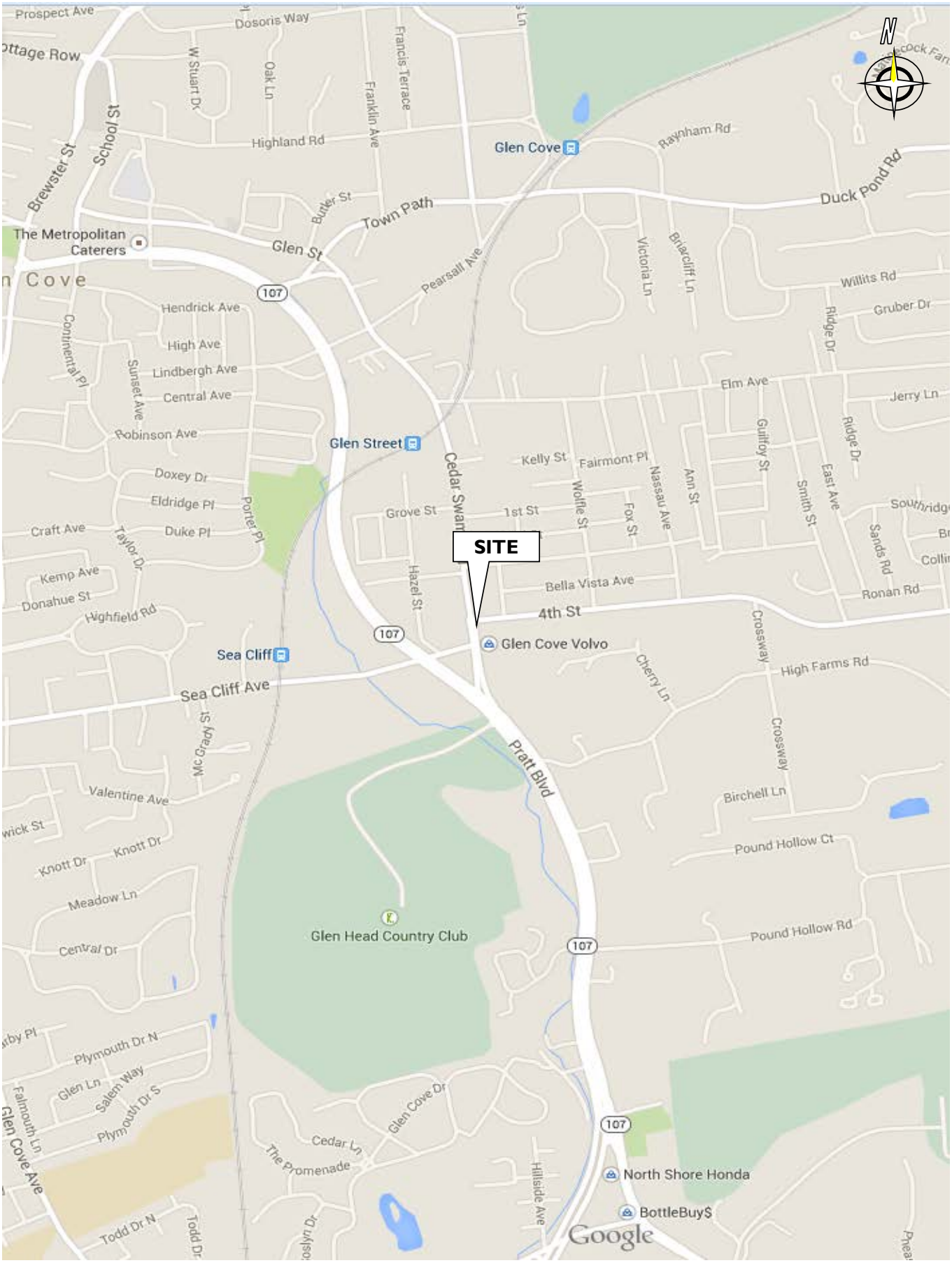
201.340.4468 t. 201.340.4472 f.


Intersection of 4th Street (EB/WB) and
Cedar Swamp Road (NB/SB)
Glen Cove, Nassau County, New York
Tuesday, March 24, 2015

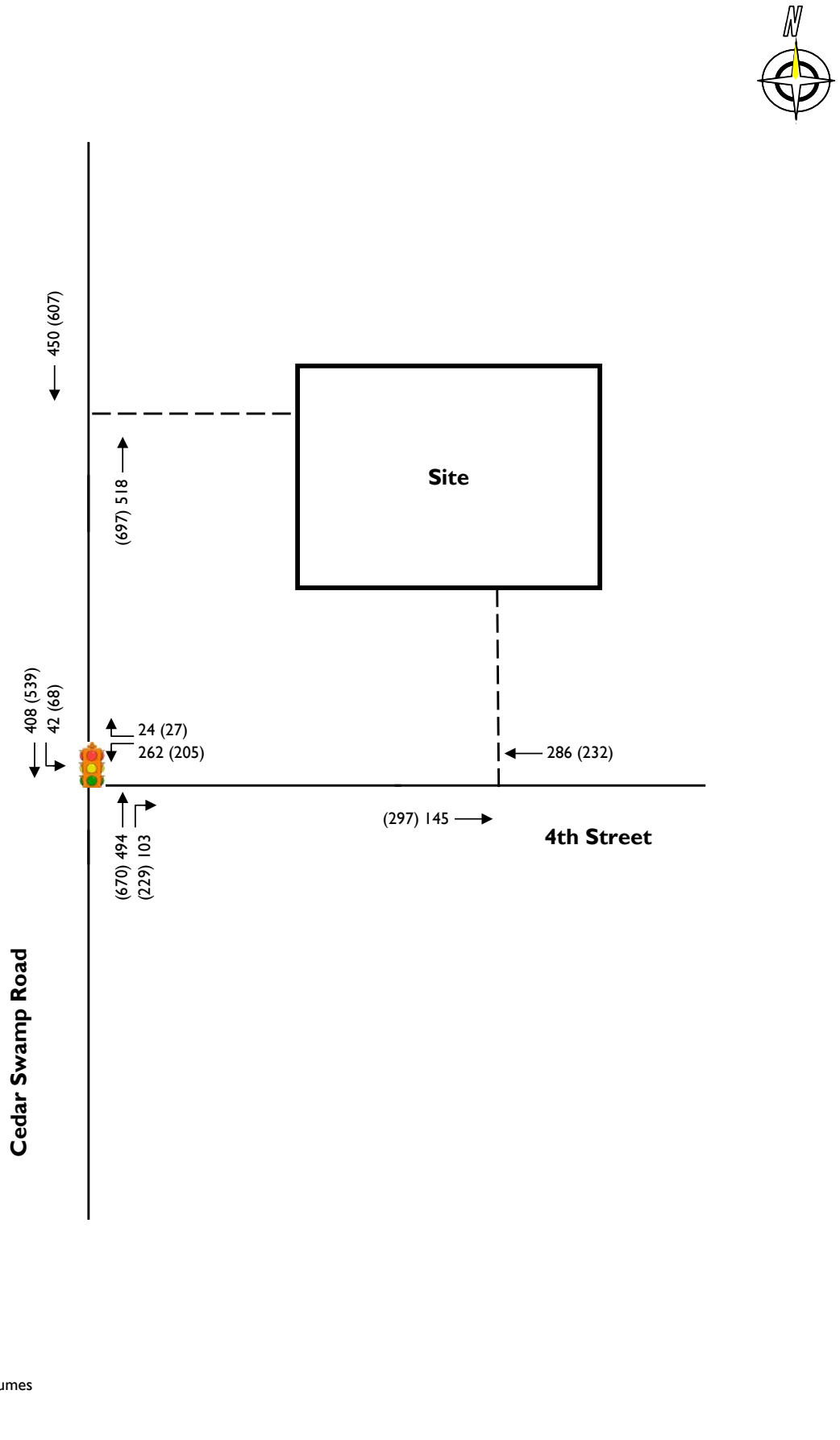
File Name : S-14174_VV
Site Code : 00014174 Start
Date : 3/24/2015


| | Cedar Swamp Rd Southbound | | | | | 4th Street Westbound | | | | | Cedar Swamp Rd Northbound | | | | | Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | RTOR | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:15 AM | 8 | 101 | 0 | 0 | 109 | **86** | 0 | 2 | 2 | **90** | 0 | 85 | 19 | **10** | 114 | 0 | 0 | 0 | 0 | 0 | 313 |
| 07:30 AM | 11 | **123** | 0 | 0 | **134** | 63 | 0 | **9** | 4 | 76 | 0 | 104 | 37 | 5 | 146 | 0 | 0 | 0 | 0 | 0 | **356** |
| 07:45 AM | 10 | 116 | 0 | 0 | 126 | 68 | **1** | 6 | 2 | 77 | **6** | **110** | 32 | 4 | **152** | 0 | 0 | 0 | **1** | **1** | 356 |
| 08:00 AM | **21** | 105 | 0 | 0 | 126 | 68 | 0 | 6 | **8** | 82 | 0 | 100 | **38** | 4 | 142 | 0 | 0 | 0 | 0 | 0 | 350 |
| Total Volume | 50 | 445 | 0 | 0 | 495 | 285 | 1 | 23 | 16 | 325 | 6 | 399 | 126 | 23 | 554 | 0 | 0 | 0 | 1 | 1 | 1375 |
| % App. Total | 10.1 | 89.9 | 0 | 0 | | 87.7 | 0.3 | 7.1 | 4.9 | | 1.1 | 72 | 22.7 | 4.2 | | 0 | 0 | 0 | 100 | | |
| PHF | .595 | .904 | .000 | .000 | .924 | .828 | .250 | .639 | .500 | .903 | .250 | .907 | .829 | .575 | .911 | .000 | .000 | .000 | .250 | .250 | .966 |
| Autos | 47 | 433 | 0 | 0 | 480 | 280 | 1 | 22 | 16 | 319 | 6 | 393 | 122 | 23 | 544 | 0 | 0 | 0 | 1 | 1 | 1344 |
| % Autos | 94.0 | 97.3 | 0 | 0 | 97.0 | 98.2 | 100 | 95.7 | 100 | 98.2 | 100 | 98.5 | 96.8 | 100 | 98.2 | 0 | 0 | 0 | 100 | 100 | 97.7 |
| HV | 0 | 5 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 5 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 13 |
| % HV | 0 | 1.1 | 0 | 0 | 1.0 | 0.4 | 0 | 0 | 0 | 0.3 | 0 | 1.3 | 1.6 | 0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0.9 |
| B/SB | 3 | 7 | 0 | 0 | 10 | 4 | 0 | 1 | 0 | 5 | 0 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 18 |
| % B/SB | 6.0 | 1.6 | 0 | 0 | 2.0 | 1.4 | 0 | 4.3 | 0 | 1.5 | 0 | 0.3 | 1.6 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 1.3 |
| Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 14 | 106 | 0 | 0 | 120 | 37 | 0 | 5 | 2 | 44 | 0 | 143 | 62 | 2 | 207 | 0 | 0 | 0 | 0 | 0 | 371 |
| 05:00 PM | 9 | **176** | 0 | 0 | **185** | 45 | 0 | 5 | 3 | 53 | 0 | **178** | **71** | 6 | **255** | 0 | 0 | 0 | 0 | 0 | **493** |
| 05:15 PM | **19** | 109 | 0 | 0 | 128 | 45 | 0 | **6** | 4 | 55 | 0 | 134 | 57 | **7** | 198 | 0 | 0 | 0 | 0 | 0 | 381 |
| 05:30 PM | 15 | 130 | 0 | 0 | 145 | **57** | 0 | 4 | **6** | **67** | 0 | 148 | 59 | 5 | 212 | 0 | 0 | 0 | 0 | 0 | 424 |
| Total Volume | 57 | 521 | 0 | 0 | 578 | 184 | 0 | 20 | 15 | 219 | 0 | 603 | 249 | 20 | 872 | 0 | 0 | 0 | 0 | 0 | 1669 |
| % App. Total | 9.9 | 90.1 | 0 | 0 | | 84 | 0 | 9.1 | 6.8 | | 0 | 69.2 | 28.6 | 2.3 | | 0 | 0 | 0 | 0 | | |
| PHF | .750 | .740 | .000 | .000 | .781 | .807 | .000 | .833 | .625 | .817 | .000 | .847 | .877 | .714 | .855 | .000 | .000 | .000 | .000 | .000 | .846 |
| Autos | 57 | 518 | 0 | 0 | 575 | 181 | 0 | 20 | 15 | 216 | 0 | 599 | 249 | 20 | 868 | 0 | 0 | 0 | 0 | 0 | 1659 |
| % Autos | 100 | 99.4 | 0 | 0 | 99.5 | 98.4 | 0 | 100 | 100 | 98.6 | 0 | 99.3 | 100 | 100 | 99.5 | 0 | 0 | 0 | 0 | 0 | 99.4 |
| HV | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| % HV | 0 | 0.2 | 0 | 0 | 0.2 | 1.6 | 0 | 0 | 0 | 1.4 | 0 | 0.3 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.4 |
| B/SB | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| % B/SB | 0 | 0.4 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.2 |

# FIGURES



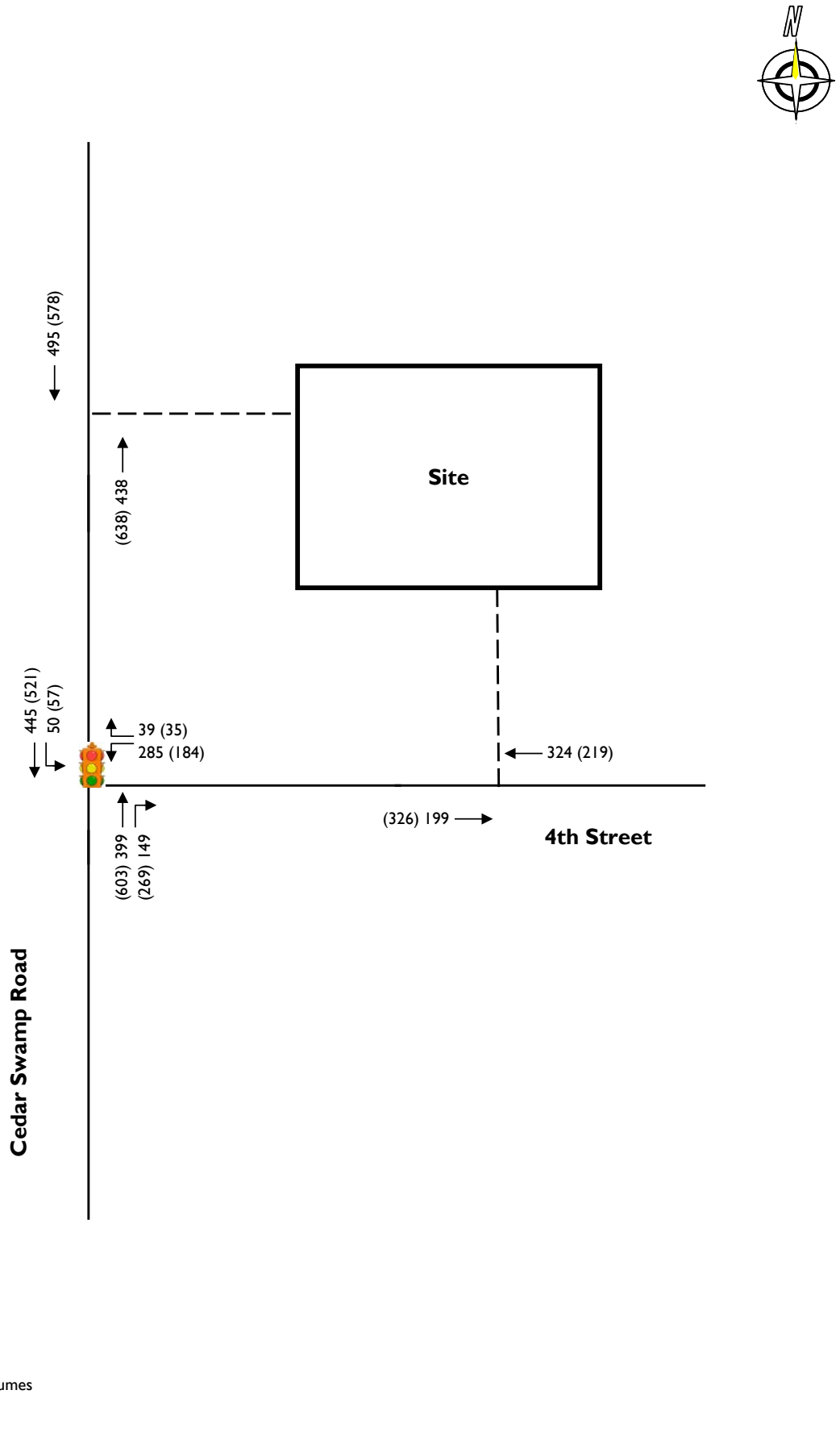

| | | |
|---|---|---|
| **STONEFIELD** | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 1**<br>**Site Location Map** |



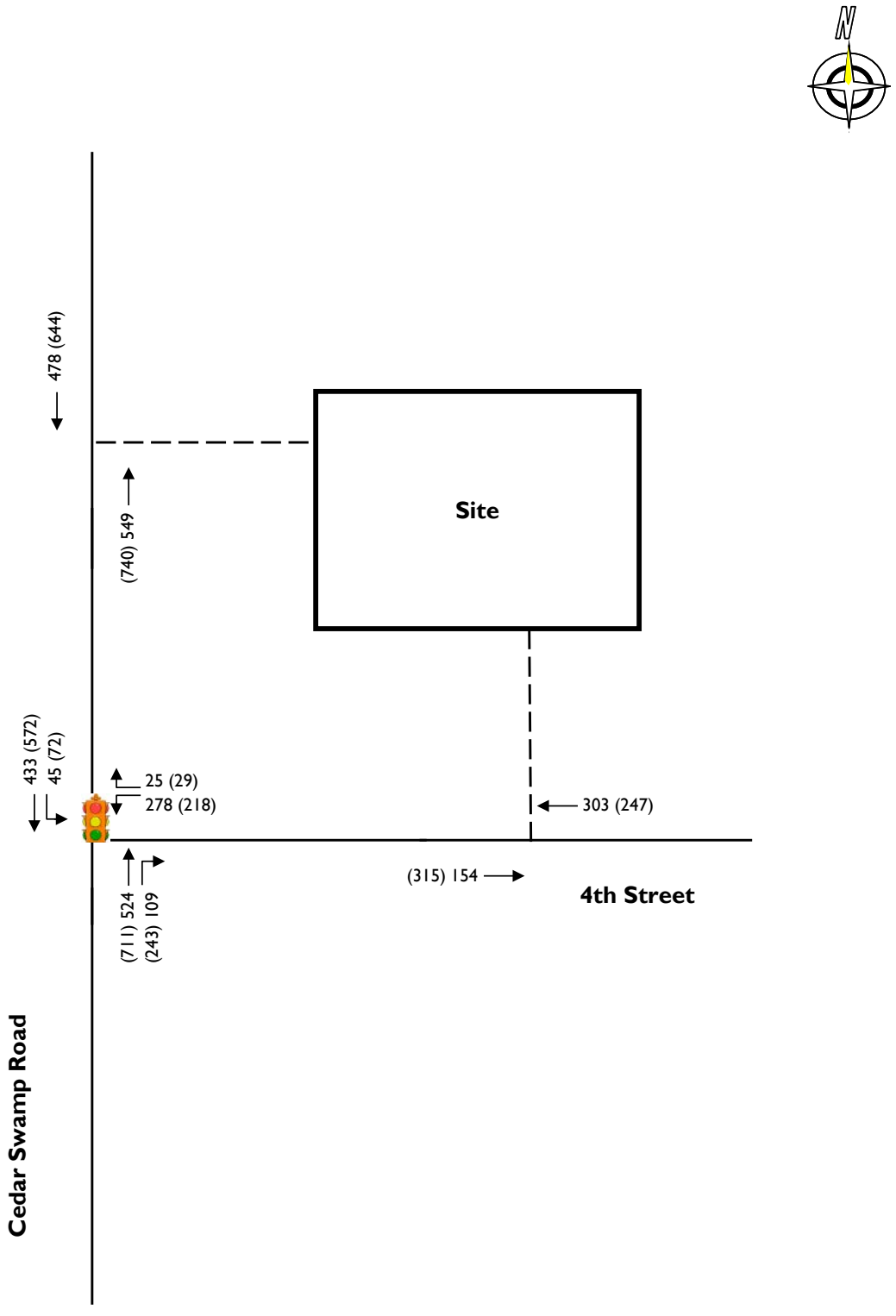

**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 2**<br>**2019 Existing Traffic Volumes** |




| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 3**<br>**2015 Existing Traffic Volumes** |




**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 4**<br>**2022 Base Traffic Volumes** |

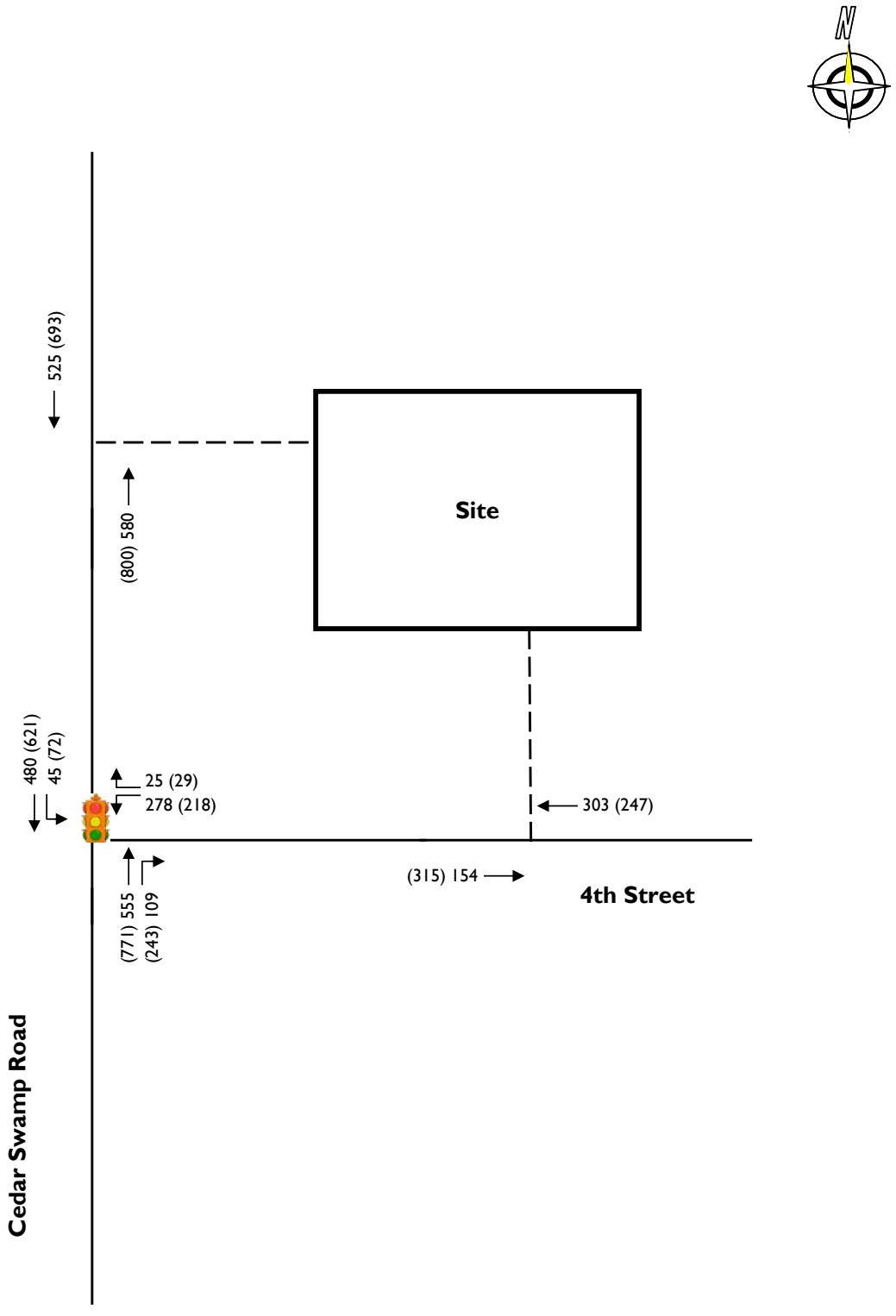

**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

STONEFIELD

**Proposed 7-Eleven Convenience Market**
**Cedar Swamp Road and 4th Street**
**City of Glen Cove, Nassau County, New York**
**Traffic Impact Study**

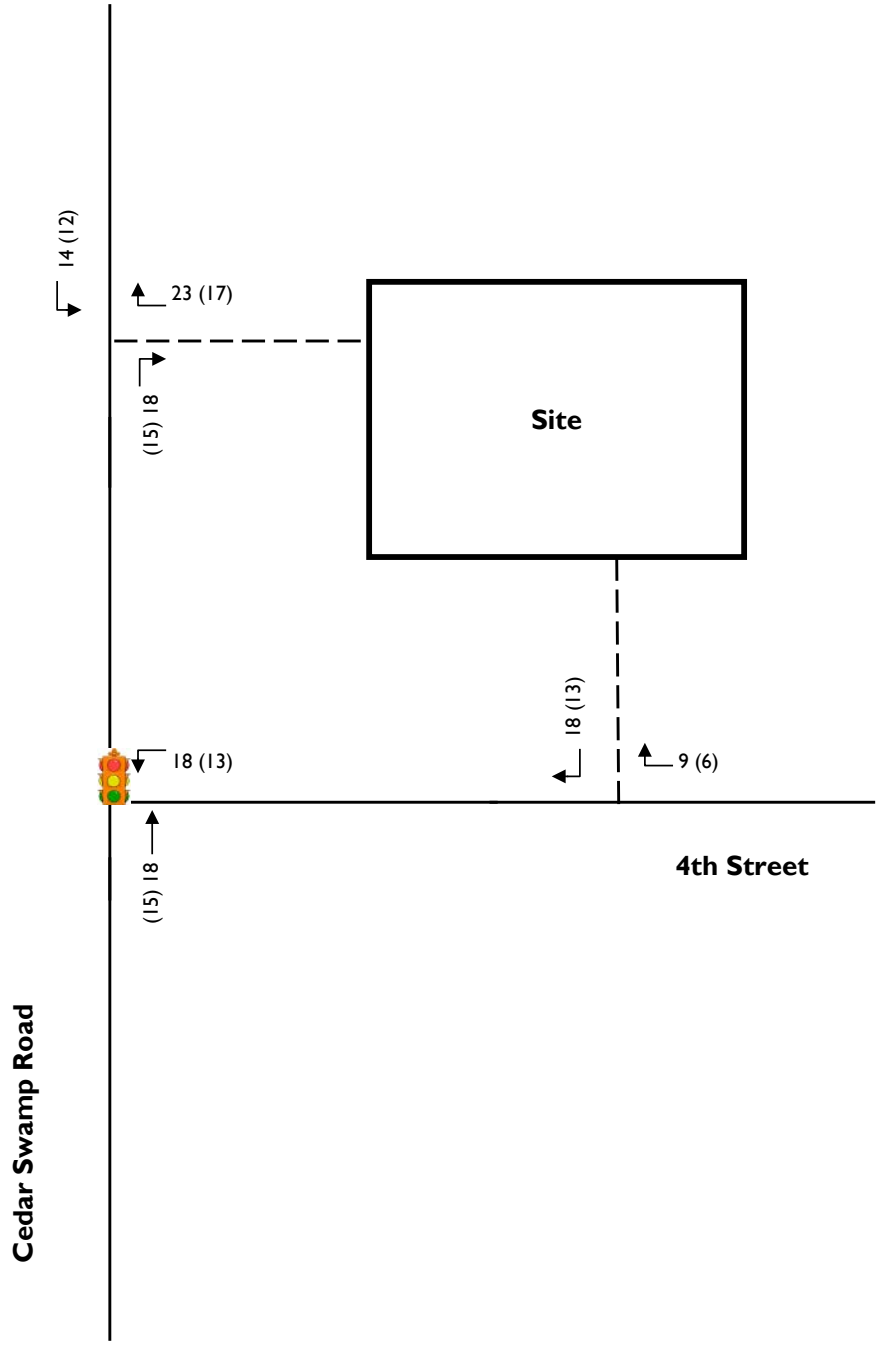
**FIGURE 5**
**Other Planned Projects**
**Future Traffic Volumes**




**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

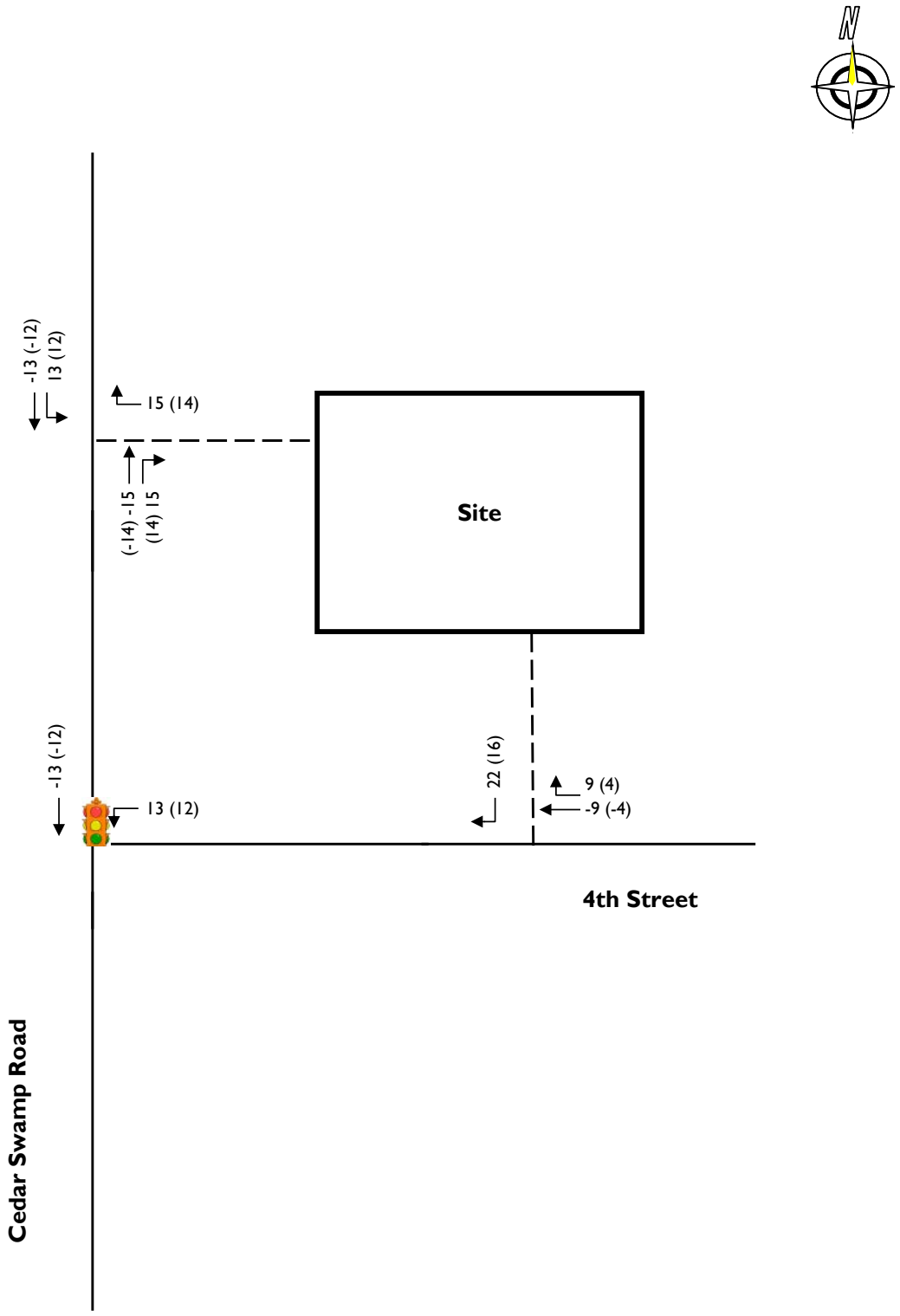
| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 6**<br>**2022 No-Build Traffic Volumes** |




**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

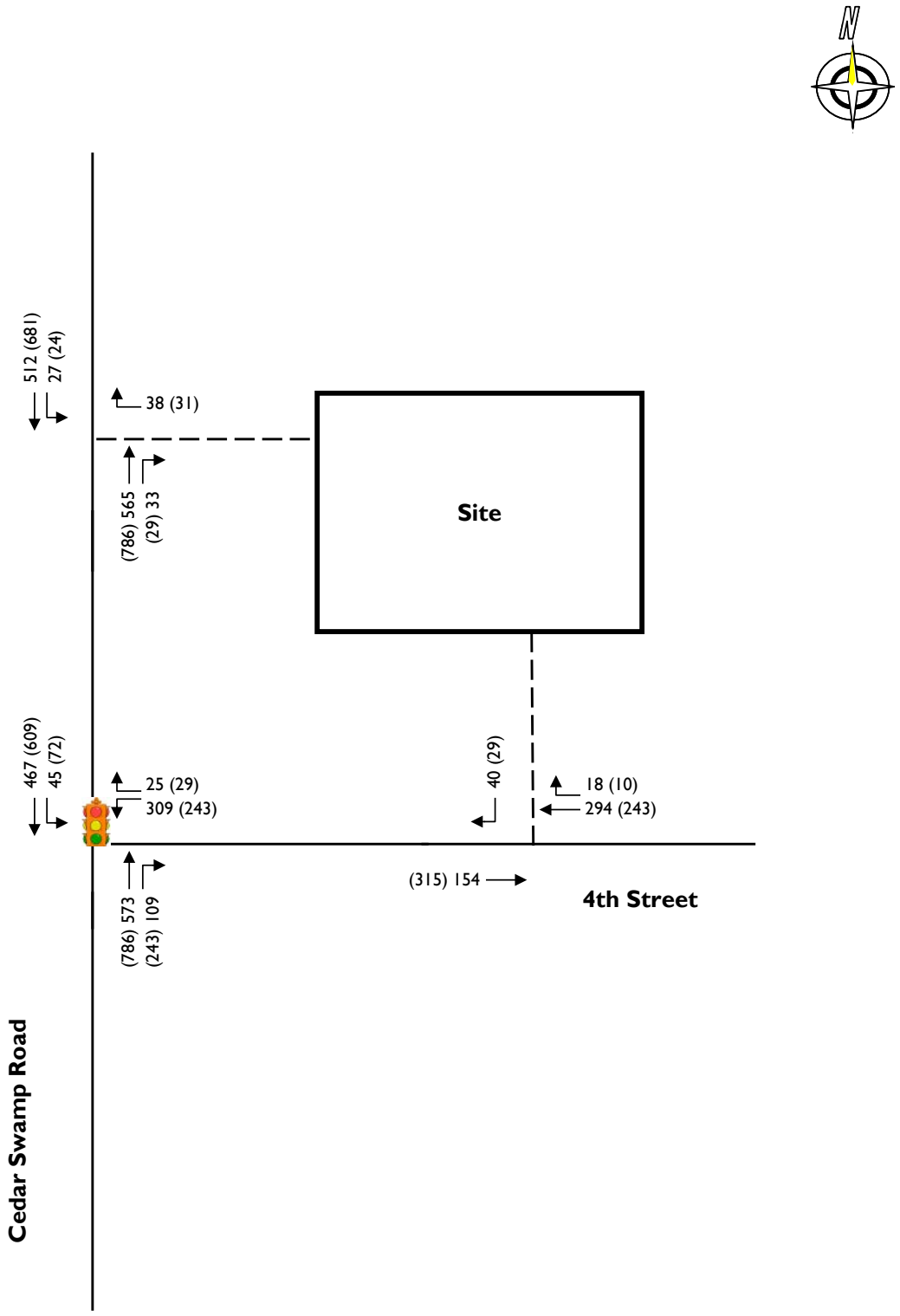
| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 7**<br>**"New" Site-Generated Traffic Volumes** |




**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 8**<br>**"Pass-By" Site-Generated Traffic Volumes** |




**LEGEND**

- Existing Roadway
- Proposed Driveway
- Existing Private Driveway
- AM (PM) Peak Hour Volumes
- Signalized Intersection

| | | |
|---|---|---|
| STONEFIELD | **Proposed 7-Eleven Convenience Market**<br>**Cedar Swamp Road and 4th Street**<br>**City of Glen Cove, Nassau County, New York**<br>**Traffic Impact Study** | **FIGURE 9**<br>**2022 Build Traffic Volumes** |

# HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 262 | 24 | 494 | 103 | 42 | 408 |
| Future Volume (veh/h) | 262 | 24 | 494 | 103 | 42 | 408 |
| Initial Q (Qb), veh | 4 | 3 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.96 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1758 | 1841 | 1841 | 1767 | 1826 | 1811 |
| Adj Flow Rate, veh/h | 301 | 28 | 568 | 118 | 48 | 469 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 3 | 4 | 4 | 4 | 5 | 6 |
| Cap, veh/h | 331 | 300 | 2066 | 848 | 475 | 2033 |
| Arrive On Green | 0.13 | 0.13 | 0.60 | 0.60 | 0.60 | 0.48 |
| Sat Flow, veh/h | 1674 | 1560 | 3589 | 1436 | 727 | 3532 |
| Grp Volume(v), veh/h | 301 | 28 | 568 | 118 | 48 | 469 |
| Grp Sat Flow(s),veh/h/ln | 1674 | 1560 | 1749 | 1436 | 727 | 1721 |
| Q Serve(g_s), s | 12.5 | 1.1 | 5.5 | 2.5 | 2.4 | 5.6 |
| Cycle Q Clear(g_c), s | 12.5 | 1.1 | 5.5 | 2.5 | 7.9 | 5.6 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 331 | 300 | 2066 | 848 | 475 | 2033 |
| V/C Ratio(X) | 0.91 | 0.09 | 0.27 | 0.14 | 0.10 | 0.23 |
| Avail Cap(c_a), veh/h | 550 | 513 | 2088 | 857 | 480 | 2054 |
| HCM Platoon Ratio | 0.70 | 0.70 | 1.00 | 1.00 | 1.00 | 0.80 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.9 | 25.2 | 7.0 | 6.4 | 9.0 | 9.1 |
| Incr Delay (d2), s/veh | 12.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.3 |
| Initial Q Delay(d3),s/veh | 11.5 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.6 | 0.7 | 1.8 | 0.7 | 0.4 | 1.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 53.5 | 26.1 | 7.4 | 6.8 | 9.4 | 9.3 |
| LnGrp LOS | D | C | A | A | A | A |
| Approach Vol, veh/h | 329 | | 686 | | | 517 |
| Approach Delay, s/veh | 51.2 | | 7.3 | | | 9.3 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 47.8 | | | 47.8 | 22.2 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 7.5 | | | 9.9 | 15.5 |
| Green Ext Time (p_c), s | | 4.5 | | | 3.6 | 0.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 17.4 |
| HCM 6th LOS | B |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 205 | 27 | 670 | 229 | 68 | 539 |
| Future Volume (veh/h) | 205 | 27 | 670 | 229 | 68 | 539 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.97 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1841 | 1885 | 1824 | 1900 | 1796 |
| Adj Flow Rate, veh/h | 218 | 29 | 713 | 244 | 72 | 573 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 4 | 1 | 0 | 0 | 7 |
| Cap, veh/h | 229 | 201 | 2353 | 982 | 425 | 2242 |
| Arrive On Green | 0.13 | 0.13 | 0.53 | 0.66 | 0.66 | 0.66 |
| Sat Flow, veh/h | 1781 | 1560 | 3676 | 1495 | 591 | 3503 |
| Grp Volume(v), veh/h | 218 | 29 | 713 | 244 | 72 | 573 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1560 | 1791 | 1495 | 591 | 1706 |
| Q Serve(g_s), s | 8.5 | 1.2 | 7.9 | 4.7 | 4.4 | 4.8 |
| Cycle Q Clear(g_c), s | 8.5 | 1.2 | 7.9 | 4.7 | 12.3 | 4.8 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 229 | 201 | 2353 | 982 | 425 | 2242 |
| V/C Ratio(X) | 0.95 | 0.14 | 0.30 | 0.25 | 0.17 | 0.26 |
| Avail Cap(c_a), veh/h | 585 | 513 | 2353 | 982 | 425 | 2242 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.80 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.3 | 27.1 | 7.6 | 4.9 | 8.3 | 4.9 |
| Incr Delay (d2), s/veh | 18.0 | 0.3 | 0.3 | 0.6 | 0.9 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.6 | 0.4 | 2.7 | 1.3 | 0.6 | 1.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 48.3 | 27.4 | 7.9 | 5.5 | 9.1 | 5.2 |
| LnGrp LOS | D | C | A | A | A | A |
| Approach Vol, veh/h | 247 | | 957 | | | 645 |
| Approach Delay, s/veh | 45.9 | | 7.3 | | | 5.7 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 52.0 | | | 52.0 | 18.0 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 9.9 | | | 14.3 | 11.5 |
| Green Ext Time (p_c), s | | 6.1 | | | 4.4 | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 11.9 |
| HCM 6th LOS | B |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 278 | 25 | 555 | 109 | 45 | 480 |
| Future Volume (veh/h) | 278 | 25 | 555 | 109 | 45 | 480 |
| Initial Q (Qb), veh | 4 | 3 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.96 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1758 | 1841 | 1841 | 1767 | 1826 | 1811 |
| Adj Flow Rate, veh/h | 320 | 29 | 638 | 125 | 52 | 552 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 3 | 4 | 4 | 4 | 5 | 6 |
| Cap, veh/h | 351 | 318 | 2025 | 831 | 432 | 1993 |
| Arrive On Green | 0.14 | 0.14 | 0.59 | 0.59 | 0.59 | 0.47 |
| Sat Flow, veh/h | 1674 | 1560 | 3589 | 1435 | 678 | 3532 |
| Grp Volume(v), veh/h | 320 | 29 | 638 | 125 | 52 | 552 |
| Grp Sat Flow(s),veh/h/ln | 1674 | 1560 | 1749 | 1435 | 678 | 1721 |
| Q Serve(g_s), s | 13.3 | 1.1 | 6.5 | 2.8 | 3.0 | 6.9 |
| Cycle Q Clear(g_c), s | 13.3 | 1.1 | 6.5 | 2.8 | 9.4 | 6.9 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 351 | 318 | 2025 | 831 | 432 | 1993 |
| V/C Ratio(X) | 0.91 | 0.09 | 0.31 | 0.15 | 0.12 | 0.28 |
| Avail Cap(c_a), veh/h | 550 | 513 | 2047 | 840 | 437 | 2014 |
| HCM Platoon Ratio | 0.70 | 0.70 | 1.00 | 1.00 | 1.00 | 0.80 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.6 | 24.6 | 7.6 | 6.8 | 10.1 | 9.8 |
| Incr Delay (d2), s/veh | 13.7 | 0.1 | 0.4 | 0.4 | 0.6 | 0.3 |
| Initial Q Delay(d3),s/veh | 10.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 0.7 | 2.2 | 0.8 | 0.5 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 54.0 | 25.4 | 8.0 | 7.2 | 10.7 | 10.1 |
| LnGrp LOS | D | C | A | A | B | B |
| Approach Vol, veh/h | 349 | | 763 | | | 604 |
| Approach Delay, s/veh | 51.6 | | 7.9 | | | 10.2 |
| Approach LOS | D | | A | | | B |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 47.0 | | | 47.0 | 23.0 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 8.5 | | | 11.4 | 16.3 |
| Green Ext Time (p_c), s | | 5.1 | | | 4.2 | 0.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 17.6 |
| HCM 6th LOS | B |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 218 | 29 | 771 | 243 | 72 | 621 |
| Future Volume (veh/h) | 218 | 29 | 771 | 243 | 72 | 621 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.97 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1841 | 1885 | 1824 | 1900 | 1796 |
| Adj Flow Rate, veh/h | 232 | 31 | 820 | 259 | 77 | 661 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 4 | 1 | 0 | 0 | 7 |
| Cap, veh/h | 245 | 214 | 2323 | 969 | 374 | 2213 |
| Arrive On Green | 0.14 | 0.14 | 0.52 | 0.65 | 0.65 | 0.65 |
| Sat Flow, veh/h | 1781 | 1560 | 3676 | 1495 | 528 | 3503 |
| Grp Volume(v), veh/h | 232 | 31 | 820 | 259 | 77 | 661 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1560 | 1791 | 1495 | 528 | 1706 |
| Q Serve(g_s), s | 9.0 | 1.2 | 9.4 | 5.2 | 5.8 | 5.9 |
| Cycle Q Clear(g_c), s | 9.0 | 1.2 | 9.4 | 5.2 | 15.3 | 5.9 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 245 | 214 | 2323 | 969 | 374 | 2213 |
| V/C Ratio(X) | 0.95 | 0.14 | 0.35 | 0.27 | 0.21 | 0.30 |
| Avail Cap(c_a), veh/h | 585 | 513 | 2323 | 969 | 374 | 2213 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.80 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.9 | 26.6 | 8.2 | 5.2 | 9.7 | 5.4 |
| Incr Delay (d2), s/veh | 16.9 | 0.3 | 0.4 | 0.7 | 1.2 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.9 | 0.5 | 3.4 | 1.4 | 0.7 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 46.9 | 26.9 | 8.6 | 5.9 | 10.9 | 5.7 |
| LnGrp LOS | D | C | A | A | B | A |
| Approach Vol, veh/h | 263 | | 1079 | | | 738 |
| Approach Delay, s/veh | 44.5 | | 8.0 | | | 6.3 |
| Approach LOS | D | | A | | | A |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 51.4 | | | 51.4 | 18.6 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 11.4 | | | 17.3 | 12.0 |
| Green Ext Time (p_c), s | | 6.9 | | | 4.8 | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 12.0 |
| HCM 6th LOS | B |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 309 | 25 | 573 | 109 | 45 | 467 |
| Future Volume (veh/h) | 309 | 25 | 573 | 109 | 45 | 467 |
| Initial Q (Qb), veh | 4 | 3 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.96 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1758 | 1841 | 1841 | 1767 | 1826 | 1811 |
| Adj Flow Rate, veh/h | 355 | 29 | 659 | 125 | 52 | 537 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 3 | 4 | 4 | 4 | 5 | 6 |
| Cap, veh/h | 386 | 350 | 1952 | 799 | 406 | 1921 |
| Arrive On Green | 0.16 | 0.16 | 0.56 | 0.56 | 0.56 | 0.45 |
| Sat Flow, veh/h | 1674 | 1560 | 3589 | 1432 | 665 | 3532 |
| Grp Volume(v), veh/h | 355 | 29 | 659 | 125 | 52 | 537 |
| Grp Sat Flow(s),veh/h/ln | 1674 | 1560 | 1749 | 1432 | 665 | 1721 |
| Q Serve(g_s), s | 14.7 | 1.1 | 7.1 | 2.9 | 3.2 | 6.9 |
| Cycle Q Clear(g_c), s | 14.7 | 1.1 | 7.1 | 2.9 | 10.3 | 6.9 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 386 | 350 | 1952 | 799 | 406 | 1921 |
| V/C Ratio(X) | 0.92 | 0.08 | 0.34 | 0.16 | 0.13 | 0.28 |
| Avail Cap(c_a), veh/h | 550 | 513 | 1972 | 808 | 410 | 1941 |
| HCM Platoon Ratio | 0.70 | 0.70 | 1.00 | 1.00 | 1.00 | 0.80 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.0 | 23.6 | 8.4 | 7.5 | 11.3 | 10.5 |
| Incr Delay (d2), s/veh | 16.4 | 0.1 | 0.5 | 0.4 | 0.7 | 0.4 |
| Initial Q Delay(d3),s/veh | 9.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.1 | 0.7 | 2.4 | 0.9 | 0.5 | 2.5 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 55.1 | 24.2 | 8.9 | 7.9 | 11.9 | 10.8 |
| LnGrp LOS | E | C | A | A | B | B |
| Approach Vol, veh/h | 384 | | 784 | | | 589 |
| Approach Delay, s/veh | 52.7 | | 8.8 | | | 10.9 |
| Approach LOS | D | | A | | | B |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 45.5 | | | 45.5 | 24.5 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 9.1 | | | 12.3 | 17.7 |
| Green Ext Time (p_c), s | | 5.2 | | | 4.0 | 0.8 |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 19.1 |
| HCM 6th LOS | | B |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 243 | 29 | 786 | 243 | 72 | 609 |
| Future Volume (veh/h) | 243 | 29 | 786 | 243 | 72 | 609 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 0.96 | 0.99 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1870 | 1841 | 1885 | 1824 | 1900 | 1796 |
| Adj Flow Rate, veh/h | 259 | 31 | 836 | 259 | 77 | 648 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 4 | 1 | 0 | 0 | 7 |
| Cap, veh/h | 317 | 278 | 2330 | 967 | 369 | 2220 |
| Arrive On Green | 0.18 | 0.18 | 0.52 | 0.65 | 0.65 | 0.65 |
| Sat Flow, veh/h | 1781 | 1560 | 3676 | 1488 | 519 | 3503 |
| Grp Volume(v), veh/h | 259 | 31 | 836 | 259 | 77 | 648 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1560 | 1791 | 1488 | 519 | 1706 |
| Q Serve(g_s), s | 9.8 | 1.2 | 9.6 | 5.2 | 5.9 | 5.7 |
| Cycle Q Clear(g_c), s | 9.8 | 1.2 | 9.6 | 5.2 | 15.6 | 5.7 |
| Prop In Lane | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 317 | 278 | 2330 | 967 | 369 | 2220 |
| V/C Ratio(X) | 0.82 | 0.11 | 0.36 | 0.27 | 0.21 | 0.29 |
| Avail Cap(c_a), veh/h | 662 | 579 | 2330 | 967 | 369 | 2220 |
| HCM Platoon Ratio | 1.00 | 1.00 | 0.80 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 27.7 | 24.1 | 8.2 | 5.2 | 9.8 | 5.3 |
| Incr Delay (d2), s/veh | 5.1 | 0.2 | 0.4 | 0.7 | 1.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.4 | 0.4 | 3.4 | 1.4 | 0.7 | 1.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 32.8 | 24.3 | 8.6 | 5.9 | 11.0 | 5.6 |
| LnGrp LOS | C | C | A | A | B | A |
| Approach Vol, veh/h | 290 | | 1095 | | | 725 |
| Approach Delay, s/veh | 31.9 | | 8.0 | | | 6.2 |
| Approach LOS | C | | A | | | A |

| Timer - Assigned Phs | | 2 | | | 6 | 8 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 51.5 | | | 51.5 | 18.5 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | | 32.0 | 26.0 |
| Max Q Clear Time (g_c+I1), s | | 11.6 | | | 17.6 | 11.8 |
| Green Ext Time (p_c), s | | 7.0 | | | 4.6 | 0.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 10.6 |
| HCM 6th LOS | B |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 154 | 294 | 18 | 0 | 40 |
| Future Vol, veh/h | 0 | 154 | 294 | 18 | 0 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 5 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 177 | 338 | 21 | 0 | 46 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 359 | 0 | - | 0 | 526 | 349 |
| Stage 1 | - | - | - | - | 349 | - |
| Stage 2 | - | - | - | - | 177 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1211 | - | - | - | 512 | 694 |
| Stage 1 | - | - | - | - | 714 | - |
| Stage 2 | - | - | - | - | 854 | - |
| Platoon blocked, % | | | - | - | - | |
| Mov Cap-1 Maneuver | 1211 | - | - | - | 512 | 694 |
| Mov Cap-2 Maneuver | - | - | - | - | 512 | - |
| Stage 1 | - | - | - | - | 714 | - |
| Stage 2 | - | - | - | - | 854 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 10.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1211 | - | - | - | 694 |
| HCM Lane V/C Ratio | - | - | - | - | 0.066 |
| HCM Control Delay (s) | 0 | - | - | - | 10.6 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 38 | 565 | 33 | 27 | 512 |
| Future Vol, veh/h | 0 | 38 | 565 | 33 | 27 | 512 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | 50 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 4 | 0 | 0 | 6 |
| Mvmt Flow | 0 | 44 | 649 | 38 | 31 | 589 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 344 | 0 | 0 | 687 | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 0 | 658 | - | - | 916 | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | - | 658 | - | - | 916 | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.9 | 0 | 0.5 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 658 | 916 | - |
| HCM Lane V/C Ratio | - | - | 0.066 | 0.034 | - |
| HCM Control Delay (s) | - | - | 10.9 | 9.1 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 315 | 243 | 10 | 0 | 29 |
| Future Vol, veh/h | 0 | 315 | 243 | 10 | 0 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 335 | 259 | 11 | 0 | 31 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 270 | 0 | - | 0 | 600 | 265 |
| Stage 1 | - | - | - | - | 265 | - |
| Stage 2 | - | - | - | - | 335 | - |
| Critical Hdwy | 4.1 | - | - | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | 2.2 | - | - | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | 1305 | - | - | - | 467 | 779 |
| Stage 1 | - | - | - | - | 784 | - |
| Stage 2 | - | - | - | - | 729 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1305 | - | - | - | 467 | 779 |
| Mov Cap-2 Maneuver | - | - | - | - | 467 | - |
| Stage 1 | - | - | - | - | 784 | - |
| Stage 2 | - | - | - | - | 729 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 9.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1305 | - | - | - | 779 |
| HCM Lane V/C Ratio | - | - | - | - | 0.04 |
| HCM Control Delay (s) | 0 | - | - | - | 9.8 |
| HCM Lane LOS | A | - | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 31 | 786 | 29 | 24 | 681 |
| Future Vol, veh/h | 0 | 31 | 786 | 29 | 24 | 681 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | 50 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 0 | 1 | 0 | 0 | 7 |
| Mvmt Flow | 0 | 33 | 836 | 31 | 26 | 724 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 434 | 0 | 0 | 867 | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 0 | 576 | - | - | 785 | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | - | 576 | - | - | 785 | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 11.6 | 0 | 0.3 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 576 | 785 | - |
| HCM Lane V/C Ratio | - | - | 0.057 | 0.033 | - |
| HCM Control Delay (s) | - | - | 11.6 | 9.7 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 | - |

# NYSDOT MOTOR VEHICLE COLLISION DATA

| Case Num | Case Year | County | Comp Muni | Muni Type | At Intersection | Comp X | Comp Y | Accd Date | Accd Time | Severity | Num Of Injuries | Num Serious Injuries | Num Of Fatalities |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37697963 | 2018 | NASSAU | Glen Cove | 1 | N | 616386.4100 | 4523313.8000 | 12/28/2018 | 03:57pm | PROPERTY DAMAGE | 0 | | 0 |
| 37275410 | 2018 | NASSAU | Glen Cove | 1 | Y | 616464.3700 | 4523395.8600 | 02/18/2018 | 12:19pm | PROPERTY DAMAGE | 0 | | 0 |
| 37499164 | 2018 | NASSAU | Glen Cove | 1 | N | 616384.2284 | 4523328.8830 | 09/26/2018 | 04:35pm | PROPERTY DAMAGE | 0 | | 0 |
| 38290601 | 2019 | NASSAU | Glen Cove | 1 | N | 616390.9578 | 4523387.3157 | 11/18/2019 | 07:22am | PROPERTY DAMAGE | 0 | | 0 |
| 36198612 | 2016 | NASSAU | Glen Cove | 1 | Y | 616375.8300 | 4523385.4700 | 02/25/2016 | 10:51am | INJURY | 1 | 0 | 0 |
| 37157838 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 02/11/2018 | 03:06pm | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37297860 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 05/23/2018 | 03:30pm | PROPERTY DAMAGE | 0 | | 0 |
| 37401525 | 2018 | NASSAU | Glen Cove | 1 | N | 616363.9965 | 4523464.5423 | 07/24/2018 | 06:30pm | PROPERTY DAMAGE | 0 | | 0 |
| 37124013 | 2018 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 01/10/2018 | 08:11am | PROPERTY DAMAGE AND INJURY | 1 | 0 | 0 |
| 36384265 | 2016 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 09/02/2016 | 01:38pm | PROPERTY DAMAGE | 0 | | 0 |
| 37067610 | 2017 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 09/25/2017 | 02:39pm | INJURY | 1 | 0 | 0 |
| 37762767 | 2018 | NASSAU | Glen Cove | 1 | Y | 616464.3700 | 4523395.8600 | 12/17/2018 | 07:22am | PROPERTY DAMAGE | 0 | | 0 |
| 36087500 | 2016 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 01/18/2016 | 03:29pm | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37172257 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 03/06/2018 | 05:00pm | NON-REPORTABLE | 0 | | 0 |
| 37955554 | 2019 | NASSAU | Glen Cove | 1 | Y | 616375.8300 | 4523385.4700 | 04/05/2019 | 11:40am | PROPERTY DAMAGE | 0 | | 0 |
| 37723723 | 2018 | NASSAU | Glen Cove | 1 | Y | 616375.8300 | 4523385.4700 | 11/14/2018 | 05:24pm | PROPERTY DAMAGE | 0 | | 0 |
| 38004370 | 2019 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 07/12/2019 | 06:42pm | PROPERTY DAMAGE AND INJURY | 1 | 0 | 0 |
| 38127868 | 2019 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 07/21/2019 | 10:44am | PROPERTY DAMAGE | 0 | | 0 |
| 37104835 | 2017 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 11/20/2017 | 12:30pm | INJURY | 1 | 0 | 0 |
| 36770823 | 2017 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 04/02/2017 | 10:58am | INJURY | 1 | 0 | 0 |
| 37693482 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 10/26/2018 | 08:00am | INJURY | 1 | 0 | 0 |
| 37756316 | 2019 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 01/28/2019 | 11:03am | PROPERTY DAMAGE | 0 | | 0 |
| 37810937 | 2019 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 03/11/2019 | 09:07am | INJURY | 1 | 0 | 0 |
| 38030522 | 2019 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 07/21/2019 | 05:31pm | PROPERTY DAMAGE AND INJURY | 1 | 0 | 0 |
| 36582869 | 2017 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 01/27/2017 | 01:05pm | NON-REPORTABLE | 0 | | 0 |
| 37367834 | 2018 | NASSAU | Glen Cove | 1 | N | 616364.5520 | 4523460.8308 | 04/23/2018 | 09:11pm | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37933330 | 2019 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 03/19/2019 | 11:41am | PROPERTY DAMAGE | 0 | | 0 |
| 36174822 | 2016 | NASSAU | Glen Cove | 1 | N | 616382.0467 | 4523343.9661 | 04/17/2016 | 10:40am | NON-REPORTABLE | 0 | | 0 |
| 37763080 | 2018 | NASSAU | Glen Cove | 1 | Y | 616375.8300 | 4523385.4700 | 12/02/2018 | 09:54pm | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37693477 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 10/22/2018 | 01:58pm | PROPERTY DAMAGE AND INJURY | 1 | 0 | 0 |
| 36652322 | 2017 | NASSAU | Glen Cove | 1 | Y | 616464.3700 | 4523395.8600 | 03/08/2017 | 08:43am | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 36190835 | 2016 | NASSAU | Glen Cove | 1 | Y | 616375.8300 | 4523385.4700 | 03/23/2016 | 09:36pm | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37232532 | 2018 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 01/26/2018 | 06:00pm | INJURY | 1 | 0 | 0 |
| 37933220 | 2019 | NASSAU | Glen Cove | 1 | Y | 616355.7400 | 4523526.1800 | 03/10/2019 | 05:17am | PROPERTY DAMAGE AND INJURY | 2 | 0 | 0 |
| 37415371 | 2018 | NASSAU | Glen Cove | 1 | Y | 616386.4100 | 4523313.8000 | 08/04/2018 | 07:08pm | PROPERTY DAMAGE | 0 | | 0 |
| 37467533 | 2018 | NASSAU | Glen Cove | 1 | N | 616363.8121 | 4523465.7748 | 05/24/2018 | 11:57am | PROPERTY DAMAGE | 0 | | 0 |

| Num Of Vehicles | Accd Type | Collision Type | Traffic Control | Light Condition | Weather | Road Surf Cond | Ped Loc |
|---|---|---|---|---|---|---|---|
| 1 | COLLISION WITH CURBING | COLLISION WITH CURBING | NONE | DAYLIGHT | RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | COLLISION WITH PARKED VEHICLE | NONE | DARK-ROAD LIGHTED | SNOW | SNOW/ICE | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | COLLISION WITH PARKED VEHICLE | NONE | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DAYLIGHT | RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DAYLIGHT | CLOUDY | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | NONE | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH PEDESTRIAN | COLLISION WITH PEDESTRIAN | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | PED/BICYCLIST AT INTERSECTION |
| 1 | COLLISION WITH SIGN POST | COLLISION WITH SIGN POST | NONE | DAYLIGHT | CLEAR | WET | NOT APPLICABLE |
| 3 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DAYLIGHT | SLEET/HAIL/FREEZING RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DARK-ROAD LIGHTED | CLEAR | DRY | NOT APPLICABLE |
| 3 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (AGAINST OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH PEDESTRIAN | COLLISION WITH PEDESTRIAN | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | PED/BICYCLIST AT INTERSECTION |
| 4 | COLLISION WITH MOTOR VEHICLE | RIGHT ANGLE | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH PEDESTRIAN | COLLISION WITH PEDESTRIAN | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | PED/BICYCLIST AT INTERSECTION |
| 2 | COLLISION WITH MOTOR VEHICLE | RIGHT TURN | TRAFFIC SIGNAL | DAYLIGHT | CLOUDY | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH PEDESTRIAN | COLLISION WITH PEDESTRIAN | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | PED/BICYCLIST NOT AT INTERSECTION |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH PEDESTRIAN | COLLISION WITH PEDESTRIAN | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | PED/BICYCLIST NOT AT INTERSECTION |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | TRAFFIC SIGNAL | DAYLIGHT | CLOUDY | DRY | NOT APPLICABLE |
| 1 | COLLISION WITH CURBING | COLLISION WITH CURBING | NONE | DARK-ROAD LIGHTED | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (WITH OTHER CAR) | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | NONE | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | RIGHT ANGLE | TRAFFIC SIGNAL | DARK-ROAD LIGHTED | RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | RIGHT ANGLE | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | RIGHT ANGLE | NONE | DAYLIGHT | CLOUDY | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | LEFT TURN (WITH OTHER CAR) | TRAFFIC SIGNAL | DARK-ROAD LIGHTED | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DUSK | CLEAR | DRY | NOT APPLICABLE |
| 1 | COLL. W/LIGHT SUPPORT/UTILITY POLE | COLLISION WITH SIGN POST | TRAFFIC SIGNAL | DARK-ROAD LIGHTED | SLEET/HAIL/FREEZING RAIN | WET | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | REAR END | TRAFFIC SIGNAL | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |
| 2 | COLLISION WITH MOTOR VEHICLE | OVERTAKING | NONE | DAYLIGHT | CLEAR | DRY | NOT APPLICABLE |

| Ped Action | Veh Type Veh 1 | Veh Type Veh 2 | Dir Of Travel Veh 1 | Dir Of Travel Veh 2 | Apparent Factor Veh 1 | Apparent Factor Veh 2 | Driver Age Veh 1 | Driver Age Veh 2 |
|---|---|---|---|---|---|---|---|---|
| NOT APPLICABLE | CAR/VAN/PICKUP | | EAST | | PAVEMENT SLIPPERY | | 18 | |
| NOT APPLICABLE | OTHER | CAR/VAN/PICKUP | UNKNOWN | NORTH | UNKNOWN | NOT APPLICABLE | | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH | WEST | BACKING UNSAFELY | NOT APPLICABLE | 52 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | WEST | WEST | FOLLOWING TOO CLOSELY | NOT ENTERED | 52 | 49 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH | SOUTH | FOLLOWING TOO CLOSELY | NOT APPLICABLE | 88 | 33 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH-WEST | SOUTH | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 96 | 24 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | NORTH | PASSING OR LANE USAGE IMPROPERLY | NOT APPLICABLE | 23 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | NORTH | UNSAFE LANE CHANGE | NOT APPLICABLE | 51 | 61 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH | EAST | TRAFFIC CONTROL DEVICES DISREGARDED | NOT APPLICABLE | 56 | 24 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH-EAST | SOUTH | NOT ENTERED | TRAFFIC CONTROL DEVICES DISREGARDED | 86 | 20 |
| CROSSING WITH SIGNAL | CAR/VAN/PICKUP | PEDESTRIAN | EAST | NOT APPLICABLE | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 40 | 25 |
| NOT APPLICABLE | CAR/VAN/PICKUP | | WEST | | PAVEMENT SLIPPERY | | 47 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | WEST | SOUTH | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 64 | 36 |
| NOT APPLICABLE | TRUCK | CAR/VAN/PICKUP | NORTH | NORTH | PASSING OR LANE USAGE IMPROPERLY | NOT APPLICABLE | 27 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | WEST | WEST | FOLLOWING TOO CLOSELY | NOT ENTERED | 80 | 60 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH-EAST | NORTH | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 22 | 67 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH | SOUTH | DRIVER INATTENTION | NOT ENTERED | 22 | 52 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | EAST | WEST | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 17 | 49 |
| CROSSING WITH SIGNAL | CAR/VAN/PICKUP | PEDESTRIAN | NORTH-EAST | NOT APPLICABLE | DRIVER INATTENTION | NOT APPLICABLE | 38 | 54 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | EAST | SOUTH | NOT ENTERED | TRAFFIC CONTROL DEVICES DISREGARDED | 45 | 61 |
| CROSSING WITH SIGNAL | CAR/VAN/PICKUP | PEDESTRIAN | NORTH-EAST | NOT APPLICABLE | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 59 | 23 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH-EAST | SOUTH | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 21 | 73 |
| CROSSING AGAINST SIGNAL | CAR/VAN/PICKUP | PEDESTRIAN | NORTH-EAST | NOT APPLICABLE | DRIVER INATTENTION | NOT APPLICABLE | 62 | 42 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | EAST | EAST | PASSING OR LANE USAGE IMPROPERLY | NOT ENTERED | 27 | 44 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | NORTH | PASSING OR LANE USAGE IMPROPERLY | NOT APPLICABLE | 64 | 28 |
| NOT APPLICABLE | CAR/VAN/PICKUP | | NORTH | | LOST CONSCIOUSNESS | | 37 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | EAST | SOUTH | TRAFFIC CONTROL DEVICES DISREGARDED | NOT APPLICABLE | 28 | 55 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH-EAST | NORTH-EAST | NOT APPLICABLE | PASSING OR LANE USAGE IMPROPERLY | 24 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH-WEST | NORTH | TRAFFIC CONTROL DEVICES DISREGARDED | NOT APPLICABLE | 18 | 45 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | EAST | NORTH | FAILURE TO YIELD RIGHT OF WAY | NOT APPLICABLE | 23 | 54 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | WEST | SOUTH | UNSAFE SPEED | FAILURE TO YIELD RIGHT OF WAY | 44 | 28 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | SOUTH-WEST | TRAFFIC CONTROL DEVICES DISREGARDED | NOT APPLICABLE | 17 | 59 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | SOUTH | SOUTH | UNSAFE SPEED | UNSAFE LANE CHANGE | 44 | 24 |
| NOT APPLICABLE | CAR/VAN/PICKUP | | SOUTH | | ALCOHOL INVOLVEMENT | | 25 | |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | NORTH | FOLLOWING TOO CLOSELY | NOT APPLICABLE | 23 | 38 |
| NOT APPLICABLE | CAR/VAN/PICKUP | CAR/VAN/PICKUP | NORTH | NORTH | FAILURE TO YIELD RIGHT OF WAY | NOT ENTERED | 38 | 58 |

| PRE_ACCD_ACTN_VEH1 | PRE_ACCD_ACTN_VEH2 | Day_Of_Week | On Street | Closest Cross Street | Parking Lot Ind |
|---|---|---|---|---|---|
| MAKING LEFT TURN | | Fri | SEA CLIFF AVE | Cedar Swamp Rd | N |
| UNKNOWN | PARKED | Sun | GABRIEL PL | 4TH ST | N |
| BACKING | PARKED | Wed | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| SLOWED OR STOPPING | STOPPED IN TRAFFIC | Mon | 4TH ST | CEDAR SWAMP RD | N |
| SLOWED OR STOPPING | MAKING LEFT TURN | Thu | CEDAR SWAMP RD | 4TH ST | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Sun | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| GOING STRAIGHT AHEAD | PARKED | Wed | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| CHANGING LANES | GOING STRAIGHT AHEAD | Tue | CEDAR SWAMP RD | Carney St | N |
| GOING STRAIGHT AHEAD | MAKING LEFT TURN | Wed | CEDAR SWAMP RD | CARNEY ST | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Fri | CEDAR SWAMP RD | CARNEY ST | N |
| MAKING RIGHT TURN ON RED | NOT APPLICABLE | Mon | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| SLOWED OR STOPPING | | Mon | 4TH ST | GABRIEL PL | N |
| GOING STRAIGHT AHEAD | GOING STRAIGHT AHEAD | Mon | CEDAR SWAMP RD | CARNEY ST | N |
| GOING STRAIGHT AHEAD | PARKED | Tue | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| SLOWED OR STOPPING | STOPPED IN TRAFFIC | Fri | 4TH ST | CEDAR SWAMP RD | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Wed | CEDAR SWAMP RD | 4TH ST | N |
| GOING STRAIGHT AHEAD | STOPPED IN TRAFFIC | Fri | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Sun | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING LEFT TURN | NOT APPLICABLE | Mon | SEA CLIFF AVE | CEDAR SWAMP RD | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Sun | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING LEFT TURN | NOT APPLICABLE | Fri | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING RIGHT TURN | GOING STRAIGHT AHEAD | Mon | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING LEFT TURN | NOT APPLICABLE | Mon | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| OVERTAKING | MAKING LEFT TURN | Sun | CARNEY ST | CEDAR SWAMP RD | N |
| MAKING U TURN | ENTERING PARKED POSITION | Fri | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| GOING STRAIGHT AHEAD | | Mon | CEDAR SWAMP RD | Carney St | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Tue | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| GOING STRAIGHT AHEAD | GOING STRAIGHT AHEAD | Sun | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| MAKING LEFT TURN | GOING STRAIGHT AHEAD | Sun | CEDAR SWAMP RD | 4TH ST | N |
| GOING STRAIGHT AHEAD | GOING STRAIGHT AHEAD | Mon | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| GOING STRAIGHT AHEAD | MAKING LEFT TURN | Wed | 4TH ST | GABRIEL PL | N |
| GOING STRAIGHT AHEAD | MAKING LEFT TURN | Wed | CEDAR SWAMP RD | 4TH ST | N |
| GOING STRAIGHT AHEAD | SLOWED OR STOPPING | Fri | CEDAR SWAMP RD | CARNEY ST | N |
| GOING STRAIGHT AHEAD | | Sun | CEDAR SWAMP RD | CARNEY ST | N |
| GOING STRAIGHT AHEAD | SLOWED OR STOPPING | Sat | CEDAR SWAMP RD | SEA CLIFF AVE | N |
| STARTING FROM PARKING | GOING STRAIGHT AHEAD | Thu | CEDAR SWAMP RD | CARNEY ST | N |