



Engineering  
& Design

# Traffic Impact Study

April 11, 2022

Revised March 30, 2023

RECEIVED  
PLANNING DEPARTMENT

APR 10 2023


TOWN OF YORKTOWN

## Underhill Farm Redevelopment Town of Yorktown, Westchester County, New York

Prepared for:

**Unicorn Soundview, LLC**  
10 Julia Lane, Suite 101  
Cold Spring, NY 10516

Prepared by:

  
**Philip J. Grealy, Ph.D., P.E.**  
**Geographic Discipline Leader**  
New York Professional Engineer  
License No. 59858

  
**Richard G. D'Andrea, P.E., PTOE**  
**Asst. Department Manager**  
New York Professional Engineer  
License No. 090241

**Colliers Engineering & Design**  
400 Columbus Avenue  
Suite 180E  
Valhalla New York 10595  
Main: 877 627 3772  
Colliersengineering.com

Project No. 20006297A

# Table of contents

<b>I. Executive Summary .....</b>	<b>3</b>
<b>II. Introduction .....</b>	<b>5</b>
A. Project Description and Location.....	5
B. Scope of Study .....	6
<b>III. Existing Roadway and Traffic Descriptions .....</b>	<b>7</b>
A. Description of Existing Roadways .....	7
1. <i>Underhill Avenue</i> .....	7
2. <i>Glenrock Street</i> .....	7
3. <i>Rochambeau Drive</i> .....	7
4. <i>NYS Route 118 (Saw Mill River Road)</i> .....	8
5. <i>Allan Avenue</i> .....	8
6. <i>Kear Street</i> .....	8
B. 2021 Existing Traffic Volumes.....	8
C. Accident Data.....	9
<b>IV. Evaluation of Future Traffic Conditions .....</b>	<b>10</b>
A. 2025 No-Build Traffic Volumes.....	10
B. Site Generated Traffic Volumes.....	10
C. Arrival/Departure Distribution.....	11
D. 2025 Build Conditions Traffic Volumes .....	12
E. Description of Analysis Procedures.....	12
1. <i>Signalized Intersection Capacity Analysis</i> .....	12
2. <i>Unsignalized Intersection Capacity Analysis</i> .....	13
F. Results of Analysis.....	13
1. <i>Underhill Avenue and NYS Route 118 (Saw Mill River Road) (Signal W-213)</i> .....	13
2. <i>Allan Avenue/Kear Street (Signal W-384) and NYS Route 118</i> .....	14
3. <i>Underhill Avenue and Existing Easterly Access Driveway</i> .....	14
4. <i>Underhill Avenue and Rochambeau Drive/Proposed Westerly Site Access</i> .....	15
5. <i>Glenrock Street and Underhill Avenue</i> .....	15
G. Consideration of Other Potential Area Developments.....	15
H. Sensitivity Analysis.....	16
I. Summary of Recommended Improvements .....	17
<b>V. Summary and Conclusion.....</b>	<b>19</b>

## Appendices

APPENDIX A .....	FIGURES
APPENDIX B .....	TABLES
APPENDIX C .....	LEVEL OF SERVICE STANDARDS
APPENDIX D .....	CAPACITY ANALYSIS
APPENDIX E.....	ACCIDENT DATA
APPENDIX F.....	PROPOSED TRAFFIC AND PEDESTRIAN IMPROVEMENT PLANS
APPENDIX G .....	POTENTIAL FUTURE INTERSECTION IMPROVEMENT PLANS
APPENDIX H.....	ANALYSIS WITH POTENTIAL FUTURE OTHER DEVELOPMENT TRAFFIC
APPENDIX I.....	SENSITIVITY ANALYSIS – NO BEAVER RIDGE ACCESS
APPENDIX J.....	TRAFFIC VOLUME BACKUP DATA
APPENDIX K .....	OTHER DEVELOPMENT BACKUP DATA

## I. Executive Summary

### Background

A detailed Traffic Impact Study has been prepared evaluating existing (see Figure No. 2 & 3 for existing AM & PM peak hour traffic volumes) and future traffic conditions in the vicinity of the proposed Underhill Farm Project. The traffic analysis accounts for the traffic from other previously approved developments in the area as well as anticipated traffic to be generated by the proposed Underhill Farm development (see Tables No. 1 and 1A and Figure No. 36 & 37 for project related traffic volumes). As noted in the study, certain improvements are proposed in association with the development. The study also identifies the types of improvements required to address future conditions if and when other potential developments occur in the area. These include the Kmart Redevelopment, the Roma Building Redevelopment, the re-occupancy of the former Turco's/Uncle Giuseppe's space as well as additional area growth. The timing of these potential projects is unknown at this time; however, based on previous proposals, traffic associated with these developments was accounted for as part of the future traffic conditions evaluation contained in Section III.G of the study.

It should also be noted that the Project proposal has been modified somewhat since prior submission of the Traffic Impact Study. The Project maintains the total of 148 residential dwelling units made up of a combination of Townhouses, Condos and Apartments. The commercial portion of the development is now proposed to consist of a 1,000 sq. ft. restaurant, 2,000 sq. ft. of office space and a total of 13,000 sq. ft. of office space.

### Project Related Improvements

As summarized in the Traffic Impact Study, the improvements, which will be completed by the Underhill Farm Applicant in order to mitigate any potential traffic impacts associated with the Project (several of these are depicted on Drawings 1, 2, and 3 contained in Appendix F of the report), include the following:

- Sight distance improvements at the Rochambeau Court intersection with Underhill Avenue and related drainage improvements all to be coordinated with the Town Highway Superintendent.
- Sight distance improvements at the intersection of Glenrock Street with Underhill Avenue.
- Construction of a full traffic and pedestrian access connection through Beaver Ridge, which in turn connects to Allen Avenue. This connection includes the appropriate signing, striping, intersection controls, and traffic calming measures to accommodate such movements.
- Pedestrian improvements on Underhill Avenue including a crossing from the site access to the existing sidewalk on the south side of Underhill Avenue. This will include the installation of a Rectangular Rapid Flashing Beacon Assembly (RRFB), a painted crosswalk, and installation of ADA compliant ramps.

- Signing and striping improvements for improved traffic control on Underhill Avenue.
- Coordination with the Town Highway and Police Departments regarding the addition of signing and related speed control or traffic calming measures to help reduce travel speeds along Underhill Avenue approaching this area.
- Traffic signal timing and equipment upgrades including new video camera detection at the NYS Route 118 and Underhill Avenue intersection to improve efficiency for processing traffic during peak periods. This would help accommodate the existing left turns and other movements during peak time periods; especially during the PM peak when long backups presently occur on the Underhill Avenue eastbound approach.
- Land dedication by the Applicant along Underhill Avenue to accommodate future widening improvements at the NYS Route 118 intersection.
- Financial contribution towards improvements at NYS Route 118/Underhill Avenue intersection (see below).

### Future Improvements to Accommodate Other Potential Developments

The plans provided in Appendix G of the Traffic Impact Study depict the improvements to provide dedicated turn lanes on the Underhill Avenue approaches and corresponding traffic signal upgrades and related pedestrian improvements and controls (Sheet 1). This plan also includes a formal dedicated right turn lane on the NYS Route 118 southbound approach, which would also be signal controlled. Sheet 2 of 2 depicts other further intersection improvements, which could be completed concurrently or at a later date. This plan depicts widening along NYS Route 118 to provide separate left turn lanes on the NYS Route 118 approaches in addition to the intersection improvements identified on Sheet 1.

## II. Introduction

### A. Project Description and Location

*(Figure No. 1)*

This report has been prepared to evaluate the potential traffic impacts associated with the proposed Underhill Farm Development, which is planned to be developed on the property of the former Soundview Prep. The site is situated on Underhill Avenue between Glenrock Street and NYS Route 118 in the Town of Yorktown, Westchester County, New York. The site is proposed to consist of a variety of multifamily housing units including rentals and condominiums totaling 148 dwelling units along with associated parking and a clubhouse and pool. The existing mansion building is planned to be redeveloped/refurbished to contain a restaurant on the 1<sup>st</sup> floor and office spaces on the 2<sup>nd</sup> and 3<sup>rd</sup> floors. An ancillary retail/office building totaling of 8,500 square feet is also planned and will be on the ground floor of the apartment building. The project will be developed in phases with Phase 1 consisting of 68 apartments, as well as the renovation and refurbishment of the existing mansion. As part of the development, the site improvements will include the roadway and pedestrian connection to Beaver Ridge as well as the enhancements and pedestrian improvements around the existing pond and other offsite traffic and pedestrian improvements. Parking will also be provided for the new senior center, which is proposed at Beaver Ridge in the vicinity of the cross-access connection. The Phase 2 development will include the 80 dwelling units of condominiums/townhouses.

As shown on Figure No. 1, access to the development is proposed via one existing and one proposed access driveway to Underhill Avenue as well as the connection to the existing Beaver Ridge development, which will be provided for cross traffic movements, pedestrians, and emergency vehicle access. The western driveway connection to Underhill Avenue will primarily provide access to the Townhouses and will align opposite Rochambeau Drive, while the easterly driveway will provide access to the apartments, condos, and commercial uses.

A Design Year of 2025 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with the completed and occupied development. It should also be noted that the development of this site was also considered as part of the SEQRA review of the Yorktown Heights Overlay District, which was recently approved by the Town of Yorktown Town Board. Also, as discussed in Section G, an additional evaluation which considers traffic from other significant potential developments in the area was undertaken to identify potential longer-term traffic improvements.

## B. Scope of Study

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the Project.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Colliers Engineering & Design CT, P.C (formerly Maser Consulting). These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT) which was used to adjust them for the effects of the Covid-19 Pandemic on traffic. Additional traffic/pedestrian counts were also collected in November 2021. Together these data were utilized to establish the Year 2021 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The 2021 Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the 2025 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the 2025 No-Build Traffic Volumes resulting in the 2025 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

## III. Existing Roadway and Traffic Descriptions

### A. Description of Existing Roadways

As shown on Figure No. 1, the proposed development will be accessed via one existing and one new access connection to Underhill Avenue and a cross connection the existing Beaver Ridge development. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

#### 1. Underhill Avenue

Underhill Avenue is a two-lane roadway former County roadway, which is now under Town jurisdiction. This roadway originates at a "T" intersection with NYS Route 129 and continues in a northeasterly direction intersecting with the Taconic State Parkway at a modified diamond interchange. The roadway continues in a northeasterly direction intersecting with NYS Route 118 at a full movement signalized intersection. The roadway also intersects with Glenrock Street and French Hill Road west of the site. The speed limit on this roadway is posted at 40 MPH. There are existing sidewalks present on the south side of Underhill Avenue extending from the Rochambeau Drive Multi-Family Residential Complex past the Cardinal Court intersection and connecting to the intersection with NYS Route 118. The sidewalks also continue on the west side of NYS Route 118 past Town Hall. There are also sidewalks on the north side of the roadway between NYS Route 118 and extending to the Courtyard at Underhill Complex and there is a bus stop located in the vicinity of the Coldwell Banker driveway.

#### 2. Glenrock Street

Glenrock Street is a narrow two-lane Town roadway that generally traverses in a north/south direction between an unsignalized stop sign controlled intersection with Underhill Avenue and extends north and connects with Giordano Drive at a "stop" controlled intersection. The roadway generally serves single-family residential land uses. No access connection to the site is proposed to this roadway. The roadway has no sidewalks and has an unposted speed limit.

#### 3. Rochambeau Drive

Rochambeau Drive is a Town roadway which originates at a stop-sign controlled "T" intersection with Underhill Avenue. The roadway extends in a southerly direction providing access to existing multi-family developments. The roadway has an asphalt sidewalk on the west side of the roadway between Underhill Avenue and Woods View Court. Under existing conditions, sight distance exiting Rochambeau Drive is somewhat limited looking to the west and as recommended in Section III-H, some clearing of vegetation and grading should be completed to improve the sight distance at this intersection.



#### 4. NYS Route 118 (Saw Mill River Road)

NYS Route 118 (Saw Mill River Road) is a State highway which runs in a generally north/south direction. The roadway originates at signalized controlled “T” intersection with NYS Route 129. The roadway traverses in a northerly direction generally consistent of one-lane per direction plus paved shoulders and it intersects with both Underhill Avenue and Kear Street/Allan Avenue at signalized intersections. The speed limit is posted at 55 MPH in the southern portion of this roadway, which is reduced to 40 MPH approaching Underhill Avenue. The roadway continues north intersecting with NYS Route 35/US Route 202 and continues as a combined route into the Town of Somers. In the vicinity of the site, sidewalks are present on the east side of the roadway between Underhill Avenue and the Route 35/202 intersection.

#### 5. Allan Avenue

Allan Avenue, in the vicinity of the site, is a two-lane Town roadway which has a signalized intersection with NYS Route 118 opposite Kear Street. The roadway serves residential land uses in this area and it terminates at a stop-sign controlled intersection with Baldwin Road. There are limited sidewalks in the vicinity of NYS Route 118 and the Beaver Ridge complex. The roadway has a posted speed limit of 30 MPH. It also has a weight limit of 25 tons.

#### 6. Kear Street

Kear Street is a two-lane Town roadway which originates at a signalized intersection with NYS Route 118 opposite Allan Avenue. Sidewalks and crosswalks are provided on three of the four legs of the intersection. The roadway continues southeasterly intersecting with the access to the Brookside Office Park and also the Caremont building and intersects with Underhill Avenue and Commerce Street at a signalized full movement intersection.

### B. 2021 Existing Traffic Volumes

*(Figures No. 2 and 3)*

Manual traffic and pedestrian counts were collected by representatives of Colliers Engineering & Design on December 3, 2020 and supplemented on January 6, 2021 and November 16, 2021 (NYS Route 118 and Underhill Avenue Only) during the AM and PM Peak Hours to determine the existing traffic and pedestrian volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the NYS Route 118 Corridor. Copies of the various data are contained in Appendix H. Based on this information, the traffic counts were adjusted to account for the effects of the Covid-19 Pandemic and the resulting adjusted Year 2021 Existing Traffic Volumes were established for the Weekday Peak AM and Weekday Peak PM Hours at the following study area intersections.

- Rochambeau Drive and Underhill Avenue
- Glenrock Street and Underhill Avenue
- Underhill Avenue and NYS Route 118 (Saw Mill River Road)
- Allan Avenue/Kear Street and NYS Route 118

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- |                        |                   |
|------------------------|-------------------|
| ▪ Weekday Peak AM Hour | 7:30 AM – 8:30 AM |
| ▪ Weekday Peak PM Hour | 5:00 PM – 6:00 PM |

The resulting Year 2021 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Weekday Peak AM Hour and Weekday Peak PM Hour, respectively.

### C. Accident Data

*(Table A and Appendix E)*

Accident data for the area roadways was obtained from the NYSDOT for the latest three-year period. Table A summarizes the data by type, severity, and other factors. A copy of the Table A is contained in Appendix "E".

## IV. Evaluation of Future Traffic Conditions

### A. 2025 No-Build Traffic Volumes

*(Figure No. 4 through 17, Appendix K)*

The 2021 Existing Traffic Volumes were increased by a growth factor of 0.50% per year to account for general background growth resulting in the 2025 Projected Traffic Volumes which are shown on Figures No. 4 and 5 for each of the Peak Hours. In addition, traffic from other specific approved developments in the area including the Pied Piper Expansion (Figures No. 6 & 7), the Weyant Residential Development (Figures No. 8 & 9), the balance of the CareMount development (Figures No. 10 & 11) and the Gardena Hotel (Boutique Hotel) (Figures No. 12 & 13) were accounted for. The specific volumes for each of these developments are identified on the Figures noted above. In addition, backup data for each of these developments based on prior traffic studies prepared for the individual projects or traffic generation estimates prepared based on Institute of Transportation Engineers data is provided in Appendix K for reference.

The resulting Total Approved Other Development Traffic Volumes associated with these other developments are shown on Figures No. 14 and 15 for each of the peak hours. These volumes were then added to the 2025 Projected Traffic Volumes resulting in the Year 2025 No-Build Traffic Volumes which are shown on Figures No. 16 and 17 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

See also Section III.G for an additional analysis that considers the traffic from other potential developments in the area including the Roma Building Redevelopment, the redevelopment of the vacant former K-Mart building and the re-occupancy of the Former Turco's/Uncle Giuseppe's building.

### B. Site Generated Traffic Volumes

*(Table No. 1 & 1A)*

Estimates of the amount of traffic to be generated by the proposed development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 11th Edition, 2021, based on Land Use Category 220 – Multifamily Housing (Low-Rise), Land Use 710 – General Office Building, Land Use 822 – Strip Retail Plaza (<40K) and Land Use 931 – Fine Dining Restaurant.

It is noted that the ITE data provides traffic generation rates for the various uses for the Peak Hour of Adjacent Street Traffic and the Peak Hour of Generator. The Peak of Adjacent Street Traffic data indicates the anticipated traffic generation for the specific uses during the corresponding peak hour along the adjacent roadway, which is typically the commuter peak hour. The Peak Hour of Generator data represents the volumes experienced during the peak hour of traffic generation for each individual land use. The Peak Hour of Generator traffic volumes may not coincide with the peak hours of traffic along the nearby roadways.

Table No. 1 contained in Appendix B, summarizes the trip generation rates and corresponding site generated traffic volumes for the future build out conditions for the site for the Weekday Peak AM and Weekday Peak PM Hours based on the ITE Peak Hour of Adjacent Street Traffic generation rates. Similarly, Table No. 1A contained in Appendix B, summarizes the trip generation rates and site generated traffic volumes for the Project based on the ITE Peak Hour of Generator traffic generation rates. A comparison of the two tables indicates utilizing the Peak Hour of Generator traffic generation rates results in somewhat higher traffic volume estimates for the Project. While it is our opinion that application of the Peak of Adjacent Street Traffic rates is appropriate since those represent the volumes that will coincide with the peak traffic volumes experienced along the area roadways, we have utilized the higher traffic volume estimates presented in Table No. 1A projection of future traffic volumes and analysis of future traffic conditions with the proposed Project contained herein.

The traffic generation estimates presented in both Tables No. 1 and 1A also include a 25% pass-by credit applied to the retail and restaurant uses on the site to account for trips that may be attracted from the existing traffic volumes passing the site. It should also be noted that “internal” trips between the residential and commercial land uses on the site are also possible, which would result in a reduction of the external “new trips” experienced along the surrounding area roadways. However, for the purposes of the capacity analysis contained herein, the full traffic volume generated by the site, with no credit taken for the pass-by or internal trips, has been analyzed providing a slightly conservative analysis of future conditions.

It should also be noted that the Phase 2 development may include approximately 30 dwelling units allocated for active seniors which may result in slightly lower traffic generation estimates associated with those dwelling units. However, no reduction in the peak hour trip generation was included in the analysis for this possibility.

### C. Arrival/Departure Distribution

*(Figures No. 20 and 21)*

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. Arrival and departure distributions were developed for the townhouse portion of the development which assume the majority of townhouse traffic will utilize the western site access. These arrival and departure distributions are identified on Figures No. 18 and 19, respectively. Similarly, arrival and departure distributions were developed separately for the apartments/condos/commercial portion of the Project which will primarily utilize the eastern site access. The anticipated arrival and departure distributions associated with the apartments/condos/commercial portion of the Project are shown on Figures No. 20 and 21, respectively.

It is noted that the arrival and departure distributions shown on these figures account for 15% of the site traffic utilizing the cross-access connection to Beaver Ridge in order to access to Allan Avenue. A separate sensitivity analysis has also been conducted to assess potential traffic conditions if this cross access is not utilized and all vehicles utilize the two driveway connections to Underhill Avenue to access the site.

## D. 2025 Build Conditions Traffic Volumes

*(Figures No. 22 through 29)*

The site generated traffic volumes presented in Table No. 1A were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes associated with the townhouse portion of the development for each of the study area intersections are shown on Figures No. 22 and 23 for each of the peak hours, respectively. Similarly, the site generated traffic volumes associated with the apartments/condos/commercial portion of the Project are identified on Figures No. 24 & 25. These site generated traffic volumes were for the townhouse and the apartments/condos/commercial portions of the Project were combined on Figures No. 26 & 27 to provide the total site generated traffic volumes. The total site generated traffic volumes were then added to the 2025 No-Build Traffic Volumes to obtain the 2025 Build Traffic Volumes. The resulting 2025 Build Traffic Volumes are shown on Figures No. 28 and 29 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

## E. Description of Analysis Procedures

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

### 1. Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

## 2. Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix "C" of this report.

## F. Results of Analysis

*(Table No. 2, Appendix D)*

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Table No. 2, contained in Appendix B, summarizes the results of the capacity analysis for the 2021 Existing, 2025 No-Build and 2025 Build Conditions. Appendix "D" contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

### 1. Underhill Avenue and NYS Route 118 (Saw Mill River Road) (Signal W-213)

NYS Route 118 and Underhill Avenue intersects at a signalized four-way intersection. The approaches generally consist of one lane. On the eastbound approach of Underhill Avenue there is a channelized right turn movement at the intersection and on the NYS Route 118 southbound approach there is a wide paved shoulder, which is currently used by right turning vehicles. The intersection is controlled by an actuated traffic signal with an advance left turn phase for the eastbound Underhill Avenue approach. Note that a push button controlled pedestrian crosswalk across the south leg of NYS Route 118 is provided at this location.

The capacity analysis for this intersection indicates that under current conditions, an overall intersection Level of Service "D" or better is experienced at this location. However, during the PM peak hour, eastbound traffic on Underhill Avenue currently experiences some long delays and queues during this period due to heavy commuter volumes. The intersection was reanalyzed for future No-Build and Build conditions. A review of the analysis indicates that the Levels of Service will be reduced under the future No-Build condition.

As part of the proposed development, certain traffic signal upgrades including the implementation of some traffic signal timing adjustments, provision of a signal communication modem, and improved vehicle detection (camera) at NYS Route 118 and Underhill Avenue will be completed to improve the efficiency of the operation and to offset any increased traffic from the development. It should be noted that the project generated traffic through this intersection during the PM Peak Hour equates to approximately three to four percent (3 - 4%) of the total volume at this intersection.

As discussed in more detail in Section G, to help accommodate traffic on a long-term basis resulting from the traffic from other potential developments, the Applicant will contribute funding to the Town for additional future traffic improvements at this location. This could be used towards improvement plans to construct turning lanes and other related improvements, including signal replacement/upgrades and pedestrian accommodations, to accommodate the other potential traffic increases in the area.

## **2. Allan Avenue/Kear Street (Signal W-384) and NYS Route 118**

Allan Avenue intersects with NYS Route 118 (Saw Mill River Road) at a signalized, full movement intersection which aligns opposite Kear Street. The approaches generally consist of one lane, although the Kear Street approach widens at the intersection. Note that on NYS Route 118, there are full shoulders on either side. Pedestrian crossings are provided across Allan Avenue and Kear Street, as well as the northerly leg of NYS Route 118. Pedestrian push buttons are also provided.

The capacity analysis conducted at this intersection indicates that overall Levels of Service "C" or better are currently experienced at this location. The intersection was reanalyzed for future conditions under the No-Build and Build scenarios. A review of the analysis indicates that with some signal timing adjustments, overall Levels of Service "C" or better will be maintained at this intersection. Traffic signal communication modems and related equipment will be provided at this location as part of the improvements.

## **3. Underhill Avenue and Existing Easterly Access Driveway**

The site is currently served by an existing driveway connection to Underhill Avenue, which served the former Soundview School. This driveway is located approximately midway between NYS Route 118 and Rochambeau Drive. The driveway is proposed to be upgraded as part of the site development (see also discussion in Section H).

Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at Level of Service "C" or better during the AM and PM Peak Hours.

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience Levels of Service "D" or better during the AM and PM Peak Hours under future conditions for traffic exiting the side road approaches. Also, as previously noted, the queues that occur during the PM Peak Hour extend past this intersection (see also Section I for improvement recommendations).

#### 4. Underhill Avenue and Rochambeau Drive/Proposed Westerly Site Access

Rochambeau Drive intersects with Underhill Avenue at a stop-sign controlled “T” intersection. As part of the development, a new access drive will be constructed opposite this road to create a 4-way intersection. The new access should consist of one entering and one exiting lane and should also be stop-controlled.

Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at Level of Service “C” or better during the AM and PM Peak Hours.

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience Levels of Service “D” or better during the AM and PM Peak Hours under future conditions (see also discussion on recommended improvements in Section I).

#### 5. Glenrock Street and Underhill Avenue

Glenrock Street intersections with Underhill Avenue at a stop-sign controlled “T” intersection. All approaches consist of a single lane.

Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service “C” during the AM and PM Peak Hours (see Section I for further discussion).

The capacity analysis was recomputed using the 2025 No-Build and Build Traffic volumes. The intersection is expected to continue to experience Levels of Service “C” or better during the AM and PM Peak Hours under future conditions. Note that some vegetative clearing along the site frontage will need to be completed as part of the development to maximize available sight distances at this location.

### G. Consideration of Other Potential Area Developments

*(Figures No. 30 through 41, Table No. 2A, Appendix G, H & K)*

In addition to the traffic conditions associated with the Underhill Farm project, a separate evaluation of future traffic conditions was completed, which accounts for traffic associated with the other potential significant developments in the vicinity of the Project that have not yet proceeded but could affect overall traffic conditions in the area. These other potential projects include the Roma Building Redevelopment, the redevelopment of the former Kmart space, and the re-occupancy of the former Turco’s/Uncle Guiseppes space. Copies of the corresponding Figures (Figures No. 30 through 41, tables (Table No. 2A) and analysis for these potential conditions are contained in Appendix G of this report. Also note that backup data for each of the potential other developments based on prior traffic studies prepared for the individual projects or traffic generation estimates prepared based on Institute of Transportation Engineers data is provided in Appendix K for reference.



The analysis of this future condition indicates that during peak periods, traffic conditions will require additional improvements to accommodate expected traffic flows and we have identified such improvements for the intersection of NYS Route 118 and Underhill Avenue.

These include two (2) potential improvement plans. The first would be the provision of a separate left turn lanes on the Underhill Avenue approaches to the intersection to alleviate increased left turn conflicts and improve the overall capacity. This improvement would also involve reconstruction of the additional pedestrian crossings, modification of the existing traffic signal, and installation of new ADA compliant pedestrian crossings on all four corners. A second improvement plan would provide even further capacity improvements but would involve additional work along the NYS Route 118 corridor. This plan concept includes the provision of separate left turn lanes on NYS Route 118, maintaining the right turn from NYS Route 118 onto Underhill Avenue, together with the other related improvements.

These improvements would have to be advanced if and when other potential development occurs in the area. As part of the Underhill Farm project, a financial contribution towards these future improvements would be made as well as the dedication of any lands necessary to effectuate the improvements shown on these drawings.

## H. Sensitivity Analysis

*(Figures No. 30 through 41, Table No. 2S, Appendix I)*

An additional sensitivity analysis was also conducted to assess potential traffic conditions if the planned vehicular cross connection to Beaver Ridge is not utilized or not available. The sensitivity analysis arrival and departure distributions associated with the Townhouse and Apartment/Condo/Commercial portions of the Project are provided on Figures No. 18S through 21S contained in Appendix I. These distributions were then utilized to apply the site generated traffic volumes from Table No. 1A to the roadway network resulting the site generated traffic volumes at each of the study area intersections as shown on Figures No. 22S through 27S. These volumes were then applied to the 2026 No-Build Traffic Volumes with the approved other developments as well as the approved and potential other developments to obtain the respective 2026 Build scenario traffic volumes as identified on Figures No. 28S & 29S and Figures No. 40S & 41S.

The capacity analyses for the 2026 Build conditions were recomputed for this sensitivity analysis scenario and the results are summarized in Table No. 2S contained in Appendix I. The analysis of this potential condition indicates that similar levels of service are anticipated at the area intersections assuming no traffic through the Beaver Ridge connection when compared to the base scenario that assumes 15% of the Project traffic will utilize the proposed Beaver Ridge vehicular connection to access Allan Avenue.

## I. Summary of Recommended Improvements

*(Appendix F & G)*

Based upon a review of the field inspections, existing traffic conditions, and traffic analysis results, the following is a summary of recommendations relative to the proposed development.

1. The intersection of the proposed access opposite Rochambeau Drive should be constructed to consist of one entering and one exiting lane and be stop-sign controlled. In addition, sight distances should be improved for both the driveway and Rochambeau Drive approaches by clearing vegetation and some regrading within the Underhill Avenue right-of-way as well as related drainage improvements. A painted stop bar should be added on each of these side road approaches to the intersection. These will have to be coordinated with the Town Highway Superintendent.
2. The existing driveway connection to the site, which served the former Soundview Prep School, will be upgraded as part of the development including ADA compliant ramps. As shown on Drawing SK-1, a Rapid Flashing Beacon (RFB), together with a striped crosswalk, is proposed to allow pedestrians to access the sidewalk on the south side of Underhill Avenue and for any pedestrians from the Rochambeau area to access the site as well as to the Senior Center. Also, "Do Not Block the Box" signing and pavement markings are also recommended. These improvements will be coordinated with the Town Highway Superintendent as part of the final site plan conditions.

An emergency access connection and a localized through traffic and pedestrian connection to the Beaver Ridge Development is proposed as part of the development. Some traffic calming measures may be necessary in association with the final site plan to ensure limited local traffic utilization and to limit vehicle speeds through this area. Related pedestrian/sidewalk improvements should be coordinated accordingly with the Town and Beaver Ridge as part of the development.

3. Vegetative pruning to improve/maintain sight distances at several area intersections, including Underhill Avenue at Rochambeau Drive, Underhill Avenue and Glenrock Street, and Underhill Avenue at French Hill Road, are recommended regardless of this development.
4. As part of the Phase 1 improvements, certain traffic signal upgrades at NYS Route 118 and Underhill Avenue will be completed to improve the efficiency of the operation and to offset any increased traffic. These will include the installation of a communications modem, upgraded vehicle detection in the form of camera actuation, adaptive software per NYSDOT direction, and signal timing improvements. As noted in the Level of Service table, with these improvements, conditions would be improved significantly at the intersection reducing the excess queues that occur and providing safer and more efficient operations overall.
5. Based on field observations, vehicle speeds on Underhill Avenue approaching this area from the southwest during certain periods are in excess of 45 MPH. The Applicant will work with the Town on implementing additional signing and other measures to help reduce travel speeds approaching this area.

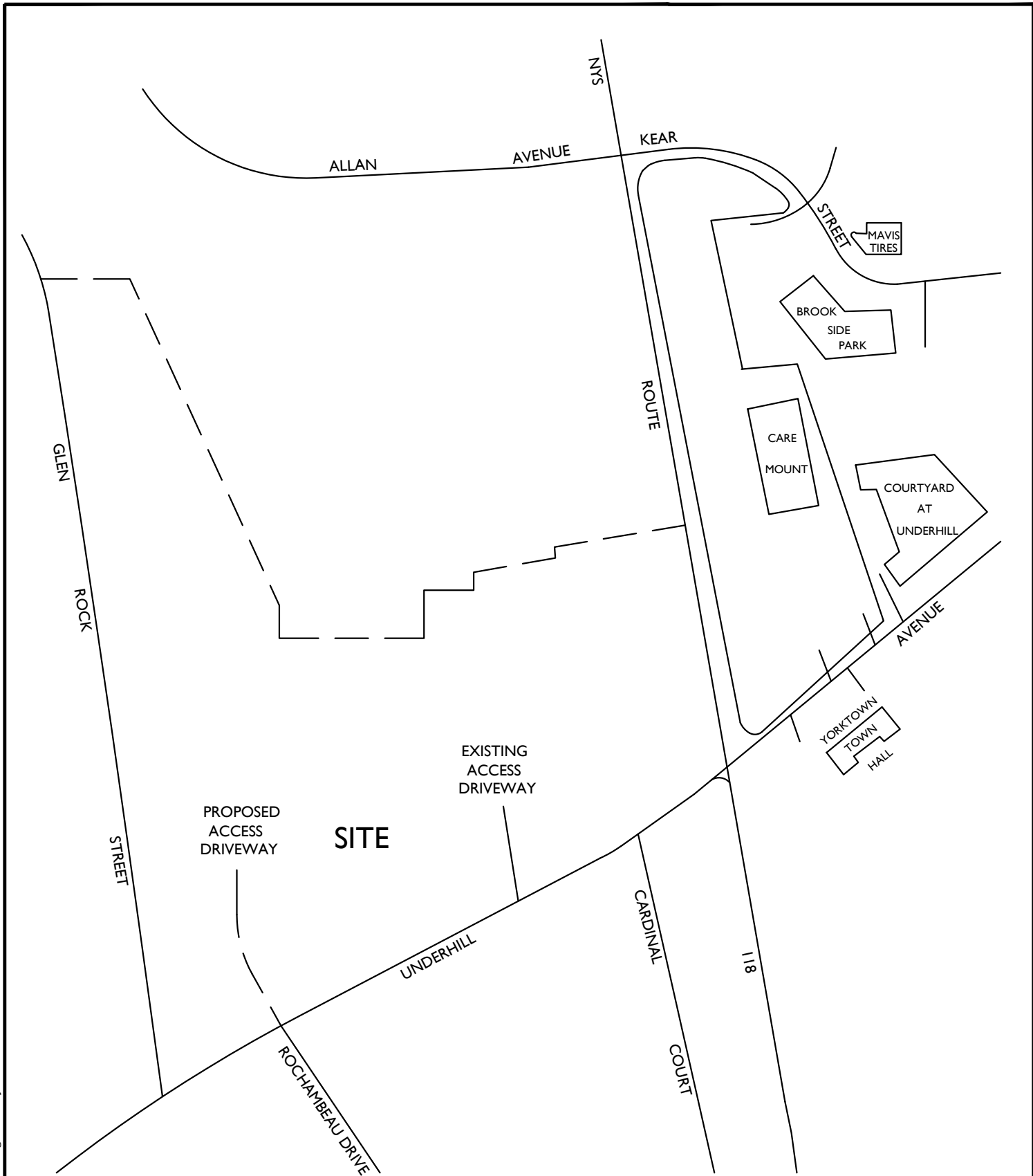
6. As indicated in Section G above, to accommodate other potential traffic increases in the area on a long-term basis, the Applicant will contribute funds to the Town towards such improvement plans to construct turning lanes and other improvements, including signal replacement/upgrades and pedestrian accommodations (see Appendix G for concept plans).
7. With the planned connection to Beaver Ridge Apartment Complex, a total of approximately 30 vehicles (entering and exiting) are expected to utilize that connection. The majority of these vehicles would access the signalized intersection at NYS Route 118 and would be those destined primarily crossing to Kear Street and those areas to the east.
8. Traffic calming measures including signing, speed tables, and other measures are being incorporated into the site plan to control speeds within the development. The layout is such that the connection to Beaver Ridge is really to accommodate traffic between the two projects and not designed as a thoroughfare. Pedestrian movements will also be accommodated at this location.

## V. Summary and Conclusion

Based on the above analysis, with the completion of the access and signal improvements, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. With the completion of these improvements, the Underhill Farm Redevelopment traffic is not expected to cause any significant impact in overall operations. In addition, the certain other longer-term improvements have been identified including provision of turning lanes, signal upgrades, and pedestrian improvements, to accommodate traffic from other potential developments in the area. The Applicant has agreed to provide funds to the Town towards these other improvements.

# Traffic Impact Study

## Appendix A | Traffic Figures



NOTE: LINE DIAGRAM NOT TO SCALE

By: RDANDREA

**Colliers** Engineering & Design

www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

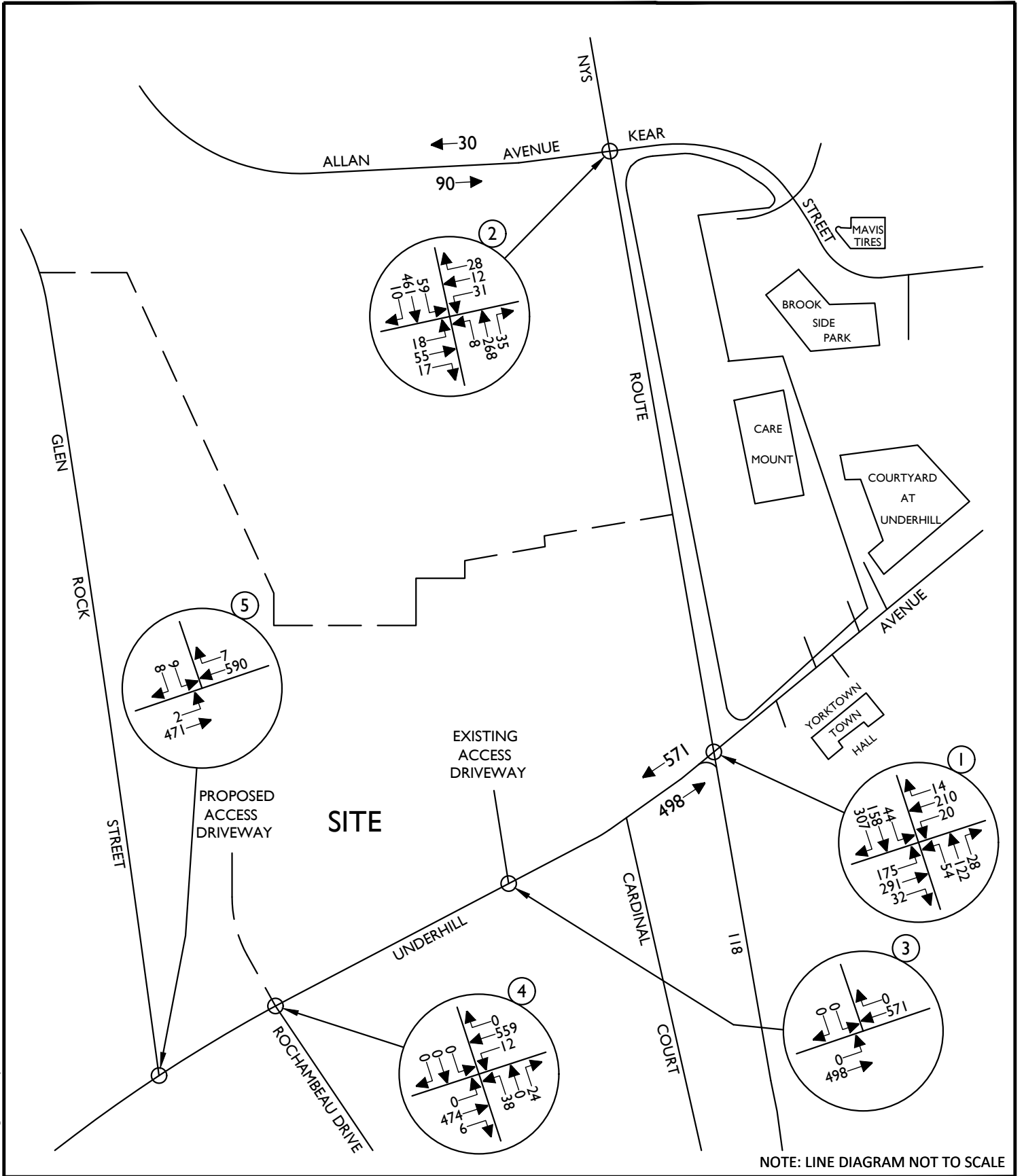
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**SITE LOCATION MAP**

SHEET NUMBER:  
**1**

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg;2 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

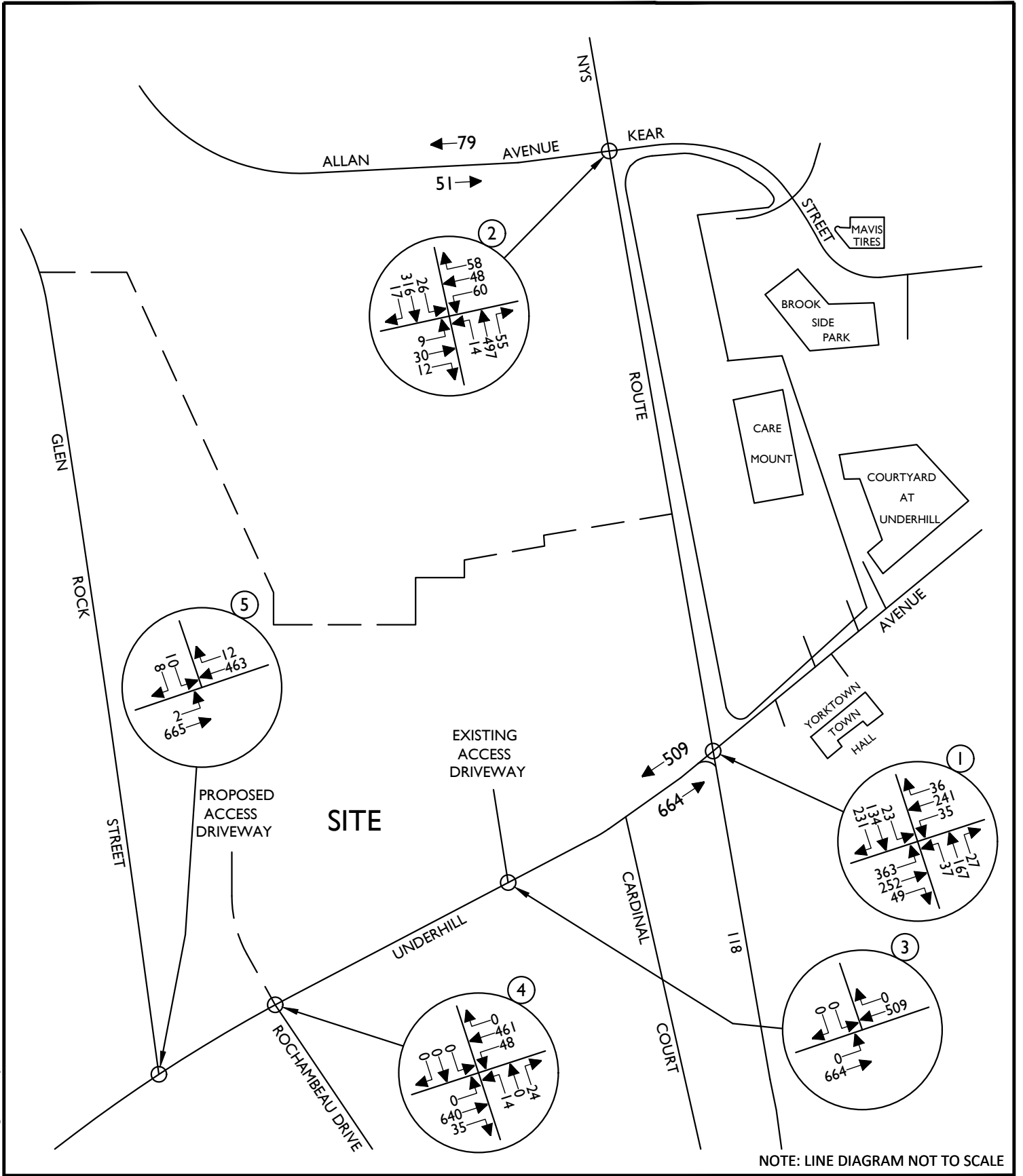
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2021 EXISTING TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

2



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

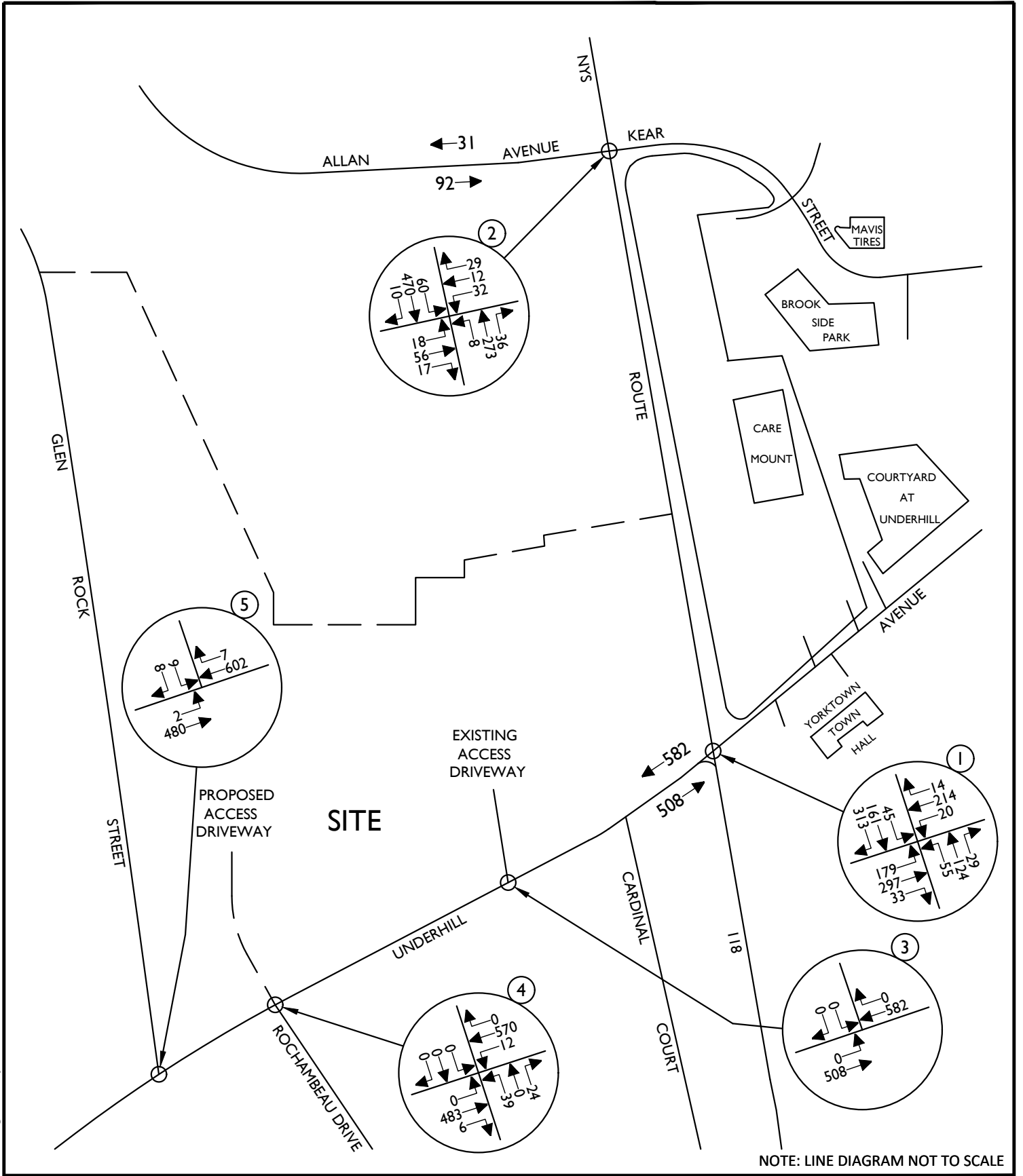
SHEET TITLE:  
2021 EXISTING TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:

3



VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg&4 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

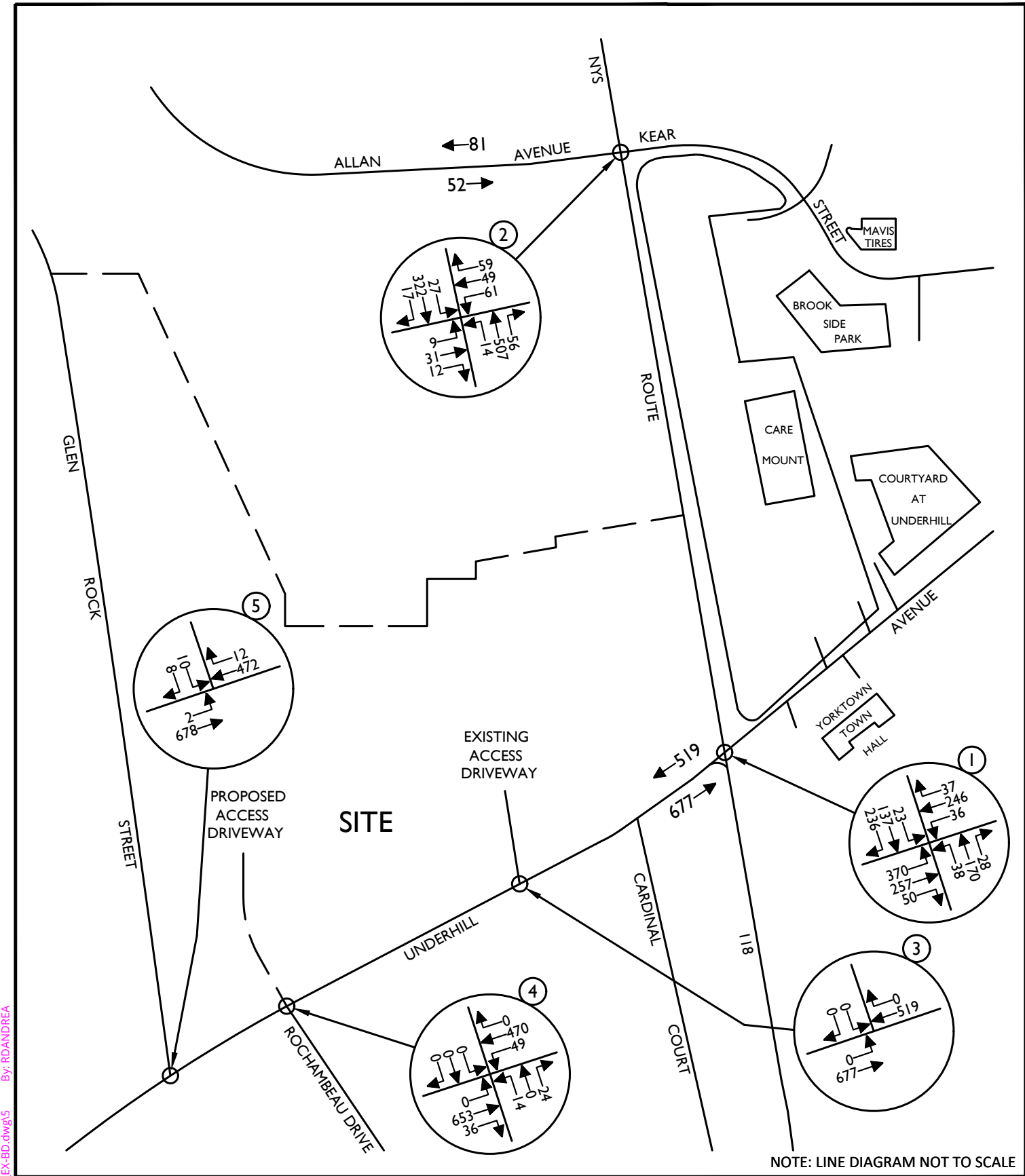
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2025 PROJECTED TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

4



NOTE: LINE DIAGRAM NOT TO SCALE

V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg\$5 By: RDANDREA



**UNDERHILL FARM RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

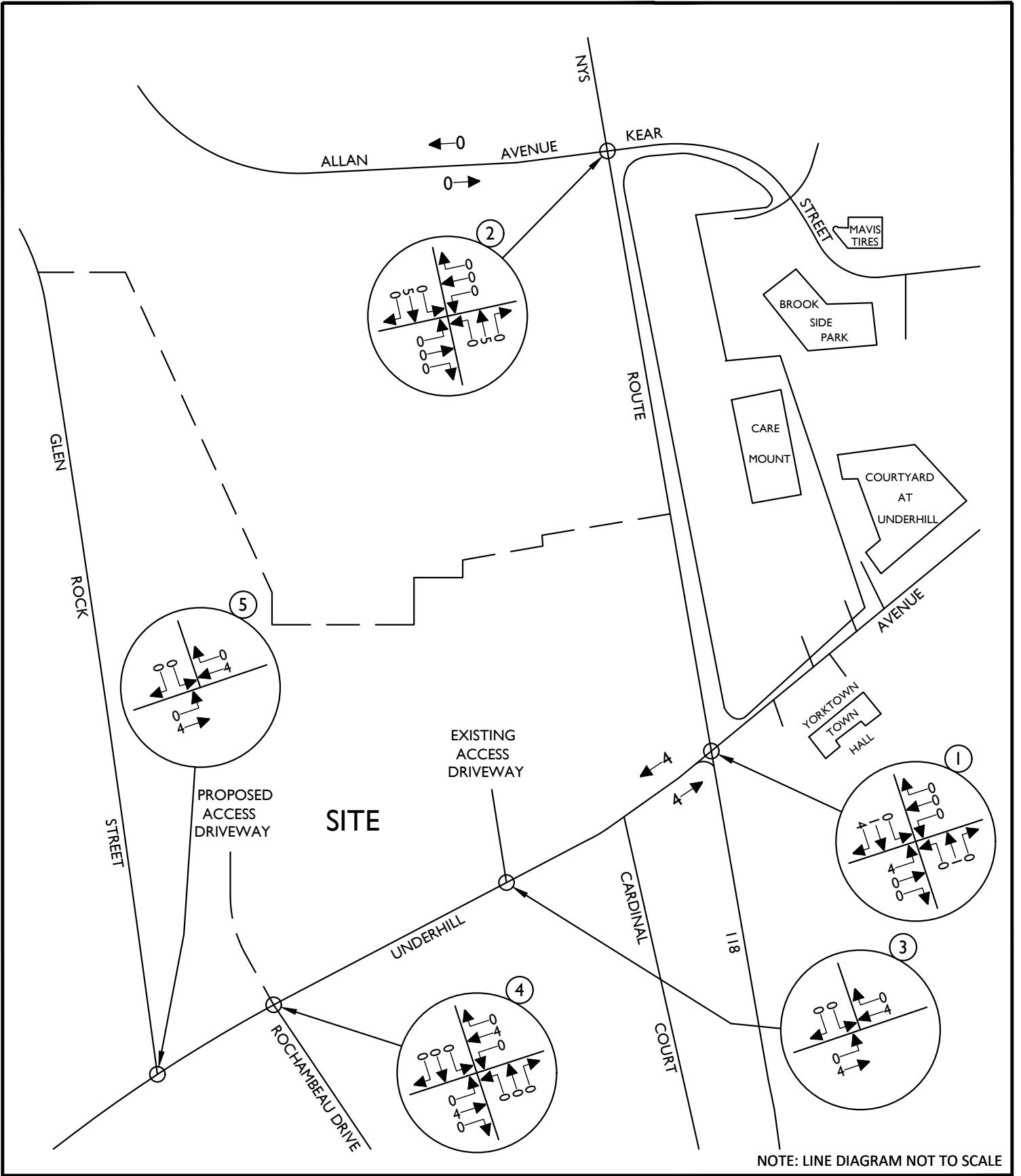
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:		DRAWING NAME:	
20006297A		230326RGD_FIGURE_EX-BD	

SHEET TITLE:  
**2025 PROJECTED TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR**

SHEET NUMBER:  
**5**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

VAcpublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg@6 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

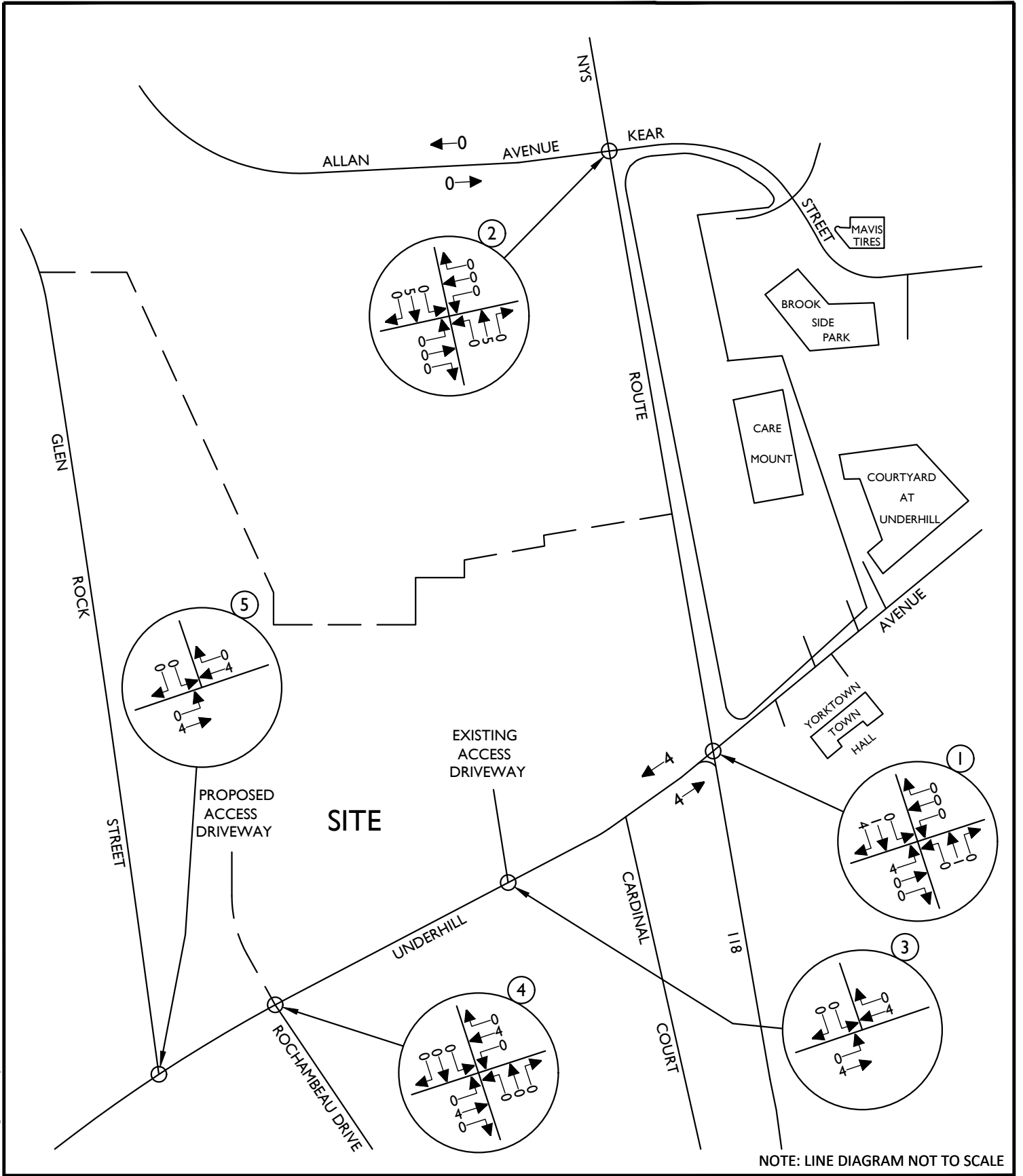
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
PIED PIPER DAYCARE (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

6

By: RDANDREA  
 V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg7



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
 RESIDENTIAL

TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK



Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
 VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION  
 OF EXCAVATORS, DESIGNERS, OR  
 ANY PERSON PREPARING TO  
 DISTURB THE EARTH'S SURFACE  
 ANYWHERE IN ANY STATE



WESTCHESTER  
 400 Columbus Avenue,  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING  
 ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

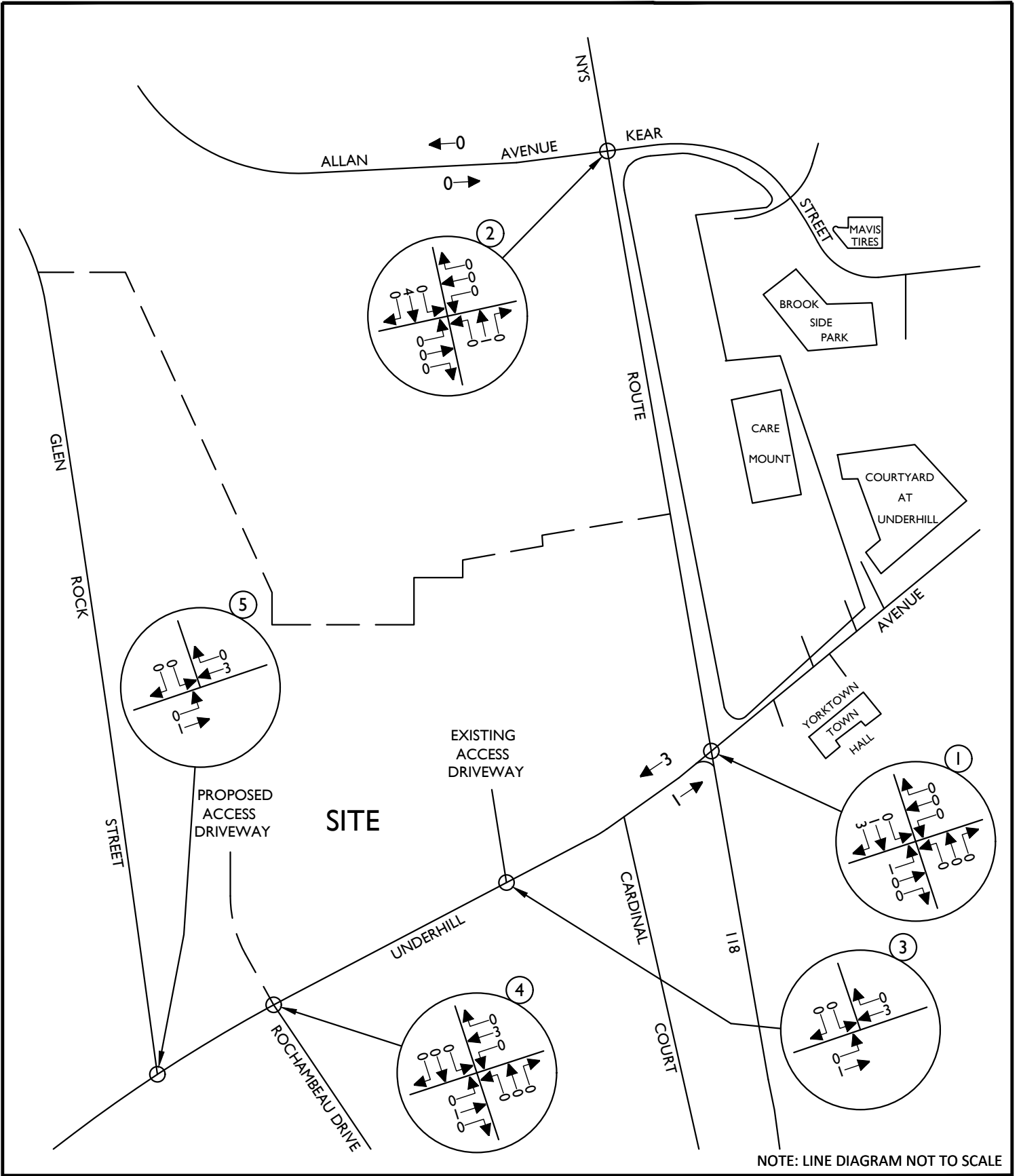
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
 PIED PIPE DAYCARE (APPROVED)  
 OTHER DEVELOPMENT TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR

SHEET NUMBER:

7

V:\Publish\_30520\230326RGRD\_FIGURE\_EX-BD.dwg&8 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**



Know what's below.  
Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

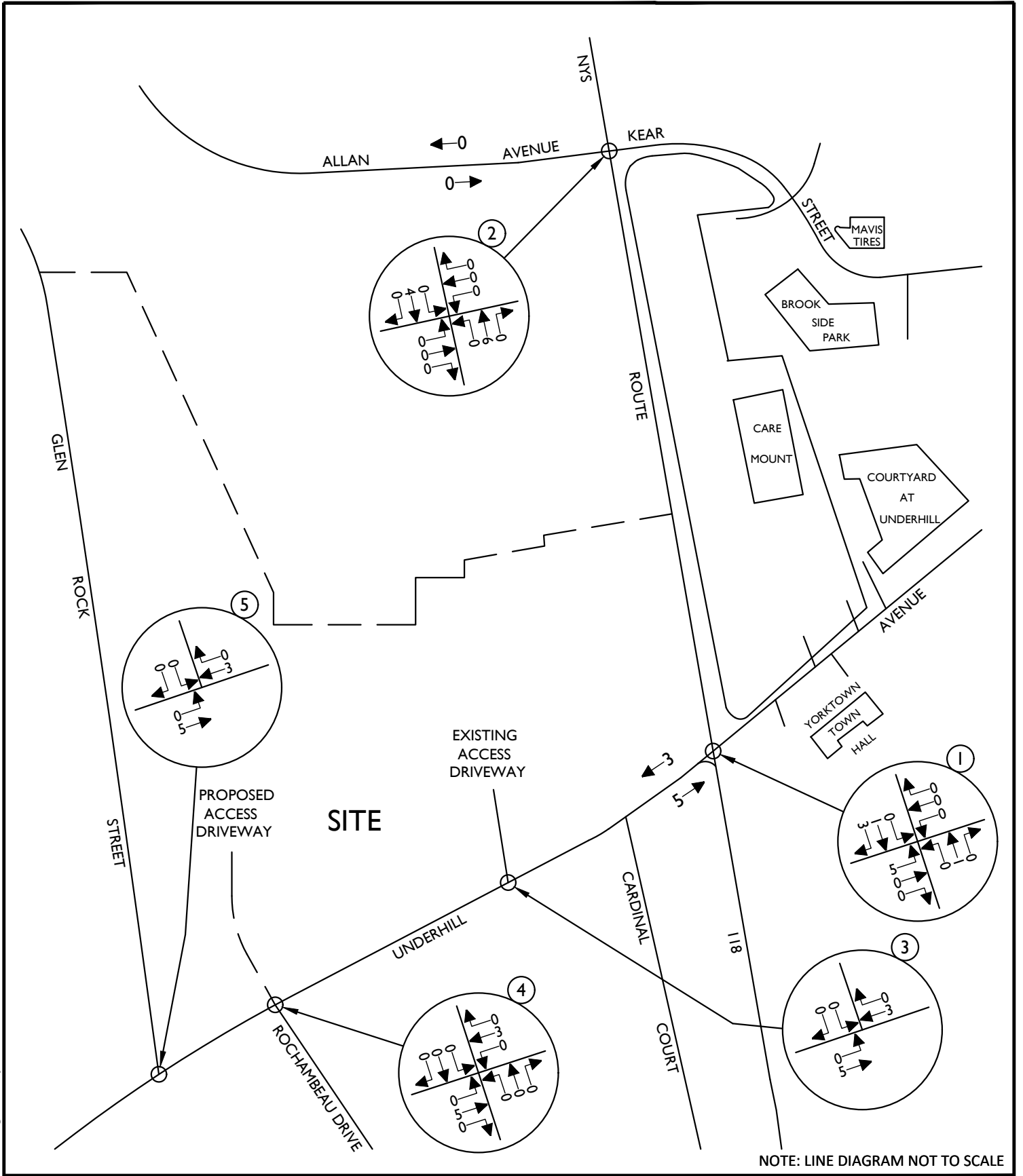
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGRD_FIGURE_EX-BD		

SHEET TITLE:  
**THE WEYANT (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR**

SHEET NUMBER:

8

By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

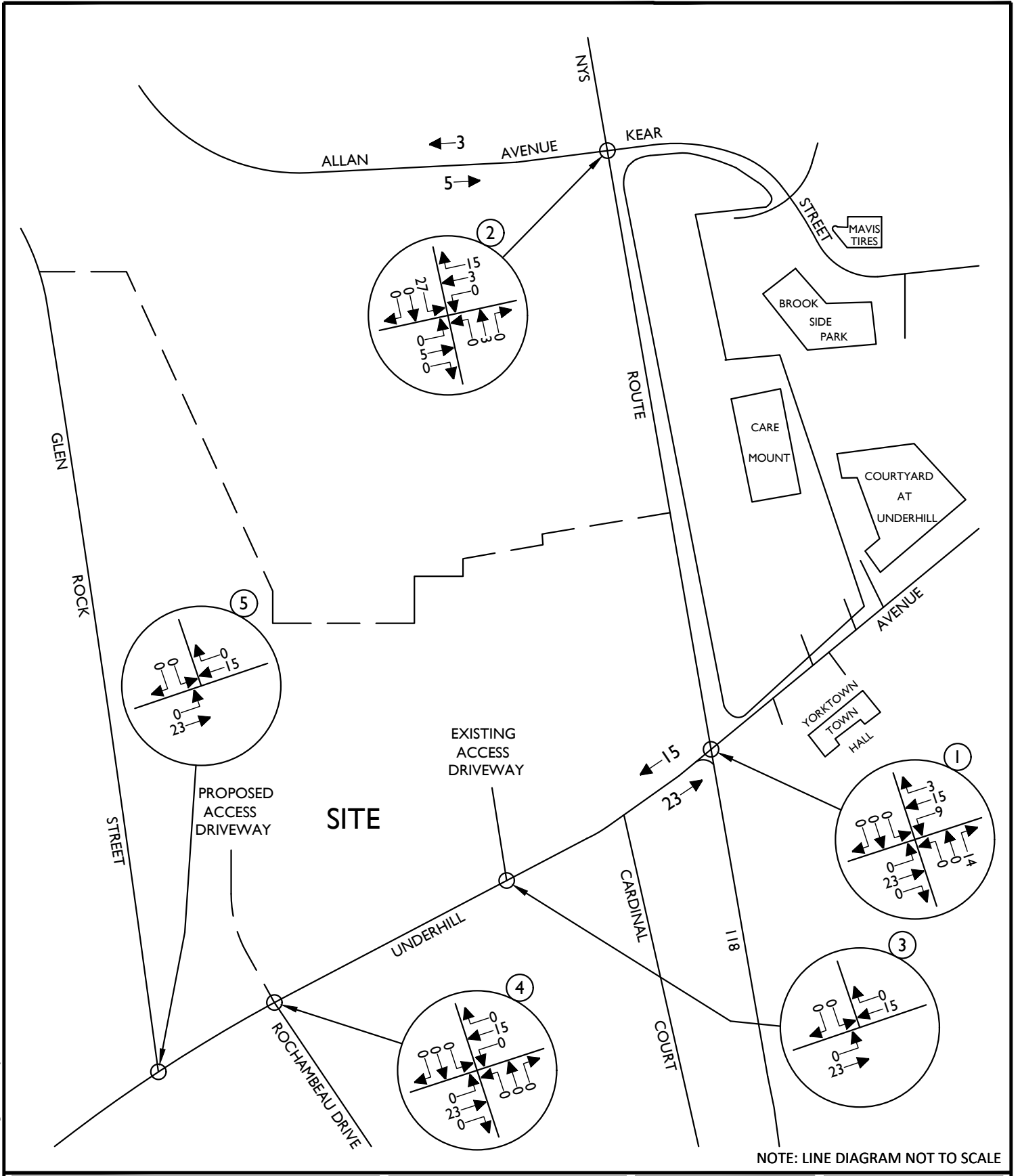
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
THE WEYANT (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:

9

VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg10 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

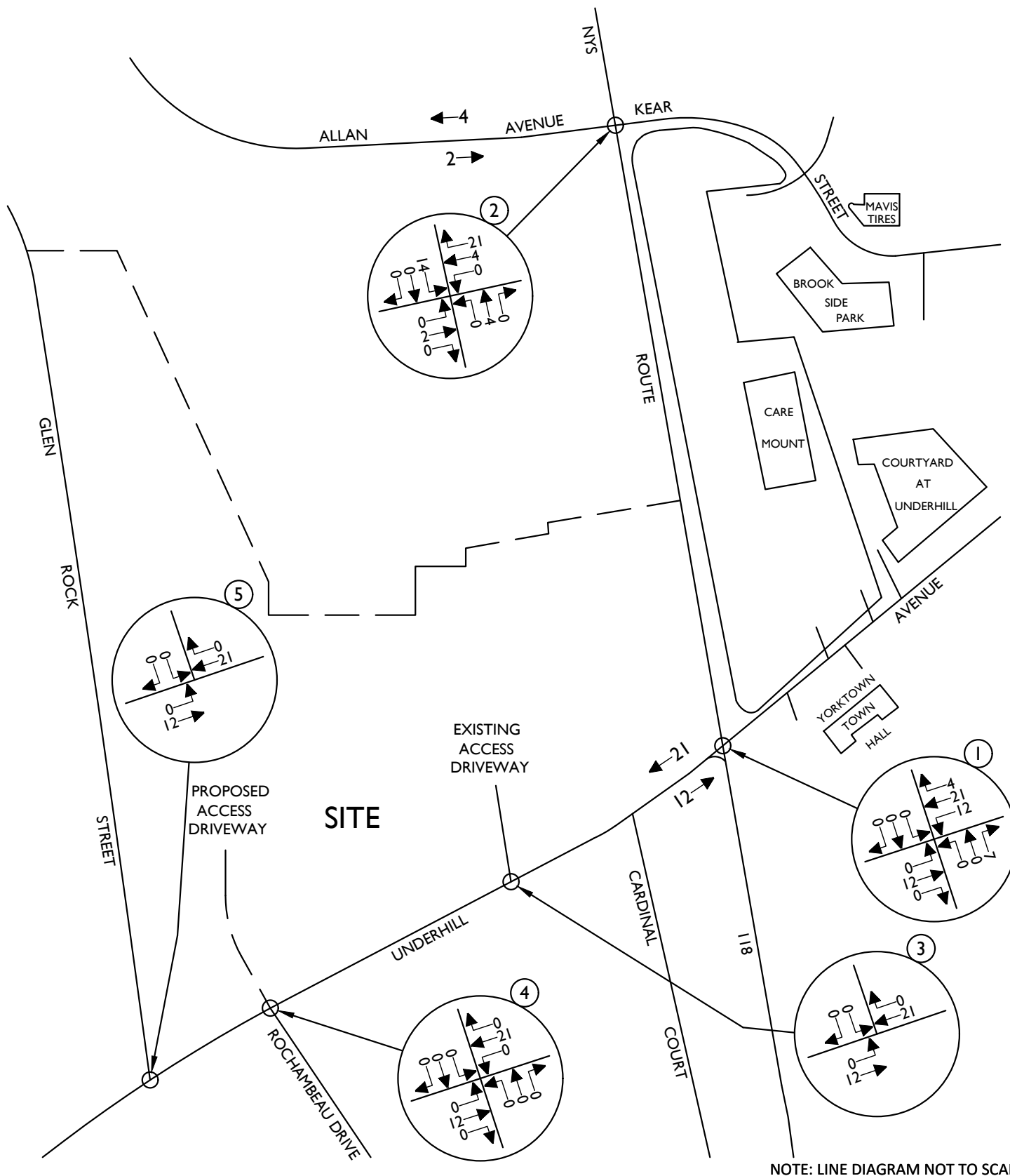
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
CAREMOUNT BUILDING (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:  
10

V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg11 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A	DRAWING NAME: 230326RGD_FIGURE_EX-BD		

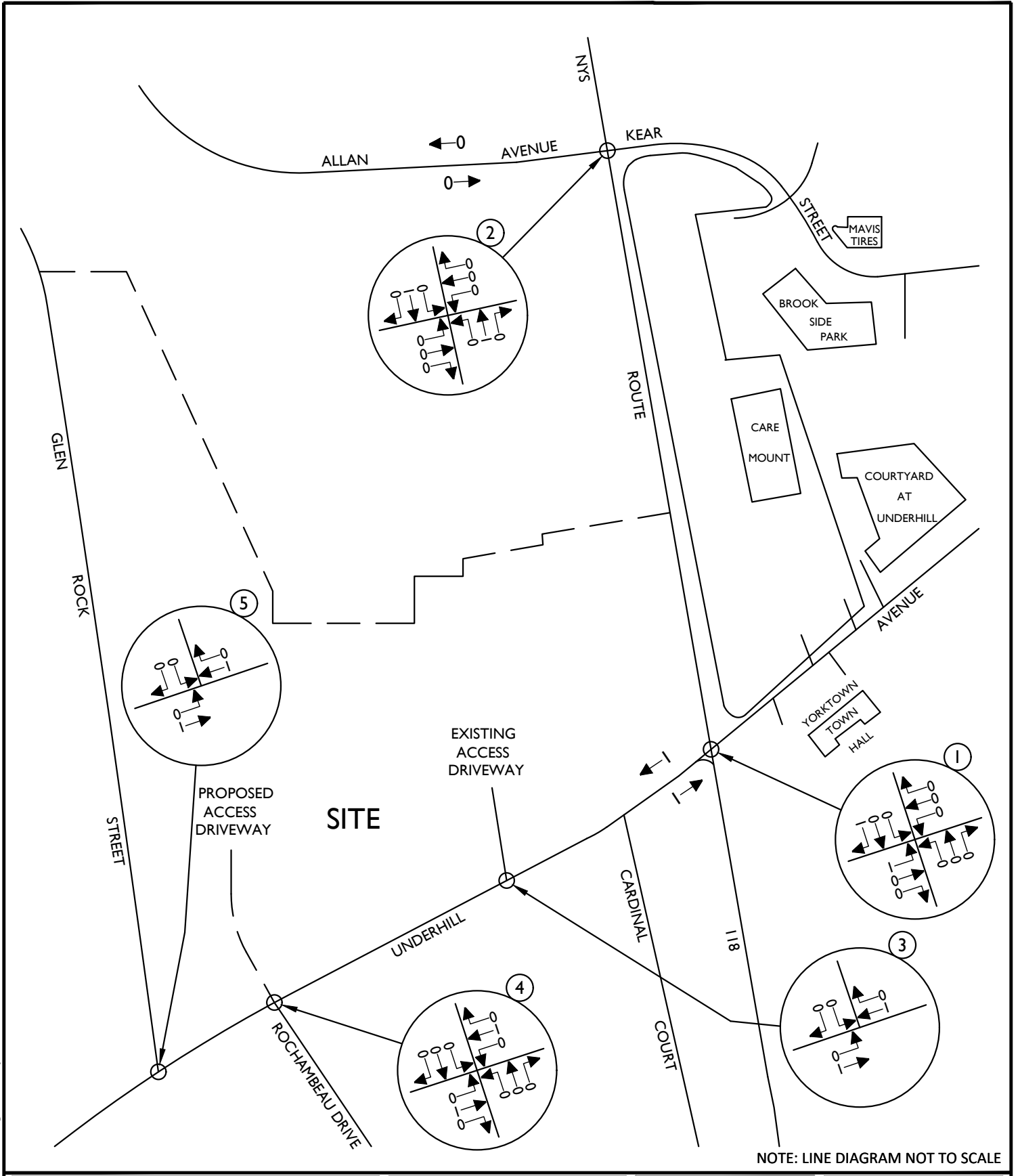
SHEET TITLE:  
CAREMOUNT BUILDING (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:  
11

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.



VAcpublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg12 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

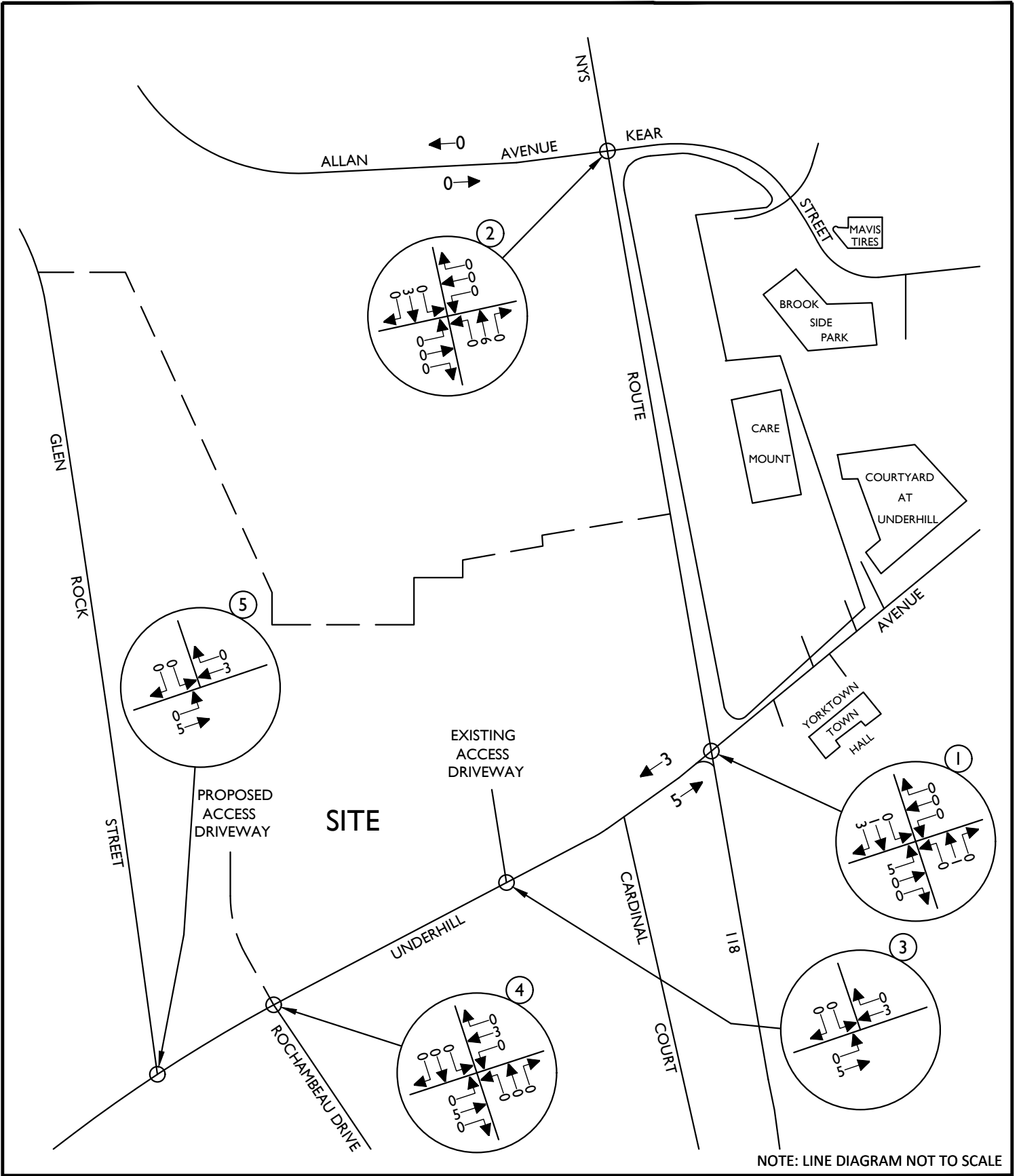
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
BOUTIQUE HOTEL  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

12

VAPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg13 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

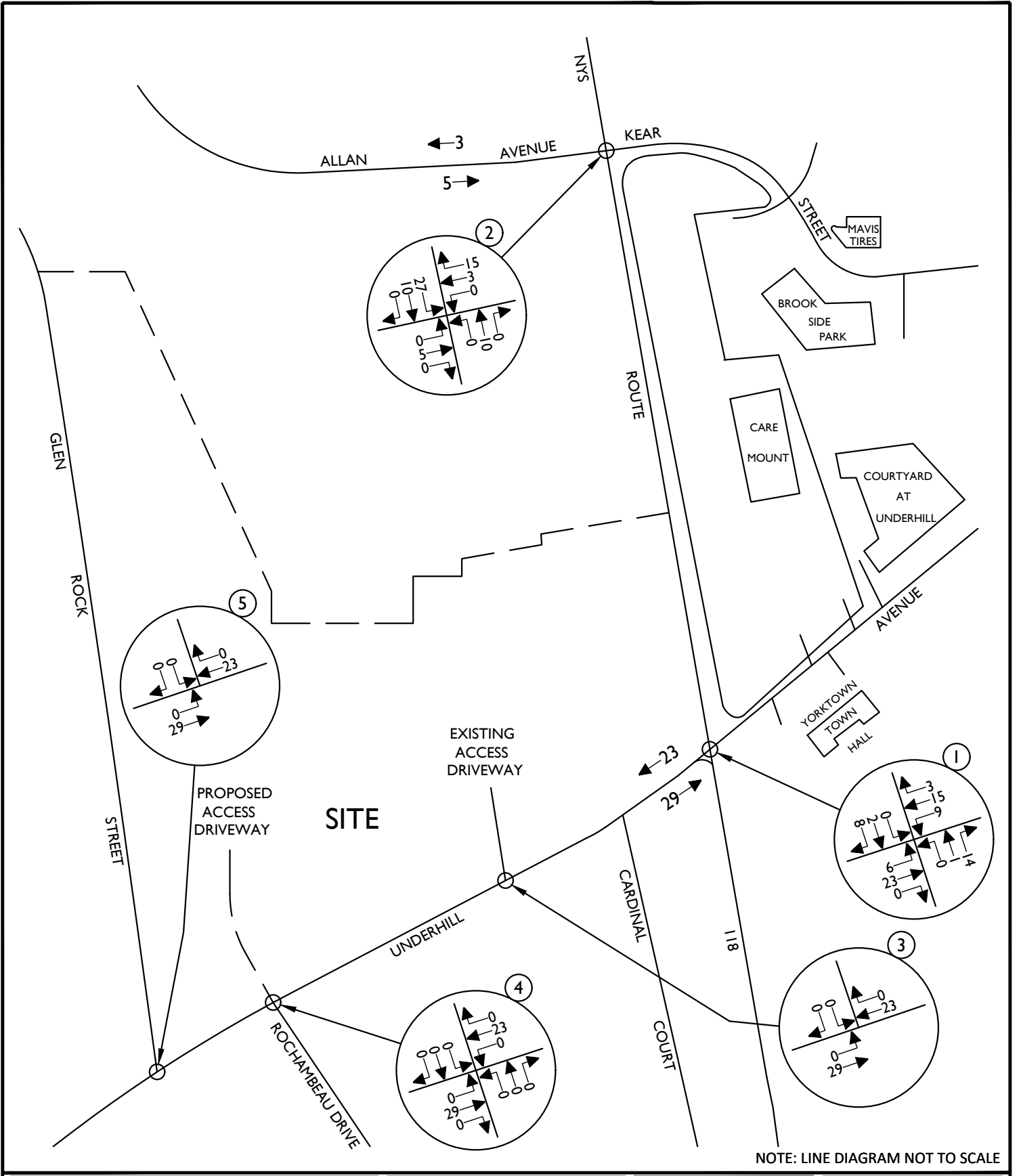
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
BOUQUET HOTEL (APPROVED)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:

13

VA:Publish\_305201230326RGD-FIGURE\_EX-BD.dwg14 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

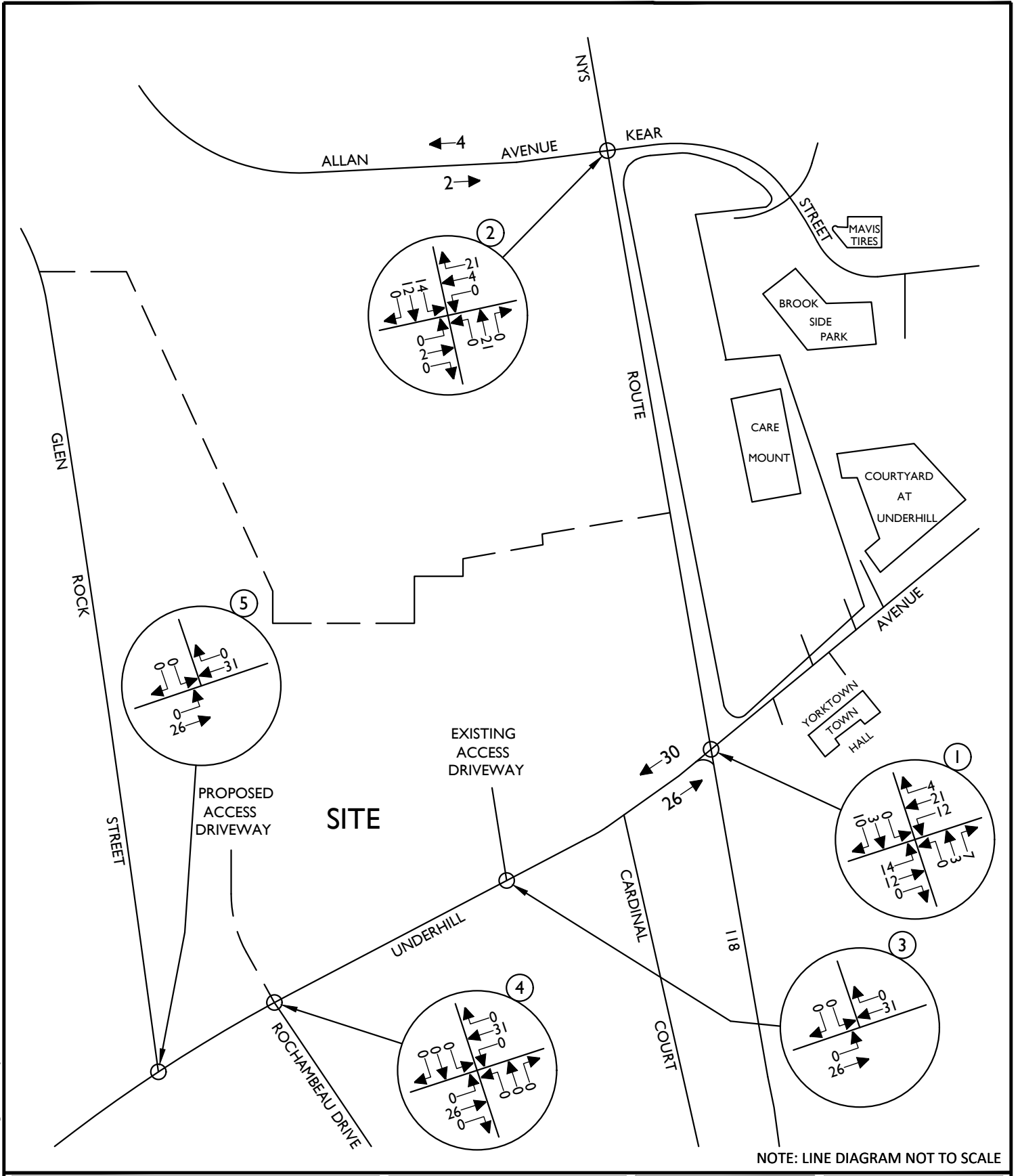
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD-FIGURE_EX-BD		

SHEET TITLE:	TOTAL APPROVED OTHER DEVELOPMENT TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR
--------------	---

SHEET NUMBER:	14
---------------	----

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg@15 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

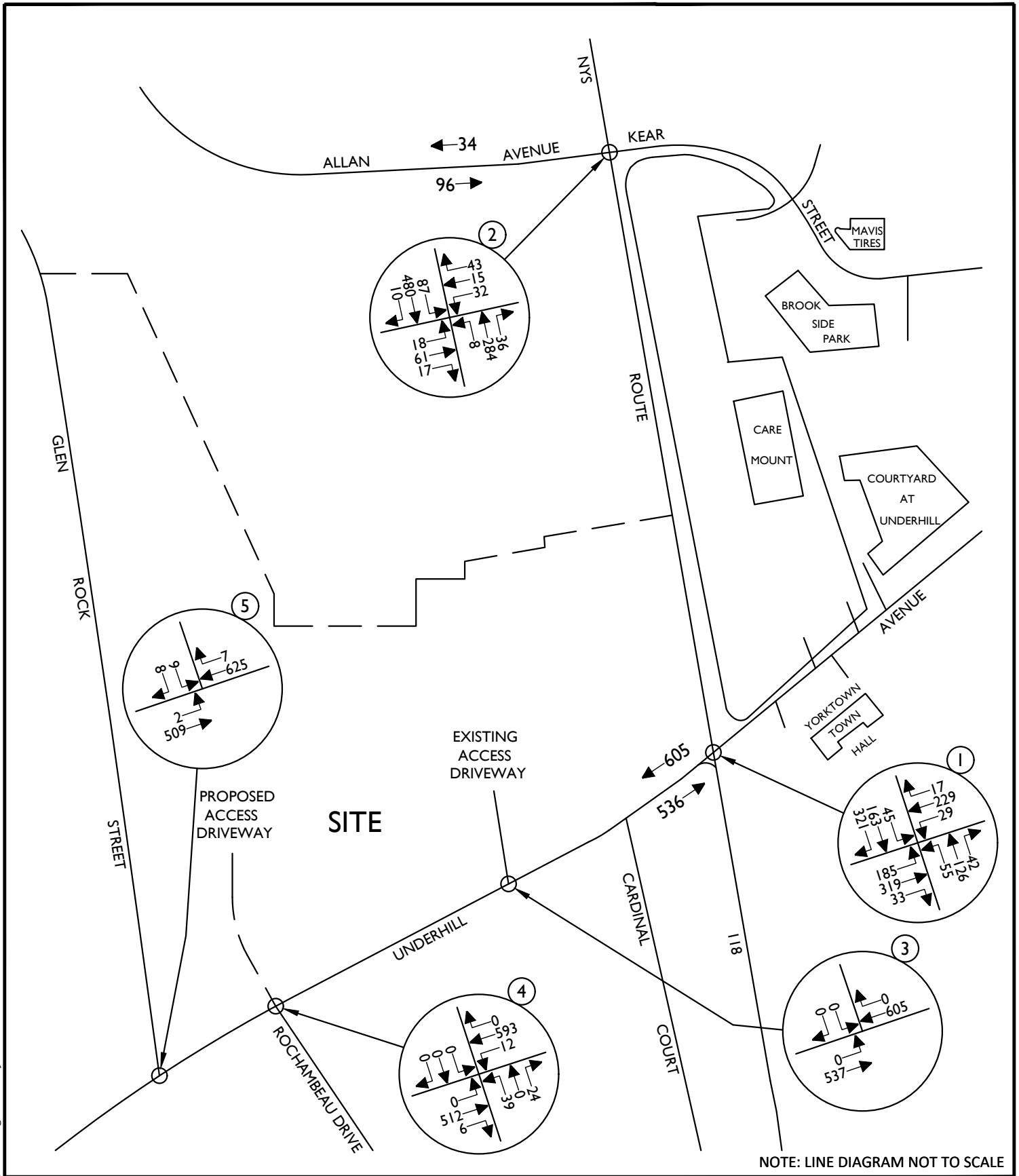
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
TOTAL APPROVED  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:  
15

AcPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg16 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

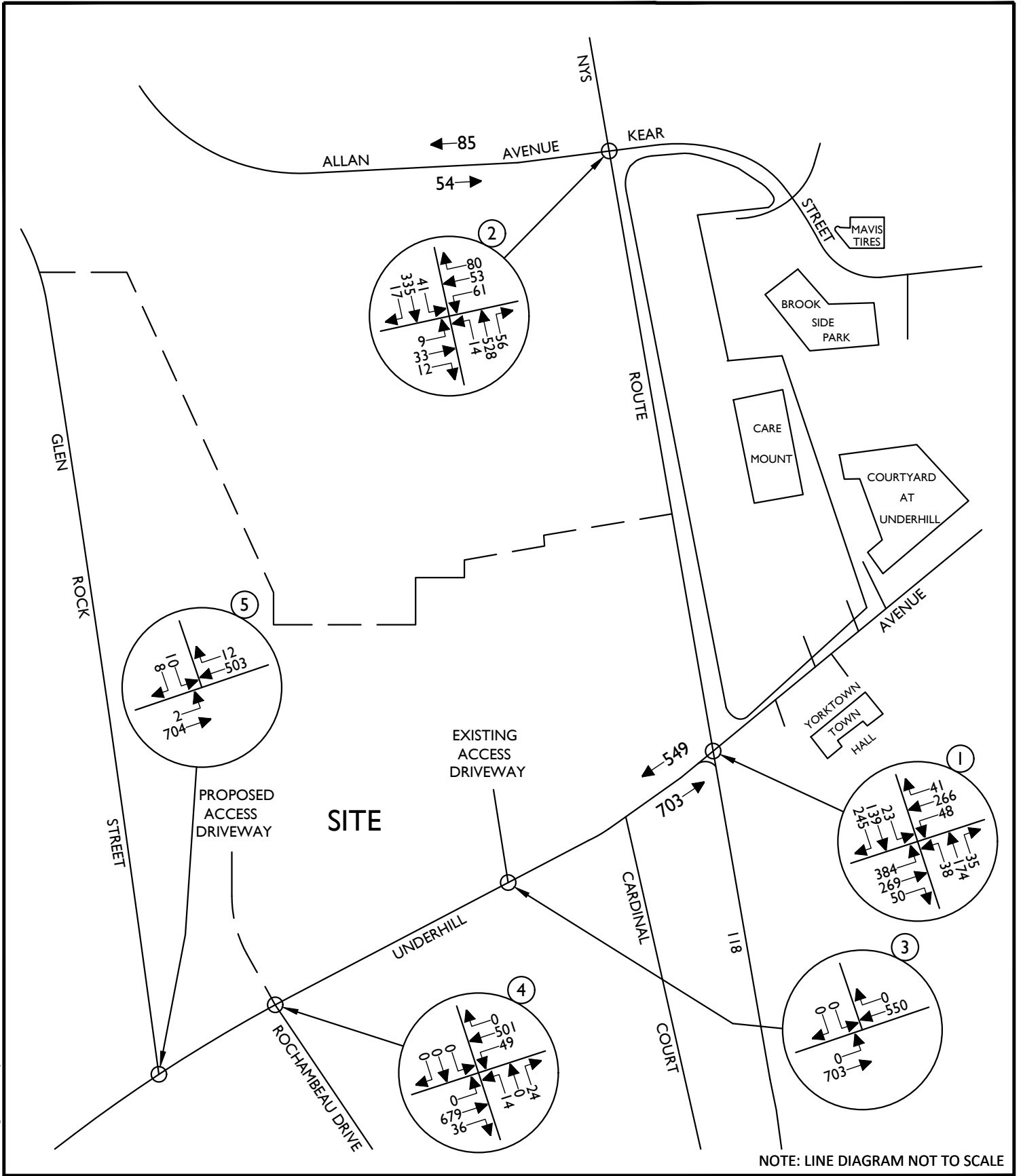
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2025 NO-BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED O.D.)

SHEET NUMBER:  
16

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

AcPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg17 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

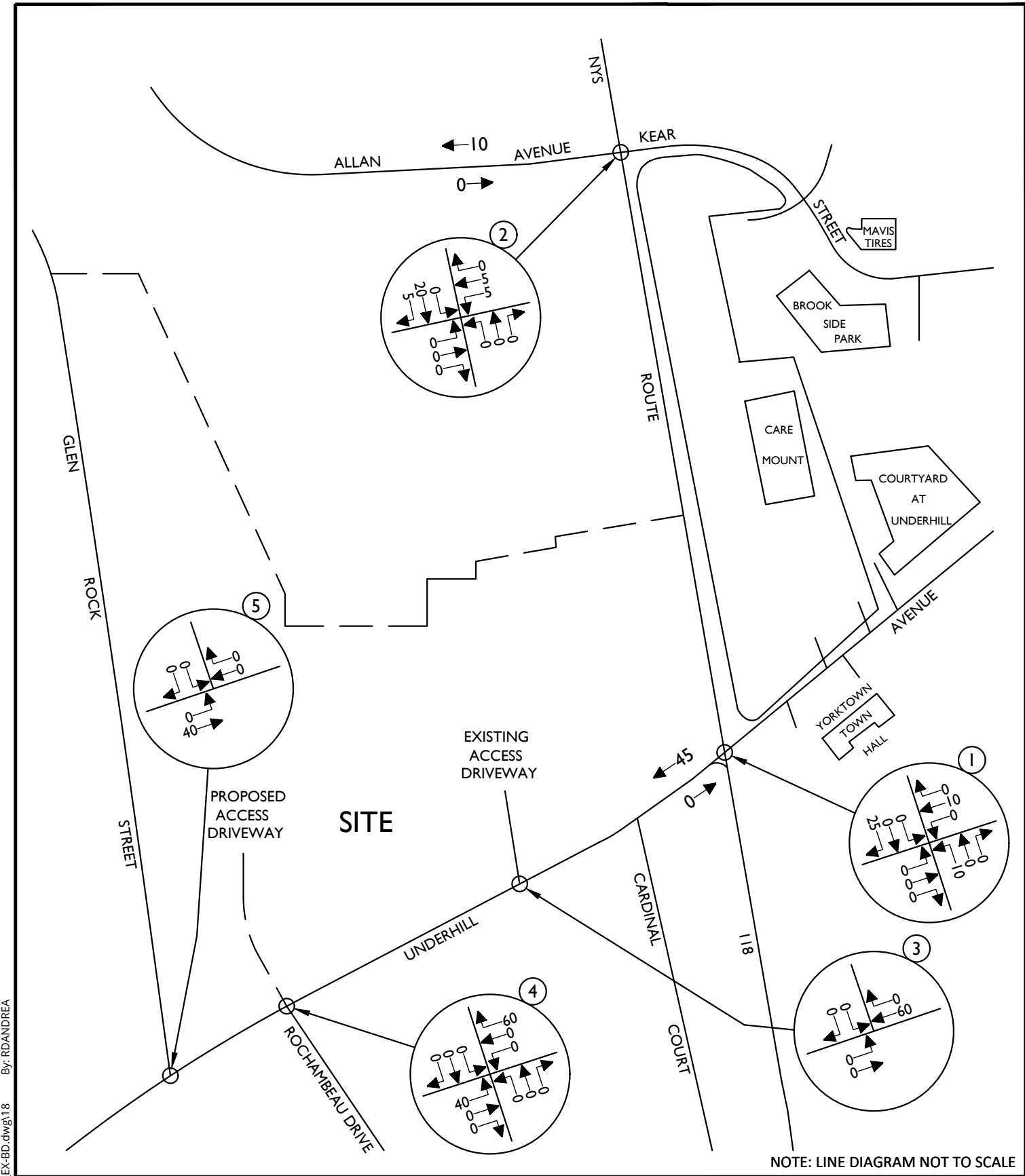
**TRAFFIC IMPACT STUDY**

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**2025 NO-BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR  
(W/ APPROVED O.D.)**

SHEET NUMBER:

17



NOTE: LINE DIAGRAM NOT TO SCALE

V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg18 By: RDANDREA

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

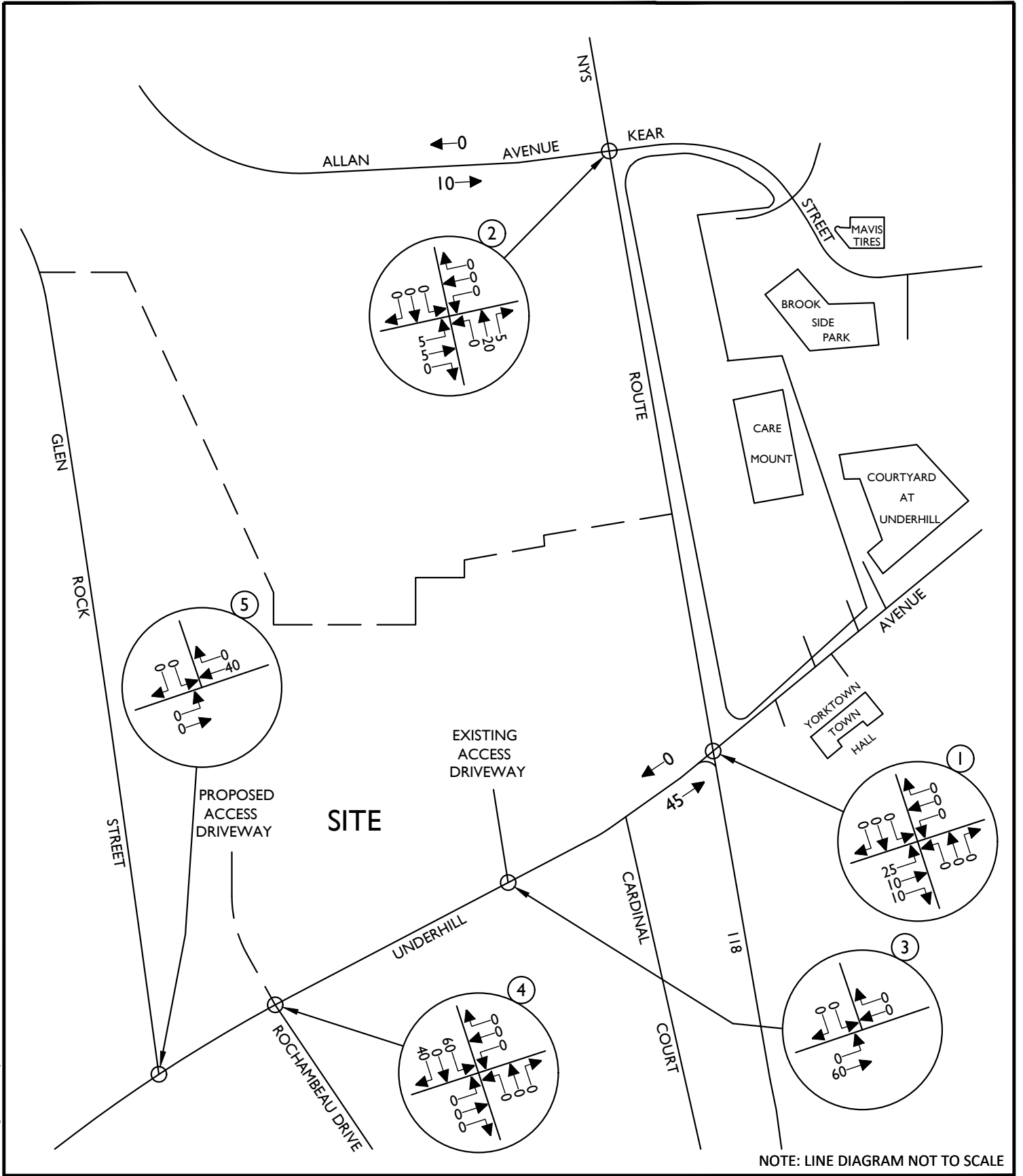
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
TOWNHOUSE  
ARRIVAL DISTRIBUTION  
(EXPRESSED AS A %)

SHEET NUMBER:  
18

VA:Publish\_305201230326RGD-FIGURE\_EX-BD.dwg19 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

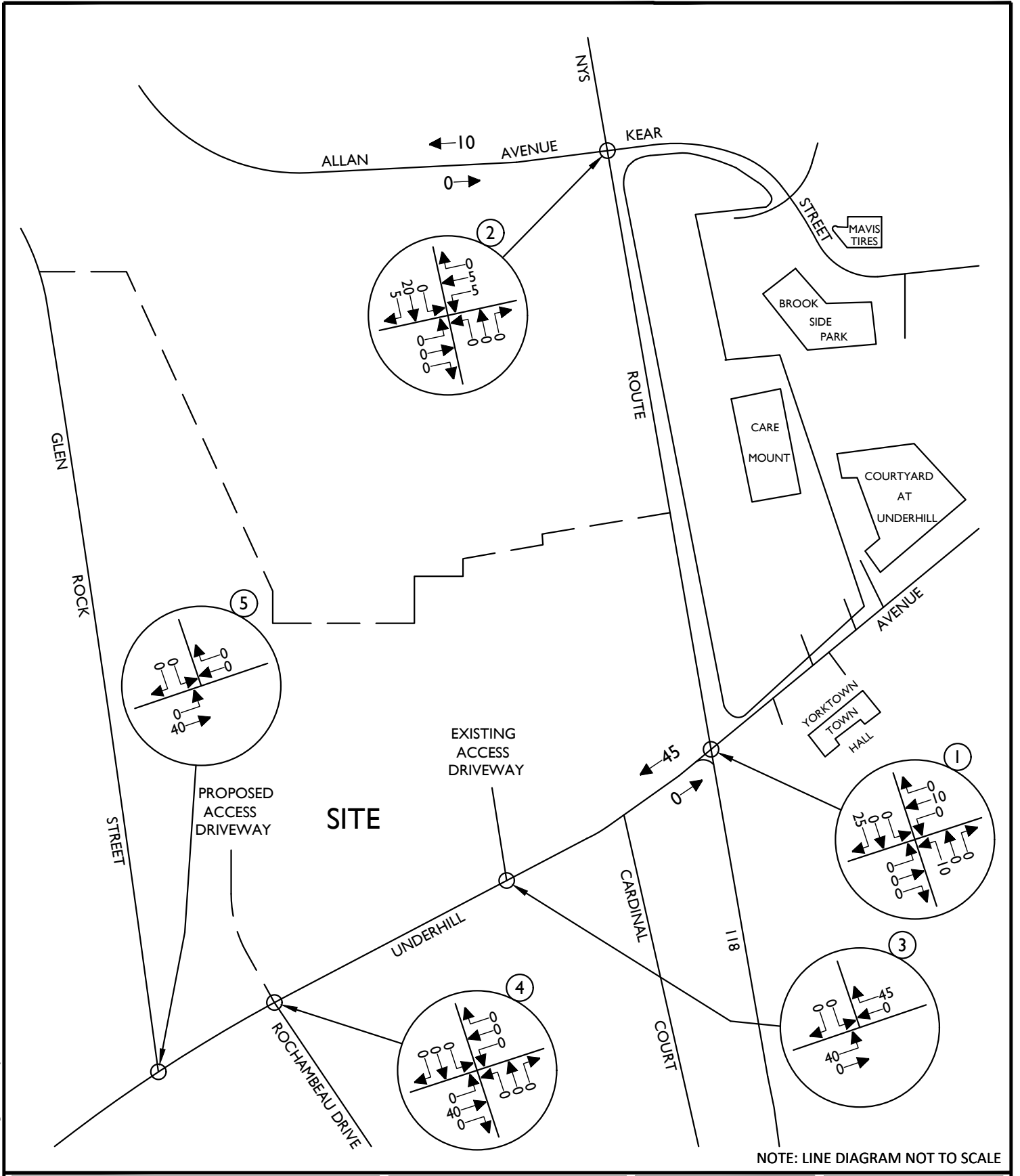
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD-FIGURE_EX-BD		

SHEET TITLE:	TOWNHOUSE DEPARTURE DISTRIBUTION (EXPRESSED AS A %)
--------------	---

SHEET NUMBER:	19
---------------	----



VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg,20 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

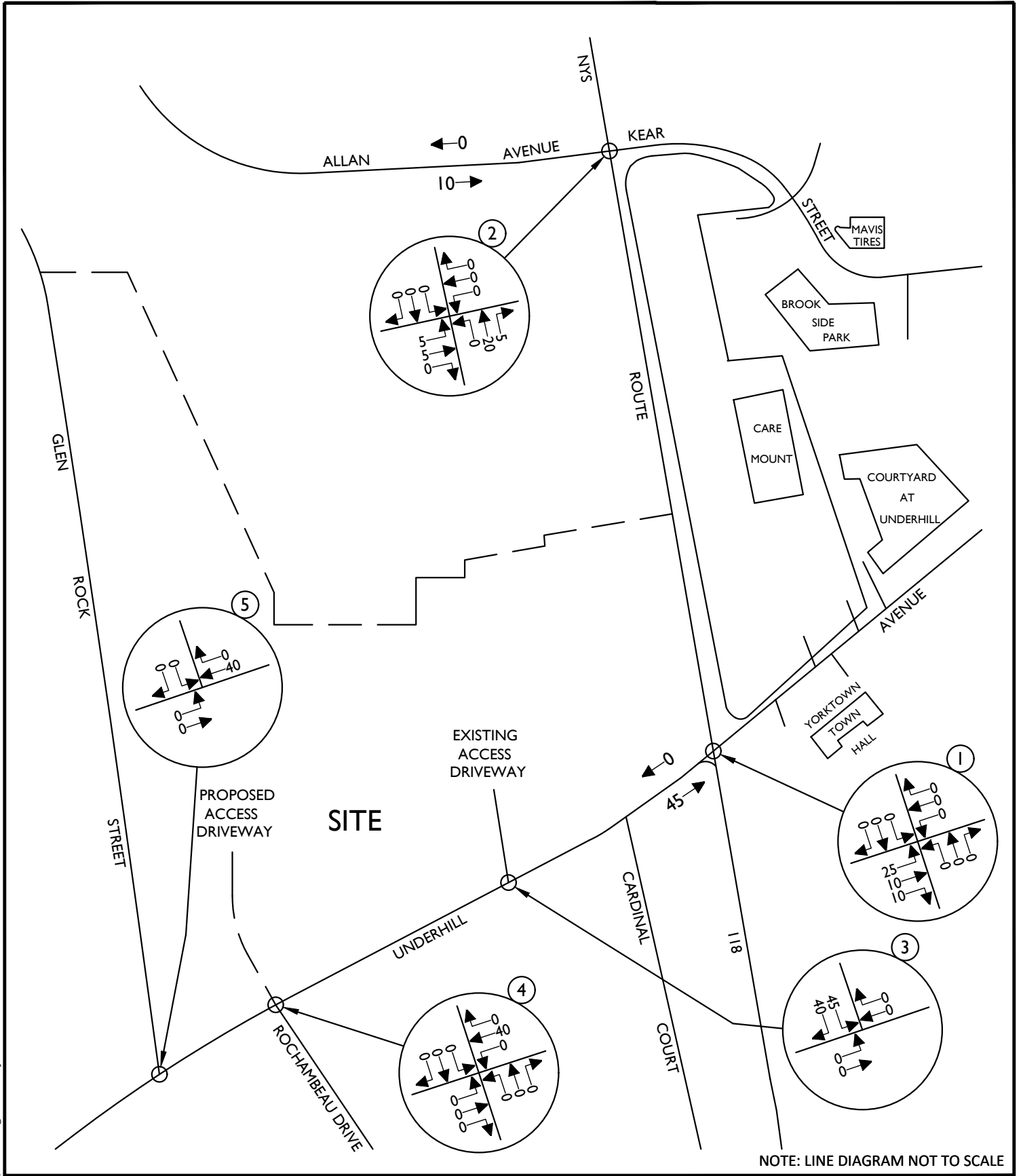
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
APARTMENTS/CONDOS/COMMERCIAL  
ARRIVAL DISTRIBUTION  
(EXPRESSED AS A %)

SHEET NUMBER:  
20

VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(21) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

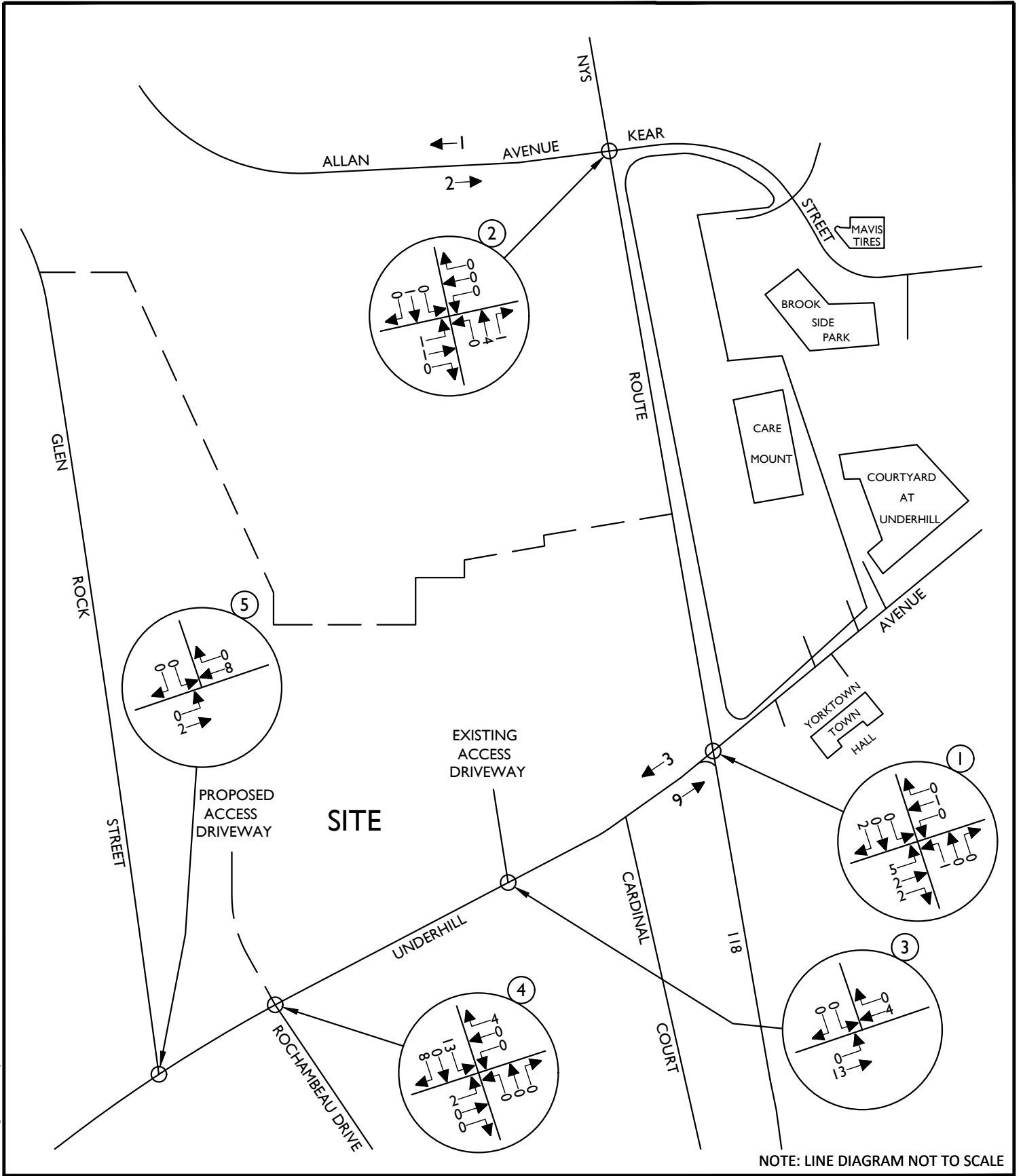
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
APARTMENTS/CONDOS/COMMERCIAL  
DEPARTURE DISTRIBUTION  
(EXPRESSED AS A %)

SHEET NUMBER:

21

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg@22 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

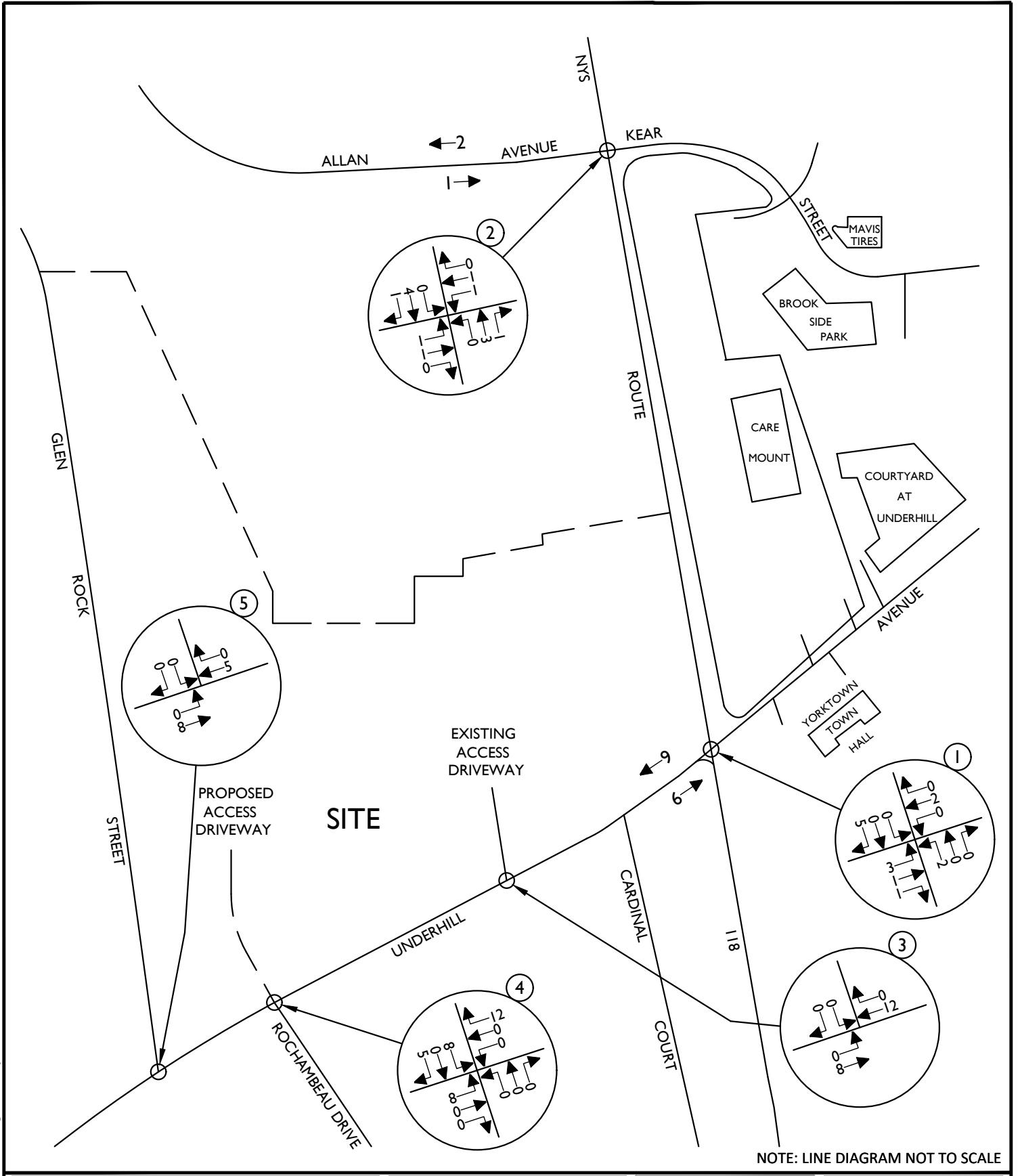
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:	TOWNHOUSE SITE GENERATED TRAFFIC VOLUMES WEEKDAY AM PEAK HOUR
--------------	---

SHEET NUMBER:	22
---------------	----

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg23 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

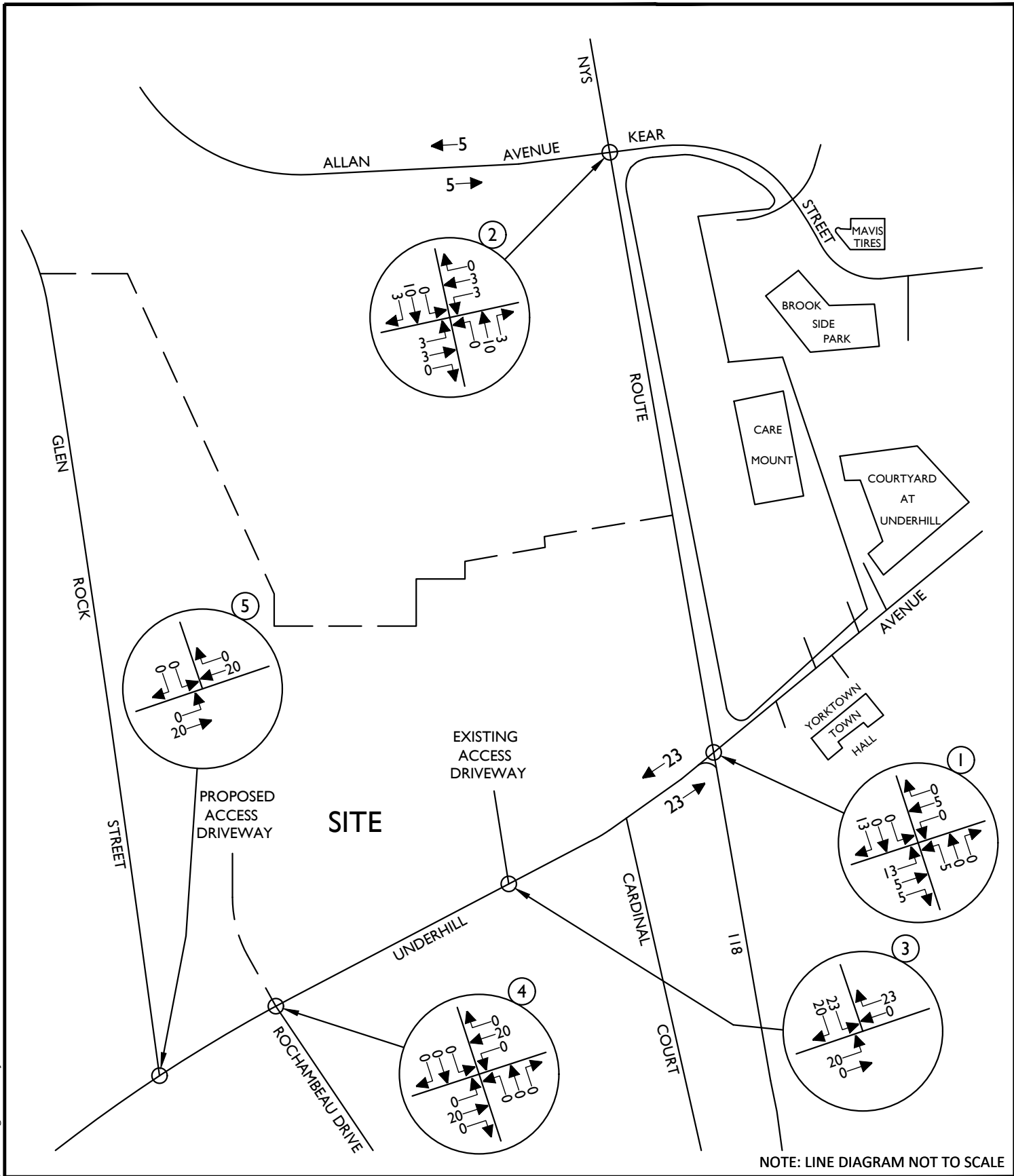
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:	TOWNHOUSE SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR
--------------	---

SHEET NUMBER:	23
---------------	----

VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg,24 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



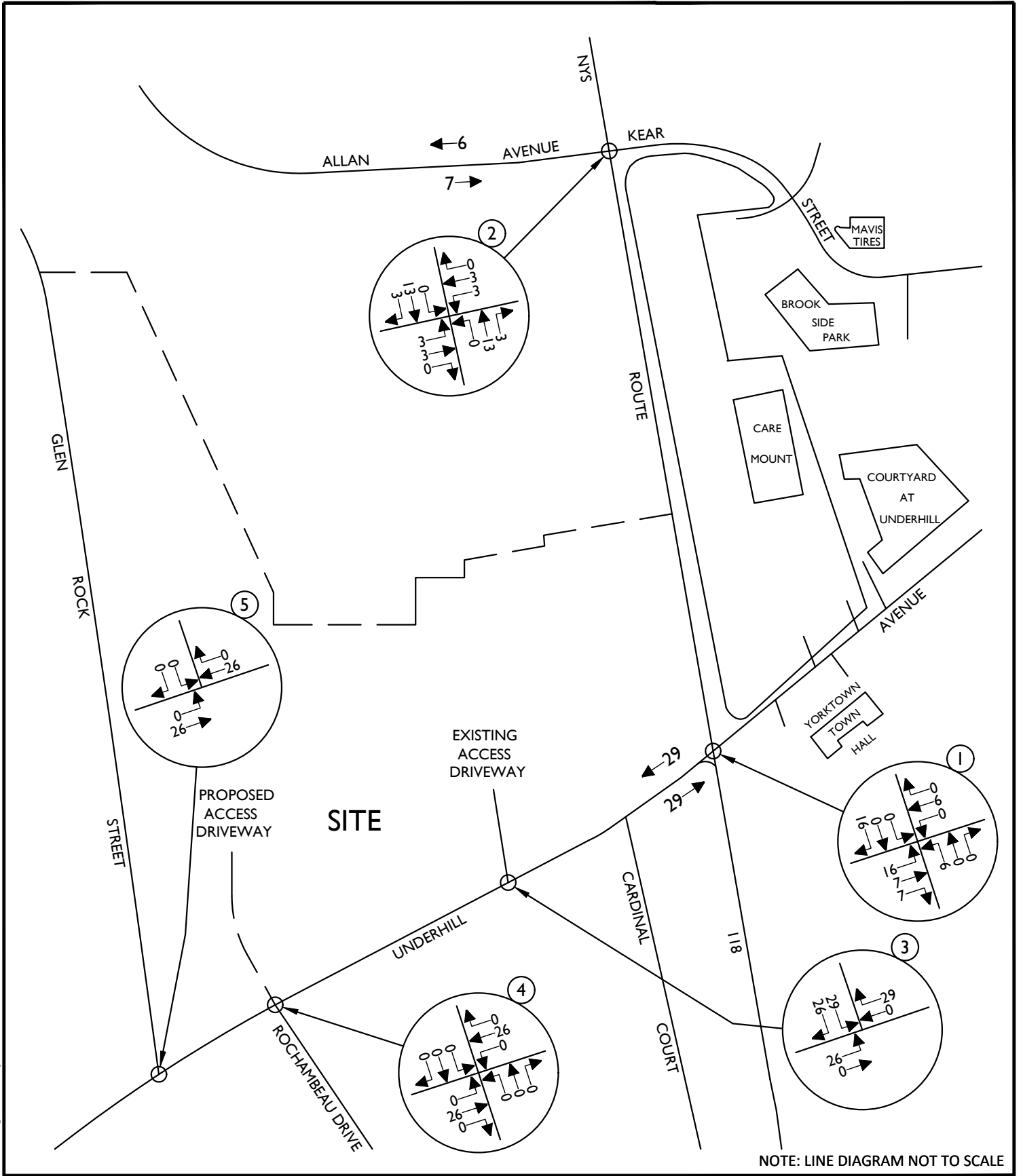
WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A		DRAWING NAME: 230326RGD_FIGURE_EX-BD	
SHEET TITLE: APARTMENTS/CONDOS/COMMERCIAL SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR			
SHEET NUMBER:			24

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

VAPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg@25 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

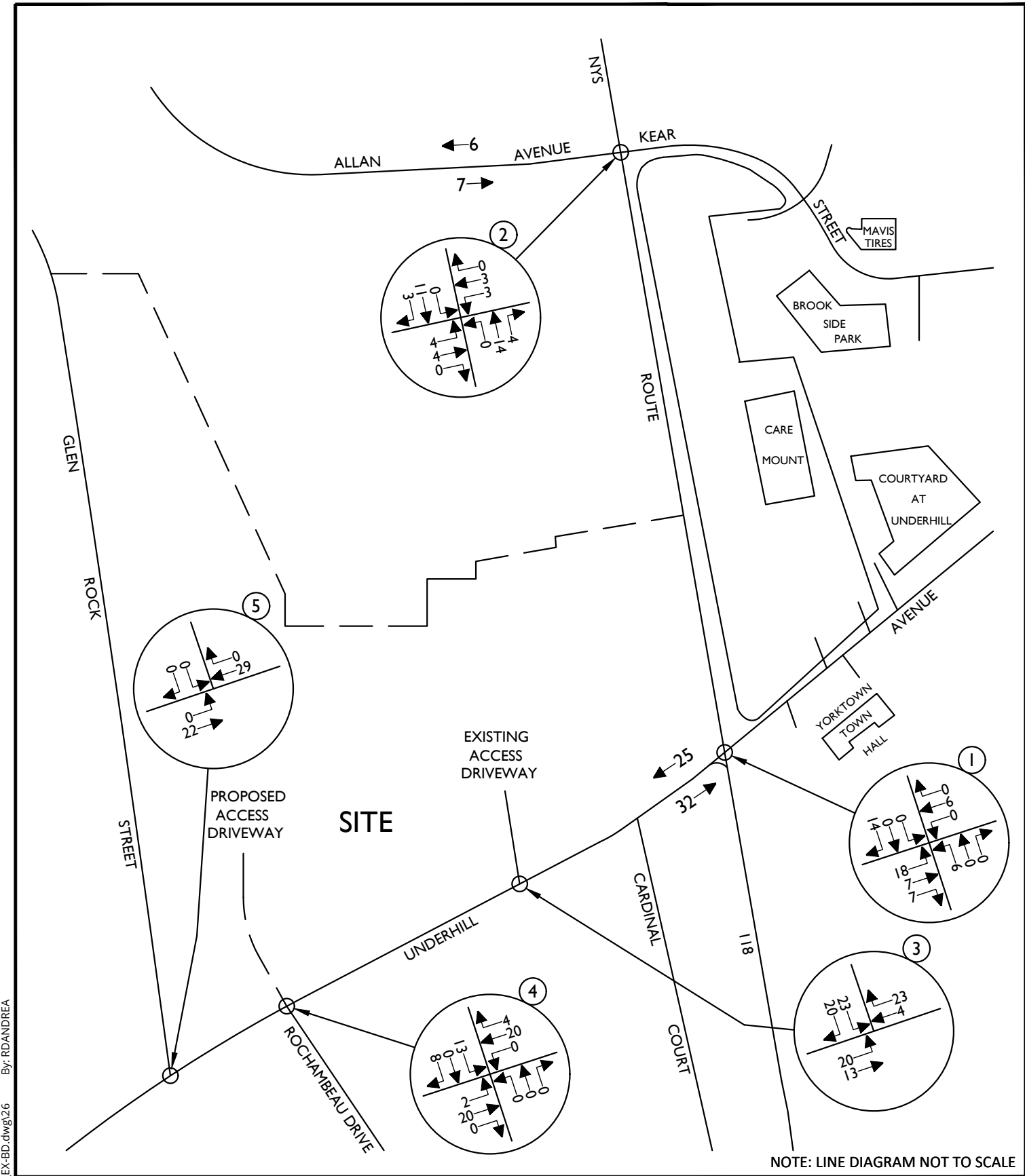
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
APARTMENTS/CONDOS/COMMERCIAL  
SITE GENERATED TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:

25



NOTE: LINE DIAGRAM NOT TO SCALE

V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg,26 By: RDANDREA



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

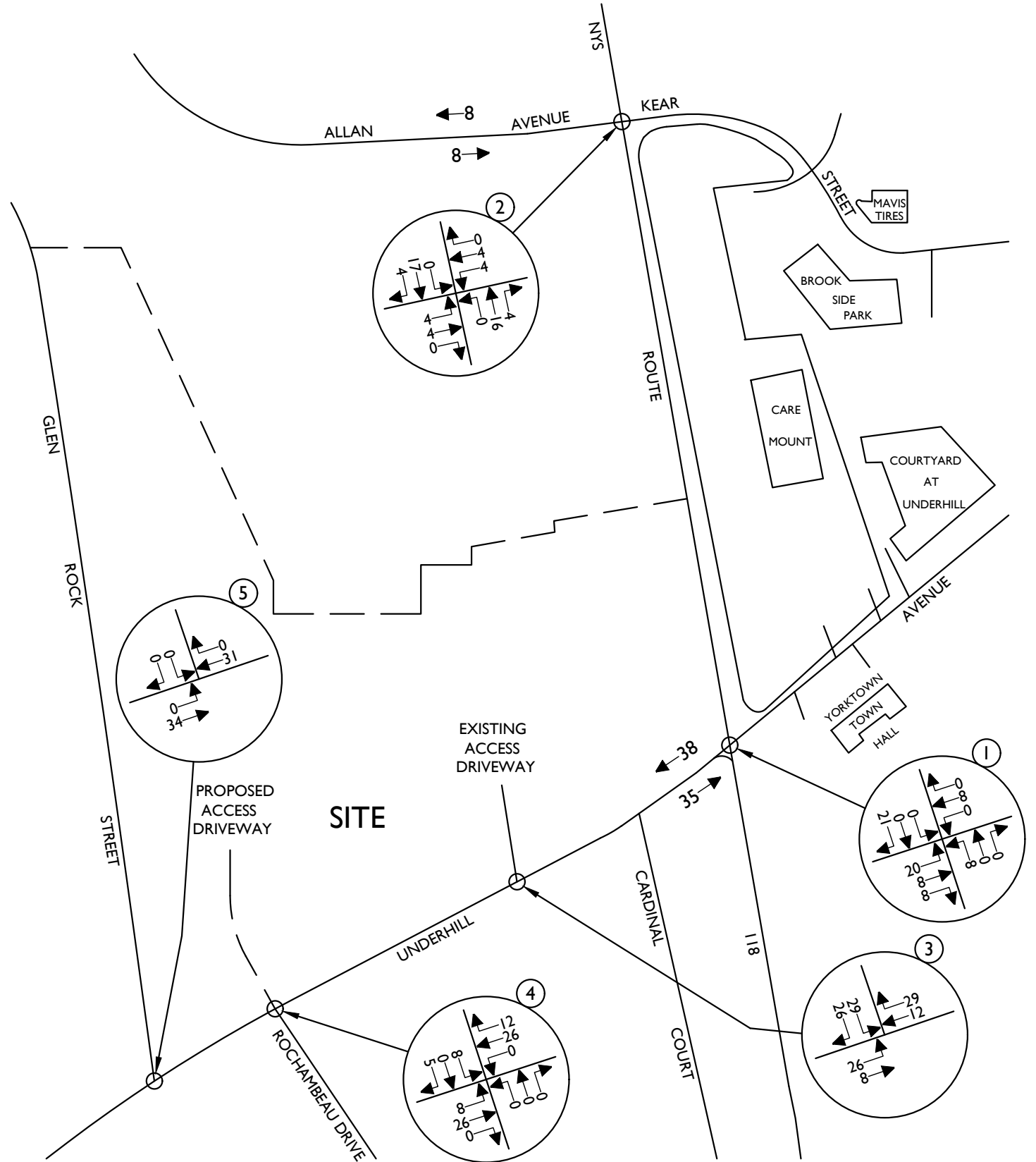
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**TOTAL SITE GENERATED  
TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR**

SHEET NUMBER:  
**26**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

VAPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg,27 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com  
 Doing Business as **MASER** CONSULTANTS

**UNDERHILL FARM  
 RESIDENTIAL**

**TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK**

**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION  
 OF EXCAVATORS, DESIGNERS, OR  
 ANY PERSON PREPARING TO  
 DISTURB THE EARTH'S SURFACE  
 ANYWHERE IN ANY STATE  
 Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
 VISIT: WWW.CALL811.COM

**Colliers** WESTCHESTER  
 400 Columbus Avenue,  
 Suite 180E  
 Valhalla, NY 10595  
 Engineering & Design Phone: 914.347.7500  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING  
 ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

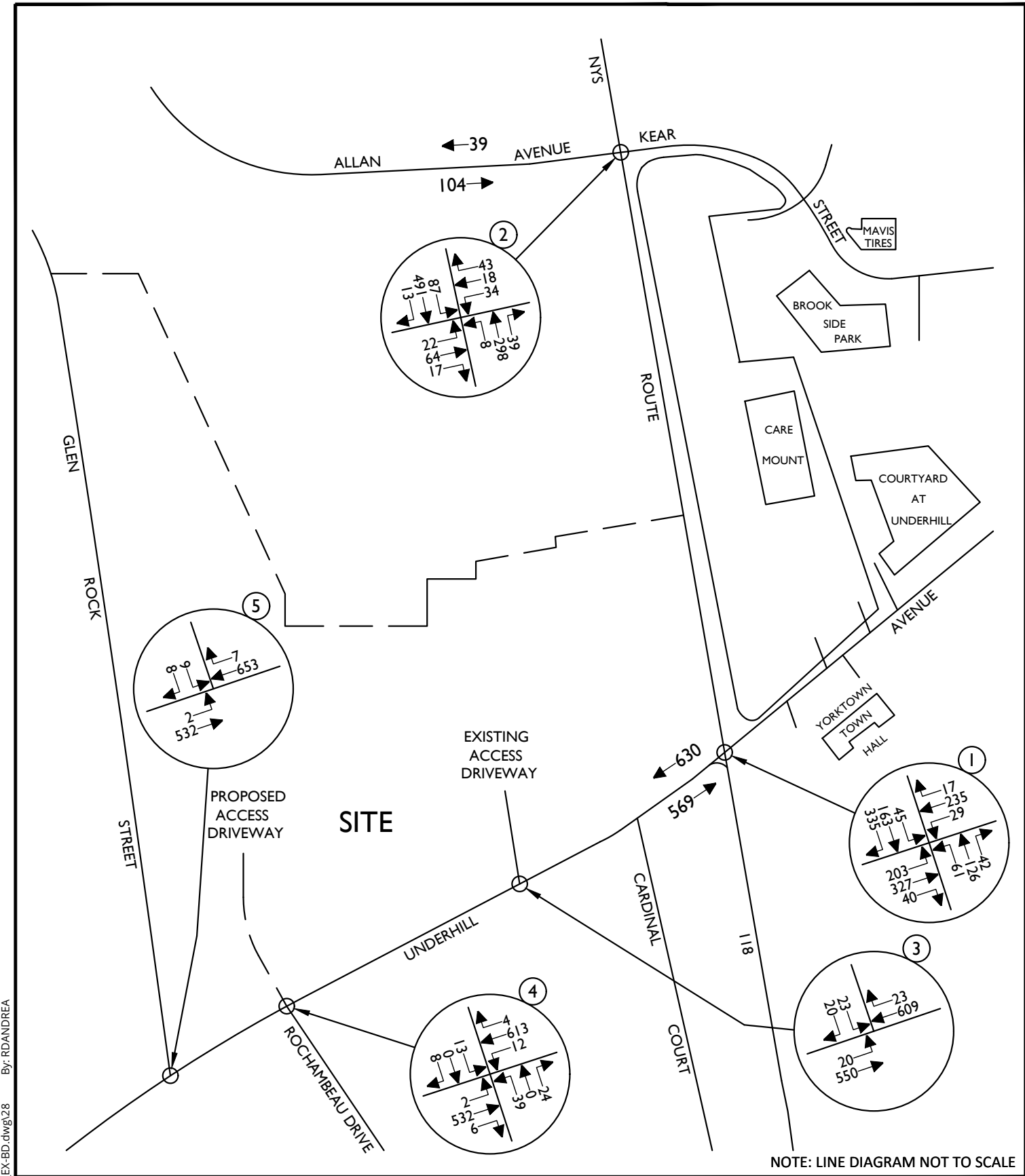
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**TOTAL SITE GENERATED  
 TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR**

SHEET NUMBER:  
**27**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.





NOTE: LINE DIAGRAM NOT TO SCALE

V:\Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg\28 By: RDANDREA



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

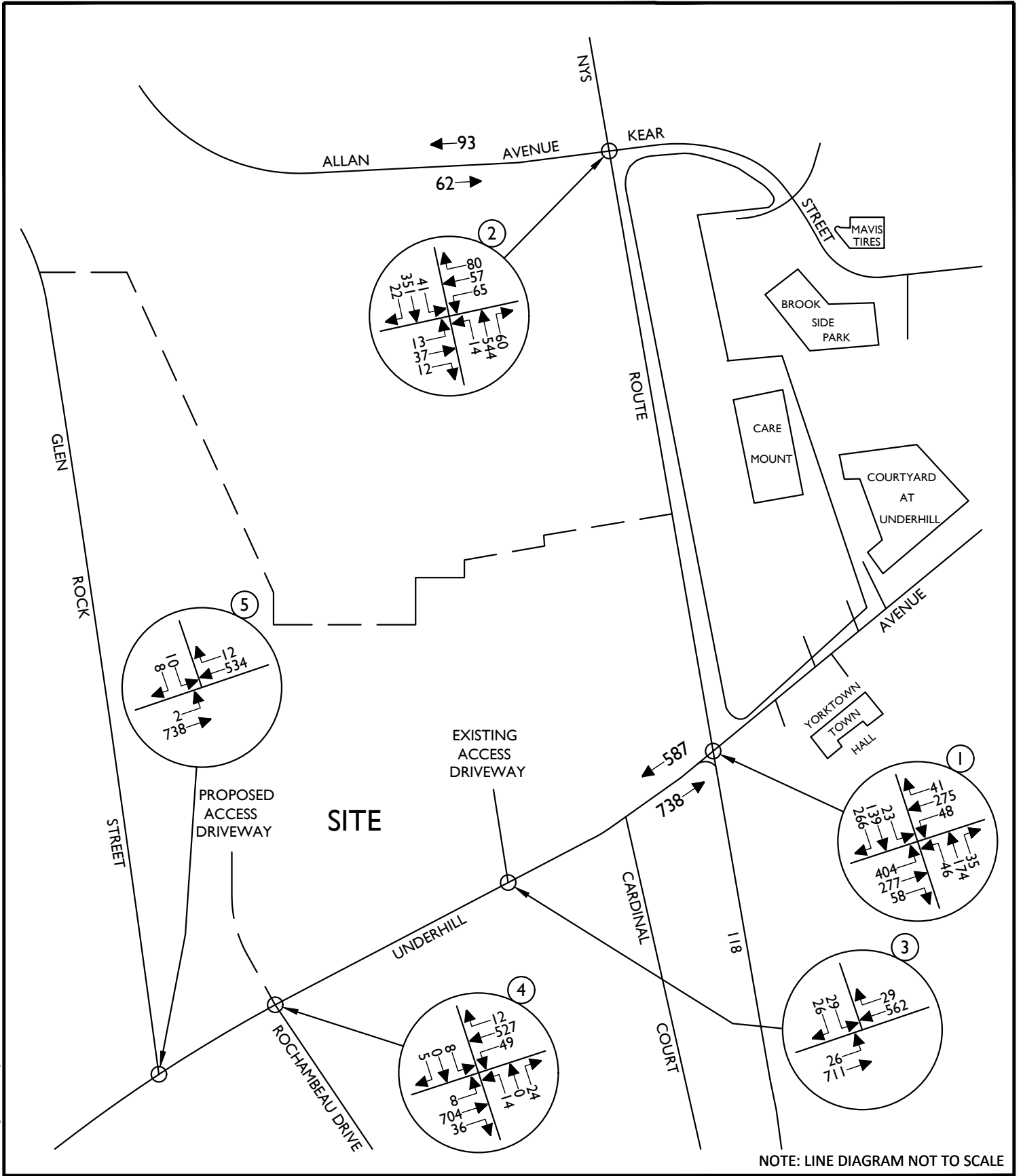
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**2025 BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED O.D.)**

SHEET NUMBER:  
**28**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

AcPublish\_305201230326RGD\_FIGURE\_EX-BD.dwg(29) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2025 BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR  
(W/ APPROVED O.D.)

SHEET NUMBER:

29

# Traffic Impact Study

## Appendix B | Tables

**Table No. 1  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes  
Peak Hour of Adjacent Street Traffic**

Underhill Farm Yorktown, NY	Entry			Exit		
	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>
<b>Apartments/Condominiums/Townhouses</b> (148 Units)						
Peak AM Hour	0.11	16	16	0.36	53	53
Peak PM Hour	0.36	53	53	0.21	31	31
<b>Commercial - Office</b> (13,000 Sq. Ft.)						
Peak AM Hour	1.92	25	25	0.31	4	4
Peak PM Hour	0.38	5	5	2.00	26	26
<b>Commercial - Retail</b> (2,000 Sq. Ft.)						
Peak AM Hour	3.00	6	5	2.00	4	3
Peak PM Hour	6.00	12	9	6.50	13	10
<b>Quality Restaurant</b> (1,000 Sq. Ft.)						
Peak AM Hour	1.00	1	1	0.00	0	0
Peak PM Hour	5.00	5	4	3.00	3	2
<b>Total</b>						
Peak AM Hour	-	48	46	-	61	60
Peak PM Hour	-	75	71	-	73	69

**NOTES:**

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE - 220 - MULTIFAMILY HOUSING (MID-RISE), ITE LAND USE CODE - 931 - FINE DINING RESTAURANT, ITE LAND USE CODE - 712 - SMALL OFFICE, AND ITE LAND USE CODE - 822 - STRIP RETAIL PLAZA (<40K). PEAK HOUR OF ADJACENT STREET TRAFFIC RATES WERE UTILIZED FOR EACH LAND USE.

2) "NEW TRIPS" INCLUDE A 25% PASS-BY/DIVERTED LINK TRIP CREDIT FOR THE RETAIL AND RESTAURANT LAND USES.

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour**

				2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 118 & Underhill Avenue			Signalized									
		Underhill Avenue	EB	LT	0.70	C	22.5	0.77	C	26.1	0.82	C	29.7
				R	0.02	A	0.0	0.02	A	0.0	0.03	A	0.0
		Underhill Avenue	WB	LTR	0.73	D	47.0	0.79	D	51.8	0.77	D	50.0
		NYS Route 118	NB	LTR	0.54	C	28.5	0.59	C	30.4	0.63	C	32.6
		NYS Route 118	SB	LTR	0.88	D	41.1	0.91	D	44.9	0.92	D	46.8
				Overall	-	C	33.5	-	D	37.0	-	D	38.6
		<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>											
		Underhill Avenue	EB	L	-	-	-	-	-	-	0.41	B	12.0
				TR	-	-	-	-	-	-	0.45	B	16.3
		Underhill Avenue	WB	L	-	-	-	-	-	-	0.09	B	10.2
				TR	-	-	-	-	-	-	0.66	C	33.0
		NYS Route 118	NB	LTR	-	-	-	-	-	-	0.65	C	29.7
		NYS Route 118	SB	LT	-	-	-	-	-	-	0.54	C	26.5
				R	-	-	-	-	-	-	0.34	A	2.3
				Overall	-	-	-	-	-	-	-	B	18.5
		<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>											
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.38	A	8.6	
			TR	-	-	-	-	-	-	0.43	B	12.7	
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.08	A	7.1	
			TR	-	-	-	-	-	-	0.65	C	27.9	
	NYS Route 118	NB	L	-	-	-	-	-	-	0.26	C	22.7	
			TR	-	-	-	-	-	-	0.52	C	24.4	
	NYS Route 118	SB	L	-	-	-	-	-	-	0.18	C	21.4	
			T	-	-	-	-	-	-	0.52	C	26.6	
			R	-	-	-	-	-	-	0.35	A	2.0	
			Overall	-	-	-	-	-	-	-	B	15.5	
2	NYS Route 118 & Allan Avenue/Kear Street			Unsignalized									
		Allan Avenue	EB	LTR	0.38	C	30.6	0.39	C	31.1	0.42	C	31.9
		Kear Street	WB	LTR	0.28	C	23.1	0.33	C	22.8	0.35	C	24.2
		NYS Route 118	NB	LTR	0.25	A	4.6	0.27	A	4.8	0.28	A	5.0
		NYS Route 118	SB	LTR	0.46	A	6.4	0.52	A	7.4	0.53	A	7.8
				Overall	-	A	9.2	-	A	10.0	-	B	10.5

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour**

			2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.				
			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
3	Underhill Avenue & East Site Access	Signalized											
		Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.1
		East Site Access	SB	LR	-	-	-	-	-	-	0.21	C	24.8
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized											
		Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.8
		Underhill Avenue	WB	LTR	0.01	A	8.4	0.01	A	8.5	0.01	A	8.9
		Rochambeau Drive	NB	LTR	0.15	C	15.0	0.17	C	15.8	0.22	C	20.1
		Site Access	SB	LTR	-	-	-	-	-	-	0.11	D	25.8
5	Underhill Avenue & Glen Rock Street	Unsignalized											
		Underhill Avenue	EB	LT	0.01	A	8.9	0.01	A	9.0	0.01	A	9.1
		Glen Rock Street	SB	LR	0.07	C	18.7	0.07	C	20.2	0.08	C	21.4

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour**

				2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 118 & Underhill Avenue	Signalized											
		Underhill Avenue	EB	LT	0.93	D	38.4	1.05	E	67.2	1.14	F	102.1
				R	0.03	A	0.0	0.03	A	0.0	0.07	A	4.5
		Underhill Avenue	WB	LTR	0.51	C	20.2	0.62	C	23.7	0.65	C	26.1
		NYS Route 118	NB	LTR	0.63	C	28.5	0.65	C	28.6	0.68	C	30.3
		NYS Route 118	SB	LTR	0.81	C	30.5	0.82	C	31.0	0.84	C	32.0
		Overall			-	C	30.3	-	D	42.0	-	E	56.4
		<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>											
		Underhill Avenue	EB	L	-	-	-	-	-	-	0.63	B	13.4
				TR	-	-	-	-	-	-	0.35	B	12.9
		Underhill Avenue	WB	L	-	-	-	-	-	-	0.13	B	10.9
				TR	-	-	-	-	-	-	0.78	D	42.6
		NYS Route 118	NB	LTR	-	-	-	-	-	-	0.74	D	42.2
		NYS Route 118	SB	LT	-	-	-	-	-	-	0.45	C	32.3
				R	-	-	-	-	-	-	0.26	A	1.7
		Overall			-	-	-	-	-	-	-	C	22.5
		<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>											
		Underhill Avenue	EB	L	-	-	-	-	-	-	0.64	B	12.5
				TR	-	-	-	-	-	-	0.35	B	12.1
		Underhill Avenue	WB	L	-	-	-	-	-	-	0.13	A	8.2
				TR	-	-	-	-	-	-	0.75	C	34.5
	NYS Route 118	NB	L	-	-	-	-	-	-	0.20	C	25.8	
			TR	-	-	-	-	-	-	0.60	C	31.5	
	NYS Route 118	SB	L	-	-	-	-	-	-	0.11	C	24.7	
			T	-	-	-	-	-	-	0.41	C	28.2	
			R	-	-	-	-	-	-	0.27	A	2.0	
	Overall			-	-	-	-	-	-	-	B	18.6	
2	NYS Route 118 & Allan Avenue/Kear Street	Unsignalized											
		Allan Avenue	EB	LTR	0.19	C	23.3	0.19	C	23.4	0.22	C	24.9
		Kear Street	WB	LTR	0.59	C	33.6	0.63	C	34.0	0.64	C	34.6
		NYS Route 118	NB	LTR	0.51	A	8.4	0.55	A	9.4	0.57	A	10.0
		NYS Route 118	SB	LTR	0.34	A	6.6	0.39	A	7.6	0.41	A	8.0
		Overall			-	B	12.2	-	B	13.3	-	B	13.9

**Table No. 2**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour**

			2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.				
			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
3	Underhill Avenue & East Site Access	Signalized											
		Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.0
		East Site Access	SB	LR	-	-	-	-	-	-	0.31	D	31.3
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized											
		Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.6
		Underhill Avenue	WB	LTR	0.06	A	9.6	0.06	A	9.8	0.06	A	9.5
		Rochambeau Drive	NB	LTR	0.10	C	15.4	0.11	C	16.2	0.14	C	19.1
		Site Access	SB	LTR	-	-	-	-	-	-	0.10	D	33.2
5	Underhill Avenue & Glen Rock Street	Unsignalized											
		Underhill Avenue	EB	LT	0.01	A	8.4	0.01	A	8.6	0.01	A	8.7
		Glen Rock Street	SB	LR	0.07	C	19.2	0.08	C	21.0	0.09	C	22.6

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE



**Table No. 1A  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes  
Peak Hour of Generator**

Underhill Farm Yorktown, NY	Entry			Exit		
	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>
<b>Apartments/Condominiums/Townhouses</b> (148 Units)						
Peak AM Hour	0.13	19	19	0.41	61	61
Peak PM Hour	0.41	60	60	0.25	37	37
<b>Commercial - Office<sup>3</sup></b> (13,000 Sq. Ft.)						
Peak AM Hour	1.92	25	25	0.31	4	4
Peak PM Hour	0.38	5	5	2.00	26	26
<b>Commercial - Retail</b> (2,000 Sq. Ft.)						
Peak AM Hour	4.00	8	6	3.50	7	5
Peak PM Hour	7.00	14	11	6.00	12	9
<b>Quality Restaurant</b> (1,000 Sq. Ft.)						
Peak AM Hour	4.00	4	3	0.00	0	0
Peak PM Hour	5.00	5	4	3.00	3	2
<b>Total</b>						
Peak AM Hour	-	56	53	-	72	70
Peak PM Hour	-	84	79	-	78	74

**NOTES:**

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE - 220 - MULTIFAMILY HOUSING (MID-RISE), ITE LAND USE CODE - 931 - FINE DINING RESTAURANT, ITE LAND USE CODE - 710 - GENERAL OFFICE BUILDING, AND ITE LAND USE CODE - 822 - STRIP RETAIL PLAZA (<40K). PEAK HOUR OF GENERATOR RATES WERE UTILIZED FOR EACH LAND USE.
- 2) "NEW TRIPS" INCLUDE A 25% PASS-BY/DIVERTED LINK TRIP CREDIT FOR THE RETAIL AND RESTAURANT LAND USES.
- 3) PEAK HOUR OF GENERATOR RATES ARE NOT PROVIDED BY ITE FOR LAND USE 710 - GENERAL OFFICE BUILDING SINCE IT IS ASSUMED THAT THE PEAK HOUR OF OFFICE GENERATED TRAFFIC IS COINCIDENT WITH PEAK HOUR OF ADJACENT STREET TRAFFIC. THEREFORE PEAK HOUR OF ADJACENT STREET TRAFFIC RATES HAVE BEEN UTILIZED.

# Traffic Impact Study

## Appendix C | Level of Service Standards

# Level of Service Standards

## Level of Service for Signalized Intersections

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

- **LOS A** describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- **LOS B** describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
- **LOS C** describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.
- **LOS D** describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.
- **LOS E** describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.
- **LOS F** describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 19-8 LOS by Volume-to-Capacity Ratio**

Control Delay (s/veh)	$v/c \leq 1.0$	$v/c \geq 1.0$
$\leq 10$	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.

## Level of Service Criteria For Two-Way Stop-Controlled (TWSC) Unsignalized Intersections

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the Highway Capacity Manual, 6th Edition published by the Transportation Research Board.

### Exhibit 20-2 LOS by Volume-to-Capacity Ratio

Control Delay (s/veh)	$v/c \leq 1.0$	$v/c \geq 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

## Level of Service Criteria For All-Way Stop-Controlled (AWSC) Unsignalized Intersections

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway Capacity Manual, 6<sup>th</sup> Edition* published by the Transportation Research Board.

**Exhibit 21-8 LOS by Volume-to-Capacity Ratio**

Control Delay (s/veh)	v/c ≤ 1.0	v/c ≥ 1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.

# Traffic Impact Study

## Appendix D | Capacity Analysis

2021 Existing Traffic Volumes  
1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	175	291	32	20	210	14	54	122	28	44	158	307
Future Volume (vph)	175	291	32	20	210	14	54	122	28	44	158	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.982			0.919	
Flt Protected		0.982			0.996			0.987			0.996	
Satd. Flow (prot)	0	2017	1577	0	1809	0	0	1578	0	0	1647	0
Flt Permitted		0.495			0.926			0.689			0.952	
Satd. Flow (perm)	0	1017	1577	0	1682	0	0	1102	0	0	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			8			78	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	190	316	35	22	228	15	59	133	30	48	172	334
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	35	0	265	0	0	222	0	0	554	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2021 Existing Traffic Volumes  
1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
03/28/2023

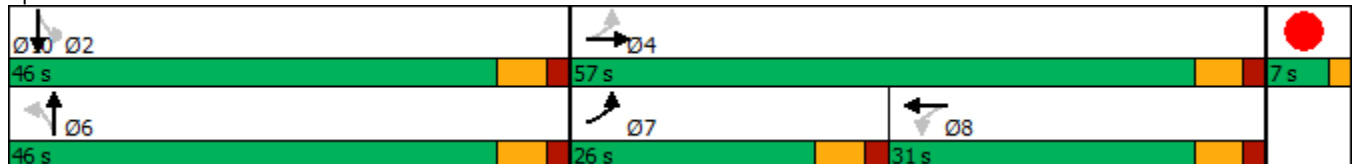


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0		16.0
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0		46.0
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%		41.8%
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0		40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Max	None		None	None		Min	Min		Min		Min
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		46.5	93.0		19.9			34.2				34.2
Actuated g/C Ratio		0.50	1.00		0.21			0.37				0.37
v/c Ratio		0.70	0.02		0.73			0.54				0.88
Control Delay		22.5	0.0		47.0			28.5				41.1
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		22.5	0.0		47.0			28.5				41.1
LOS		C	A		D			C				D
Approach Delay		21.0			47.0			28.5				41.1
Approach LOS		C			D			C				D

Intersection Summary

Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 93  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 33.5  
 Intersection LOS: C  
 Intersection Capacity Utilization 84.8%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Intersection Summary	

2021 Existing Traffic Volumes  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	18	55	17	31	12	28	8	268	35	59	461	10
Future Volume (vph)	18	55	17	31	12	28	8	268	35	59	461	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.975			0.947			0.985			0.997	
Fl <sub>t</sub> Protected		0.990			0.979			0.999			0.994	
Satd. Flow (prot)	0	1747	0	0	1908	0	0	1754	0	0	1767	0
Fl <sub>t</sub> Permitted		0.933			0.858			0.985			0.927	
Satd. Flow (perm)	0	1646	0	0	1672	0	0	1730	0	0	1648	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			25			6			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	59	18	33	13	30	9	285	37	63	490	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	0	0	76	0	0	331	0	0	564	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2021 Existing Traffic Volumes  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
03/28/2023

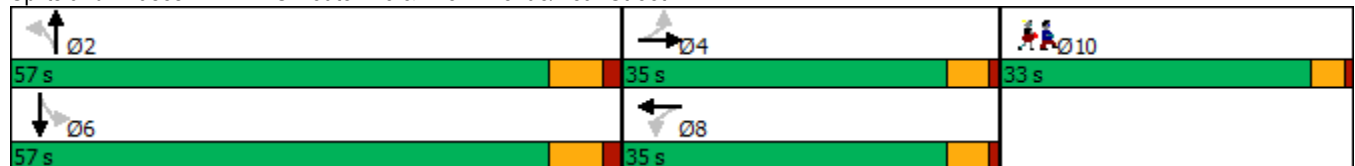


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.6			10.6			52.7			52.7	
Actuated g/C Ratio		0.15			0.15			0.75			0.75	
v/c Ratio		0.38			0.28			0.25			0.46	
Control Delay		30.6			23.1			4.6			6.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		30.6			23.1			4.6			6.4	
LOS		C			C			A			A	
Approach Delay		30.6			23.1			4.6			6.4	
Approach LOS		C			C			A			A	

**Intersection Summary**

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 70.2  
 Natural Cycle: 105  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.46  
 Intersection Signal Delay: 9.2  
 Intersection Capacity Utilization 69.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service C

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Intersection Summary	

2021 Existing Traffic Volumes  
4: Rochambeau Drive & Underhill Avenue

Peak AM Hour  
03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Volume (vph)	474	6	12	559	38	24
Future Volume (vph)	474	6	12	559	38	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.948	
Flt Protected				0.999	0.970	
Satd. Flow (prot)	1934	0	0	1806	1892	0
Flt Permitted				0.999	0.970	
Satd. Flow (perm)	1934	0	0	1806	1892	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	0%	5%
Adj. Flow (vph)	494	6	13	582	40	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	500	0	0	595	65	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.3%
ICU Level of Service	A
Analysis Period (min)	15



2021 Existing Traffic Volumes  
4: Rochambeau Drive & Underhill Avenue

Peak AM Hour  
03/28/2023

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	474	6	12	559	38	24
Future Vol, veh/h	474	6	12	559	38	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	2	0	5
Mvmt Flow	494	6	13	582	40	25

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	500	0	1105 497
Stage 1	-	-	-	-	497 -
Stage 2	-	-	-	-	608 -
Critical Hdwy	-	-	4.1	-	5 5.55
Critical Hdwy Stg 1	-	-	-	-	4 -
Critical Hdwy Stg 2	-	-	-	-	4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.345
Pot Cap-1 Maneuver	-	-	1075	-	362 625
Stage 1	-	-	-	-	747 -
Stage 2	-	-	-	-	693 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1075	-	355 625
Mov Cap-2 Maneuver	-	-	-	-	355 -
Stage 1	-	-	-	-	747 -
Stage 2	-	-	-	-	681 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	426	-	-	1075	-
HCM Lane V/C Ratio	0.152	-	-	0.012	-
HCM Control Delay (s)	15	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

2021 Existing Traffic Volumes  
5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	471	590	7	9	8
Future Volume (vph)	2	471	590	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1769	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1769	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	518	648	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	520	656	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.5%
ICU Level of Service	A
Analysis Period (min)	15

2021 Existing Traffic Volumes  
5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
03/28/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	2	471	590	7	9	8
Future Vol, veh/h	2	471	590	7	9	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	518	648	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	656	0	-	0	1174 652
Stage 1	-	-	-	-	652 -
Stage 2	-	-	-	-	522 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	931	-	-	-	212 447
Stage 1	-	-	-	-	518 -
Stage 2	-	-	-	-	595 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	931	-	-	-	211 447
Mov Cap-2 Maneuver	-	-	-	-	211 -
Stage 1	-	-	-	-	516 -
Stage 2	-	-	-	-	595 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	931	-	-	-	281
HCM Lane V/C Ratio	0.002	-	-	-	0.066
HCM Control Delay (s)	8.9	0	-	-	18.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

2025 No-Build Traffic Volumes W/Approved Other Development  
1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	185	319	33	29	229	17	55	126	42	45	163	321
Future Volume (vph)	185	319	33	29	229	17	55	126	42	45	163	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.974			0.918	
Flt Protected		0.982			0.995			0.988			0.996	
Satd. Flow (prot)	0	2005	1577	0	1804	0	0	1565	0	0	1646	0
Flt Permitted		0.497			0.894			0.686			0.950	
Satd. Flow (perm)	0	1015	1577	0	1620	0	0	1087	0	0	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			12			79	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	201	347	36	32	249	18	60	137	46	49	177	349
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	548	36	0	299	0	0	243	0	0	575	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 No-Build Traffic Volumes W/Approved Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0		16.0
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0		46.0
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%		41.8%
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0		40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Max	None		None	None		Min	Min		Min		Min
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		48.8	97.2		22.5			36.2				36.2
Actuated g/C Ratio		0.50	1.00		0.23			0.37				0.37
v/c Ratio		0.77	0.02		0.79			0.59				0.91
Control Delay		26.1	0.0		51.8			30.4				44.9
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		26.1	0.0		51.8			30.4				44.9
LOS		C	A		D			C				D
Approach Delay		24.5			51.8			30.4				44.9
Approach LOS		C			D			C				D
Queue Length 50th (ft)		241	0		181			117				305
Queue Length 95th (ft)		#345	0		#305			202				#515
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		744	1577		423			459				700
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		0.74	0.02		0.71			0.53				0.82

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	97.2
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.91
Intersection Signal Delay:	37.0
Intersection Capacity Utilization:	90.1%
Intersection LOS:	D
ICU Level of Service:	E

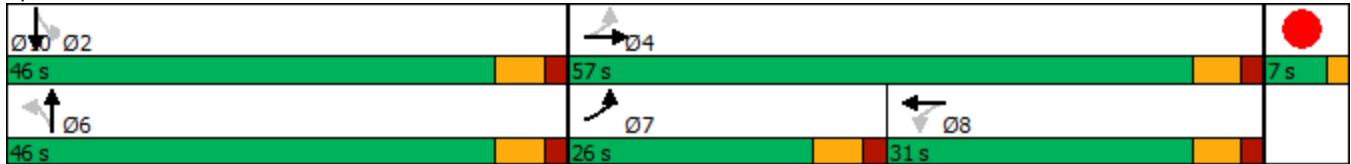
Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue





2025 No-Build Traffic Volumes W/Approved Other Development  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	18	61	17	32	15	43	8	284	36	87	480	10
Future Volume (vph)	18	61	17	32	15	43	8	284	36	87	480	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.976			0.935			0.985			0.998	
Fl <sub>t</sub> Protected		0.991			0.983			0.999			0.992	
Satd. Flow (prot)	0	1750	0	0	1892	0	0	1754	0	0	1765	0
Fl <sub>t</sub> Permitted		0.936			0.871			0.985			0.890	
Satd. Flow (perm)	0	1653	0	0	1676	0	0	1730	0	0	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			35			6			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	65	18	34	16	46	9	302	38	93	511	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	102	0	0	96	0	0	349	0	0	615	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 No-Build Traffic Volumes W/Approved Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

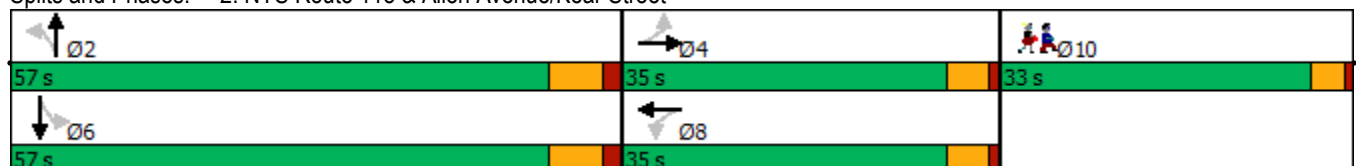
Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.7			10.7			52.2			52.2	
Actuated g/C Ratio		0.15			0.15			0.75			0.75	
v/c Ratio		0.39			0.33			0.27			0.52	
Control Delay		31.1			22.8			4.8			7.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.1			22.8			4.8			7.4	
LOS		C			C			A			A	
Approach Delay		31.1			22.8			4.8			7.4	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		39			25			48			112	
Queue Length 95th (ft)		82			65			91			213	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		723			748			1298			1186	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.14			0.13			0.27			0.52	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	69.7
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	10.0
Intersection Capacity Utilization	73.4%
Analysis Period (min)	15
Intersection LOS:	A
ICU Level of Service	D

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 No-Build Traffic Volumes W/Approved Other Development  
 4: Rochambeau Drive & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (vph)	512	6	12	593	39	24
Future Volume (vph)	512	6	12	593	39	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.949	
Flt Protected				0.999	0.970	
Satd. Flow (prot)	1934	0	0	1806	1895	0
Flt Permitted				0.999	0.970	
Satd. Flow (perm)	1934	0	0	1806	1895	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	0%	5%
Adj. Flow (vph)	533	6	13	618	41	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	539	0	0	631	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.1%
ICU Level of Service	A
Analysis Period (min)	15

2025 No-Build Traffic Volumes W/Approved Other Development  
 4: Rochambeau Drive & Underhill Avenue

Peak AM Hour  
 03/28/2023

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	512	6	12	593	39	24
Future Vol, veh/h	512	6	12	593	39	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	2	0	5
Mvmt Flow	533	6	13	618	41	25

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	539	0	1180
Stage 1	-	-	-	-	536
Stage 2	-	-	-	-	644
Critical Hdwy	-	-	4.1	-	5
Critical Hdwy Stg 1	-	-	-	-	4
Critical Hdwy Stg 2	-	-	-	-	4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1040	-	336
Stage 1	-	-	-	-	728
Stage 2	-	-	-	-	677
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1040	-	330
Mov Cap-2 Maneuver	-	-	-	-	330
Stage 1	-	-	-	-	728
Stage 2	-	-	-	-	664

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	398	-	-	1040	-
HCM Lane V/C Ratio	0.165	-	-	0.012	-
HCM Control Delay (s)	15.8	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

2025 No-Build Traffic Volumes W/Approved Other Development  
5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	509	625	7	9	8
Future Volume (vph)	2	509	625	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1769	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1769	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	559	687	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	561	695	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.3%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	509	625	7	9	8
Future Vol, veh/h	2	509	625	7	9	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	559	687	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	695	0	-	0	1254 691
Stage 1	-	-	-	-	691 -
Stage 2	-	-	-	-	563 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	901	-	-	-	190 425
Stage 1	-	-	-	-	497 -
Stage 2	-	-	-	-	570 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	901	-	-	-	189 425
Mov Cap-2 Maneuver	-	-	-	-	189 -
Stage 1	-	-	-	-	496 -
Stage 2	-	-	-	-	570 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	901	-	-	-	256
HCM Lane V/C Ratio	0.002	-	-	-	0.073
HCM Control Delay (s)	9	0	-	-	20.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2



2025 Build Traffic Volumes W/Approved Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Future Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.975			0.917	
Flt Protected		0.981			0.995			0.987			0.996	
Satd. Flow (prot)	0	2002	1577	0	1804	0	0	1569	0	0	1646	0
Flt Permitted		0.492			0.893			0.647			0.951	
Satd. Flow (perm)	0	1004	1577	0	1619	0	0	1029	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			12			83	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	221	355	43	32	255	18	66	137	46	49	177	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	576	43	0	305	0	0	249	0	0	590	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved Other Development  
1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0	16.0	
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0	46.0	
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%	41.8%	
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		50.5	100.3		24.4			37.8			37.8	
Actuated g/C Ratio		0.50	1.00		0.24			0.38			0.38	
v/c Ratio		0.82	0.03		0.77			0.63			0.92	
Control Delay		29.7	0.0		50.0			32.6			46.8	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		29.7	0.0		50.0			32.6			46.8	
LOS		C	A		D			C			D	
Approach Delay		27.7			50.0			32.6			46.8	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)		259	0		186			123			316	
Queue Length 95th (ft)		#403	0		#316			213			#534	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		711	1577		407			418			677	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.81	0.03		0.75			0.60			0.87	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	100.3
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.92
Intersection Signal Delay:	38.6
Intersection Capacity Utilization:	92.3%
Intersection LOS:	D
ICU Level of Service:	F

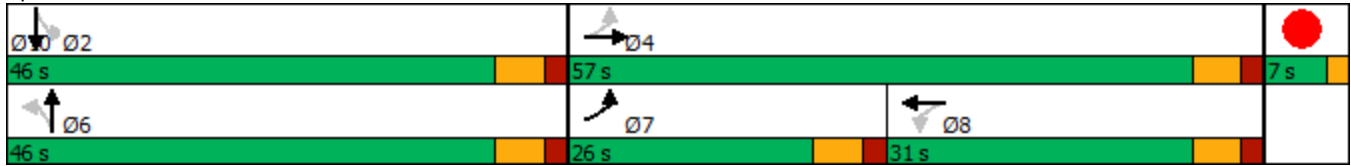
Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	22	64	17	34	18	43	8	298	39	87	491	13
Future Volume (vph)	22	64	17	34	18	43	8	298	39	87	491	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.978			0.939			0.985			0.997	
Flt Protected		0.990			0.982			0.999			0.993	
Satd. Flow (prot)	0	1752	0	0	1898	0	0	1754	0	0	1765	0
Flt Permitted		0.921			0.858			0.985			0.889	
Satd. Flow (perm)	0	1630	0	0	1658	0	0	1730	0	0	1580	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			32			6			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	23	68	18	36	19	46	9	317	41	93	522	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	101	0	0	367	0	0	629	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frnt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

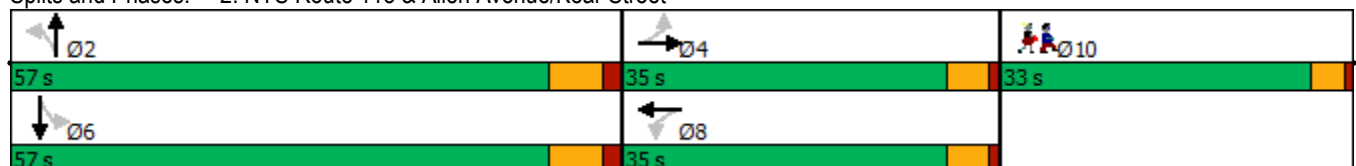
Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.9			10.9			52.2			52.2	
Actuated g/C Ratio		0.16			0.16			0.75			0.75	
v/c Ratio		0.42			0.35			0.28			0.53	
Control Delay		31.9			24.2			5.0			7.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.9			24.2			5.0			7.8	
LOS		C			C			A			A	
Approach Delay		31.9			24.2			5.0			7.8	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		42			28			51			116	
Queue Length 95th (ft)		88			70			100			229	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		711			737			1294			1181	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.15			0.14			0.28			0.53	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	69.9
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.53
Intersection Signal Delay:	10.5
Intersection Capacity Utilization	74.9%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	D

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street





Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved Other Development  
 3: Underhill Avenue & Site Access

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	20	550	609	23	23	20
Future Volume (vph)	20	550	609	23	23	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.938	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1803	1774	0	1702	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1803	1774	0	1702	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	8%	4%	2%	2%	2%
Adj. Flow (vph)	22	611	677	26	26	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	633	703	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.1%
Analysis Period (min)	15
	ICU Level of Service B

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	20	550	609	23	23	20
Future Vol, veh/h	20	550	609	23	23	20
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	8	4	2	2	2
Mvmt Flow	22	611	677	26	26	22

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	703	0	-	0	1345 690
Stage 1	-	-	-	-	690 -
Stage 2	-	-	-	-	655 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	895	-	-	-	167 445
Stage 1	-	-	-	-	498 -
Stage 2	-	-	-	-	517 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	895	-	-	-	161 445
Mov Cap-2 Maneuver	-	-	-	-	161 -
Stage 1	-	-	-	-	480 -
Stage 2	-	-	-	-	517 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	24.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	895	-	-	-	229
HCM Lane V/C Ratio	0.025	-	-	-	0.209
HCM Control Delay (s)	9.1	0	-	-	24.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

2025 Build Traffic Volumes W/Approved Other Development  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	2	532	6	12	613	4	39	0	24	13	0	8
Future Volume (vph)	2	532	6	12	613	4	39	0	24	13	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.999			0.999			0.949			0.951	
Fl <sub>t</sub> Protected					0.999			0.970			0.969	
Satd. Flow (prot)	0	1808	0	0	1764	0	0	1828	0	0	1717	0
Fl <sub>t</sub> Permitted					0.999			0.970			0.969	
Satd. Flow (perm)	0	1808	0	0	1764	0	0	1828	0	0	1717	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			173	
Travel Time (s)		5.0			9.7			7.3			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	8%	20%	17%	4%	2%	6%	2%	5%	2%	2%	2%
Adj. Flow (vph)	2	554	6	13	639	4	41	0	25	14	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	562	0	0	656	0	0	66	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	52.2%
ICU Level of Service	A
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved Other Development  
4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
03/28/2023

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	532	6	12	613	4	39	0	24	13	0	8
Future Vol, veh/h	2	532	6	12	613	4	39	0	24	13	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	8	20	17	4	2	6	2	5	2	2	2
Mvmt Flow	2	554	6	13	639	4	41	0	25	14	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	643	0	0	560	0	0	1232	1230	557	1241	1231	641
Stage 1	-	-	-	-	-	-	561	561	-	667	667	-
Stage 2	-	-	-	-	-	-	671	669	-	574	564	-
Critical Hdwy	4.12	-	-	4.27	-	-	5.76	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.353	-	-	3.554	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	942	-	-	940	-	-	244	286	584	152	177	475
Stage 1	-	-	-	-	-	-	628	634	-	448	457	-
Stage 2	-	-	-	-	-	-	570	591	-	504	508	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	942	-	-	940	-	-	235	279	584	143	173	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	279	-	143	173	-
Stage 1	-	-	-	-	-	-	626	632	-	447	447	-
Stage 2	-	-	-	-	-	-	548	578	-	481	506	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			20.1			25.8		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	304	942	-	-	940	-	-	195
HCM Lane V/C Ratio	0.216	0.002	-	-	0.013	-	-	0.112
HCM Control Delay (s)	20.1	8.8	0	-	8.9	0	-	25.8
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.4

2025 Build Traffic Volumes W/Approved Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	532	653	7	9	8
Future Volume (vph)	2	532	653	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1771	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1771	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	585	718	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	587	726	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	44.8%
ICU Level of Service	A
Analysis Period (min)	15

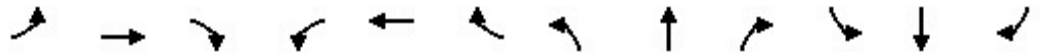
Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	532	653	7	9	8
Future Vol, veh/h	2	532	653	7	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	585	718	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	726	0	-	0	1311 722
Stage 1	-	-	-	-	722 -
Stage 2	-	-	-	-	589 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	877	-	-	-	175 407
Stage 1	-	-	-	-	481 -
Stage 2	-	-	-	-	554 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	877	-	-	-	174 407
Mov Cap-2 Maneuver	-	-	-	-	174 -
Stage 1	-	-	-	-	480 -
Stage 2	-	-	-	-	554 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	877	-	-	-	238
HCM Lane V/C Ratio	0.003	-	-	-	0.078
HCM Control Delay (s)	9.1	0	-	-	21.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

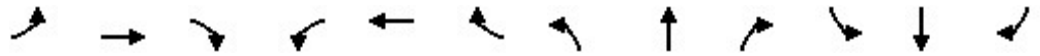
2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Roundabouts) - Dean Hill Ave  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Future Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.990			0.975			0.850	
Flt Protected	0.950			0.950				0.987			0.989	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	0	1569	0	0	1657	1607
Flt Permitted	0.373			0.527				0.839			0.881	
Satd. Flow (perm)	658	1889	0	833	1826	0	0	1334	0	0	1476	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			3			10			325	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	221	355	43	32	255	18	66	137	46	49	177	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	398	0	32	273	0	0	249	0	0	226	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0



2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Right Turn Lane) (Peak AM/PM) (Area 1: NYS Route 118 & Underhill Avenue) 03/29/2023



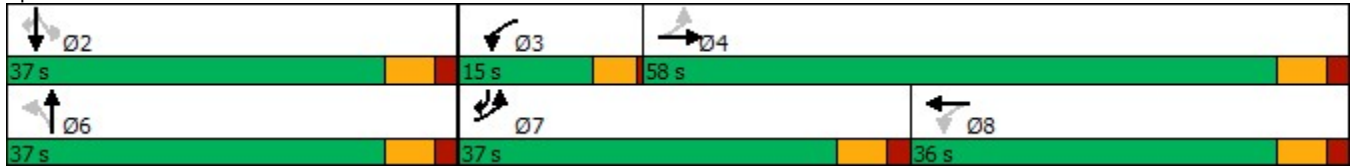
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	33.8	30.3		23.4	14.6			18.3			18.3	37.5
Actuated g/C Ratio	0.52	0.47		0.36	0.22			0.28			0.28	0.58
v/c Ratio	0.41	0.45		0.09	0.66			0.65			0.54	0.34
Control Delay	12.0	16.3		10.2	33.0			29.7			26.5	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	12.0	16.3		10.2	33.0			29.7			26.5	2.3
LOS	B	B		B	C			C			C	A
Approach Delay		14.7			30.6			29.7			11.6	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	41	80		5	93			79			73	6
Queue Length 95th (ft)	109	255		21	217			186			167	41
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	896	1542		486	900			683			751	1445
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.25	0.26		0.07	0.30			0.36			0.30	0.25

Intersection Summary

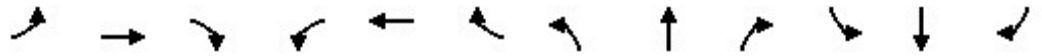
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	64.9
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	18.5
Intersection Capacity Utilization:	68.3%
Intersection LOS:	B
ICU Level of Service:	C

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue

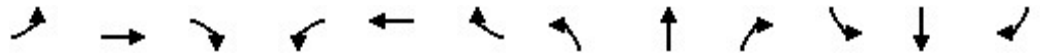


2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes Back Approaches)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Future Volume (vph)	203	327	40	29	235	17	61	126	42	45	163	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.984			0.990			0.962			0.850	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	1669	1513	0	1617	1554	1607
Flt Permitted	0.385			0.527			0.637			0.642	0.988	
Satd. Flow (perm)	679	1889	0	833	1826	0	1119	1513	0	1093	1537	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			3			17				363
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	221	355	43	32	255	18	66	137	46	49	177	364
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	221	398	0	32	273	0	66	183	0	44	182	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & Peak Approaches)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



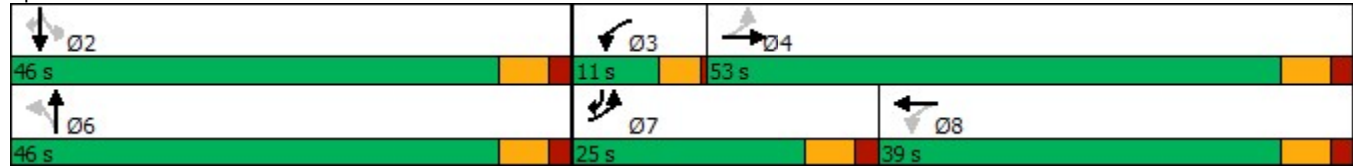
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	30.0	26.5		20.9	12.5		12.4	12.4		12.4	12.4	29.9
Actuated g/C Ratio	0.55	0.48		0.38	0.23		0.23	0.23		0.23	0.23	0.55
v/c Ratio	0.38	0.43		0.08	0.65		0.26	0.52		0.18	0.52	0.35
Control Delay	8.6	12.7		7.1	27.9		22.7	24.4		21.4	26.6	2.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	8.6	12.7		7.1	27.9		22.7	24.4		21.4	26.6	2.0
LOS	A	B		A	C		C	C		C	C	A
Approach Delay		11.3			25.7			23.9			11.1	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	30	58		3	75		17	46		11	53	0
Queue Length 95th (ft)	75	194		14	174		55	120		42	133	32
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	729	1638		419	1136		842	1144		823	1157	1229
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.30	0.24		0.08	0.24		0.08	0.16		0.05	0.16	0.30

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	54.8
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.65
Intersection Signal Delay:	15.5
Intersection Capacity Utilization	62.4%
Intersection LOS:	B
ICU Level of Service	B

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2021 Existing Traffic Volumes  
1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	363	252	49	35	241	36	37	167	27	23	134	231
Future Volume (vph)	363	252	49	35	241	36	37	167	27	23	134	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.984			0.984			0.920	
Flt Protected		0.971			0.994			0.992			0.997	
Satd. Flow (prot)	0	1989	1655	0	1777	0	0	1735	0	0	1678	0
Flt Permitted		0.538			0.890			0.813			0.971	
Satd. Flow (perm)	0	1102	1655	0	1591	0	0	1422	0	0	1635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		5			9			94	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	374	260	51	36	248	37	38	172	28	24	138	238
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	634	51	0	321	0	0	238	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2021 Existing Traffic Volumes  
1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	22.0		22.0	22.0		16.0	16.0		16.0		16.0
Total Split (s)	16.0	43.0		27.0	27.0		60.0	60.0		60.0		60.0
Total Split (%)	14.5%	39.1%		24.5%	24.5%		54.5%	54.5%		54.5%		54.5%
Maximum Green (s)	10.0	37.0		21.0	21.0		54.0	54.0		54.0		54.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Min	None		None	None		Min	Min		Min		Min
Walk Time (s)		5.0		5.0	5.0							
Flash Dont Walk (s)		11.0		11.0	11.0							
Pedestrian Calls (#/hr)		3		3	3							
Act Effct Green (s)		37.2	66.7		26.2			17.4				17.4
Actuated g/C Ratio		0.56	1.00		0.39			0.26				0.26
v/c Ratio		0.93	0.03		0.51			0.63				0.81
Control Delay		38.4	0.0		20.2			28.5				30.5
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		38.4	0.0		20.2			28.5				30.5
LOS		D	A		C			C				C
Approach Delay		35.5			20.2			28.5				30.5
Approach LOS		D			C			C				C
Queue Length 50th (ft)		151	0		94			82				116
Queue Length 95th (ft)		#520	0		198			147				209
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		681	1655		626			1159				1349
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		0.93	0.03		0.51			0.21				0.30

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	66.7
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	30.3
Intersection Capacity Utilization:	90.0%
Intersection LOS:	C
ICU Level of Service:	E



Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2021 Existing Traffic Volumes  
 1: NYS Route 118 & Underhill Avenue

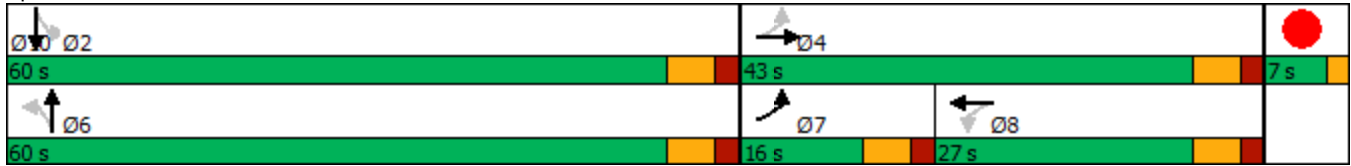
Peak PM Hour  
 03/28/2023

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2021 Existing Traffic Volumes  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	9	30	12	60	48	58	14	497	55	26	316	17
Future Volume (vph)	9	30	12	60	48	58	14	497	55	26	316	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.953			0.987			0.994	
Flt Protected		0.992			0.982			0.999			0.996	
Satd. Flow (prot)	0	1736	0	0	1926	0	0	1758	0	0	1765	0
Flt Permitted		0.951			0.859			0.988			0.942	
Satd. Flow (perm)	0	1664	0	0	1685	0	0	1738	0	0	1669	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			20			5			2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	32	13	63	51	61	15	523	58	27	333	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	0	0	175	0	0	596	0	0	378	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2021 Existing Traffic Volumes  
2: NYS Route 118 & Allen Avenue/Kear Street

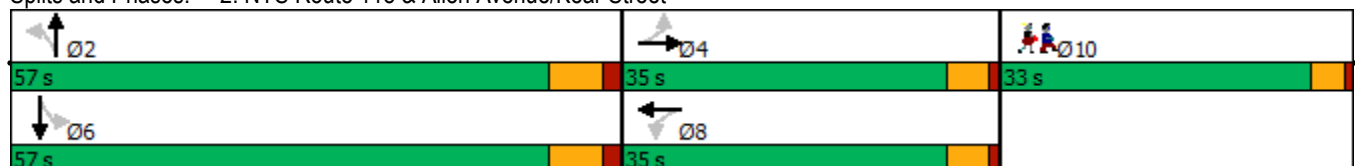
Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		12.5			12.5			50.1			50.1	
Actuated g/C Ratio		0.17			0.17			0.67			0.67	
v/c Ratio		0.19			0.59			0.51			0.34	
Control Delay		23.3			33.6			8.4			6.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.3			33.6			8.4			6.6	
LOS		C			C			A			A	
Approach Delay		23.3			33.6			8.4			6.6	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		17			66			113			61	
Queue Length 95th (ft)		46			126			221			123	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		677			690			1168			1120	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.08			0.25			0.51			0.34	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	74.6
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.59
Intersection Signal Delay:	12.2
Intersection Capacity Utilization	59.2%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	B

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

2021 Existing Traffic Volumes  
4: Rochambeau Drive & Underhill Avenue

Peak PM Hour  
03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	640	35	48	461	14	24
Future Volume (vph)	640	35	48	461	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993				0.916	
Flt Protected				0.995	0.982	
Satd. Flow (prot)	1789	0	0	1743	1791	0
Flt Permitted				0.995	0.982	
Satd. Flow (perm)	1789	0	0	1743	1791	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	20%	17%	4%	6%	5%
Adj. Flow (vph)	667	36	50	480	15	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	703	0	0	530	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	74.2%
ICU Level of Service	D
Analysis Period (min)	15

2021 Existing Traffic Volumes  
4: Rochambeau Drive & Underhill Avenue

Peak PM Hour  
03/28/2023

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	640	35	48	461	14	24
Future Vol, veh/h	640	35	48	461	14	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	20	17	4	6	5
Mvmt Flow	667	36	50	480	15	25

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	703	0	1265 685
Stage 1	-	-	-	-	685 -
Stage 2	-	-	-	-	580 -
Critical Hdwy	-	-	4.27	-	5.06 5.55
Critical Hdwy Stg 1	-	-	-	-	4.06 -
Critical Hdwy Stg 2	-	-	-	-	4.06 -
Follow-up Hdwy	-	-	2.353	-	3.554 3.345
Pot Cap-1 Maneuver	-	-	829	-	300 506
Stage 1	-	-	-	-	644 -
Stage 2	-	-	-	-	692 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	829	-	275 506
Mov Cap-2 Maneuver	-	-	-	-	275 -
Stage 1	-	-	-	-	644 -
Stage 2	-	-	-	-	635 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	15.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	829	-
HCM Lane V/C Ratio	0.103	-	-	0.06	-
HCM Control Delay (s)	15.4	-	-	9.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-



2021 Existing Traffic Volumes  
5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	2	665	463	12	10	8
Future Volume (vph)	2	665	463	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	723	503	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	725	516	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.6%
Analysis Period (min)	15
	ICU Level of Service A

2021 Existing Traffic Volumes  
5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
03/28/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	665	463	12	10	8
Future Vol, veh/h	2	665	463	12	10	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	723	503	13	11	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	516	0	-	0	1237 510
Stage 1	-	-	-	-	510 -
Stage 2	-	-	-	-	727 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1050	-	-	-	194 563
Stage 1	-	-	-	-	603 -
Stage 2	-	-	-	-	478 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1050	-	-	-	193 563
Mov Cap-2 Maneuver	-	-	-	-	193 -
Stage 1	-	-	-	-	601 -
Stage 2	-	-	-	-	478 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1050	-	-	-	273
HCM Lane V/C Ratio	0.002	-	-	-	0.072
HCM Control Delay (s)	8.4	0	-	-	19.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

2025 No-Build Traffic Volumes W/Approved Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	384	269	50	48	266	41	38	174	35	23	139	245
Future Volume (vph)	384	269	50	48	266	41	38	174	35	23	139	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.984			0.981			0.919	
Flt Protected		0.971			0.993			0.992			0.997	
Satd. Flow (prot)	0	1989	1655	0	1772	0	0	1728	0	0	1676	0
Flt Permitted		0.509			0.852			0.816			0.971	
Satd. Flow (perm)	0	1043	1655	0	1521	0	0	1421	0	0	1633	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		5			11			97	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	396	277	52	49	274	42	39	179	36	24	143	253
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	673	52	0	365	0	0	254	0	0	420	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 No-Build Traffic Volumes W/Approved Other Development  
1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.0		22.0	22.0		16.0	16.0		16.0	16.0	
Total Split (s)	16.0	43.0		27.0	27.0		60.0	60.0		60.0	60.0	
Total Split (%)	14.5%	39.1%		24.5%	24.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	10.0	37.0		21.0	21.0		54.0	54.0		54.0	54.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	None		None	None		Min	Min		Min	Min	
Walk Time (s)		5.0		5.0	5.0							
Flash Dont Walk (s)		11.0		11.0	11.0							
Pedestrian Calls (#/hr)		3		3	3							
Act Effct Green (s)		37.2	67.7		26.2			18.4			18.4	
Actuated g/C Ratio		0.55	1.00		0.39			0.27			0.27	
v/c Ratio		1.05	0.03		0.62			0.65			0.82	
Control Delay		67.2	0.0		23.7			28.6			31.0	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		67.2	0.0		23.7			28.6			31.0	
LOS		E	A		C			C			C	
Approach Delay		62.4			23.7			28.6			31.0	
Approach LOS		E			C			C			C	
Queue Length 50th (ft)		~187	0		116			88			125	
Queue Length 95th (ft)		#589	0		#245			156			222	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		644	1655		590			1143			1330	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		1.05	0.03		0.62			0.22			0.32	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	67.7
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.05
Intersection Signal Delay:	42.0
Intersection Capacity Utilization	95.7%
Intersection LOS:	D
ICU Level of Service	F

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

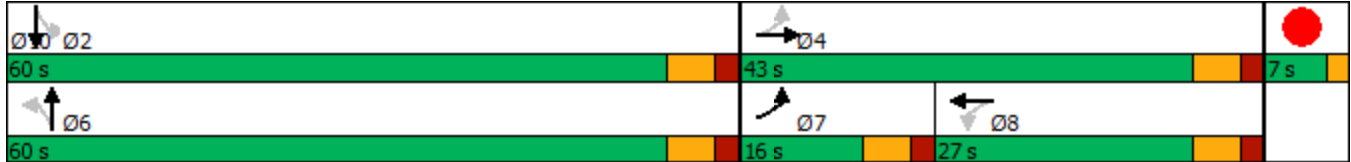
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 No-Build Traffic Volumes W/Approved Other Development  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	9	33	12	61	53	80	14	528	56	41	335	17
Future Volume (vph)	9	33	12	61	53	80	14	528	56	41	335	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.969			0.944			0.987			0.994	
Fl <sub>t</sub> Protected		0.992			0.985			0.999			0.995	
Satd. Flow (prot)	0	1740	0	0	1914	0	0	1758	0	0	1763	0
Fl <sub>t</sub> Permitted		0.951			0.873			0.988			0.901	
Satd. Flow (perm)	0	1668	0	0	1696	0	0	1738	0	0	1597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			27			5			2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	35	13	64	56	84	15	556	59	43	353	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	204	0	0	630	0	0	414	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 No-Build Traffic Volumes W/Approved Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
 03/28/2023

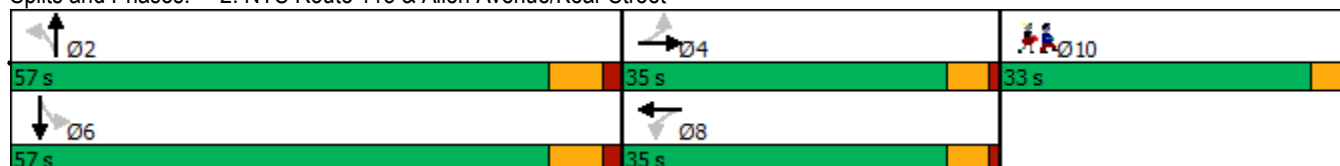


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		13.4			13.4			50.1			50.1	
Actuated g/C Ratio		0.18			0.18			0.66			0.66	
v/c Ratio		0.19			0.63			0.55			0.39	
Control Delay		23.4			34.0			9.4			7.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.4			34.0			9.4			7.6	
LOS		C			C			A			A	
Approach Delay		23.4			34.0			9.4			7.6	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		18			77			130			74	
Queue Length 95th (ft)		48			143			256			150	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		670			691			1154			1059	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.09			0.30			0.55			0.39	

**Intersection Summary**

Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	75.5
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.63
Intersection Signal Delay:	13.3
Intersection LOS:	B
Intersection Capacity Utilization:	67.5%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

2025 No-Build Traffic Volumes W/Approved Other Development  
 4: Rochambeau Drive & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	679	36	49	501	14	24
Future Volume (vph)	679	36	49	501	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.916		
Flt Protected				0.996	0.982	
Satd. Flow (prot)	1789	0	0	1746	1791	0
Flt Permitted				0.996	0.982	
Satd. Flow (perm)	1789	0	0	1746	1791	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	20%	17%	4%	6%	5%
Adj. Flow (vph)	707	38	51	522	15	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	745	0	0	573	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	77.1%
ICU Level of Service	D
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	679	36	49	501	14	24
Future Vol, veh/h	679	36	49	501	14	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	20	17	4	6	5
Mvmt Flow	707	38	51	522	15	25

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	745	0	1350 726
Stage 1	-	-	-	-	726 -
Stage 2	-	-	-	-	624 -
Critical Hdwy	-	-	4.27	-	5.06 5.55
Critical Hdwy Stg 1	-	-	-	-	4.06 -
Critical Hdwy Stg 2	-	-	-	-	4.06 -
Follow-up Hdwy	-	-	2.353	-	3.554 3.345
Pot Cap-1 Maneuver	-	-	799	-	275 483
Stage 1	-	-	-	-	626 -
Stage 2	-	-	-	-	671 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	799	-	250 483
Mov Cap-2 Maneuver	-	-	-	-	250 -
Stage 1	-	-	-	-	626 -
Stage 2	-	-	-	-	611 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	16.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	360	-	-	799	-
HCM Lane V/C Ratio	0.11	-	-	0.064	-
HCM Control Delay (s)	16.2	-	-	9.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

2025 No-Build Traffic Volumes W/Approved Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	↙
Traffic Volume (vph)	2	704	503	12	10	8
Future Volume (vph)	2	704	503	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.997		0.939	
Fl <sub>t</sub> Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Fl <sub>t</sub> Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	765	547	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	767	560	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.6%
Analysis Period (min)	15
	ICU Level of Service A

**Intersection**

Int Delay, s/veh 0.3

**Movement** EBL EBT WBT WBR SBL SBR

Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	2	704	503	12	10	8
Future Vol, veh/h	2	704	503	12	10	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	765	547	13	11	9

**Major/Minor** Major1 Major2 Minor2

Conflicting Flow All	560	0	-	0	1323	554
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1011	-	-	-	172	532
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	457	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1011	-	-	-	171	532
Mov Cap-2 Maneuver	-	-	-	-	171	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	457	-

**Approach** EB WB SB

HCM Control Delay, s	0	0	21
HCM LOS			C

**Minor Lane/Major Mvmt** EBL EBT WBT WBR SBLn1

Capacity (veh/h)	1011	-	-	-	245
HCM Lane V/C Ratio	0.002	-	-	-	0.08
HCM Control Delay (s)	8.6	0	-	-	21
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 Build Traffic Volumes W/Approved Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Future Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	11	12	12	11	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.985			0.981			0.916	
Flt Protected		0.971			0.994			0.991			0.997	
Satd. Flow (prot)	0	1989	1655	0	1777	0	0	1670	0	0	1615	0
Flt Permitted		0.494			0.849			0.777			0.970	
Satd. Flow (perm)	0	1012	1655	0	1518	0	0	1309	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50		5			10			105	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	416	286	60	49	284	42	47	179	36	24	143	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	702	60	0	375	0	0	262	0	0	441	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.07	1.02	0.99	1.04	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved Other Development  
1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.0	22.0	22.0	22.0		16.0	16.0		16.0	16.0	
Total Split (s)	16.0	43.0	43.0	27.0	27.0		60.0	60.0		60.0	60.0	
Total Split (%)	14.5%	39.1%	39.1%	24.5%	24.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	10.0	37.0	37.0	21.0	21.0		54.0	54.0		54.0	54.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		6.0	6.0		6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)		5.0	5.0	5.0	5.0							
Flash Dont Walk (s)		11.0	11.0	11.0	11.0							
Pedestrian Calls (#/hr)		3	3	3	3							
Act Effct Green (s)		37.3	37.3		26.2			20.0			20.0	
Actuated g/C Ratio		0.54	0.54		0.38			0.29			0.29	
v/c Ratio		1.14	0.07		0.65			0.68			0.84	
Control Delay		102.1	4.5		26.1			30.3			32.0	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		102.1	4.5		26.1			30.3			32.0	
LOS		F	A		C			C			C	
Approach Delay		94.4			26.1			30.3			32.0	
Approach LOS		F			C			C			C	
Queue Length 50th (ft)		~246	2		125			93			134	
Queue Length 95th (ft)		#657	21		#292			166			237	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		615	913		576			1029			1255	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		1.14	0.07		0.65			0.25			0.35	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	69.4
Natural Cycle:	120
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.14
Intersection Signal Delay:	56.4
Intersection Capacity Utilization:	99.9%
Intersection LOS:	E
ICU Level of Service:	F

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023

Analysis Period (min) 15

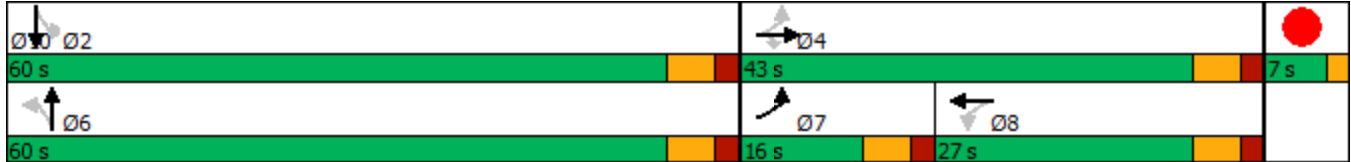
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved Other Development  
2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	13	37	12	65	57	80	14	544	60	41	351	22
Future Volume (vph)	13	37	12	65	57	80	14	544	60	41	351	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.973			0.947			0.987			0.993	
Flt Protected		0.990			0.984			0.999			0.995	
Satd. Flow (prot)	0	1743	0	0	1918	0	0	1758	0	0	1761	0
Flt Permitted		0.919			0.873			0.988			0.902	
Satd. Flow (perm)	0	1618	0	0	1702	0	0	1738	0	0	1597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			25			5			3	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	14	39	13	68	60	84	15	573	63	43	369	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	212	0	0	651	0	0	435	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frnt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

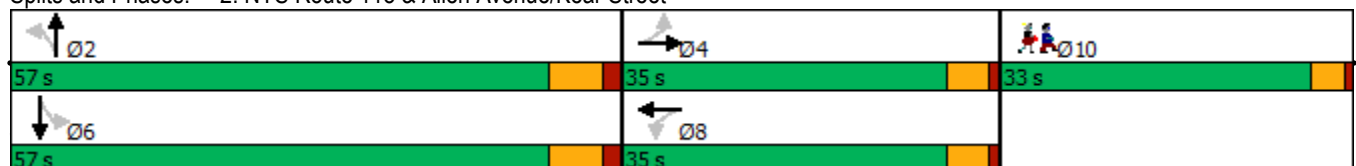
Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		13.8			13.8			50.1			50.1	
Actuated g/C Ratio		0.18			0.18			0.66			0.66	
v/c Ratio		0.22			0.64			0.57			0.41	
Control Delay		24.9			34.6			10.0			8.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.9			34.6			10.0			8.0	
LOS		C			C			A			A	
Approach Delay		24.9			34.6			10.0			8.0	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		23			82			140			81	
Queue Length 95th (ft)		55			149			277			164	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		645			688			1147			1054	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.10			0.31			0.57			0.41	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	75.9
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.64
Intersection Signal Delay:	13.9
Intersection Capacity Utilization:	69.3%
Analysis Period (min):	15
Intersection LOS:	B
ICU Level of Service:	C

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	



2025 Build Traffic Volumes W/Approved Other Development  
 3: Underhill Avenue & Site Access

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	711	562	29	29	26
Future Volume (vph)	26	711	562	29	29	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.993		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1905	1803	0	1698	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1905	1803	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	790	624	32	32	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	819	656	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	68.5%
ICU Level of Service	C
Analysis Period (min)	15

**Intersection**

Int Delay, s/veh 1.4

**Movement** EBL EBT WBT WBR SBL SBR

Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	26	711	562	29	29	26
Future Vol, veh/h	26	711	562	29	29	26
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	790	624	32	32	29

**Major/Minor** Major1 Major2 Minor2

Conflicting Flow All	656	0	-	0	1488	640
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	848	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	931	-	-	-	137	475
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	420	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	931	-	-	-	129	475
Mov Cap-2 Maneuver	-	-	-	-	129	-
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	420	-

**Approach** EB WB SB

HCM Control Delay, s	0.3	0	31.3
HCM LOS			D

**Minor Lane/Major Mvmt** EBL EBT WBT WBR SBLn1

Capacity (veh/h)	931	-	-	-	197
HCM Lane V/C Ratio	0.031	-	-	-	0.31
HCM Control Delay (s)	9	0	-	-	31.3
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

2025 Build Traffic Volumes W/Approved Other Development  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	8	704	36	49	527	12	14	0	24	8	0	5
Future Volume (vph)	8	704	36	49	527	12	14	0	24	8	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%				0%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.993			0.997			0.916			0.948	
Fl <sub>t</sub> Protected		0.999			0.996			0.982			0.970	
Satd. Flow (prot)	0	1921	0	0	1794	0	0	1816	0	0	1713	0
Fl <sub>t</sub> Permitted		0.999			0.996			0.982			0.970	
Satd. Flow (perm)	0	1921	0	0	1794	0	0	1816	0	0	1713	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			150	
Travel Time (s)		5.0			9.7			7.3			3.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	2%	2%	2%	2%	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	8	733	38	51	549	13	15	0	25	8	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	779	0	0	613	0	0	40	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	69.9%
ICU Level of Service	C
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved Other Development  
4: Rochambeau Drive/Site Access & Underhill Avenue

Peak PM Hour  
03/28/2023

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	704	36	49	527	12	14	0	24	8	0	5
Future Vol, veh/h	8	704	36	49	527	12	14	0	24	8	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	1	2	2	2	2	2	2	5	2	2	2
Mvmt Flow	8	733	38	51	549	13	15	0	25	8	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	771	0	0	1428	1432	752	1439	1445	556
Stage 1	-	-	-	-	-	-	768	768	-	658	658	-
Stage 2	-	-	-	-	-	-	660	664	-	781	787	-
Critical Hdwy	4.12	-	-	4.12	-	-	5.72	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	1009	-	-	844	-	-	196	234	469	111	132	531
Stage 1	-	-	-	-	-	-	532	554	-	453	461	-
Stage 2	-	-	-	-	-	-	584	593	-	388	403	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1009	-	-	844	-	-	179	210	469	97	119	531
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	210	-	97	119	-
Stage 1	-	-	-	-	-	-	525	546	-	447	420	-
Stage 2	-	-	-	-	-	-	527	541	-	362	397	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			19.1			33.2		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	294	1009	-	-	844	-	-	141
HCM Lane V/C Ratio	0.135	0.008	-	-	0.06	-	-	0.096
HCM Control Delay (s)	19.1	8.6	0	-	9.5	0	-	33.2
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.3

2025 Build Traffic Volumes W/Approved Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	738	534	12	10	8
Future Volume (vph)	2	738	534	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	802	580	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	804	593	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.4%
Analysis Period (min)	15
	ICU Level of Service A

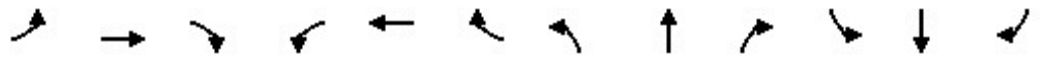
Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	738	534	12	10	8
Future Vol, veh/h	2	738	534	12	10	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	802	580	13	11	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	593	0	-	0	1393 587
Stage 1	-	-	-	-	587 -
Stage 2	-	-	-	-	806 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	983	-	-	-	156 510
Stage 1	-	-	-	-	556 -
Stage 2	-	-	-	-	439 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	983	-	-	-	155 510
Mov Cap-2 Maneuver	-	-	-	-	155 -
Stage 1	-	-	-	-	554 -
Stage 2	-	-	-	-	439 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.6
HCM LOS			C

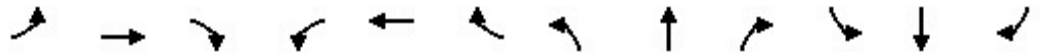
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	983	-	-	-	224
HCM Lane V/C Ratio	0.002	-	-	-	0.087
HCM Control Delay (s)	8.7	0	-	-	22.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Right Turn Lane) - Dean Hill Ave  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Future Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.981			0.981			0.850	
Flt Protected	0.950			0.950				0.991			0.993	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	0	1727	0	0	1833	1546
Flt Permitted	0.287			0.553				0.904			0.912	
Satd. Flow (perm)	517	1866	0	882	1797	0	0	1576	0	0	1684	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			7			7				274
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	416	286	60	49	284	42	47	179	36	24	143	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	416	346	0	49	326	0	0	262	0	0	167	274
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Right Turn Lane) (Peak PM Hb Ave)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	46.4	40.5		26.5	17.5			17.0			17.0	45.8
Actuated g/C Ratio	0.61	0.53		0.35	0.23			0.22			0.22	0.60
v/c Ratio	0.63	0.35		0.13	0.78			0.74			0.45	0.26
Control Delay	13.4	12.9		10.9	42.6			42.2			32.3	1.7
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	13.4	12.9		10.9	42.6			42.2			32.3	1.7
LOS	B	B		B	D			D			C	A
Approach Delay		13.2			38.5			42.2			13.3	
Approach LOS		B			D			D			B	
Queue Length 50th (ft)	83	91		7	135			108			66	0
Queue Length 95th (ft)	209	201		26	293			244			157	31
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	840	1365		461	762			691			734	1219
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.50	0.25		0.11	0.43			0.38			0.23	0.22

**Intersection Summary**

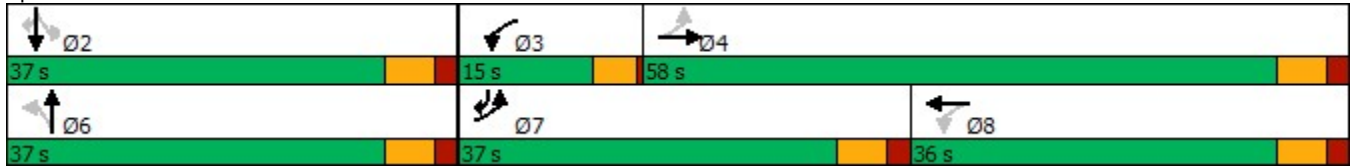
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	76.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.78
Intersection Signal Delay:	22.5
Intersection Capacity Utilization:	81.8%
Intersection LOS:	C
ICU Level of Service:	D



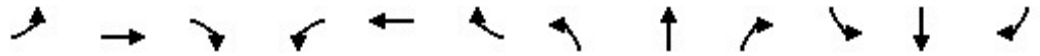
2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes ~~Peak PM Hb Ave~~)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue

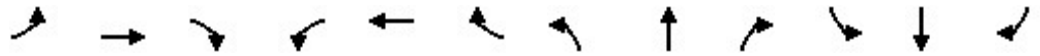


2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & All Approaches)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Future Volume (vph)	404	277	58	48	275	41	46	174	35	23	139	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.974			0.981			0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	1669	1724	0	1666	1743	1546
Flt Permitted	0.303			0.553			0.660			0.562	0.995	
Satd. Flow (perm)	545	1866	0	882	1797	0	1159	1724	0	985	1736	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			10				274
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	416	286	60	49	284	42	47	179	36	24	143	274
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	416	346	0	49	326	0	47	215	0	22	145	274
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & Right Turn Approaches)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



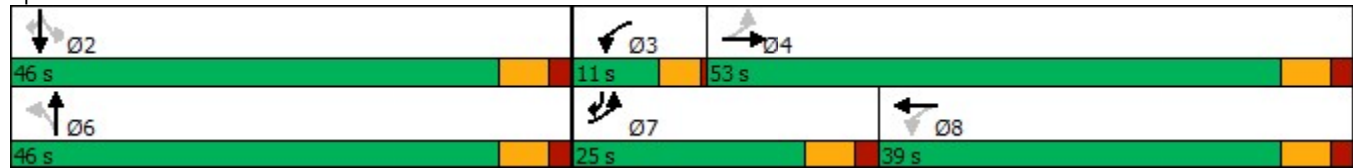
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	40.2	34.4		24.3	15.9		13.5	13.5		13.5	13.5	37.8
Actuated g/C Ratio	0.61	0.52		0.37	0.24		0.20	0.20		0.20	0.20	0.57
v/c Ratio	0.64	0.35		0.13	0.75		0.20	0.60		0.11	0.41	0.27
Control Delay	12.5	12.1		8.2	34.5		25.8	31.5		24.7	28.2	2.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	12.5	12.1		8.2	34.5		25.8	31.5		24.7	28.2	2.0
LOS	B	B		A	C		C	C		C	C	A
Approach Delay		12.3			31.1			30.5			11.7	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	71	82		6	117		16	76		7	53	0
Queue Length 95th (ft)	168	170		21	224		47	158		28	117	32
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	676	1366		404	925		720	1075		612	1079	1027
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.62	0.25		0.12	0.35		0.07	0.20		0.04	0.13	0.27

**Intersection Summary**

Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 66  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.75  
 Intersection Signal Delay: 18.6  
 Intersection Capacity Utilization 79.0%  
 Intersection LOS: B  
 ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



# Traffic Impact Study

## Appendix E | Accident Data

**TABLE A**  
**ACCIDENT SUMMARY - TOWN ACCIDENT DATA**  
**VARIOUS INTERSECTIONS IN THE TOWN OF YORKTOWN**

Node/Link	Location	Mile Marker	Date	Time	Traffic Control	Accident Class	# of Vehicles Injuries	Light Condition	Road Condition	Weather	Manner of Collision	Apparent Contributing Factors
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	09/22/19	04:30pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	OTHER	TURNING IMPROPER
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	07/24/19	12:45pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	OVERTAKING	PASSING OR LANE USAGE IMPROPERLY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	03/03/19	08:30am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	RIGHT ANGLE	TRAFFIC CONTROL DEVICES DISREGARDED
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	05/21/16	11:20am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLOUDY	UNKNOWN	NOT ENTERED
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	11/30/19	11:02pm	TRAFFIC SIGNAL	N/R	2-0	DARK-ROAD LIGHTED	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	06/03/19	04:45pm	TRAFFIC SIGNAL	I	2-1	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	10/30/18	06:24am	TRAFFIC SIGNAL	PDO	2-0	DAWN	DRY	CLEAR	RN (AGAINST OTH	FAILURE TO YIELD RIGHT OF WAY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	12/05/16	06:10pm	TRAFFIC SIGNAL	PDO & I	2-4	DARK-ROAD UNLIGHTED	DRY	CLOUDY	REAR END	DRIVER INATTENTION
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	11/14/19	08:23am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	10/18/19	03:32pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	HEAD ON	TURNING IMPROPER
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	09/27/19	07:35am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	12/14/18	04:06pm	TRAFFIC SIGNAL	PDO & I	2-1	DUSK	WET	CLOUDY	RN (AGAINST OTH	FAILURE TO YIELD RIGHT OF WAY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	10/07/18	04:30am	TRAFFIC SIGNAL	PDO	1-0	DARK-ROAD LIGHTED	WET	RAIN	OTHER	UNSAFE SPEED
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	09/09/18	01:45pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLOUDY	OTHER	TURNING IMPROPER
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	06/22/18	08:38am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLOUDY	REAR END	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	01/26/18	12:07pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	RN (AGAINST OTH	FAILURE TO YIELD RIGHT OF WAY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	01/03/18	08:11am	TRAFFIC SIGNAL	PDO	3-0	DAYLIGHT	DRY	CLEAR	OTHER	FOLLOWING TOO CLOSELY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	02/21/17	04:15pm	UNKNOWN	PDO	1-0	UNKNOWN	UNKNOWN	UNKNOWN	OTHER	NOT ENTERED
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	03/14/16	12:00am	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	WET	CLOUDY	REAR END	NOT ENTERED
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ UNDERHILL AVE	118 87011037	01/05/16	05:02pm	TRAFFIC SIGNAL	PDO	2-0	DARK-ROAD LIGHTED	DRY	CLEAR	RIGHT ANGLE	UNSAFE SPEED
ROUTE 118/SAW MILL RIVER ROAD	SAW MILL RIVER RD	118 87011038	09/24/17	04:29pm	TRAFFIC SIGNAL	PDO & I	2-3	DAYLIGHT	DRY	CLEAR	UNKNOWN	FAILURE TO YIELD RIGHT OF WAY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	11/11/16	03:36pm	TRAFFIC SIGNAL	PDO & I	2-1	DAYLIGHT	DRY	CLEAR	UNKNOWN	TURNING IMPROPER
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	09/26/19	05:55pm	TRAFFIC SIGNAL	PDO & I	2-1	DAYLIGHT	WET	CLEAR	OTHER	PASSING OR LANE USAGE IMPROPERLY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ KEAR ST	118 87011039	01/08/18	06:06pm	TRAFFIC SIGNAL	PDO	2-0	DARK-ROAD UNLIGHTED	WET	T/HAIL/FREEZING	REAR END	NOT APPLICABLE
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	01/01/18	10:18pm	NONE	PDO & I	1-1	DARK-ROAD UNLIGHTED	DRY	CLEAR	OTHER	FATIGUED/DROWSY
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	10/20/17	11:45am	TRAFFIC SIGNAL	I	2-1	DAYLIGHT	DRY	CLEAR	UNKNOWN	OTHER (VEHICLE)
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	01/18/17	06:19pm	TRAFFIC SIGNAL	PDO & I	1-1	DARK-ROAD UNLIGHTED	WET	CLOUDY	OTHER	NOT APPLICABLE
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ KEAR ST	118 87011039	12/16/16	09:10pm	TRAFFIC SIGNAL	PDO	2-0	DARK-ROAD LIGHTED	DRY	CLEAR	URN (WITH OTHI	NOT APPLICABLE
ROUTE 118/SAW MILL RIVER ROAD	AT INT. W/ ALLAN AVE	118 87011039	02/27/16	02:00pm	TRAFFIC SIGNAL	PDO & I	2-2	DAYLIGHT	WET	RAIN	RIGHT ANGLE	NOT ENTERED

TABLE A (Continued)

ACCIDENT SUMMARY - TOWN ACCIDENT DATA  
VARIOUS INTERSECTIONS IN THE TOWN OF YORKTOWN

Node/Link	Location	Mile Marker	Date	Time	Traffic Control	Accident Class	# of Vehicles Injuries	Light Condition	Road Condition	Weather	Manner of Collision	Apparent Contributing Factors
OVERHILL ST	OVERHILL ST		08/01/20	08:00pm	NONE	N/R	1-0	DAYLIGHT	DRY	CLEAR	OTHER	TURNING IMPROPER
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		11/24/19	11:22am	NONE	PDO	2-0	DAYLIGHT	WET	RAIN	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ CARDINAL CT		08/22/19	02:52pm	TRAFFIC SIGNAL	N/R	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		06/30/19	02:53pm	NONE	PDO & I	2-1	DAYLIGHT	WET	RAIN	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ CARDINAL CT		05/22/19	03:34pm	NONE	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		03/05/19	04:48pm	TRAFFIC SIGNAL	PDO	2-0	DUSK	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		01/10/19	04:17pm	NONE	PDO	2-0	DAYLIGHT	DRY	CLEAR	IN (AGAINST OT)	GLARE
UNDERHILL AVE	AT INT. W/ FRENCH HILL RD		09/05/18	05:35pm	STOP SIGN	PDO & I	2-1	DAYLIGHT	DRY	CLEAR	IN (AGAINST OT)	FAILURE TO YIELD RIGHT OF WAY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		06/29/18	06:58pm	NONE	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ FRENCH HILL RD		06/12/18	06:18pm	NONE	PDO & I	3-1	DAYLIGHT	DRY	CLEAR	OTHER	DRIVER INATTENTION
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		03/09/18	08:40pm	NONE	PDO	2-0	DARK-ROAD UNLIGHTED	WET	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		12/22/17	05:25pm	NONE	PDO	3-0	DARK-ROAD LIGHTED	WET	CLOUDY	OTHER	ALCOHOL INVOLVEMENT
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		09/26/17	03:32pm	NONE	PDO & I	3-1	DAYLIGHT	DRY	CLEAR	OTHER	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		05/30/17	03:58pm	NO PASSING ZONE	PDO & I	3-3	DAYLIGHT	DRY	CLEAR	OTHER	NOT APPLICABLE
UNDERHILL AVE	AT INT. W/ OVERHILL ST		05/17/17	03:55pm	NOT ENTERED	N/R	2-0	NOT ENTERED	NOT ENTERED	NOT ENTERED	NOT ENTERED	UNKNOWN
UNDERHILL AVE	AT INT. W/ ROCHAMBEAU DR		02/04/17	12:46pm	NONE	PDO	3-0	DAYLIGHT	DRY	CLEAR	OTHER	FOLLOWING TOO CLOSELY
UNDERHILL AVE	AT INT. W/ OVERHILL ST		11/18/16	08:40pm	NONE	PDO	2-0	DARK-ROAD LIGHTED	DRY	CLEAR	UNKNOWN	PASSING OR LANE USAGE IMPROPERLY
UNDERHILL AVE	AT INT. W/ FRENCH HILL RD		10/18/16	01:50pm	NONE	PDO	2-0	DAYLIGHT	DRY	CLEAR	IN (AGAINST OT)	NOT ENTERED
UNDERHILL AVE	AT INT. W/ CARDINAL CT		03/03/16	04:52pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	UNDERHILL AVE		01/16/20	04:44pm	TRAFFIC SIGNAL	PDO	3-0	DARK-ROAD UNLIGHTED	DRY	CLEAR	OTHER	NOT APPLICABLE
UNDERHILL AVE	UNDERHILL AVE		10/04/19	03:20pm	NONE	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	UNDERHILL AVE		01/09/18	04:31pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	WET	CLEAR	REAR END	FOLLOWING TOO CLOSELY
UNDERHILL AVE	UNDERHILL AVE		02/14/17	02:00pm	TRAFFIC SIGNAL	PDO	2-0	DAYLIGHT	DRY	CLEAR	REAR END	DRIVER INATTENTION
UNDERHILL AVE	UNDERHILL AVE		04/15/16	04:25pm	TRAFFIC SIGNAL	PDO & I	3-1	DAYLIGHT	DRY	CLEAR	OTHER	NOT ENTERED

# Accident Location Information System(ALIS)

Date:  
11/19/2020  
11:15:51 AM

## Accident Verbal Description

17720\_VDR

Date in this report covers the period - 1/1/2016-11/18/2020

Complete Accident data from NYSDMV is only available thru 1/31/2020 12:00:00 AM

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
AT INTERSECTION WITH [Route] 118

**1/5/2016** Tue 17:02 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2016-36068501**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: RIGHT ANGLE Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DARK-ROAD LIGHTED  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3571 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 44 Sex: M Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 3873 State of Registration: NY  
Num of Occupants: 2 Driver's Age: 19 Sex: M Citation Issued: N  
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT ENTERED, UNSAFE SPEED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: SAW MILL RIVER RD  
AT INTERSECTION WITH ALLAN AVE

**2/27/2016** Sat 14:00 PM Persons Killed: 0 Persons Injured: 2 Extent of Injuries: BC **Case: 2016-36132694**  
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: SUFFOLK CO PD YAPHANK Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: RIGHT ANGLE Weather: RAIN  
Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 4235 State of Registration: NY  
Num of Occupants: 6 Driver's Age: 67 Sex: M Citation Issued: Y  
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED, FAILURE TO YIELD RIGHT OF WAY

Veh :1 CAR/VAN/PICKUP Registered Weight: 5093 State of Registration: NY  
Num of Occupants: 2 Driver's Age: 44 Sex: F Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
AT INTERSECTION WITH [Route] 118

**3/14/2016** Mon 00:00 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2016-36155970**  
Accident Class: PROPERTY DAMAGE Police Agency: Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: REAR END Weather: CLOUDY  
Road Surface Condition: WET Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 OTHER Registered Weight: State of Registration: -3  
Num of Occupants: 1 Driver's Age: 38 Sex: M Citation Issued: N  
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER



Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 4584 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 49 Sex: M Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: SLOWED OR STOPPING  
 Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: [Route] 118  
 AT INTERSECTION WITH UNDERHILL AVE

**5/21/2016** Sat 11:20 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: **2016-36316333**  
 Accident Class: PROPERTY DAMAGE Police Agency: Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: UNKNOWN Weather: CLOUDY  
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3345 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 32 Sex: F Citation Issued: N  
 Direction of Travel: SOUTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: MAKING RIGHT TURN  
 Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :2 CAR/VAN/PICKUP Registered Weight: 3350 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 74 Sex: F Citation Issued: N  
 Direction of Travel: SOUTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: [Route] 118  
 AT INTERSECTION WITH ALLAN AVE

**11/11/2016** Fri 15:36 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: **2016-36484530**  
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: UNKNOWN Weather: CLEAR  
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3235 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 54 Sex: F Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 2687 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 19 Sex: F Citation Issued: N  
 Direction of Travel: SOUTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: TURNING IMPROPER, NOT ENTERED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: STATE HWY 118  
 AT INTERSECTION WITH UNDERHILL AVE

**12/5/2016** Mon 18:10 PM Persons Killed: 0 Persons Injured: 4 Extent of Injuries: CCCC Case: **2016-36525240**  
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: TARRYTOWN VILLAGE PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: REAR END Weather: CLOUDY  
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3310 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 54 Sex: F Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER

Pre-Accd Action: GOING STRAIGHT AHEAD

Apparent Factors: DRIVER INATTENTION, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3640 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 58 Sex: M Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH Kear St

**12/16/2016** Fri 21:10 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2016-36561778**  
 Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: RIGHT TURN (WITH OTHER CAR) Weather: CLEAR  
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3032 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 78 Sex: F Citation Issued: Y  
 Direction of Travel: NORTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: MAKING RIGHT TURN  
 Apparent Factors: NOT APPLICABLE, TURNING IMPROPER

Veh :1 CAR/VAN/PICKUP Registered Weight: 4285 State of Registration: NY  
 Num of Occupants: 2 Driver's Age: 56 Sex: M Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH ALLAN AVE

**1/18/2017** Wed 18:19 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: A **Case: 2017-36584832**  
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: YORKTOWN TOWN PD Num of Veh: 1  
 Type Of Accident: COLLISION WITH PEDESTRIAN Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER Weather: CLOUDY  
 Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: PED/BICYCLIST AT INTERSECTION Action of Ped/Bicycle: CROSSING/ NO SIGNAL OR CROSSWALK

Veh :2 PEDESTRIAN Registered Weight: State of Registration: -3  
 Num of Occupants: 1 Driver's Age: 32 Sex: F Citation Issued: N  
 Direction of Travel: NOT APPLICABLE Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: NOT APPLICABLE  
 Apparent Factors: NOT APPLICABLE, PEDESTRIAN'S ERROR/CONFUSION

Veh :1 CAR/VAN/PICKUP Registered Weight: 3030 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 69 Sex: M Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**2/21/2017** Tue 16:15 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2017-36645999**  
 Accident Class: PROPERTY DAMAGE Police Agency: Num of Veh: 1  
 Type Of Accident: COLLISION WITH DEER Traffic Control: UNKNOWN  
 Manner of Collision: OTHER Weather: UNKNOWN  
 Road Surface Condition: UNKNOWN Road Char.: UNKNOWN Light Condition: UNKNOWN  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 4237 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 62 Sex: F Citation Issued: N

Direction of Travel: UNKNOWN      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: SLOWED OR STOPPING  
 Apparent Factors: NOT ENTERED, NOT ENTERED

County: Westchester    Muni: Yorktown(T)    Ref. Marker: 118 87011038    Street: SAW MILL RIVER RD  
 122 Meters North of Underhill Ave

**9/24/2017**    Sun 16:29 PM    Persons Killed: 0    Persons Injured: 3    Extent of Injuries: BCC    **Case: 2017-36907054**  
 Accident Class: PROPERTY DAMAGE AND INJURY    Police Agency: YORKTOWN TOWN PD    Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE    Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: UNKNOWN    Weather: CLEAR  
 Road Surface Condition: DRY    Road Char.: STRAIGHT AND LEVEL    Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE    Action of Ped/Bicycle: NOT APPLICABLE

Veh :1    CAR/VAN/PICKUP    Registered Weight: 2864    State of Registration: NY  
 Num of Occupants: 2    Driver's Age: 33    Sex: F    Citation Issued: N  
 Direction of Travel: SOUTH-WEST    Public Property Damage: OTHER    School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

Veh :2    CAR/VAN/PICKUP    Registered Weight: 3830    State of Registration: NY  
 Num of Occupants: 1    Driver's Age: 61    Sex: M    Citation Issued: N  
 Direction of Travel: NORTH-WEST    Public Property Damage: OTHER    School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

County: Westchester    Muni: Yorktown(T)    Ref. Marker: 118 87011039    Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH ALLAN AVE

**10/20/2017**    Fri 11:45 AM    Persons Killed: 0    Persons Injured: 1    Extent of Injuries: A    **Case: 2017-36949337**  
 Accident Class: INJURY    Police Agency: YORKTOWN TOWN PD    Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE    Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: UNKNOWN    Weather: CLEAR  
 Road Surface Condition: DRY    Road Char.: STRAIGHT AND LEVEL    Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE    Action of Ped/Bicycle: NOT APPLICABLE

Veh :1    CAR/VAN/PICKUP    Registered Weight: 3180    State of Registration: NY  
 Num of Occupants: 1    Driver's Age: 26    Sex: F    Citation Issued: N  
 Direction of Travel: NORTH-WEST    Public Property Damage: OTHER    School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: OTHER (VEHICLE), NOT APPLICABLE

Veh :2    MOTORCYCLE    Registered Weight: 498    State of Registration: NY  
 Num of Occupants: 1    Driver's Age: 29    Sex: M    Citation Issued: N  
 Direction of Travel: NORTH    Public Property Damage: OTHER    School Bus Involved: OTHER  
 Pre-Accd Action: OVERTAKING  
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, TRAFFIC CONTROL DEVICES DISREGARDED

County: Westchester    Muni: Yorktown(T)    Ref. Marker: 118 87011039    Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH KEAR ST

**1/8/2018**    Mon 18:06 PM    Persons Killed: 0    Persons Injured: 0    Extent of Injuries:    **Case: 2018-37102950**  
 Accident Class: PROPERTY DAMAGE    Police Agency: YORKTOWN TOWN PD    Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE    Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: REAR END    Weather: SLEET/HAIL/FREEZING RAIN  
 Road Surface Condition: WET    Road Char.: STRAIGHT AND LEVEL    Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE    Action of Ped/Bicycle: NOT APPLICABLE

Veh :1    TRUCK    Registered Weight: 19500    State of Registration: NY  
 Num of Occupants: 1    Driver's Age: 30    Sex: M    Citation Issued: N  
 Direction of Travel: NORTH    Public Property Damage: OTHER    School Bus Involved: OTHER  
 Pre-Accd Action: UNKNOWN  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2    CAR/VAN/PICKUP    Registered Weight: 3384    State of Registration: NY  
 Num of Occupants: 1    Driver's Age: 20    Sex: M    Citation Issued: N

Direction of Travel: NORTH      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH SAW MILL RIVER RD

**1/3/2018** Wed 08:11 AM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:      **Case: 2018-37104713**  
 Accident Class: PROPERTY DAMAGE      Police Agency: YORKTOWN TOWN PD      Num of Veh: 3  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE      Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER      Weather: CLEAR  
 Road Surface Condition: DRY      Road Char.: STRAIGHT/ GRADE      Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :3      CAR/VAN/PICKUP      Registered Weight: 4268      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 38      Sex: F      Citation Issued: N  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight:      State of Registration: CT  
 Num of Occupants: 2      Driver's Age: 48      Sex: M      Citation Issued: N  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: FOLLOWING TOO CLOSELY, DRIVER INATTENTION

Veh :2      CAR/VAN/PICKUP      Registered Weight:      State of Registration: MN  
 Num of Occupants: 1      Driver's Age: 55      Sex: M      Citation Issued: N  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH ALLAN AVE

**1/1/2018** Mon 22:18 PM      Persons Killed: 0      Persons Injured: 1      Extent of Injuries: B      **Case: 2018-37116460**  
 Accident Class: PROPERTY DAMAGE AND INJURY      Police Agency: YONKERS CITY PD      Num of Veh: 1  
 Type Of Accident: COLLISION WITH TREE      Traffic Control: NONE  
 Manner of Collision: OTHER      Weather: CLEAR  
 Road Surface Condition: DRY      Road Char.: STRAIGHT AND LEVEL      Light Condition: DARK-ROAD UNLIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 4233      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 21      Sex: M      Citation Issued: N  
 Direction of Travel: NORTH      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: FATIGUED/DROWSY, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH SAW MILL RIVER RD

**1/26/2018** Fri 12:07 PM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:      **Case: 2018-37129498**  
 Accident Class: PROPERTY DAMAGE      Police Agency: YORKTOWN TOWN PD      Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE      Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: LEFT TURN (AGAINST OTHER CAR)      Weather: CLEAR  
 Road Surface Condition: DRY      Road Char.: STRAIGHT AND LEVEL      Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 5308      State of Registration: NY  
 Num of Occupants: 2      Driver's Age: 43      Sex: M      Citation Issued: N  
 Direction of Travel: WEST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2      CAR/VAN/PICKUP      Registered Weight: 2448      State of Registration: NY

Num of Occupants: 1                      Driver's Age: 69                      Sex: F                      Citation Issued: N  
 Direction of Travel: NORTH-EAST                      Public Property Damage: OTHER                      School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**6/22/2018**      Fri 08:38 AM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:      **Case: 2018-37343983**  
 Accident Class: PROPERTY DAMAGE      Police Agency: YORKTOWN TOWN PD      Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE      Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: REAR END      Weather: CLOUDY  
 Road Surface Condition: DRY      Road Char.: STRAIGHT/ GRADE      Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 3605      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 27      Sex: M      Citation Issued: N  
 Direction of Travel: WEST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2      CAR/VAN/PICKUP      Registered Weight: 3147      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 55      Sex: F      Citation Issued: N  
 Direction of Travel: WEST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**9/9/2018**      Sun 13:45 PM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:      **Case: 2018-37471083**  
 Accident Class: PROPERTY DAMAGE      Police Agency: YORKTOWN TOWN PD      Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE      Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER      Weather: CLOUDY  
 Road Surface Condition: DRY      Road Char.: STRAIGHT/ GRADE      Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :2      CAR/VAN/PICKUP      Registered Weight: 3513      State of Registration: NY  
 Num of Occupants: 2      Driver's Age: 84      Sex: F      Citation Issued: N  
 Direction of Travel: SOUTH-EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: TURNING IMPROPER, NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 4169      State of Registration: NY  
 Num of Occupants: 2      Driver's Age: 41      Sex: M      Citation Issued: N  
 Direction of Travel: WEST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**10/7/2018**      Sun 04:30 AM      Persons Killed: 0      Persons Injured: 0      Extent of Injuries:      **Case: 2018-37518828**  
 Accident Class: PROPERTY DAMAGE      Police Agency: YORKTOWN TOWN PD      Num of Veh: 1  
 Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE      Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER      Weather: RAIN  
 Road Surface Condition: WET      Road Char.: STRAIGHT/ GRADE      Light Condition: DARK-ROAD LIGHTED  
 Loc. of Ped/Bicycle: NOT APPLICABLE      Action of Ped/Bicycle: NOT APPLICABLE

Veh :1      CAR/VAN/PICKUP      Registered Weight: 3208      State of Registration: NY  
 Num of Occupants: 1      Driver's Age: 26      Sex: M      Citation Issued: N  
 Direction of Travel: EAST      Public Property Damage: OTHER      School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: UNSAFE SPEED, PAVEMENT SLIPPERY

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: SAW MILL RIVER RD  
AT INTERSECTION WITH UNDERHILL AVE

**10/30/2018** Tue 06:24 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37558731**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAWN  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3929 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 38 Sex: M Citation Issued: N  
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: CT  
Num of Occupants: 1 Driver's Age: 21 Sex: M Citation Issued: Y  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
AT INTERSECTION WITH SAW MILL RIVER RD

**12/14/2018** Fri 16:06 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: B **Case: 2018-37645644**  
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLOUDY  
Road Surface Condition: WET Road Char.: STRAIGHT/ GRADE Light Condition: DUSK  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3360 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 67 Sex: F Citation Issued: N  
Direction of Travel: SOUTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 4322 State of Registration: NY  
Num of Occupants: 2 Driver's Age: 63 Sex: F Citation Issued: N  
Direction of Travel: NORTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: MAKING LEFT TURN  
Apparent Factors: NOT APPLICABLE, FAILURE TO YIELD RIGHT OF WAY

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: [Route] 118  
AT INTERSECTION WITH UNDERHILL AVE

**3/3/2019** Sun 08:30 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-37793596**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: RIGHT ANGLE Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: State of Registration: NY  
Num of Occupants: 1 Driver's Age: 52 Sex: M Citation Issued: N  
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT ENTERED, NOT ENTERED

Veh :1 CAR/VAN/PICKUP Registered Weight: 3015 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 67 Sex: F Citation Issued: N  
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED, NOT ENTERED

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: SAW MILL RIVER RD  
AT INTERSECTION WITH UNDERHILL AVE

**6/3/2019** Mon 16:45 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C **Case: 2019-37912565**  
Accident Class: INJURY Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: REAR END Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3292 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 18 Sex: M Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3135 State of Registration: NY  
Num of Occupants: 2 Driver's Age: 26 Sex: M Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: [Route] 118  
AT INTERSECTION WITH UNDERHILL AVE

**7/24/2019** Wed 12:45 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-37993043**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: OVERTAKING Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3758 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 70 Sex: F Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: STARTING IN TRAFFIC  
Apparent Factors: NOT APPLICABLE, PASSING OR LANE USAGE IMPROPERLY

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: NJ  
Num of Occupants: 1 Driver's Age: 51 Sex: F Citation Issued: N  
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: [Route] 118  
AT INTERSECTION WITH UNDERHILL AVE

**9/22/2019** Sun 16:30 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-38088324**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: OTHER Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 2697 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 28 Sex: M Citation Issued: N  
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3846 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 73 Sex: F Citation Issued: N  
Direction of Travel: SOUTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: MAKING LEFT TURN

Apparent Factors: NOT APPLICABLE, TURNING IMPROPER

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011039 Street: SAW MILL RIVER RD  
 AT INTERSECTION WITH ALLAN AVE

**9/26/2019** Thu 17:55 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C **Case: 2019-38092114**  
 Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: OTHER Weather: CLEAR  
 Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3475 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 23 Sex: M Citation Issued: N  
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, PASSING OR LANE USAGE IMPROPERLY

Veh :2 CAR/VAN/PICKUP Registered Weight: 2612 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 46 Sex: F Citation Issued: N  
 Direction of Travel: NORTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**9/27/2019** Fri 07:35 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-38098075**  
 Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: REAR END Weather: CLEAR  
 Road Surface Condition: DRY Road Char.: STRAIGHT AT HILLCREST Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3368 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 57 Sex: F Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: SLOWED OR STOPPING  
 Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3556 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 51 Sex: F Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: STOPPED IN TRAFFIC  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
 AT INTERSECTION WITH [Route] 118

**10/18/2019** Fri 15:32 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-38130226**  
 Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
 Manner of Collision: HEAD ON Weather: CLEAR  
 Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 4101 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 63 Sex: M Citation Issued: N  
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: GOING STRAIGHT AHEAD  
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 TRUCK Registered Weight: 54000 State of Registration: NY  
 Num of Occupants: 1 Driver's Age: 53 Sex: M Citation Issued: N  
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER  
 Pre-Accd Action: MAKING LEFT TURN



Apparent Factors: NOT APPLICABLE, TURNING IMPROPER

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: UNDERHILL AVE  
AT INTERSECTION WITH SAW MILL RIVER RD

**11/14/2019** Thu 08:23 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-38171817**  
Accident Class: PROPERTY DAMAGE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: REAR END Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 3589 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 51 Sex: F Citation Issued: N  
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: SLOWED OR STOPPING  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 4237 State of Registration: NY  
Num of Occupants: 1 Driver's Age: 22 Sex: F Citation Issued: N  
Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: SLOWED OR STOPPING  
Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

County: Westchester Muni: Yorktown(T) Ref. Marker: 118 87011037 Street: SAW MILL RIVER RD  
AT INTERSECTION WITH UNDERHILL AVE

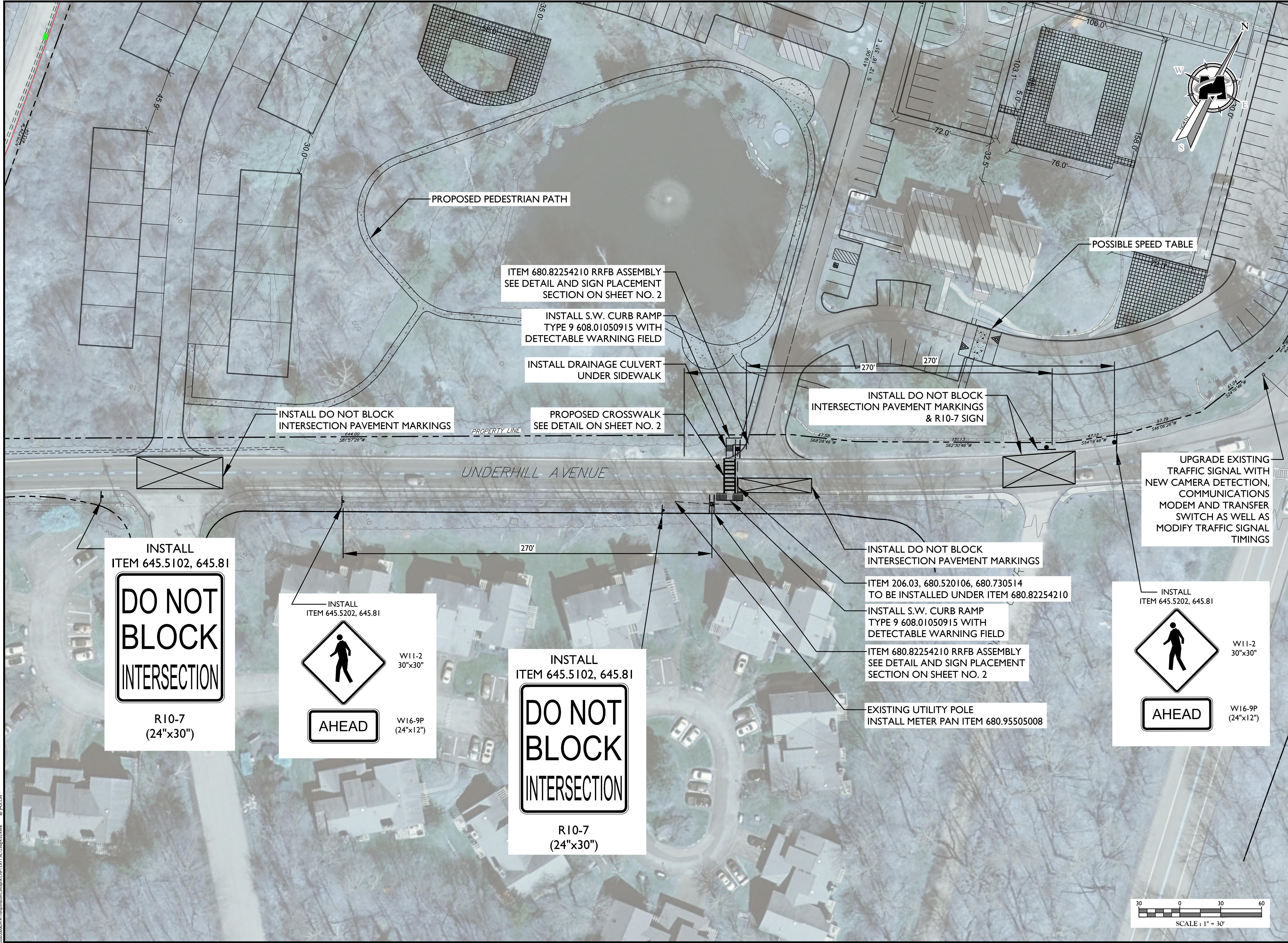
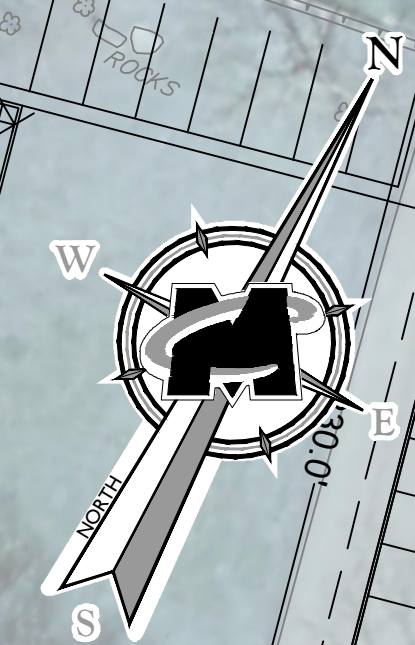
**11/30/2019** Sat 23:02 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2019-38201765**  
Accident Class: NON-REPORTABLE Police Agency: YORKTOWN TOWN PD Num of Veh: 2  
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL  
Manner of Collision: REAR END Weather: CLEAR  
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED  
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: NY  
Num of Occupants: 4 Driver's Age: 44 Sex: M Citation Issued: N  
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: STOPPED IN TRAFFIC  
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: State of Registration: NY  
Num of Occupants: 2 Driver's Age: 24 Sex: M Citation Issued: N  
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER  
Pre-Accd Action: GOING STRAIGHT AHEAD  
Apparent Factors: NOT APPLICABLE, FOLLOWING TOO CLOSELY

# Traffic Impact Study

## Appendix F | Proposed Traffic and Pedestrian Improvement Plans



REV	DATE	DRAWN BY	DESCRIPTION	ADDITIONAL DIBS NOTE
1	12/22	JFK		

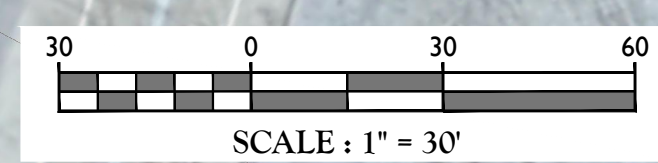
**PRELIMINARY**

CONCEPTUAL IMPROVEMENT PLAN  
 FOR  
 UNDERHILL FARM  
  
 NYS ROUTE 118 &  
 UNDERHILL AVENUE  
 TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK

WESTCHESTER OFFICE  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	1/5/21	P.W.G.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	R-CNPT-LAYT-ALT2		

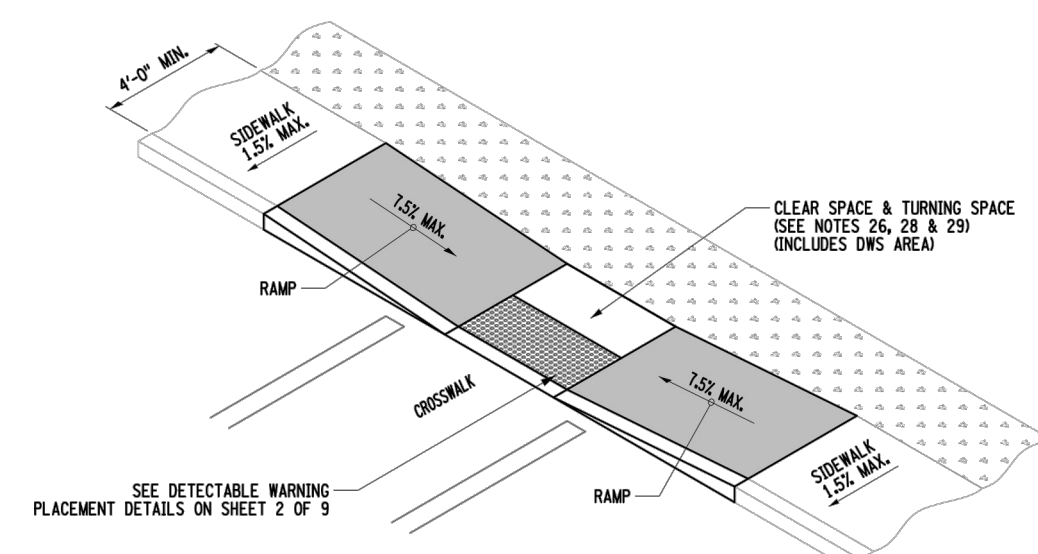
SHEET TITLE:  
**PEDESTRIAN RRFB ACCOMMODATION PLAN**



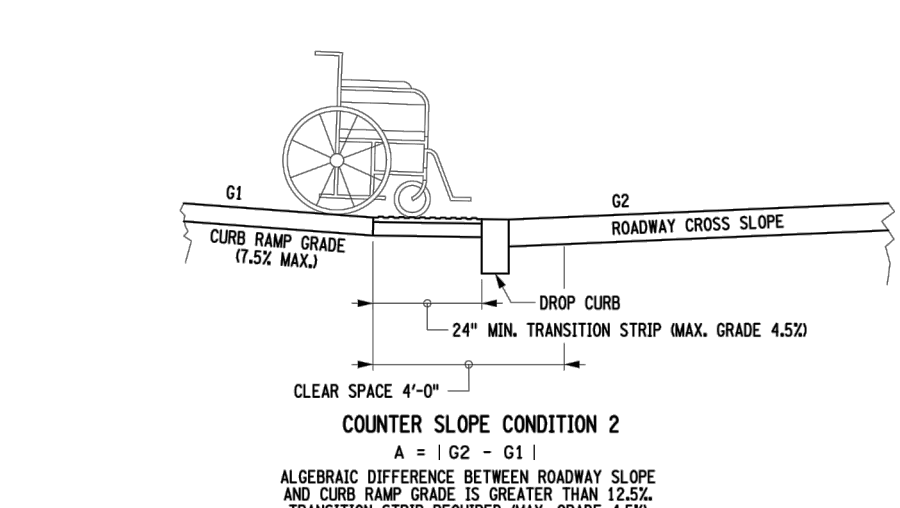
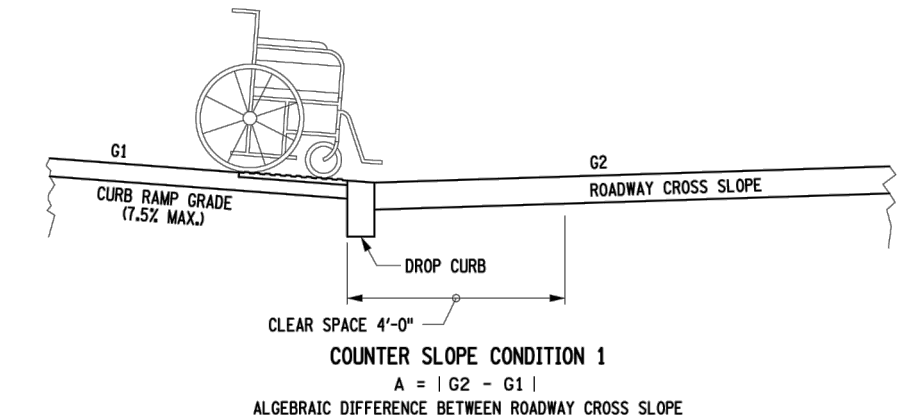
2023/06/06/VA/Traffic/Concept/CNPT-LAYT-ALT2.dwg 03.8188 B. BLACON

REV	DATE	DRAWN BY	DESCRIPTION

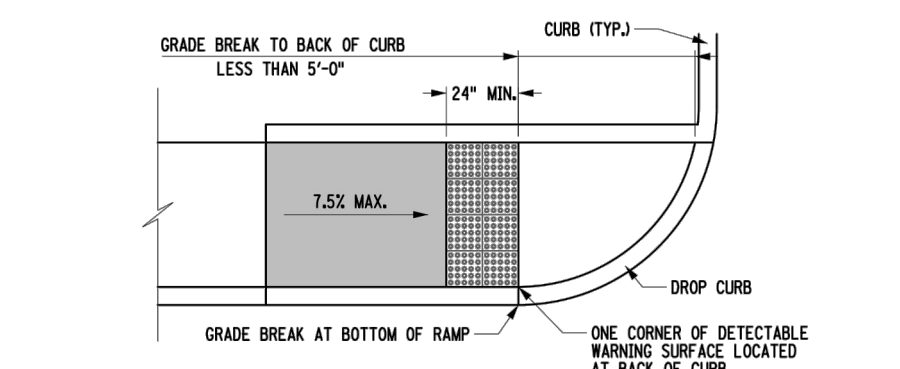
- SIDEWALK AND CURB RAMP DETAIL NOTES:**
- WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TURNING SPACE SHALL BE PROVIDED AT THE BASE OR THE TOP OF CURB RAMP AS APPLICABLE. TURNING SPACES SHALL BE PERMITTED TO OVERLAP CLEAR SPACES.
  - TURNING SPACES SHALL NOT BE DESIGNED WITH CROSS SLOPE GREATER THAN 1.5% IN ANY DIRECTION, WHILE PROVIDING POSITIVE DRAINAGE. THE MAXIMUM CROSS SLOPE FOR WORK ACCEPTANCE IS 2.0%. A NONSTANDARD FEATURE JUSTIFICATION IS REQUIRED WHERE TURNING SPACES EXCEED 2.0% IN ANY DIRECTION.
  - BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4'-0" X 4'-0" MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN CROSSWALK, AND OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. THE CLEAR SPACE MAY OVERLAP TURNING SPACES, DETECTABLE WARNING SURFACES, AND DROP CURBS.



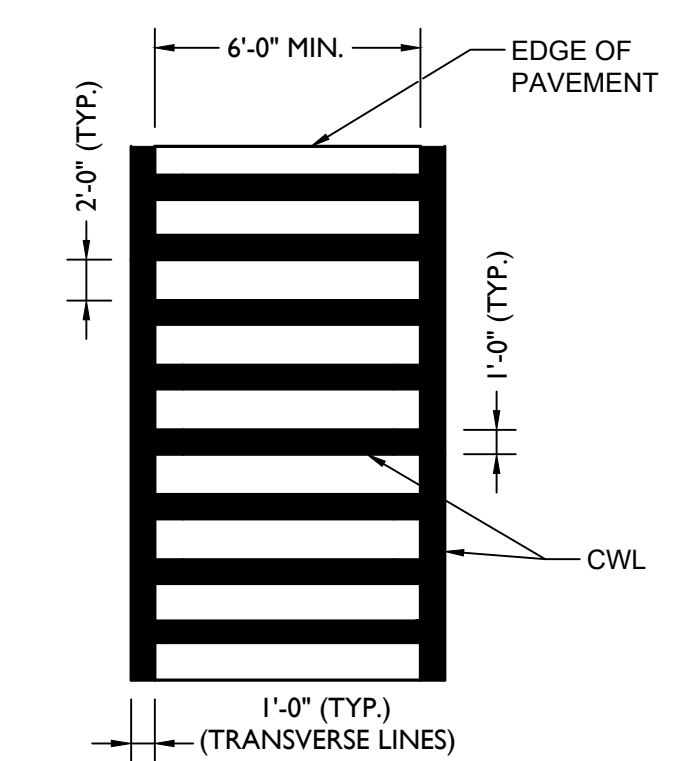
**CURB RAMP CONFIGURATION: TYPE 9  
MID BLOCK CROSSING OR T- INTERSECTION**  
NOT TO SCALE



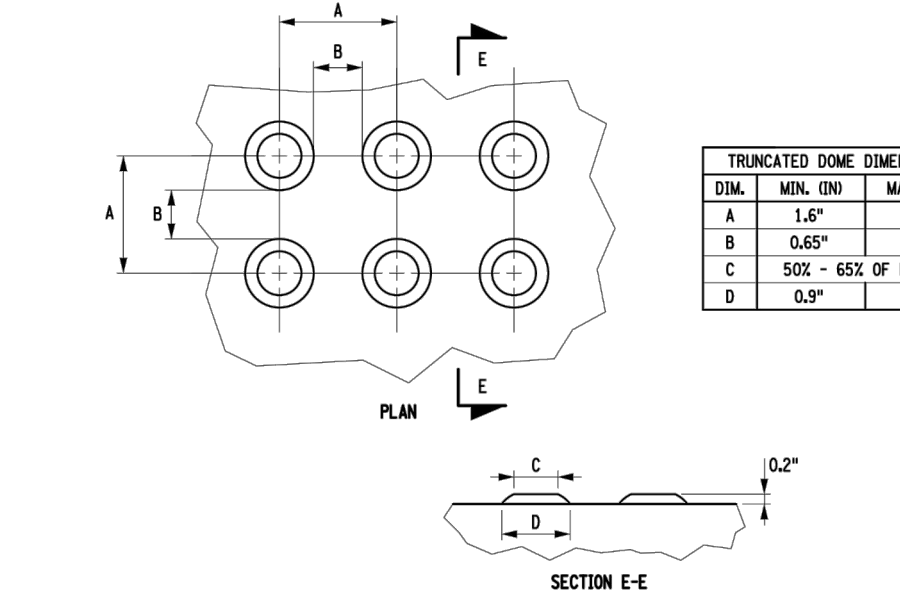
**COUNTER SLOPE CONDITIONS**  
NOT TO SCALE



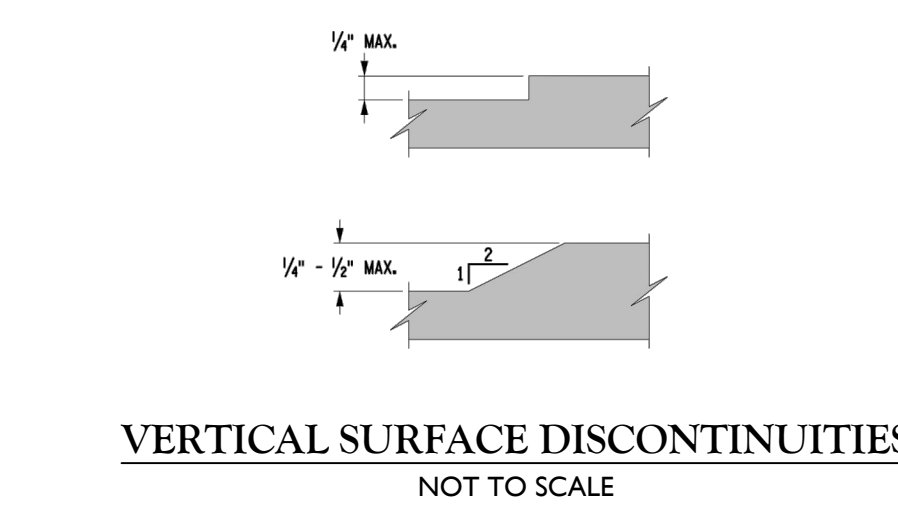
**DETECTABLE WARNING FIELD PLACEMENT  
OPTION 2**  
NOT TO SCALE



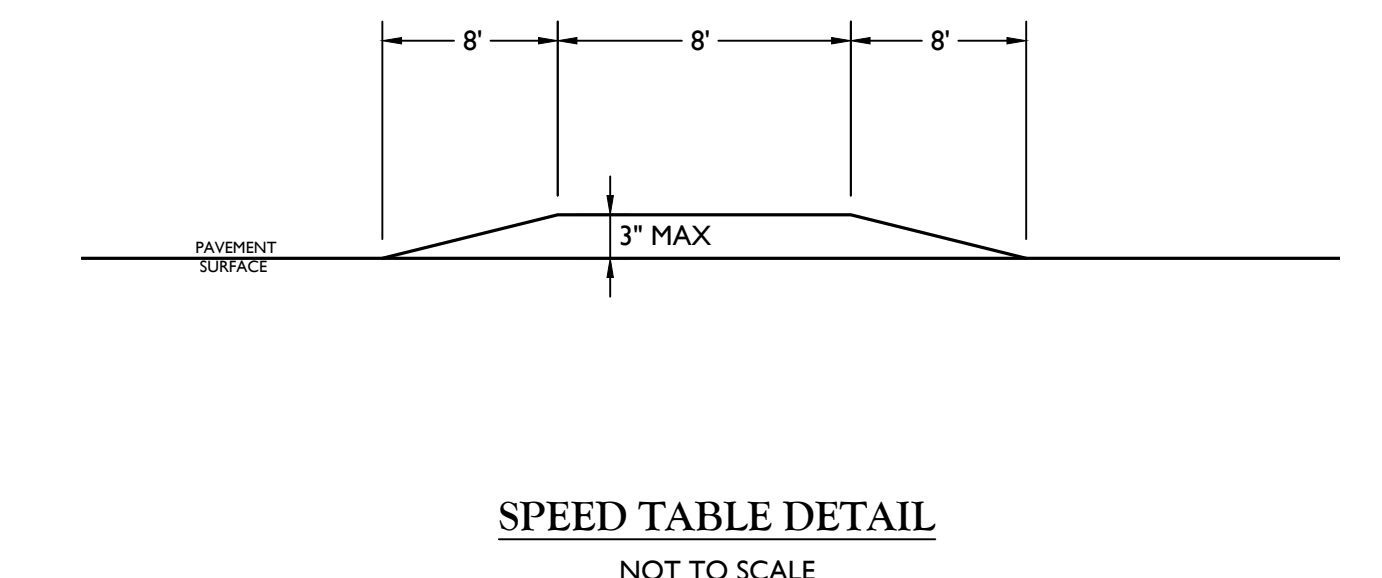
**STRIPING LEGEND**  
CWL - SOLID WHITE CROSSWALK LINE 12" (ITEM 685.11)



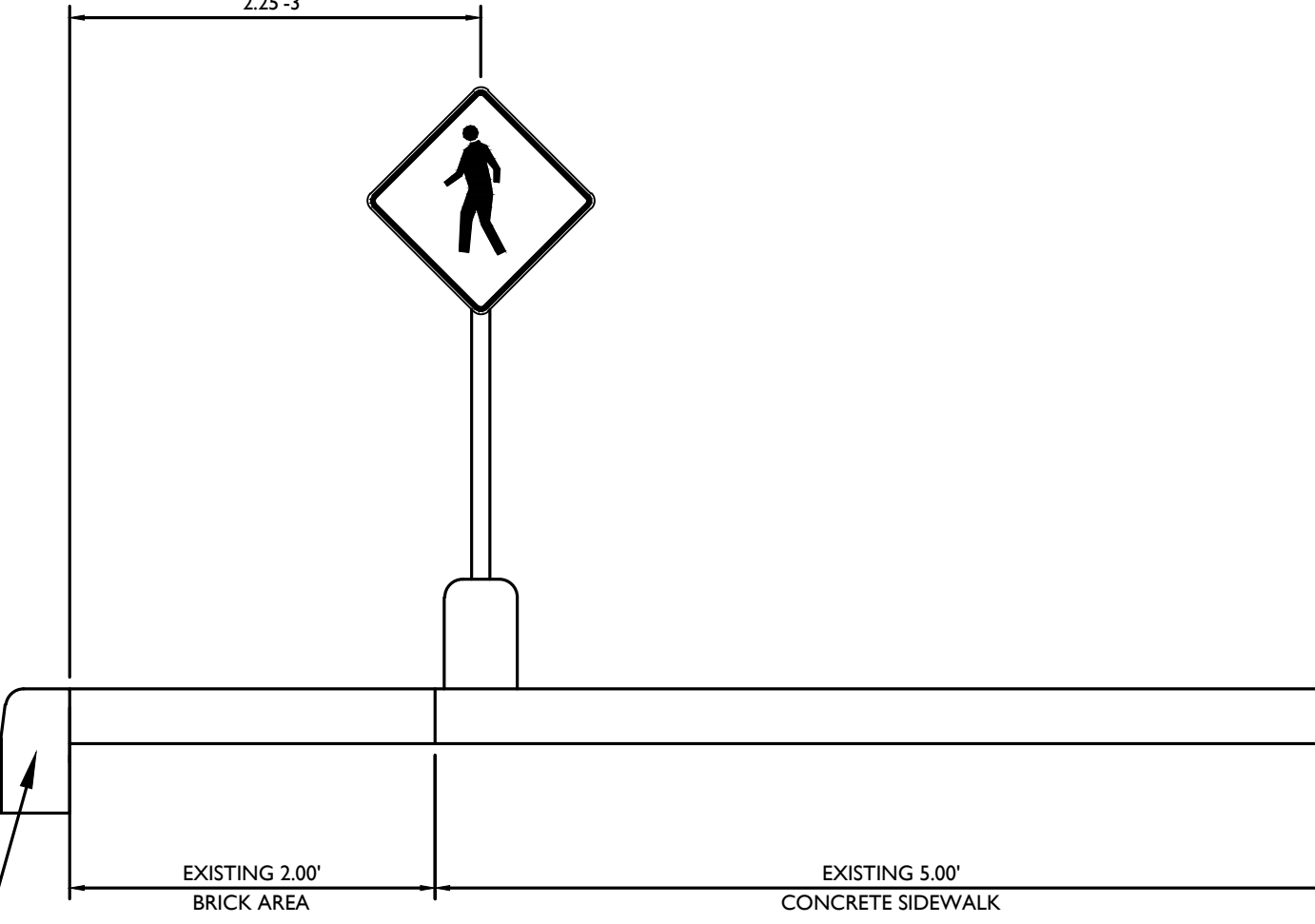
**DETECTABLE WARNING DOME DETAIL**  
NOT TO SCALE



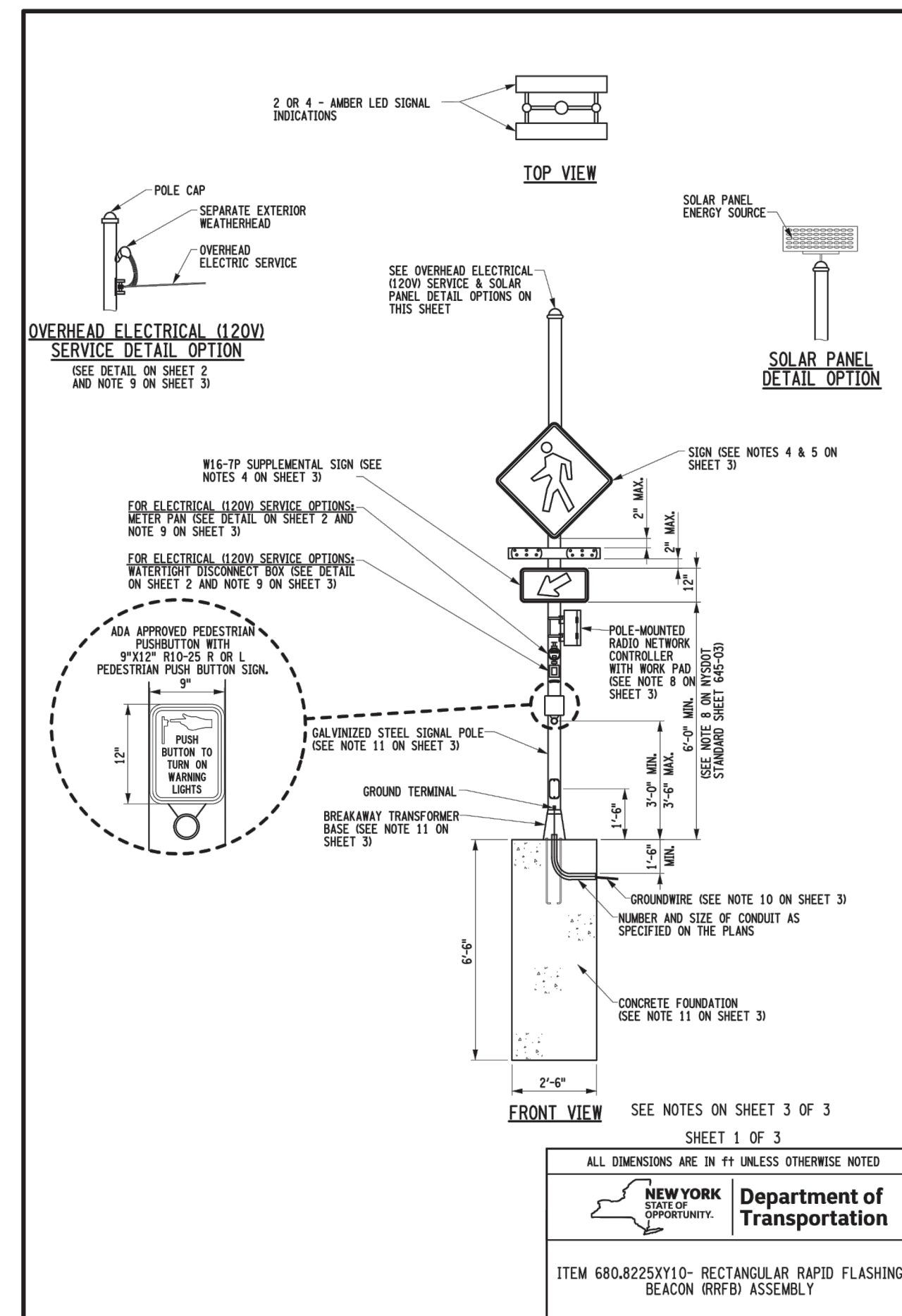
**VERTICAL SURFACE DISCONTINUITIES**  
NOT TO SCALE



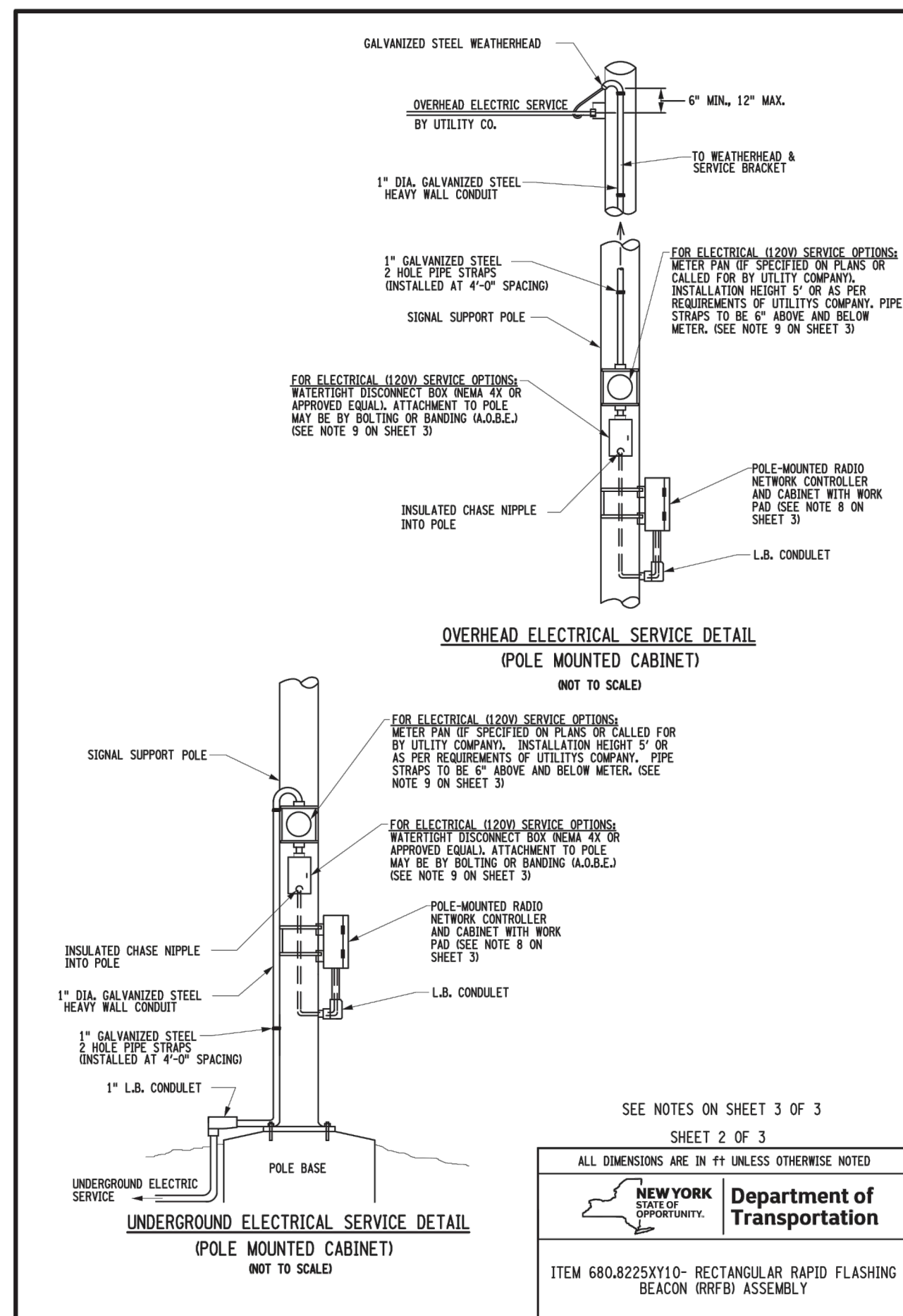
**SPEED TABLE DETAIL**  
NOT TO SCALE



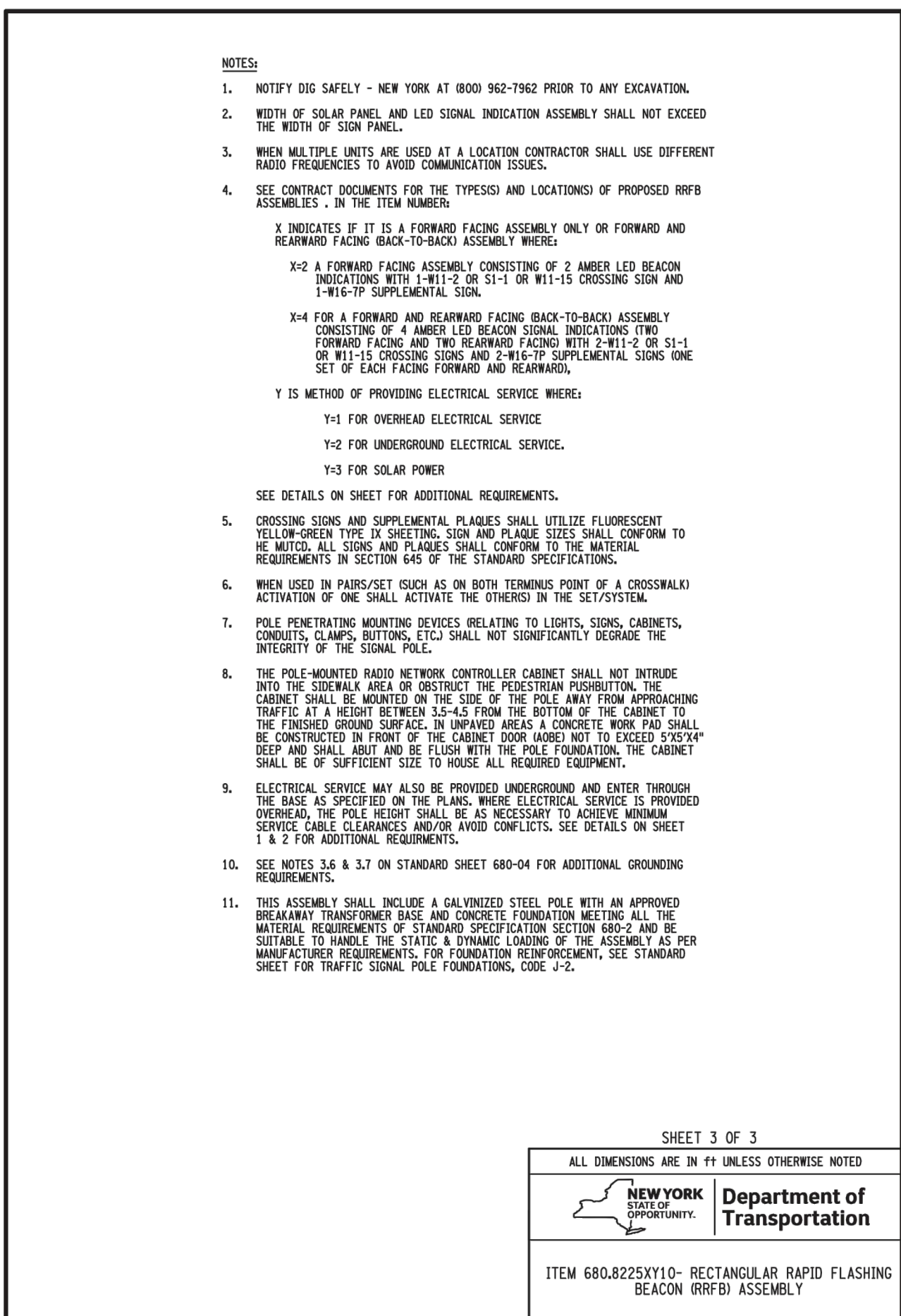
**SIGN PLACEMENT SECTION**  
NOT TO SCALE



SHEET 1 OF 3  
 ALL DIMENSIONS ARE IN FT UNLESS OTHERWISE NOTED  
  
**Department of Transportation**  
 ITEM 680.8225XY10- RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY



SHEET 2 OF 3  
 ALL DIMENSIONS ARE IN FT UNLESS OTHERWISE NOTED  
  
**Department of Transportation**  
 ITEM 680.8225XY10- RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY

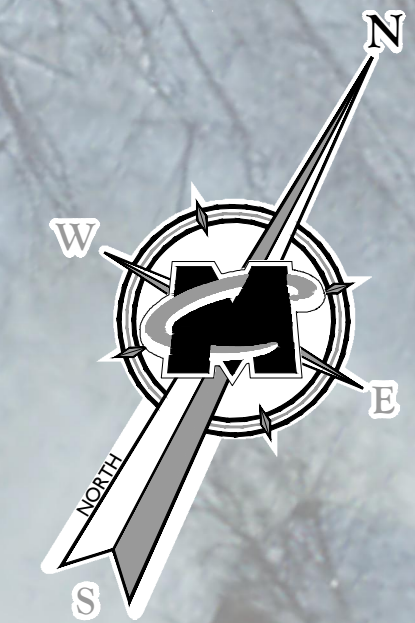
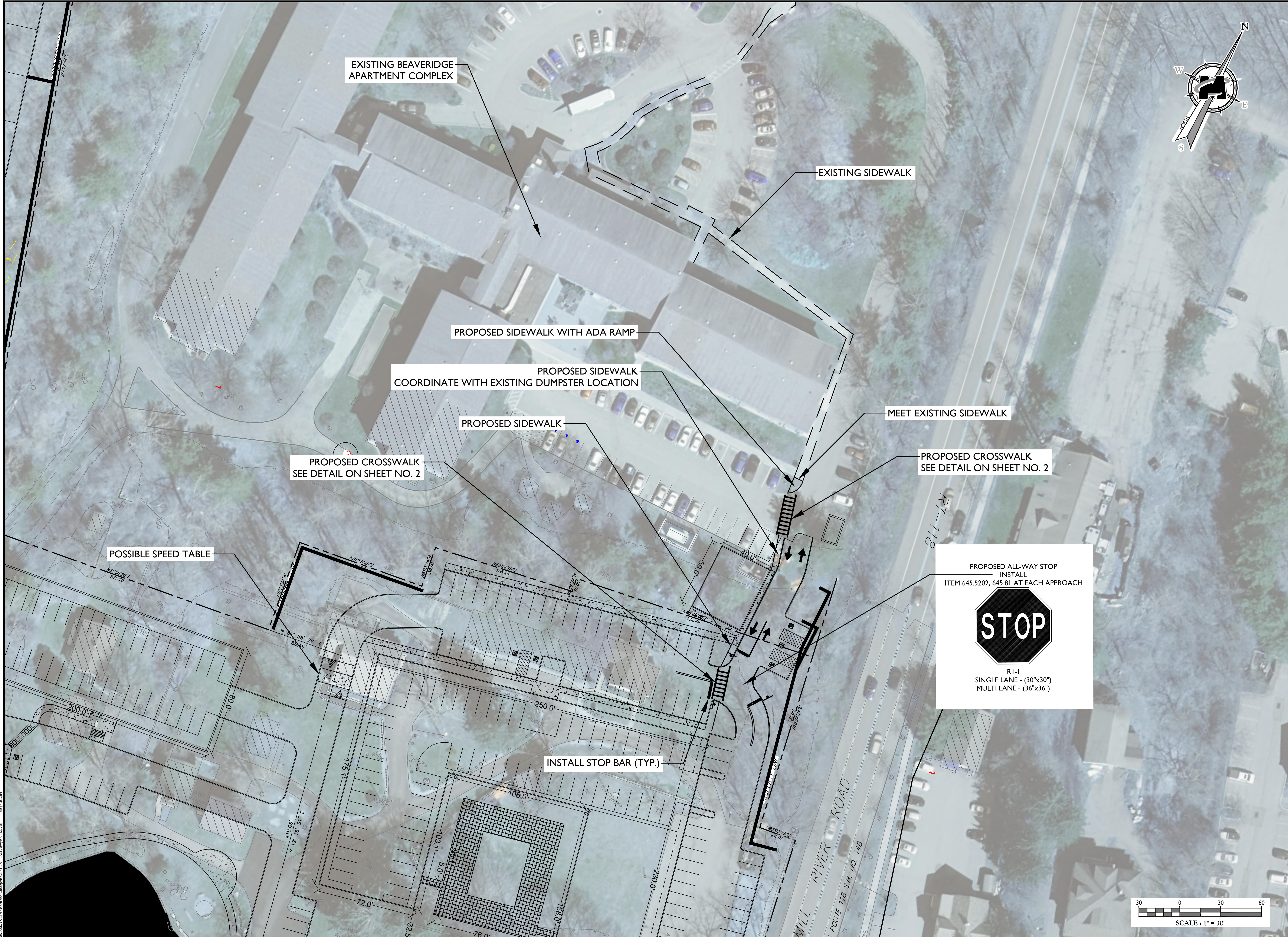


**PRELIMINARY**

**PRELIMINARY CONCEPT PLAN**  
 FOR  
**UNDERHILL FARM**  
 NYS ROUTE 118 &  
 UNDERHILL AVENUE  
 TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK

**WESTCHESTER OFFICE**  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	1/5/21	P.W.G.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:	SHEET TITLE:	
20006297A	R-DTLS	DETAILS	



**MASER CONSULTING**  
 WILL BE KNOWN AS COLLIER ENGINEERING & DESIGN IN 2021  
 Customer Loyalty through Client Satisfaction  
 www.maserconsulting.com

Office Locations:

- NEW JERSEY
- NEW YORK
- PENNSYLVANIA
- VIRGINIA
- FLORIDA
- NORTH CAROLINA
- SOUTH CAROLINA
- NEW MEXICO
- MARYLAND
- GEORGIA
- TEXAS
- TENNESSEE
- COLORADO

Copyright © 2022. Maser Consulting. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were constructed or to whom it is certified. This drawing may not be copied, re-used, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting.

**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV.	DATE	DRAWN BY	DESCRIPTION

**PRELIMINARY**

CONCEPTUAL  
 IMPROVEMENT PLANS  
 FOR  
 UNDERHILL FARM

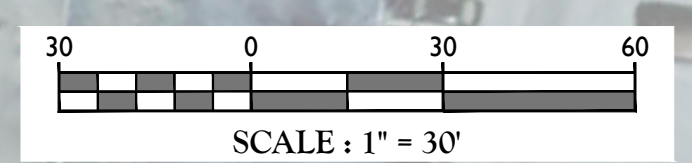
NYS ROUTE 118 &  
 UNDERHILL AVENUE

TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK

**MASER CONSULTING** WESTCHESTER OFFICE  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	1/5/21	P.W.G.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	R-CNPT-LAYT-ALT2		

PEDESTRIAN  
 ACCOMMODATION PLAN



# Traffic Impact Study

## Appendix G | Potential Future Intersection Improvement Plans



**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV.	DATE	DRAWN BY	DESCRIPTION

**PRELIMINARY**

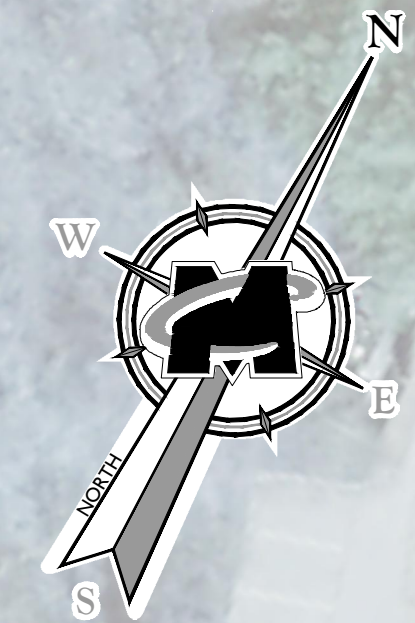
**FUTURE INTERSECTION IMPROVEMENT PLAN**  
**ALTERNATE 1**  
**NYS ROUTE 118 & UNDERHILL AVENUE**  
**TOWN OF YORKTOWN WESTCHESTER COUNTY NEW YORK**

**WESTCHESTER OFFICE**  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

SCALE AS SHOWN	DATE 1/5/21	DRAWN BY P.W.G.	CHECKED BY P.J.G.
PROJECT NUMBER 20006297A	DRAWING NAME R-CNPT-LAYT		

**ALTERNATE INTERSECTION IMPROVEMENT PLAN**

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



**MASER CONSULTING**  
 WILL BE KNOWN AS COLLERS ENGINEERING & DESIGN IN 2021  
 Customer Loyalty through Client Satisfaction  
 www.maserconsulting.com  
 Office Locations:

■ NEW JERSEY	■ NEW MEXICO
■ NEW YORK	■ MARYLAND
■ PENNSYLVANIA	■ GEORGIA
■ VIRGINIA	■ TEXAS
■ FLORIDA	■ TENNESSEE
■ NORTH CAROLINA	■ COLORADO
■ SOUTH CAROLINA	

Copyright © 2022, Maser Consulting. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting.

**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

**PRELIMINARY**

FUTURE INTERSECTION IMPROVEMENT PLAN  
**ALTERNATE 2**  
 NYS ROUTE 118 & UNDERHILL AVENUE  
 TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK

**WESTCHESTER OFFICE**  
 400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 Fax: 914.347.7266

SCALE: AS SHOWN	DATE: 1/5/21	DRAWN BY: P.W.G.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A	DRAWING NAME: R-CNPT-LAYT-ALT2		

SHEET TITLE:  
**PHASE 2 INTERSECTION IMPROVEMENT PLAN (ALTERNATE 2)**  
 SHEET NUMBER:  
 2 of 2



NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

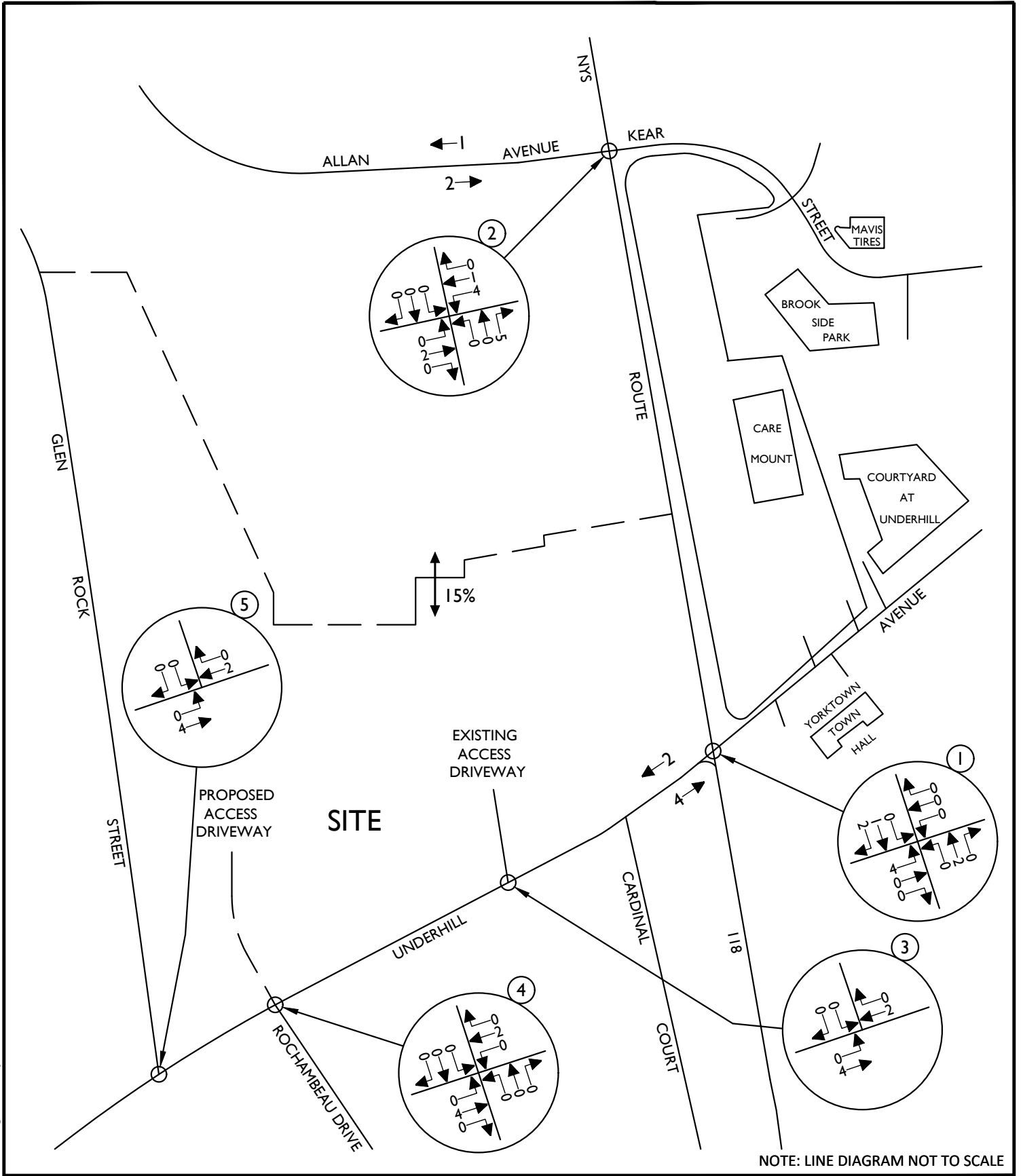


# Traffic Impact Study

## Appendix H | Analysis with Potential Future Other Development Traffic

# Figures

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg(30) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

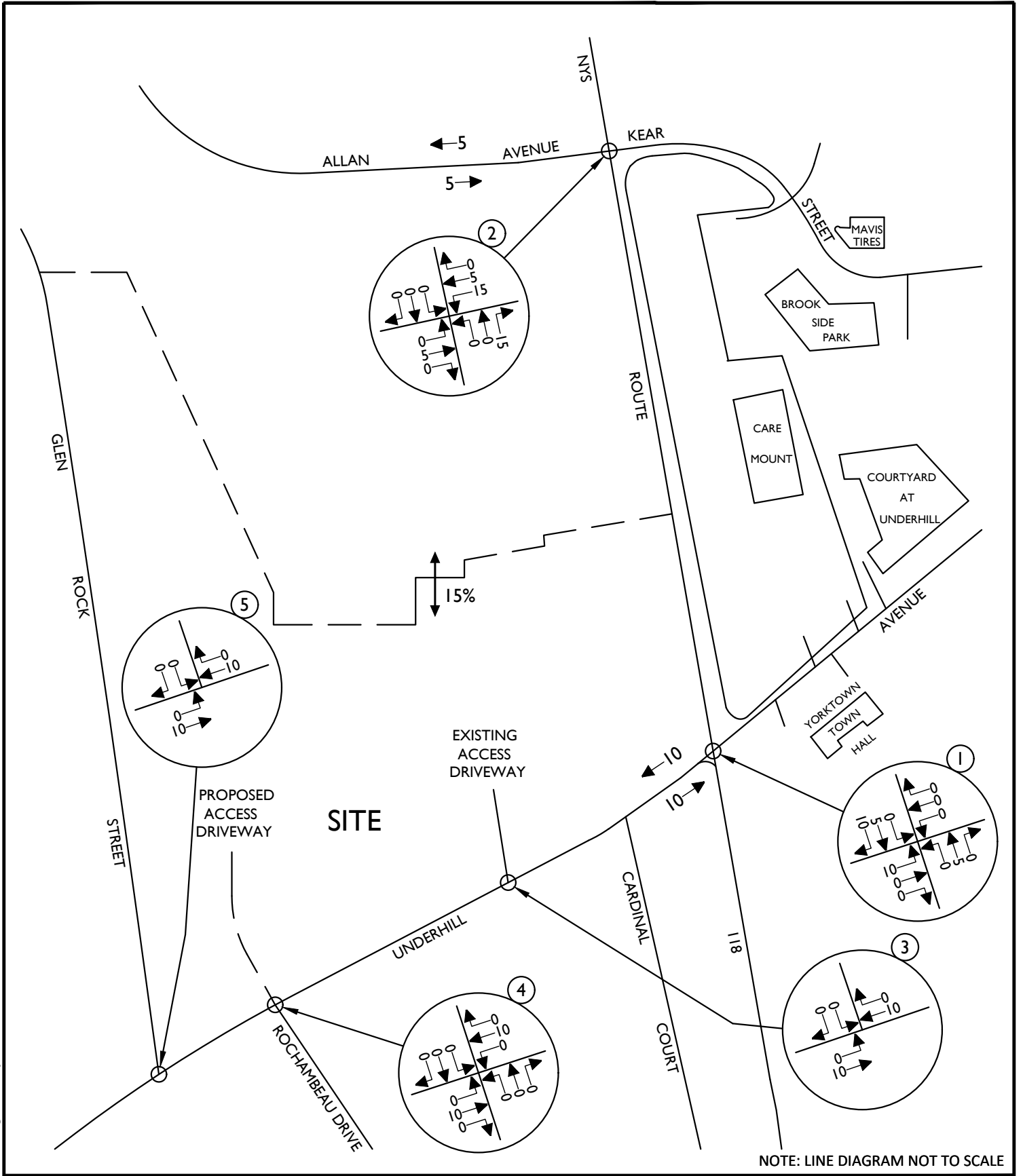
SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A	DRAWING NAME: 230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
UNOCCUPIED FORMER TURCO'S  
(POTENTIAL)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY AM PEAK HOUR

SHEET NUMBER:

30

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg(31) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

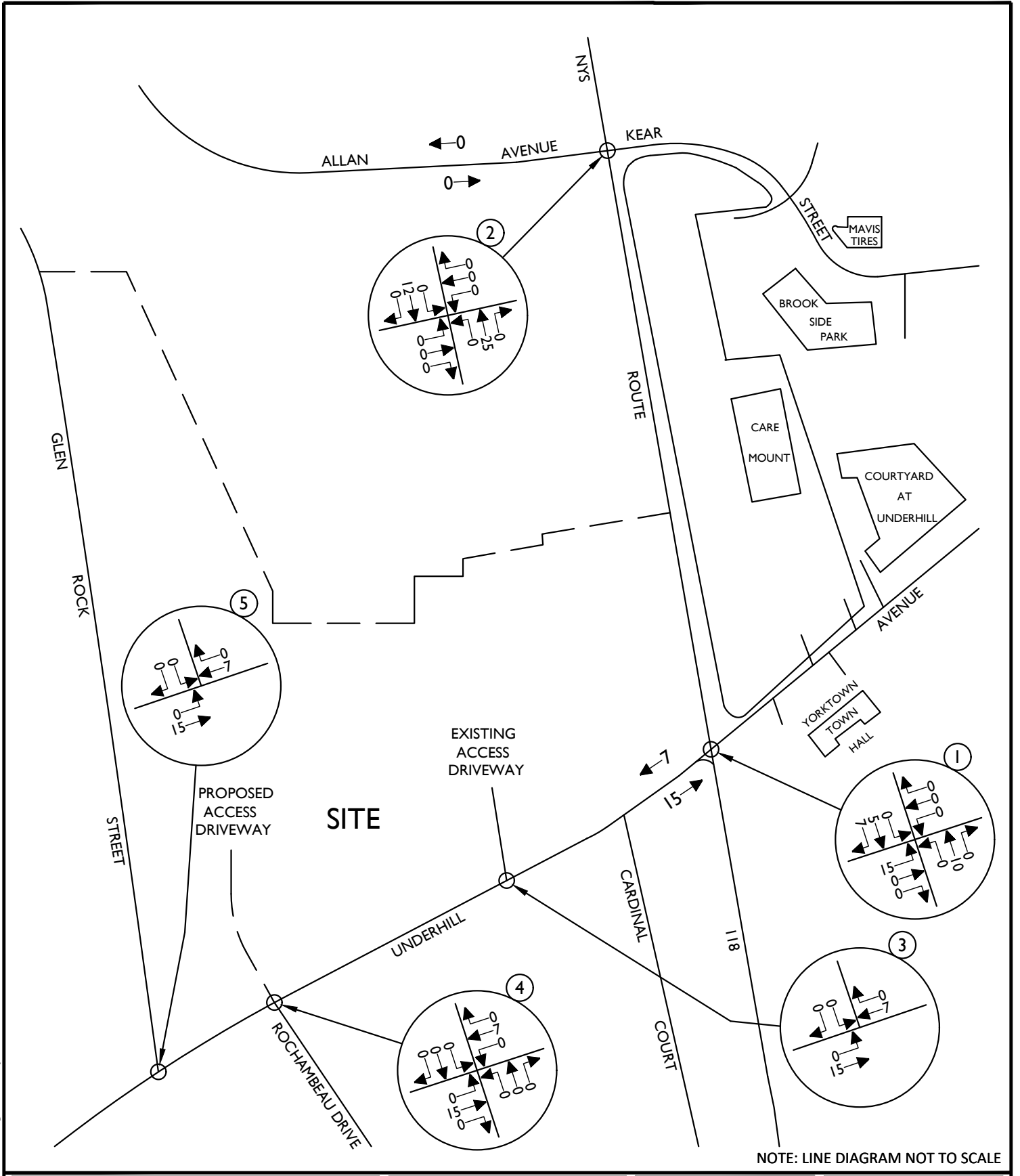
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
UNOCCUPIED FORMER TURCO'S  
(POTENTIAL)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PM PEAK HOUR

SHEET NUMBER:

31

VAcPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(3)2 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

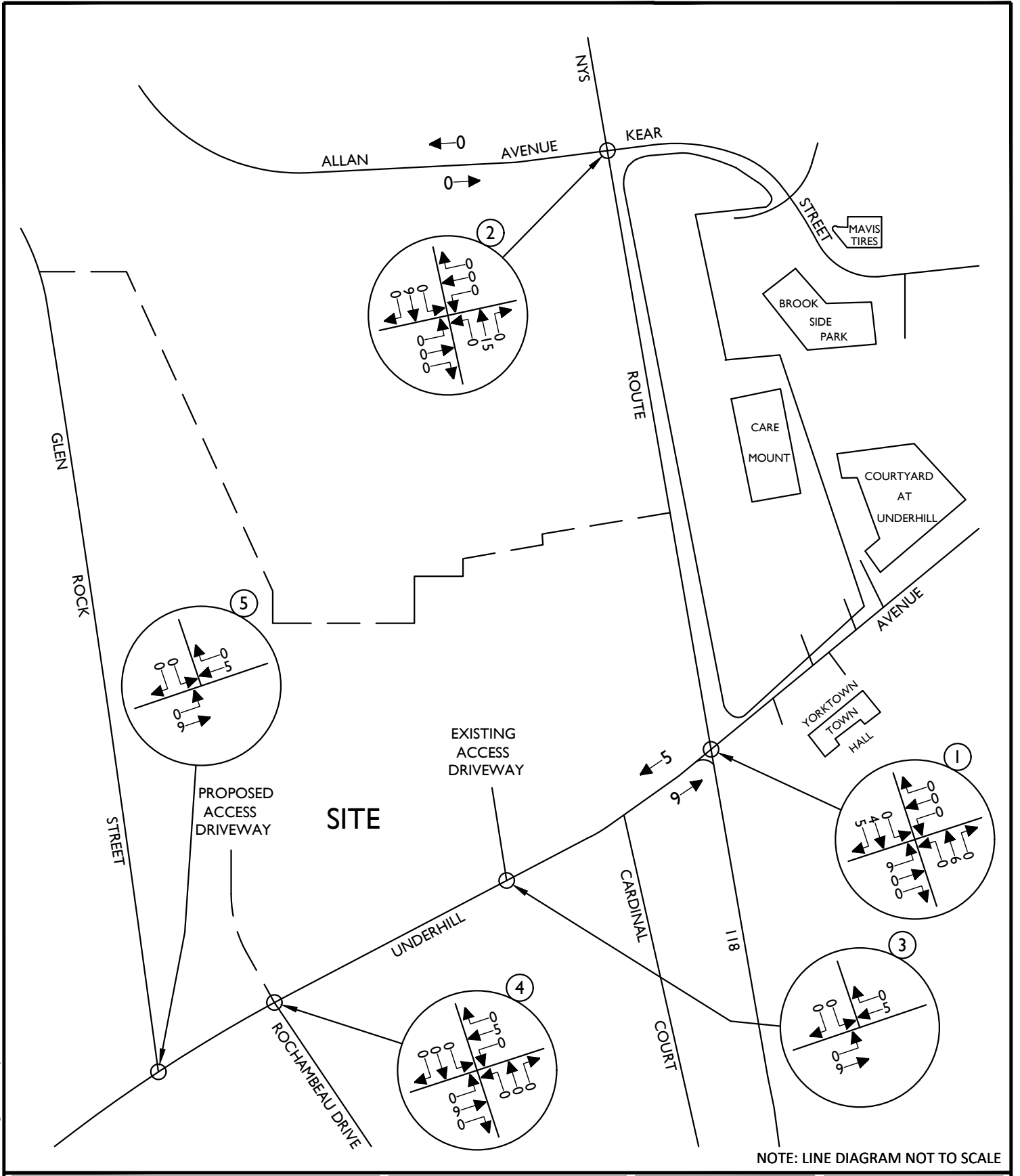
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
ROMA BUILDING REDEVELOPMENT  
(POTENTIAL)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

32

VAcpublish\_305201230326RGD\_FIGURE\_EX-BD.dwg(33) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

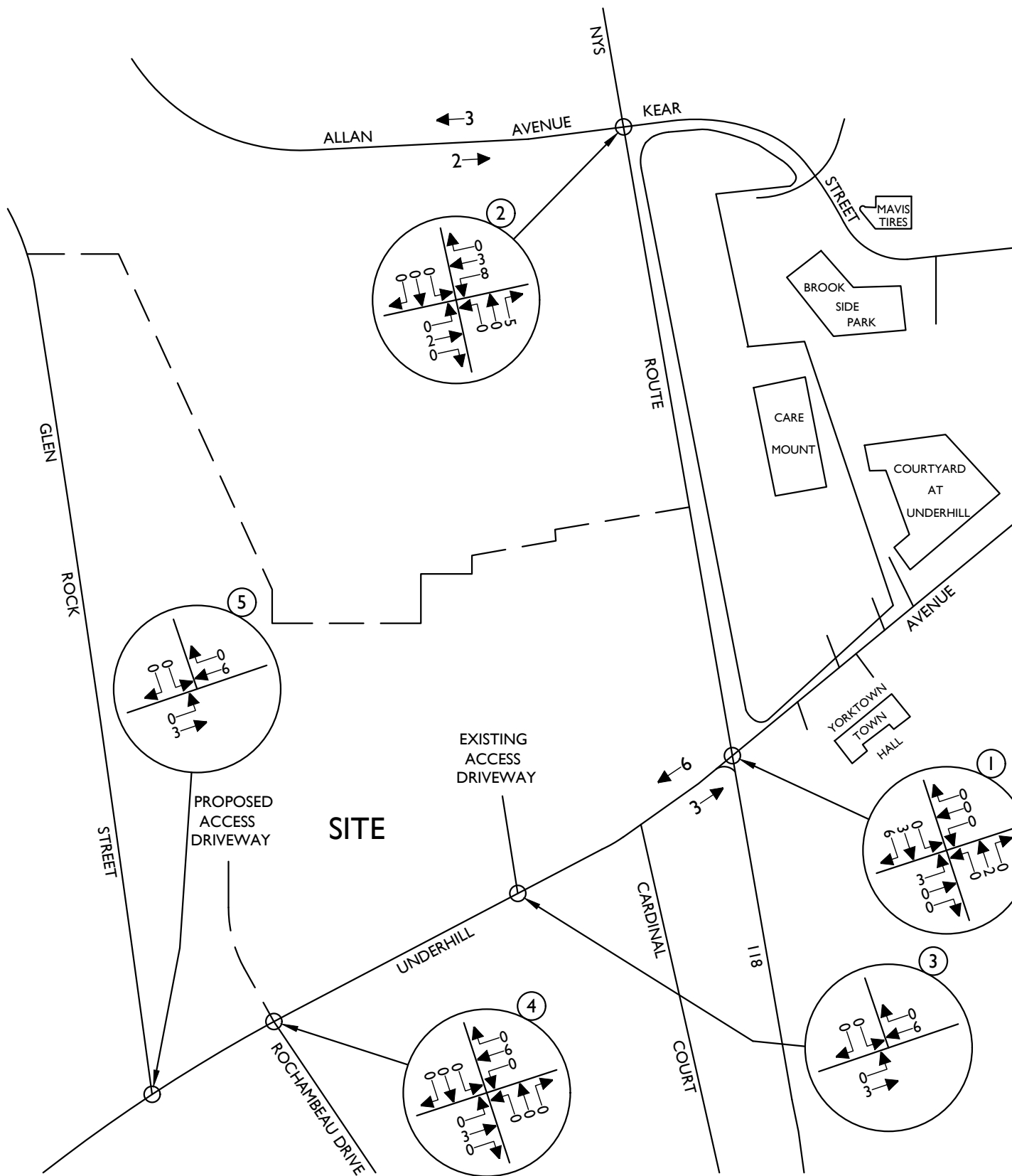
SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A	DRAWING NAME: 230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
ROMA BUILDING REDEVELOPMENT  
(POTENTIAL)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:

33

VA:Publish\_305201230326RGD\_FIGURE\_EX-BD.dwg(34) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK

**811**  
PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**Colliers**  
Engineering & Design  
WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

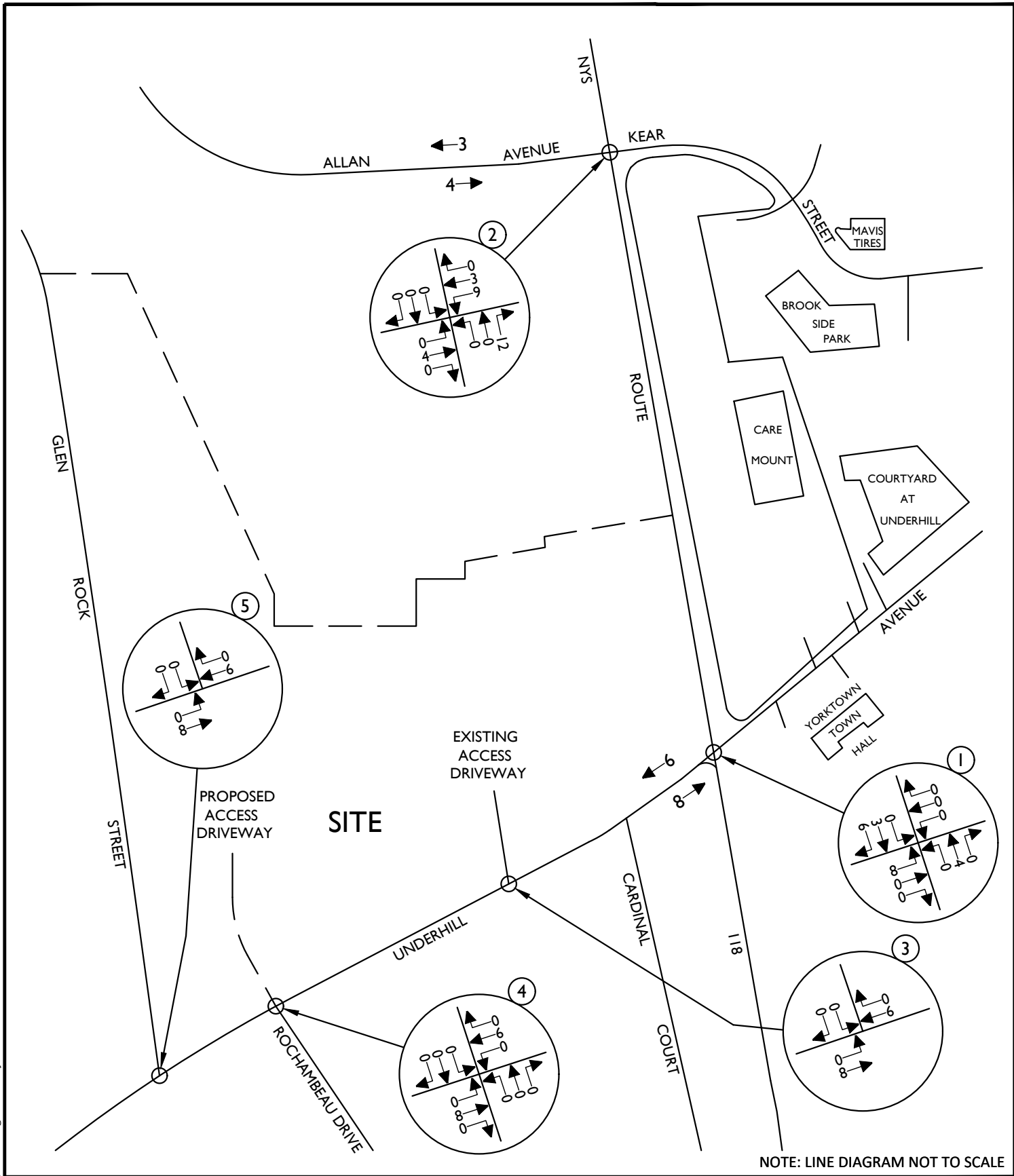
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
K-MART REDEVELOPMENT (POTENTIAL)  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:  
34

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

VAcPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(35) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com  
 Doing Business as **MASER** CONSULTANTS

UNDERHILL FARM  
 RESIDENTIAL

TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK

**811**  
 PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION  
 OF EXCAVATORS, DESIGNERS, OR  
 ANY PERSON PREPARING TO  
 DISTURB THE EARTH'S SURFACE  
 ANYWHERE IN ANY STATE  
 Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
 VISIT: WWW.CALL811.COM

**Colliers**  
 Engineering & Design  
 WESTCHESTER  
 400 Columbus Avenue,  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING  
 ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

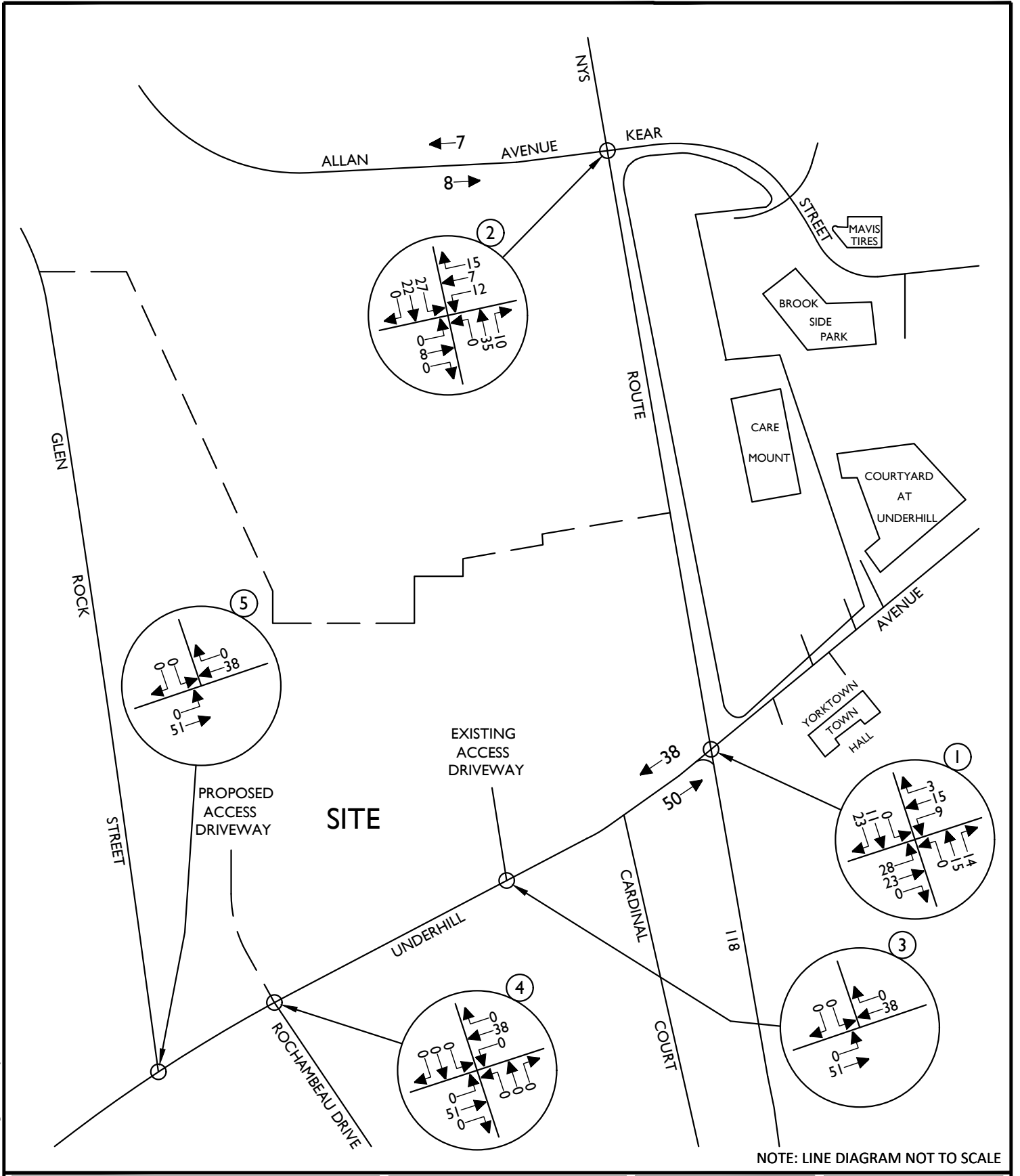
SHEET TITLE:  
 K-MART REDEVELOPMENT (POTENTIAL)  
 OTHER DEVELOPMENT TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR

SHEET NUMBER:  
 35

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.



VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(36 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

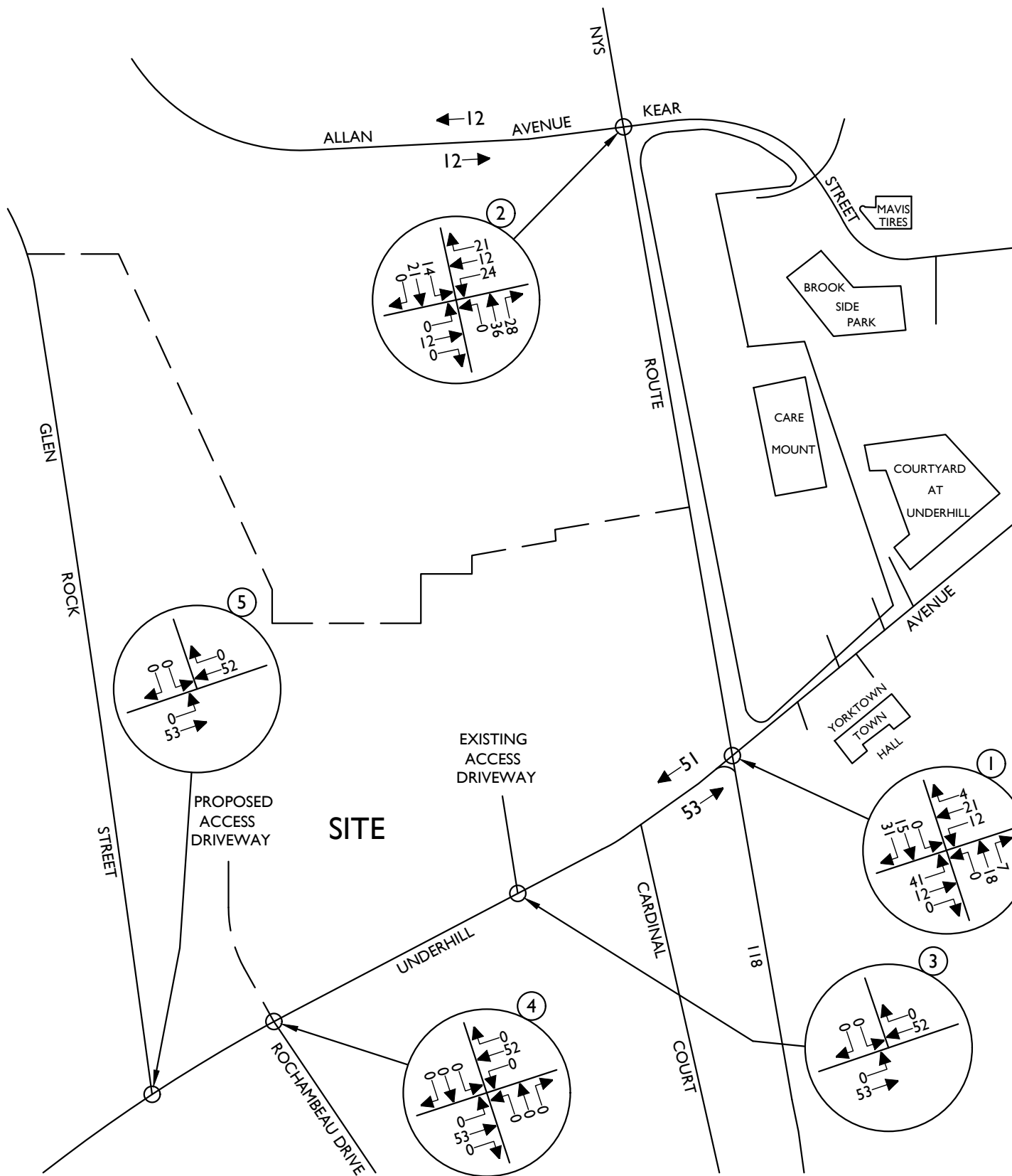
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
TOTAL APPROVE & POTENTIAL  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

36

VA:Publish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(37) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

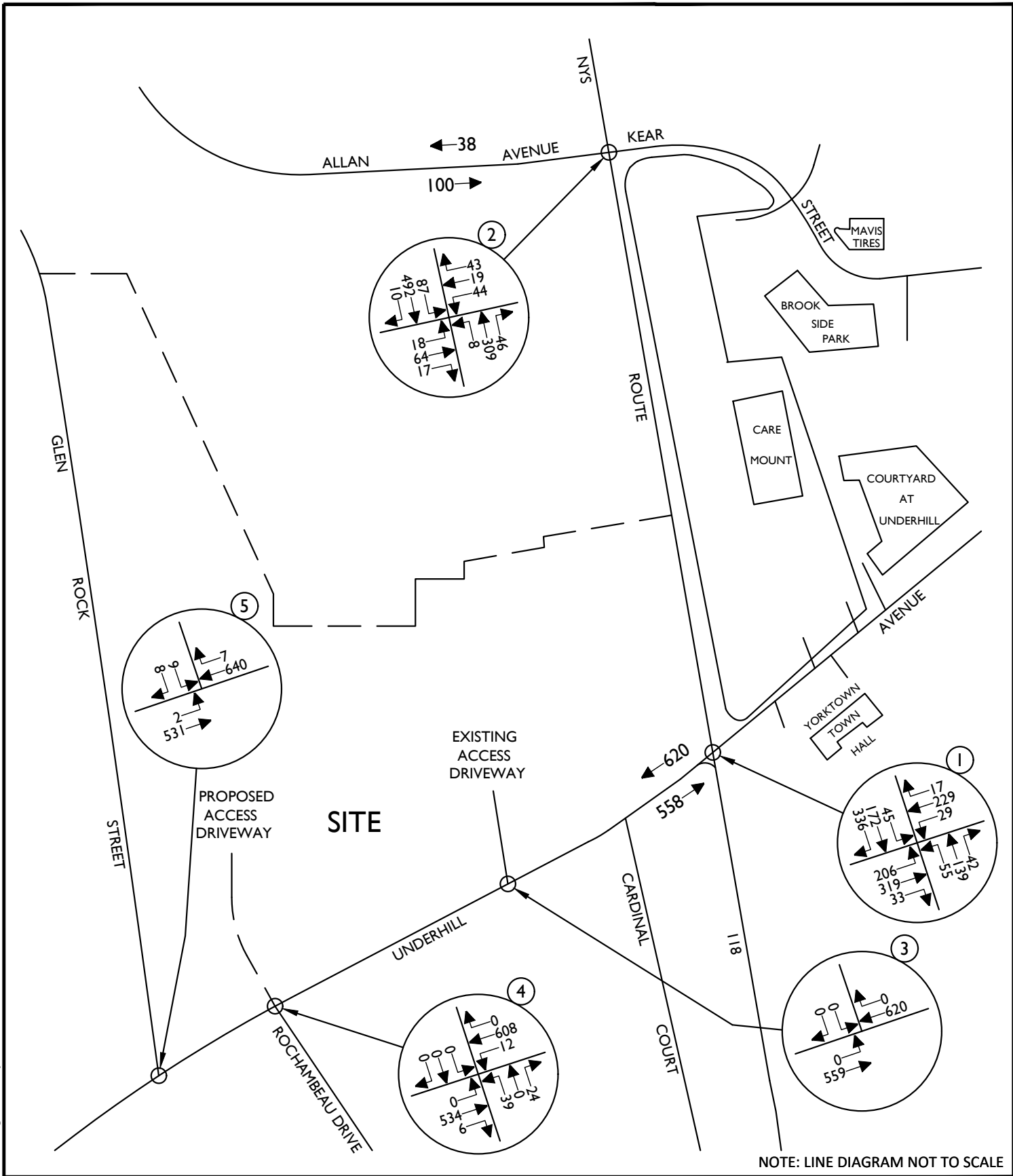
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**TOTAL APPROVED & POTENTIAL  
OTHER DEVELOPMENT TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR**

SHEET NUMBER:  
**37**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

ACPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(38) By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK

**811**  
PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**Colliers**  
Engineering & Design  
WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

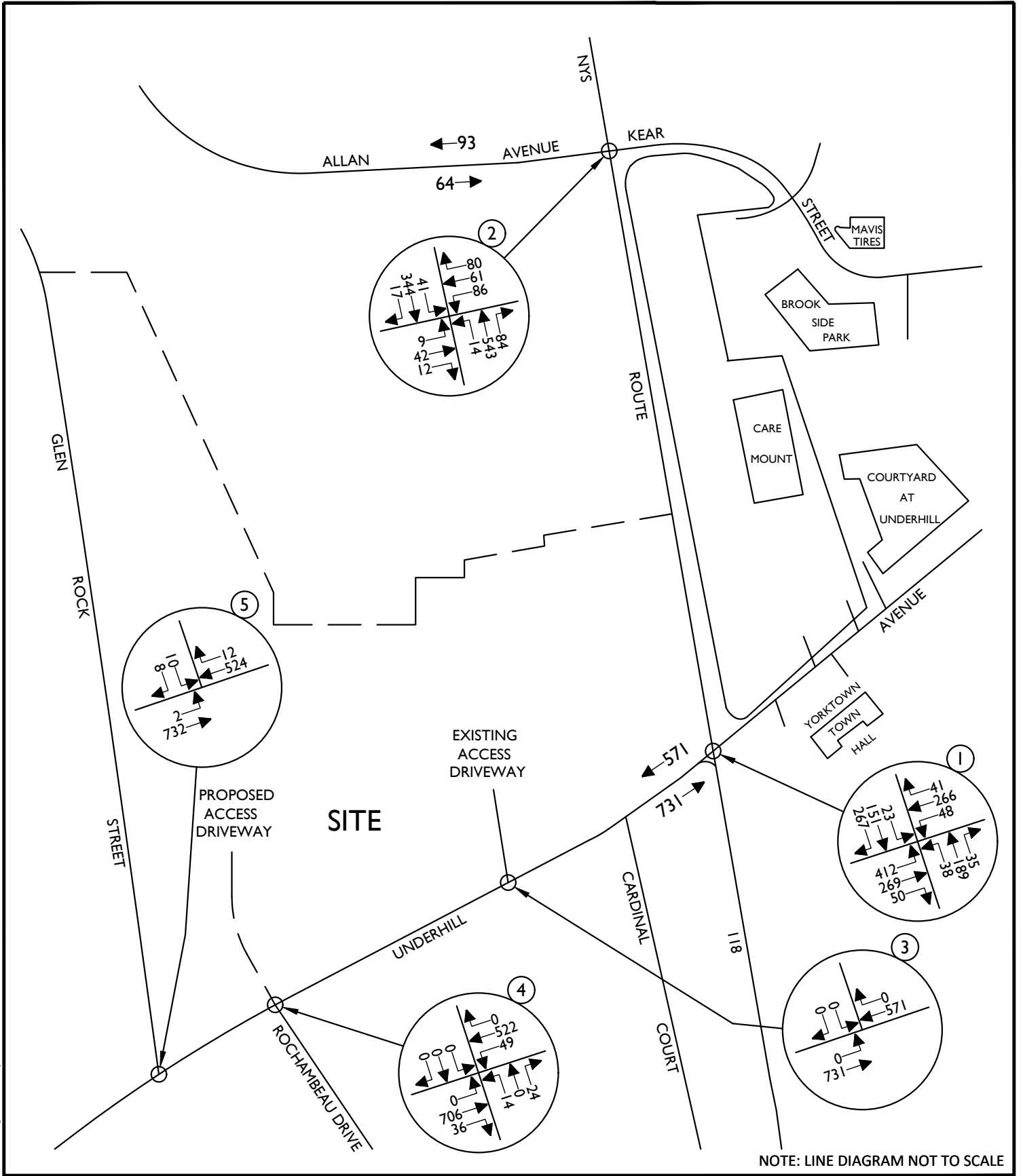
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2025 NO-BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED & POTENTIAL O.D.)

SHEET NUMBER:  
38

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

ACPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg(3)9 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

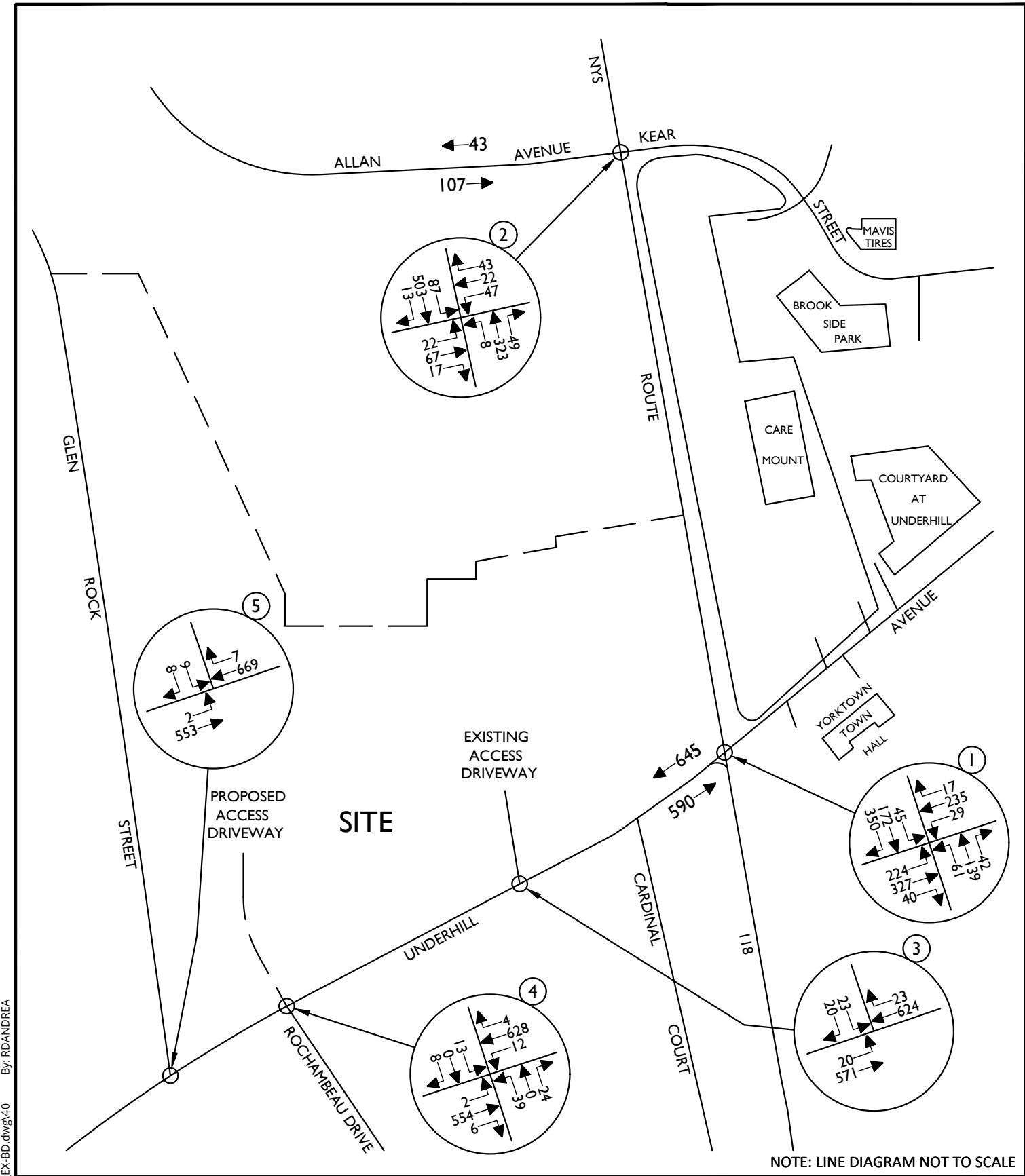
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**2025 NO-BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR  
(W/ APPROVED & POTENTIAL O.D.)**

SHEET NUMBER:

39



NOTE: LINE DIAGRAM NOT TO SCALE

ACPublish\_305201230326RGD\_FIGURE\_EX-BD.dwg,40 By: RDANDREA



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

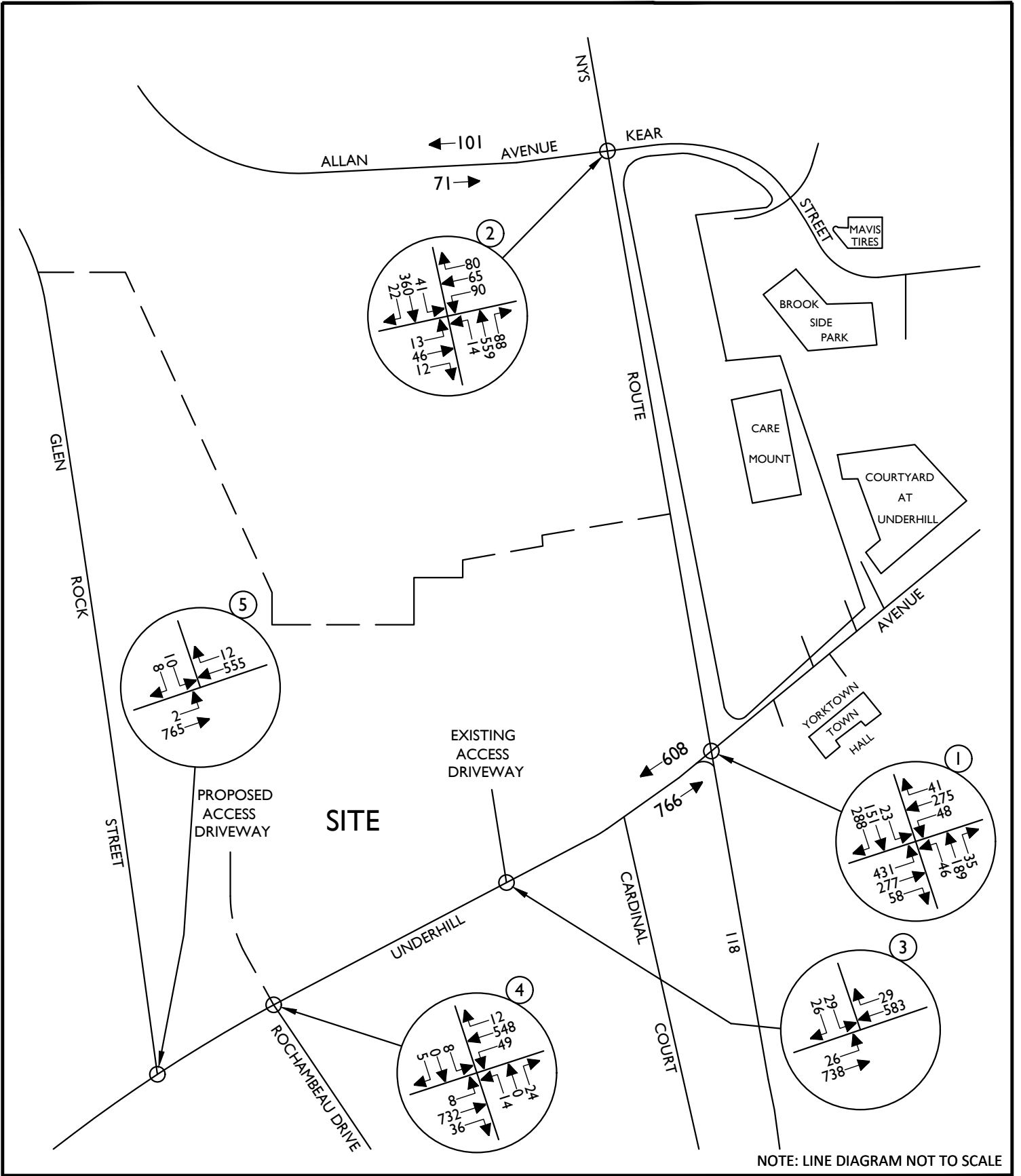
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
2025 BUILD TRAFFIC VOLUMES  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED & POTENTIAL O.D.)

SHEET NUMBER:  
40

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

AcPublish\_30520\230326RGD\_FIGURE\_EX-BD.dwg,41 By: RDANDREA



www.colliersengineering.com  
 Doing Business as **MASER CONSULTING**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
 RESIDENTIAL**

TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK



**PROTECT YOURSELF**  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.  
 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



WESTCHESTER  
 400 Columbus Avenue, Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_EX-BD		

SHEET TITLE:  
**2025 BUILD TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR  
 (W/ APPROVED & POTENTIAL O.D.)**

SHEET NUMBER:  
**41**

# Tables

**Table No. 2A**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour**

				2021 Existing			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.			
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 118 & Underhill Avenue			Signalized									
	Underhill Avenue	EB	LT	0.70	C	22.5	0.82	C	29.8	0.88	D	35.5	
			R	0.02	A	0.0	0.02	A	0.0	0.03	A	0.0	
	Underhill Avenue	WB	LTR	0.73	D	47.0	0.76	D	49.7	0.77	D	50.7	
	NYS Route 118	NB	LTR	0.54	C	28.5	0.61	C	31.5	0.65	C	33.4	
	NYS Route 118	SB	LTR	0.88	D	41.1	0.93	D	48.3	0.94	D	49.9	
		<b>Overall</b>			-	C	33.5	-	D	39.1	-	D	41.8
	<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>												
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.44	B	12.6	
			TR	-	-	-	-	-	-	0.44	B	16.4	
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.09	B	10.8	
			TR	-	-	-	-	-	-	0.68	D	35.5	
	NYS Route 118	NB	LTR	-	-	-	-	-	-	0.68	C	31.7	
	NYS Route 118	SB	LT	-	-	-	-	-	-	0.55	C	27.6	
			R	-	-	-	-	-	-	0.35	A	2.4	
		<b>Overall</b>			-	-	-	-	-	-	B	19.4	
	<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>												
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.41	A	8.9	
			TR	-	-	-	-	-	-	0.43	B	12.6	
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.08	A	7.6	
		TR	-	-	-	-	-	-	0.66	C	29.5		
NYS Route 118	NB	L	-	-	-	-	-	-	0.27	C	23.7		
		TR	-	-	-	-	-	-	0.56	C	26.5		
NYS Route 118	SB	L	-	-	-	-	-	-	0.18	C	22.4		
		T	-	-	-	-	-	-	0.55	C	28.4		
		R	-	-	-	-	-	-	0.36	A	2.2		
	<b>Overall</b>			-	-	-	-	-	-	B	16.2		
2	NYS Route 118 & Allan Avenue/Kear Street			Unsignalized									
	Allan Avenue	EB	LTR	0.38	C	30.6	0.42	C	31.4	0.44	C	32.4	
	Kear Street	WB	LTR	0.28	C	23.1	0.43	C	27.4	0.45	C	28.5	
	NYS Route 118	NB	LTR	0.25	A	4.6	0.33	A	5.5	0.34	A	5.7	
	NYS Route 118	SB	LTR	0.46	A	6.4	0.58	A	8.8	0.60	A	9.2	
		<b>Overall</b>			-	A	9.2	-	B	11.4	-	B	12.0



**Table No. 2A  
Level of Service Summary Table  
Weekday Peak AM Hour**

			2021 Existing			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.				
			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
3	Underhill Avenue & East Site Access	Signalized											
		Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.2
		East Site Access	SB	LR	-	-	-	-	-	-	0.22	D	26.1
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized											
		Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.9
		Underhill Avenue	WB	LTR	0.01	A	8.4	0.01	A	8.6	0.01	A	9.0
		Rochambeau Drive Site Access	NB SB	LTR LTR	0.15 -	C -	15.0 -	0.17 -	C -	16.3 -	0.23 0.12	C D	20.9 27.2
5	Underhill Avenue & Glen Rock Street	Unsignalized											
		Underhill Avenue	EB	LT	0.01	A	8.9	0.01	A	9.1	0.01	A	9.2
		Glen Rock Street	SB	LR	0.07	C	18.7	0.08	C	21.0	0.08	C	22.1

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

**Table No. 2A**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour**

				2021 Existing			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.			
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	
1	NYS Route 118 & Underhill Avenue	Signalized											
		Underhill Avenue	EB	LT	0.93	D	38.4	1.15	F	103.3	1.25	F	147.8
				R	0.03	A	0.0	0.03	A	0.0	0.07	A	5.0
		Underhill Avenue	WB	LTR	0.51	C	20.2	0.64	C	25.9	0.70	C	30.0
		NYS Route 118	NB	LTR	0.63	C	28.5	0.63	C	27.3	0.67	C	28.5
		NYS Route 118	SB	LTR	0.81	C	30.5	0.84	C	32.0	0.85	C	32.8
		Overall			-	C	30.3	-	E	56.4	-	E	74.5
		<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>											
		Underhill Avenue	EB	L	-	-	-	-	-	-	0.66	B	15.2
				TR	-	-	-	-	-	-	0.34	B	13.2
		Underhill Avenue	WB	L	-	-	-	-	-	-	0.14	B	11.6
				TR	-	-	-	-	-	-	0.79	D	45.3
		NYS Route 118	NB	LTR	-	-	-	-	-	-	0.77	D	44.8
		NYS Route 118	SB	LT	-	-	-	-	-	-	0.47	C	33.5
			R	-	-	-	-	-	-	0.28	A	2.0	
	Overall			-	-	-	-	-	-	-	C	23.8	
	<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>												
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.68	B	14.5	
			TR	-	-	-	-	-	-	0.35	B	12.4	
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.13	A	8.5	
			TR	-	-	-	-	-	-	0.74	C	34.8	
	NYS Route 118	NB	L	-	-	-	-	-	-	0.20	C	25.7	
			TR	-	-	-	-	-	-	0.63	C	32.5	
	NYS Route 118	SB	L	-	-	-	-	-	-	0.11	C	24.8	
			T	-	-	-	-	-	-	0.44	C	28.5	
			R	-	-	-	-	-	-	0.29	A	2.0	
	Overall			-	-	-	-	-	-	-	B	19.2	
2	NYS Route 118 & Allan Avenue/Kear Street	Unsignalized											
		Allan Avenue	EB	LTR	0.19	C	23.3	0.19	C	23.9	0.22	C	24.7
		Kear Street	WB	LTR	0.59	C	33.6	0.69	D	36.9	0.68	D	36.5
		NYS Route 118	NB	LTR	0.51	A	8.4	0.60	B	11.5	0.63	B	12.3
		NYS Route 118	SB	LTR	0.34	A	6.6	0.41	A	8.7	0.44	A	9.3
		Overall			-	B	12.2	-	B	15.6	-	B	16.1

**Table No. 2A  
Level of Service Summary Table  
Weekday Peak PM Hour**

			2021 Existing			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.				
			v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
3	Underhill Avenue & East Site Access	Signalized											
		Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.1
		East Site Access	SB	LR	-	-	-	-	-	-	0.33	D	33.8
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized											
		Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.7
		Underhill Avenue	WB	LTR	0.06	A	9.6	0.07	A	9.9	0.06	A	9.7
		Rochambeau Drive	NB	LTR	0.10	C	15.4	0.12	C	16.8	0.14	C	20.1
		Site Access	SB	LTR	-	-	-	-	-	-	0.10	E	35.6
5	Underhill Avenue & Glen Rock Street	Unsignalized											
		Underhill Avenue	EB	LT	0.01	A	8.4	0.01	A	8.6	0.01	A	8.7
		Glen Rock Street	SB	LR	0.07	C	19.2	0.09	C	22.1	0.09	C	23.9

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

# Capacity Analysis

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Future Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.976			0.917	
Flt Protected		0.980			0.995			0.988			0.996	
Satd. Flow (prot)	0	2000	1577	0	1804	0	0	1569	0	0	1645	0
Flt Permitted		0.478			0.890			0.652			0.951	
Satd. Flow (perm)	0	975	1577	0	1614	0	0	1035	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			11			83	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	243	355	43	32	255	18	66	151	46	49	187	380
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	43	0	305	0	0	263	0	0	616	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0	16.0	
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0	46.0	
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%	41.8%	
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		51.0	102.8		25.0			39.8			39.8	
Actuated g/C Ratio		0.50	1.00		0.24			0.39			0.39	
v/c Ratio		0.88	0.03		0.77			0.65			0.94	
Control Delay		35.5	0.0		50.7			33.4			49.9	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		35.5	0.0		50.7			33.4			49.9	
LOS		D	A		D			C			D	
Approach Delay		33.1			50.7			33.4			49.9	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)		273	0		186			133			342	
Queue Length 95th (ft)		#457	0		#317			229			#573	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		683	1577		395			409			661	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.88	0.03		0.77			0.64			0.93	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	102.8
Natural Cycle:	100
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.94
Intersection Signal Delay:	41.8
Intersection Capacity Utilization:	95.1%
Intersection LOS:	D
ICU Level of Service:	F

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

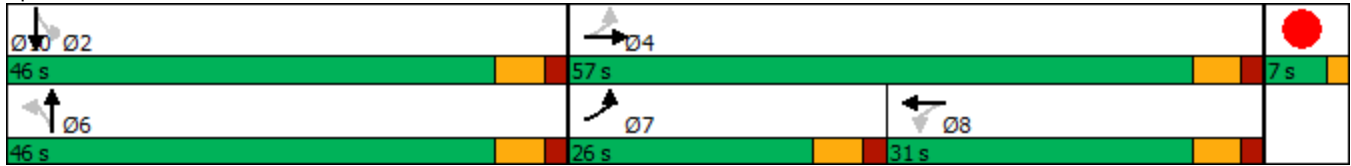


Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	22	67	17	47	22	43	8	323	49	87	503	13
Future Volume (vph)	22	67	17	47	22	43	8	323	49	87	503	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.978			0.948			0.983			0.997	
Fl <sub>t</sub> Protected		0.990			0.979			0.999			0.993	
Satd. Flow (prot)	0	1752	0	0	1910	0	0	1751	0	0	1765	0
Fl <sub>t</sub> Permitted		0.930			0.829			0.986			0.882	
Satd. Flow (perm)	0	1646	0	0	1618	0	0	1728	0	0	1568	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			24			7			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	23	71	18	50	23	46	9	344	52	93	535	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	119	0	0	405	0	0	642	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023

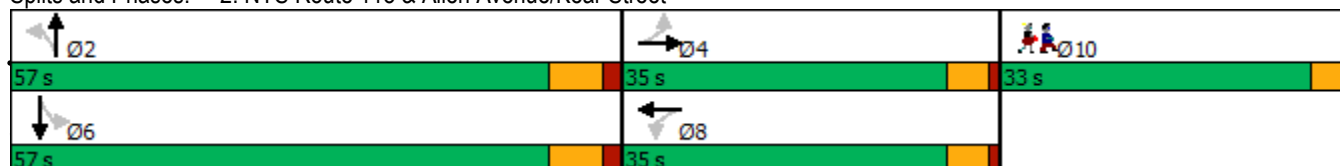


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.9			10.9			50.0			50.0	
Actuated g/C Ratio		0.15			0.15			0.68			0.68	
v/c Ratio		0.44			0.45			0.34			0.60	
Control Delay		32.4			28.5			5.7			9.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		32.4			28.5			5.7			9.2	
LOS		C			C			A			A	
Approach Delay		32.4			28.5			5.7			9.2	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		44			39			58			121	
Queue Length 95th (ft)		90			87			113			242	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		680			679			1187			1075	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.16			0.18			0.34			0.60	

**Intersection Summary**

Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	73
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.60
Intersection Signal Delay:	12.0
Intersection LOS:	B
Intersection Capacity Utilization:	80.3%
ICU Level of Service:	D
Analysis Period (min):	15

**Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street**



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 3: Underhill Avenue & Site Access

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	20	571	624	23	23	20
Future Volume (vph)	20	571	624	23	23	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.938	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1803	1774	0	1702	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1803	1774	0	1702	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	8%	4%	2%	2%	2%
Adj. Flow (vph)	22	634	693	26	26	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	656	719	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.2%
Analysis Period (min)	15
	ICU Level of Service B

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	20	571	624	23	23	20
Future Vol, veh/h	20	571	624	23	23	20
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	8	4	2	2	2
Mvmt Flow	22	634	693	26	26	22

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	719	0	-	0	1384 706
Stage 1	-	-	-	-	706 -
Stage 2	-	-	-	-	678 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	882	-	-	-	158 436
Stage 1	-	-	-	-	489 -
Stage 2	-	-	-	-	504 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	882	-	-	-	152 436
Mov Cap-2 Maneuver	-	-	-	-	152 -
Stage 1	-	-	-	-	470 -
Stage 2	-	-	-	-	504 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	26.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	882	-	-	-	218
HCM Lane V/C Ratio	0.025	-	-	-	0.219
HCM Control Delay (s)	9.2	0	-	-	26.1
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	2	554	6	12	628	4	39	0	24	13	0	8
Future Volume (vph)	2	554	6	12	628	4	39	0	24	13	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.999			0.999			0.949			0.951	
Fl <sub>t</sub> Protected					0.999			0.970			0.969	
Satd. Flow (prot)	0	1809	0	0	1765	0	0	1828	0	0	1717	0
Fl <sub>t</sub> Permitted					0.999			0.970			0.969	
Satd. Flow (perm)	0	1809	0	0	1765	0	0	1828	0	0	1717	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			173	
Travel Time (s)		5.0			9.7			7.3			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	8%	20%	17%	4%	2%	6%	2%	5%	2%	2%	2%
Adj. Flow (vph)	2	577	6	13	654	4	41	0	25	14	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	585	0	0	671	0	0	66	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.0%
ICU Level of Service	A
Analysis Period (min)	15



2025 Build Traffic Volumes W/Approved & Potential Other Development  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
 03/28/2023

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	554	6	12	628	4	39	0	24	13	0	8
Future Vol, veh/h	2	554	6	12	628	4	39	0	24	13	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	8	20	17	4	2	6	2	5	2	2	2
Mvmt Flow	2	577	6	13	654	4	41	0	25	14	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	658	0	0	583	0	0	1270	1268	580	1279	1269	656
Stage 1	-	-	-	-	-	-	584	584	-	682	682	-
Stage 2	-	-	-	-	-	-	686	684	-	597	587	-
Critical Hdwy	4.12	-	-	4.27	-	-	5.76	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.353	-	-	3.554	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	930	-	-	921	-	-	233	276	569	143	168	465
Stage 1	-	-	-	-	-	-	616	625	-	440	450	-
Stage 2	-	-	-	-	-	-	563	586	-	490	497	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	930	-	-	921	-	-	224	269	569	134	164	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	269	-	134	164	-
Stage 1	-	-	-	-	-	-	614	623	-	439	440	-
Stage 2	-	-	-	-	-	-	541	573	-	467	496	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			20.9			27.2		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	291	930	-	-	921	-	-	184
HCM Lane V/C Ratio	0.226	0.002	-	-	0.014	-	-	0.119
HCM Control Delay (s)	20.9	8.9	0	-	9	0	-	27.2
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.4

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	553	669	7	9	8
Future Volume (vph)	2	553	669	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1771	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1771	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	608	735	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	610	743	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.6%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	553	669	7	9	8
Future Vol, veh/h	2	553	669	7	9	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	608	735	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	743	0	-	0	1351 739
Stage 1	-	-	-	-	739 -
Stage 2	-	-	-	-	612 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	864	-	-	-	166 398
Stage 1	-	-	-	-	472 -
Stage 2	-	-	-	-	541 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	864	-	-	-	166 398
Mov Cap-2 Maneuver	-	-	-	-	166 -
Stage 1	-	-	-	-	471 -
Stage 2	-	-	-	-	541 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	864	-	-	-	229
HCM Lane V/C Ratio	0.003	-	-	-	0.082
HCM Control Delay (s)	9.2	0	-	-	22.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	206	319	33	29	229	17	55	139	42	45	172	336
Future Volume (vph)	206	319	33	29	229	17	55	139	42	45	172	336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.976			0.918	
Flt Protected		0.981			0.995			0.988			0.996	
Satd. Flow (prot)	0	2002	1577	0	1804	0	0	1565	0	0	1645	0
Flt Permitted		0.493			0.892			0.686			0.951	
Satd. Flow (perm)	0	1006	1577	0	1617	0	0	1087	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			11			80	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	224	347	36	32	249	18	60	151	46	49	187	365
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	571	36	0	299	0	0	257	0	0	601	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0		16.0
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0		46.0
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%		41.8%
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0		40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Max	None		None	None		Min	Min		Min		Min
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		50.4	101.0		24.4			38.5				38.5
Actuated g/C Ratio		0.50	1.00		0.24			0.38				0.38
v/c Ratio		0.82	0.02		0.76			0.61				0.93
Control Delay		29.8	0.0		49.7			31.5				48.3
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		29.8	0.0		49.7			31.5				48.3
LOS		C	A		D			C				D
Approach Delay		28.0			49.7			31.5				48.3
Approach LOS		C			D			C				D
Queue Length 50th (ft)		256	0		182			127				329
Queue Length 95th (ft)		#393	0		#305			217				#553
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		706	1577		403			437				671
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		0.81	0.02		0.74			0.59				0.90

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	101
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	39.1
Intersection Capacity Utilization:	92.9%
Intersection LOS:	D
ICU Level of Service:	F

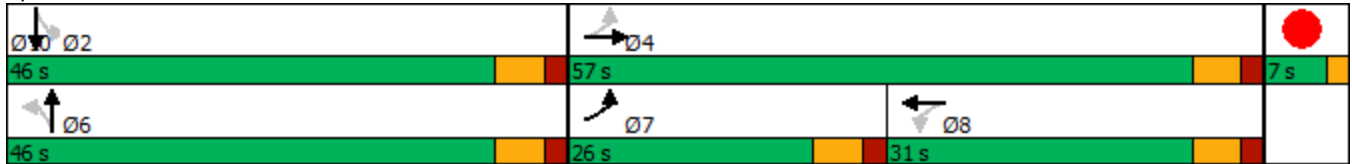
Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue





2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	18	64	17	44	19	43	8	309	46	87	492	10
Future Volume (vph)	18	64	17	44	19	43	8	309	46	87	492	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.977			0.945			0.983			0.998	
Fl <sub>t</sub> Protected		0.991			0.980			0.999			0.993	
Satd. Flow (prot)	0	1752	0	0	1906	0	0	1751	0	0	1767	0
Fl <sub>t</sub> Permitted		0.941			0.843			0.986			0.883	
Satd. Flow (perm)	0	1664	0	0	1640	0	0	1728	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			26			7			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	68	18	47	20	46	9	329	49	93	523	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	113	0	0	387	0	0	627	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023

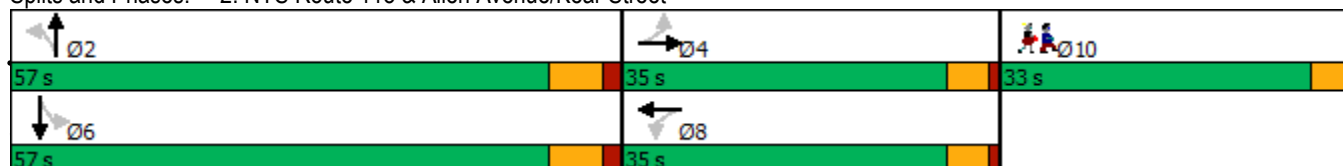


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.7			10.7			50.0			50.0	
Actuated g/C Ratio		0.15			0.15			0.69			0.69	
v/c Ratio		0.42			0.43			0.33			0.58	
Control Delay		31.4			27.4			5.5			8.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.4			27.4			5.5			8.8	
LOS		C			C			A			A	
Approach Delay		31.4			27.4			5.5			8.8	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		40			36			54			116	
Queue Length 95th (ft)		85			81			104			225	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		691			691			1190			1080	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.15			0.16			0.33			0.58	

**Intersection Summary**

Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	72.7
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.58
Intersection Signal Delay:	11.4
Intersection Capacity Utilization	78.8%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	D

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 4: Rochambeau Drive & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	534	6	12	608	39	24
Future Volume (vph)	534	6	12	608	39	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.949	
Flt Protected				0.999	0.970	
Satd. Flow (prot)	1936	0	0	1806	1895	0
Flt Permitted				0.999	0.970	
Satd. Flow (perm)	1936	0	0	1806	1895	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	0%	5%
Adj. Flow (vph)	556	6	13	633	41	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	562	0	0	646	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	534	6	12	608	39	24
Future Vol, veh/h	534	6	12	608	39	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	2	0	5
Mvmt Flow	556	6	13	633	41	25

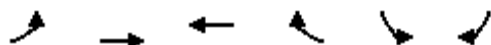
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	562	0	1218 559
Stage 1	-	-	-	-	559 -
Stage 2	-	-	-	-	659 -
Critical Hdwy	-	-	4.1	-	5 5.55
Critical Hdwy Stg 1	-	-	-	-	4 -
Critical Hdwy Stg 2	-	-	-	-	4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.345
Pot Cap-1 Maneuver	-	-	1019	-	323 583
Stage 1	-	-	-	-	716 -
Stage 2	-	-	-	-	670 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1019	-	317 583
Mov Cap-2 Maneuver	-	-	-	-	317 -
Stage 1	-	-	-	-	716 -
Stage 2	-	-	-	-	657 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	384	-	-	1019	-
HCM Lane V/C Ratio	0.171	-	-	0.012	-
HCM Control Delay (s)	16.3	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	531	640	7	9	8
Future Volume (vph)	2	531	640	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1769	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1769	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	584	703	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	586	711	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	44.1%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	2	531	640	7	9	8
Future Vol, veh/h	2	531	640	7	9	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	584	703	8	10	9

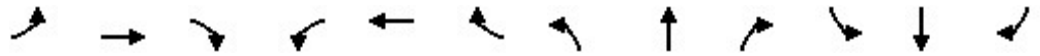
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	711	0	-	0	1295 707
Stage 1	-	-	-	-	707 -
Stage 2	-	-	-	-	588 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	888	-	-	-	179 416
Stage 1	-	-	-	-	489 -
Stage 2	-	-	-	-	555 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	888	-	-	-	178 416
Mov Cap-2 Maneuver	-	-	-	-	178 -
Stage 1	-	-	-	-	488 -
Stage 2	-	-	-	-	555 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	888	-	-	-	244
HCM Lane V/C Ratio	0.002	-	-	-	0.077
HCM Control Delay (s)	9.1	0	-	-	21
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

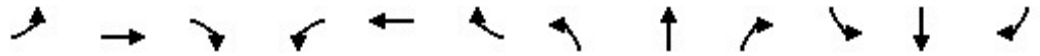


2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Right Lane) - Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Future Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.990			0.976			0.850	
Flt Protected	0.950			0.950				0.988			0.990	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	0	1569	0	0	1657	1607
Flt Permitted	0.364			0.527				0.832			0.881	
Satd. Flow (perm)	642	1889	0	833	1826	0	0	1321	0	0	1474	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			3			10			325	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	243	355	43	32	255	18	66	151	46	49	187	380
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	398	0	32	273	0	0	263	0	0	236	380
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Right Lane) - Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023

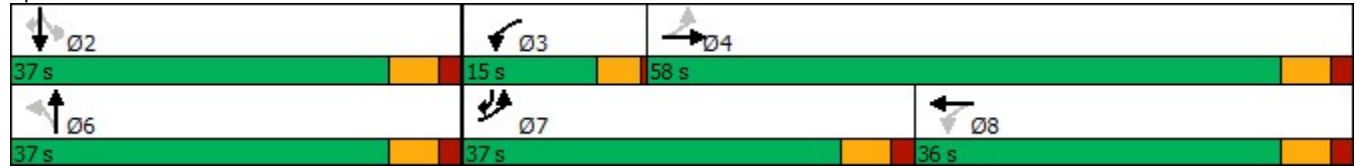


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	36.0	32.4		23.9	15.1			19.9			19.9	40.8
Actuated g/C Ratio	0.52	0.47		0.35	0.22			0.29			0.29	0.59
v/c Ratio	0.44	0.44		0.09	0.68			0.68			0.55	0.35
Control Delay	12.6	16.4		10.8	35.5			31.7			27.6	2.4
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	12.6	16.4		10.8	35.5			31.7			27.6	2.4
LOS	B	B		B	D			C			C	A
Approach Delay		15.0			32.9			31.7			12.1	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	51	88		5	104			93			83	8
Queue Length 95th (ft)	119	252		21	226			209			184	46
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	861	1471		465	852			641			709	1419
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.28	0.27		0.07	0.32			0.41			0.33	0.27

Intersection Summary	
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	68.7
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	19.4
Intersection Capacity Utilization:	70.6%
Intersection LOS:	B
ICU Level of Service:	C

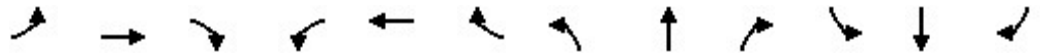
Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



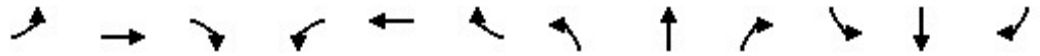


2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turning Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Future Volume (vph)	224	327	40	29	235	17	61	139	42	45	172	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.984			0.990			0.965				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	1669	1517	0	1617	1554	1607
Flt Permitted	0.380			0.527			0.631			0.634	0.989	
Satd. Flow (perm)	671	1889	0	833	1826	0	1108	1517	0	1079	1538	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			3			16				363
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	243	355	43	32	255	18	66	151	46	49	187	380
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	243	398	0	32	273	0	66	197	0	44	192	380
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turn Right Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



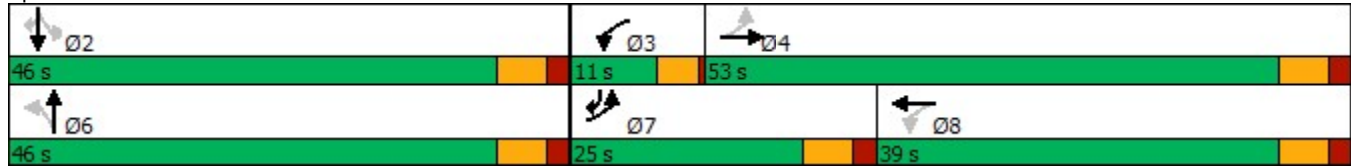
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	31.7	28.1		21.2	12.8		12.8	12.8		12.8	12.8	31.7
Actuated g/C Ratio	0.56	0.49		0.37	0.22		0.22	0.22		0.22	0.22	0.56
v/c Ratio	0.41	0.43		0.08	0.66		0.27	0.56		0.18	0.55	0.36
Control Delay	8.9	12.6		7.6	29.5		23.7	26.5		22.4	28.4	2.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	8.9	12.6		7.6	29.5		23.7	26.5		22.4	28.4	2.2
LOS	A	B		A	C		C	C		C	C	A
Approach Delay		11.2			27.2			25.8			11.8	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	35	60		4	81		18	54		12	61	2
Queue Length 95th (ft)	85	198		15	185		58	136		44	147	36
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	721	1589		409	1099		807	1110		786	1121	1209
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.34	0.25		0.08	0.25		0.08	0.18		0.06	0.17	0.31

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	57
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	16.2
Intersection Capacity Utilization:	64.7%
Intersection LOS:	B
ICU Level of Service:	C

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue







2025 Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Future Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	11	12	12	11	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.985			0.983			0.916	
Flt Protected		0.970			0.994			0.992			0.997	
Satd. Flow (prot)	0	1987	1655	0	1777	0	0	1675	0	0	1614	0
Flt Permitted		0.480			0.814			0.789			0.972	
Satd. Flow (perm)	0	983	1655	0	1455	0	0	1332	0	0	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50		5			10			106	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	444	286	60	49	284	42	47	195	36	24	156	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	730	60	0	375	0	0	278	0	0	477	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.07	1.02	0.99	1.04	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	22.0	22.0	22.0	22.0		16.0	16.0		16.0		16.0
Total Split (s)	16.0	43.0	43.0	27.0	27.0		60.0	60.0		60.0		60.0
Total Split (%)	14.5%	39.1%	39.1%	24.5%	24.5%		54.5%	54.5%		54.5%		54.5%
Maximum Green (s)	10.0	37.0	37.0	21.0	21.0		54.0	54.0		54.0		54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0	0.0		0.0			0.0				0.0
Total Lost Time (s)		6.0	6.0		6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Min	None	None	None	None		Min	Min		Min		Min
Walk Time (s)		5.0	5.0	5.0	5.0							
Flash Dont Walk (s)		11.0	11.0	11.0	11.0							
Pedestrian Calls (#/hr)		3	3	3	3							
Act Effct Green (s)		37.4	37.4		26.2			22.1				22.1
Actuated g/C Ratio		0.52	0.52		0.37			0.31				0.31
v/c Ratio		1.25	0.07		0.70			0.67				0.85
Control Delay		147.8	5.0		30.0			28.5				32.8
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		147.8	5.0		30.0			28.5				32.8
LOS		F	A		C			C				C
Approach Delay		137.0			30.0			28.5				32.8
Approach LOS		F			C			C				C
Queue Length 50th (ft)		~318	2		134			101				153
Queue Length 95th (ft)		#732	23		#324			174				264
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		583	887		536			1016				1223
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		1.25	0.07		0.70			0.27				0.39

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	71.6
Natural Cycle:	140
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.25
Intersection Signal Delay:	74.5
Intersection Capacity Utilization	102.8%
Intersection LOS:	E
ICU Level of Service	G

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

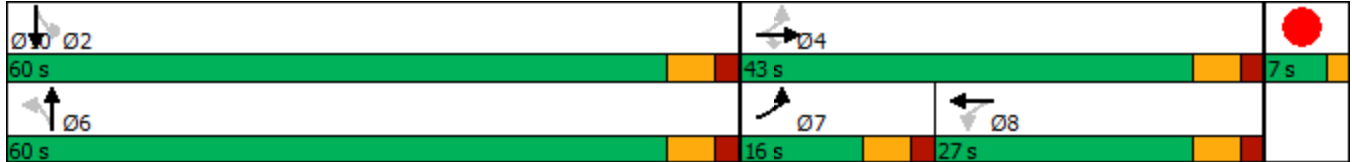
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	13	46	12	90	65	80	14	559	88	41	360	22
Future Volume (vph)	13	46	12	90	65	80	14	559	88	41	360	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.977			0.954			0.982			0.993	
Fl <sub>t</sub> Protected		0.991			0.981			0.999			0.995	
Satd. Flow (prot)	0	1752	0	0	1926	0	0	1749	0	0	1761	0
Fl <sub>t</sub> Permitted		0.928			0.861			0.988			0.897	
Satd. Flow (perm)	0	1641	0	0	1691	0	0	1730	0	0	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			20			7			3	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	14	48	13	95	68	84	15	588	93	43	379	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	247	0	0	696	0	0	445	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

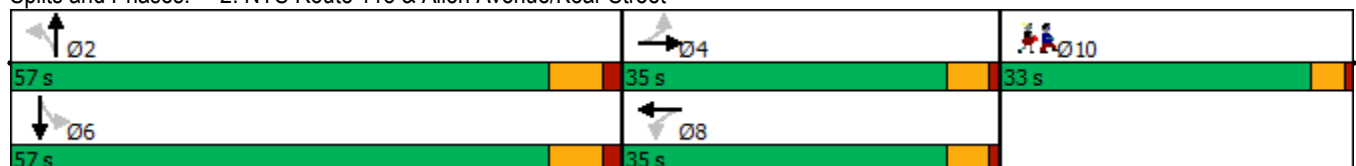
Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		15.9			15.9			50.1			50.1	
Actuated g/C Ratio		0.20			0.20			0.64			0.64	
v/c Ratio		0.22			0.68			0.63			0.44	
Control Delay		24.7			36.5			12.3			9.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.7			36.5			12.3			9.3	
LOS		C			D			B			A	
Approach Delay		24.7			36.5			12.3			9.3	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		27			102			175			93	
Queue Length 95th (ft)		61			176			348			190	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		636			663			1112			1020	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.12			0.37			0.63			0.44	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	78.1
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	16.1
Intersection LOS:	B
Intersection Capacity Utilization:	72.1%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street





Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 3: Underhill Avenue & Site Access

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	↙
Traffic Volume (vph)	26	738	583	29	29	26
Future Volume (vph)	26	738	583	29	29	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.994		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1905	1805	0	1698	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1905	1805	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	820	648	32	32	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	849	680	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	69.9%
ICU Level of Service	C
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	26	738	583	29	29	26
Future Vol, veh/h	26	738	583	29	29	26
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	820	648	32	32	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	680	0	-	0	1542 664
Stage 1	-	-	-	-	664 -
Stage 2	-	-	-	-	878 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	912	-	-	-	127 461
Stage 1	-	-	-	-	512 -
Stage 2	-	-	-	-	406 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	912	-	-	-	120 461
Mov Cap-2 Maneuver	-	-	-	-	120 -
Stage 1	-	-	-	-	482 -
Stage 2	-	-	-	-	406 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	33.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	912	-	-	-	185
HCM Lane V/C Ratio	0.032	-	-	-	0.33
HCM Control Delay (s)	9.1	0	-	-	33.8
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1.4

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	8	732	36	49	548	12	14	0	24	8	0	5
Future Volume (vph)	8	732	36	49	548	12	14	0	24	8	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.997			0.916			0.948	
Flt Protected					0.996			0.982			0.970	
Satd. Flow (prot)	0	1925	0	0	1794	0	0	1816	0	0	1713	0
Flt Permitted					0.996			0.982			0.970	
Satd. Flow (perm)	0	1925	0	0	1794	0	0	1816	0	0	1713	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			150	
Travel Time (s)		5.0			9.7			7.3			3.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	2%	2%	2%	2%	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	8	763	38	51	571	13	15	0	25	8	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	809	0	0	635	0	0	40	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	71.2%
ICU Level of Service	C
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	732	36	49	548	12	14	0	24	8	0	5
Future Vol, veh/h	8	732	36	49	548	12	14	0	24	8	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	1	2	2	2	2	2	2	5	2	2	2
Mvmt Flow	8	763	38	51	571	13	15	0	25	8	0	5

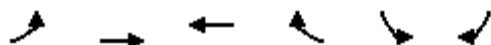
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	584	0	0	801	0	0	1480	1484	782	1491	1497	578
Stage 1	-	-	-	-	-	-	798	798	-	680	680	-
Stage 2	-	-	-	-	-	-	682	686	-	811	817	-
Critical Hdwy	4.12	-	-	4.12	-	-	5.72	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	991	-	-	822	-	-	184	222	454	102	123	516
Stage 1	-	-	-	-	-	-	518	543	-	441	451	-
Stage 2	-	-	-	-	-	-	573	585	-	373	390	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	991	-	-	822	-	-	167	198	454	89	110	516
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	198	-	89	110	-
Stage 1	-	-	-	-	-	-	510	535	-	434	410	-
Stage 2	-	-	-	-	-	-	515	531	-	347	384	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			20.1			35.6		
HCM LOS							C			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	991	-	-	822	-	-	131
HCM Lane V/C Ratio	0.142	0.008	-	-	0.062	-	-	0.103
HCM Control Delay (s)	20.1	8.7	0	-	9.7	0	-	35.6
HCM Lane LOS	C	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.3

2025 Build Traffic Volumes W/Approved & Potential Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (vph)	2	765	555	12	10	8
Future Volume (vph)	2	765	555	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.997		0.939	
Fl <sub>t</sub> Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Fl <sub>t</sub> Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	832	603	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	834	616	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.9%
Analysis Period (min)	15
	ICU Level of Service A

**Intersection**

Int Delay, s/veh 0.3

**Movement** EBL EBT WBT WBR SBL SBR

Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	2	765	555	12	10	8
Future Vol, veh/h	2	765	555	12	10	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	832	603	13	11	9

**Major/Minor** Major1 Major2 Minor2

Conflicting Flow All	616	0	-	0	1446	610
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	836	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	964	-	-	-	145	494
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	425	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	964	-	-	-	144	494
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	425	-

**Approach** EB WB SB

HCM Control Delay, s	0	0	23.9
HCM LOS			C

**Minor Lane/Major Mvmt** EBL EBT WBT WBR SBLn1

Capacity (veh/h)	964	-	-	-	210
HCM Lane V/C Ratio	0.002	-	-	-	0.093
HCM Control Delay (s)	8.7	0	-	-	23.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	412	269	50	48	266	41	38	189	35	23	151	267
Future Volume (vph)	412	269	50	48	266	41	38	189	35	23	151	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.984			0.982			0.918	
Flt Protected		0.971			0.993			0.993			0.997	
Satd. Flow (prot)	0	1989	1655	0	1772	0	0	1732	0	0	1674	0
Flt Permitted		0.496			0.846			0.827			0.971	
Satd. Flow (perm)	0	1016	1655	0	1510	0	0	1442	0	0	1630	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		5			10			98	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	425	277	52	49	274	42	39	195	36	24	156	275
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	702	52	0	365	0	0	270	0	0	455	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.0		22.0	22.0		16.0	16.0		16.0	16.0	
Total Split (s)	16.0	43.0		27.0	27.0		60.0	60.0		60.0	60.0	
Total Split (%)	14.5%	39.1%		24.5%	24.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	10.0	37.0		21.0	21.0		54.0	54.0		54.0	54.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	None		None	None		Min	Min		Min	Min	
Walk Time (s)		5.0		5.0	5.0							
Flash Dont Walk (s)		11.0		11.0	11.0							
Pedestrian Calls (#/hr)		3		3	3							
Act Effct Green (s)		37.3	69.7		26.2			20.3			20.3	
Actuated g/C Ratio		0.54	1.00		0.38			0.29			0.29	
v/c Ratio		1.15	0.03		0.64			0.63			0.84	
Control Delay		103.3	0.0		25.9			27.3			32.0	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		103.3	0.0		25.9			27.3			32.0	
LOS		F	A		C			C			C	
Approach Delay		96.2			25.9			27.3			32.0	
Approach LOS		F			C			C			C	
Queue Length 50th (ft)		~250	0		122			95			142	
Queue Length 95th (ft)		#659	0		#282			165			246	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		613	1655		570			1128			1294	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		1.15	0.03		0.64			0.24			0.35	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	69.7
Natural Cycle:	120
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.15
Intersection Signal Delay:	56.4
Intersection Capacity Utilization:	99.4%
Intersection LOS:	E
ICU Level of Service:	F

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

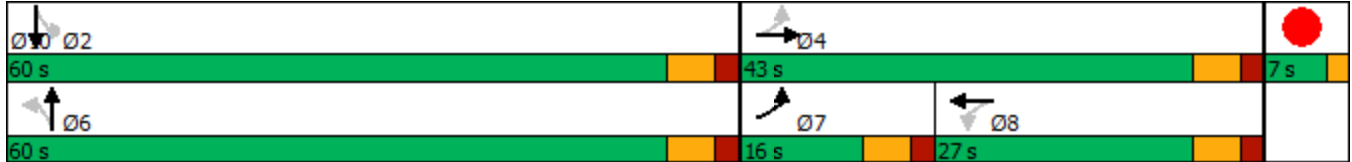
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	9	42	12	86	61	80	14	543	84	41	344	17
Future Volume (vph)	9	42	12	86	61	80	14	543	84	41	344	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.973			0.953			0.982			0.994	
Fl <sub>t</sub> Protected		0.993			0.981			0.999			0.995	
Satd. Flow (prot)	0	1748	0	0	1924	0	0	1749	0	0	1763	0
Fl <sub>t</sub> Permitted		0.956			0.852			0.988			0.896	
Satd. Flow (perm)	0	1683	0	0	1671	0	0	1730	0	0	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			21			7			2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	44	13	91	64	84	15	572	88	43	362	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	239	0	0	675	0	0	423	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
 03/28/2023

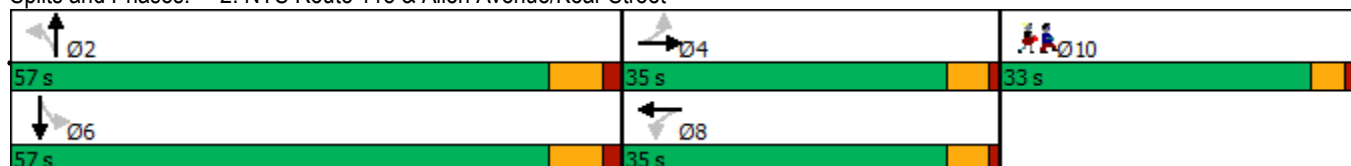


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		15.3			15.3			50.1			50.1	
Actuated g/C Ratio		0.20			0.20			0.65			0.65	
v/c Ratio		0.19			0.69			0.60			0.41	
Control Delay		23.9			36.9			11.5			8.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.9			36.9			11.5			8.7	
LOS		C			D			B			A	
Approach Delay		23.9			36.9			11.5			8.7	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		23			98			162			85	
Queue Length 95th (ft)		55			170			320			172	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		658			661			1121			1027	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.10			0.36			0.60			0.41	

**Intersection Summary**

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 77.5  
 Natural Cycle: 105  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 15.6  
 Intersection Capacity Utilization 70.3%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

**Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street**



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 4: Rochambeau Drive & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	706	36	49	522	14	24
Future Volume (vph)	706	36	49	522	14	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Grade (%)	-6%			6%	-7%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>	0.993				0.916	
Fl <sub>t</sub> Protected				0.996	0.982	
Satd. Flow (prot)	1790	0	0	1746	1791	0
Fl <sub>t</sub> Permitted				0.996	0.982	
Satd. Flow (perm)	1790	0	0	1746	1791	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	220			425	323	
Travel Time (s)	5.0			9.7	7.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	20%	17%	4%	6%	5%
Adj. Flow (vph)	735	38	51	544	15	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	773	0	0	595	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.04	1.04	0.88	0.96
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	78.1%
ICU Level of Service	D
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	706	36	49	522	14	24
Future Vol, veh/h	706	36	49	522	14	24
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, %	-6	-	-	6	-7	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	20	17	4	6	5
Mvmt Flow	735	38	51	544	15	25

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	773	0	1400 754
Stage 1	-	-	-	-	754 -
Stage 2	-	-	-	-	646 -
Critical Hdwy	-	-	4.27	-	5.06 5.55
Critical Hdwy Stg 1	-	-	-	-	4.06 -
Critical Hdwy Stg 2	-	-	-	-	4.06 -
Follow-up Hdwy	-	-	2.353	-	3.554 3.345
Pot Cap-1 Maneuver	-	-	779	-	261 468
Stage 1	-	-	-	-	614 -
Stage 2	-	-	-	-	661 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	779	-	236 468
Mov Cap-2 Maneuver	-	-	-	-	236 -
Stage 1	-	-	-	-	614 -
Stage 2	-	-	-	-	599 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	344	-	-	779	-
HCM Lane V/C Ratio	0.115	-	-	0.066	-
HCM Control Delay (s)	16.8	-	-	9.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

2025 No-Build Traffic Volumes W/Approved & Potential Other Development  
 5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	732	524	12	10	8
Future Volume (vph)	2	732	524	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	796	570	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	798	583	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.1%
Analysis Period (min)	15
	ICU Level of Service A

**Intersection**

Int Delay, s/veh 0.3

**Movement** EBL EBT WBT WBR SBL SBR

Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	2	732	524	12	10	8
Future Vol, veh/h	2	732	524	12	10	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	796	570	13	11	9

**Major/Minor** Major1 Major2 Minor2

Conflicting Flow All	583	0	-	0	1377	577
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	800	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	991	-	-	-	160	516
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	442	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	991	-	-	-	159	516
Mov Cap-2 Maneuver	-	-	-	-	159	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	442	-

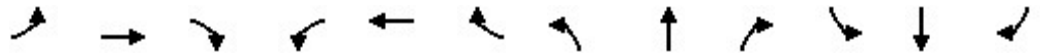
**Approach** EB WB SB

HCM Control Delay, s	0	0	22.1
HCM LOS			C

**Minor Lane/Major Mvmt** EBL EBT WBT WBR SBLn1

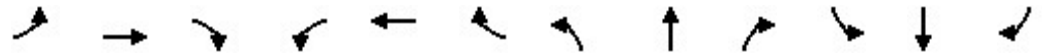
Capacity (veh/h)	991	-	-	-	230
HCM Lane V/C Ratio	0.002	-	-	-	0.085
HCM Control Delay (s)	8.6	0	-	-	22.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turning Lane) - Reg Lanes - Hour Underhill A  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Future Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%				-1%
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.981			0.983				0.850
Flt Protected	0.950			0.950				0.992			0.993	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	0	1733	0	0	1833	1546
Flt Permitted	0.278			0.553				0.907			0.909	
Satd. Flow (perm)	500	1866	0	882	1797	0	0	1584	0	0	1678	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			7			7				281
Link Speed (mph)		30			30			40				40
Link Distance (ft)		390			299			461				1058
Travel Time (s)		8.9			6.8			7.9				18.0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	444	286	60	49	284	42	47	195	36	24	156	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)	444	346	0	49	326	0	0	278	0	0	180	297
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Bay) - Reg Lanes - Hour Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	48.8	43.0		27.1	18.0			18.0			18.0	48.9
Actuated g/C Ratio	0.61	0.54		0.34	0.23			0.23			0.23	0.61
v/c Ratio	0.66	0.34		0.14	0.79			0.77			0.47	0.28
Control Delay	15.2	13.2		11.6	45.3			44.8			33.5	2.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	15.2	13.2		11.6	45.3			44.8			33.5	2.0
LOS	B	B		B	D			D			C	A
Approach Delay		14.3			40.9			44.8			13.9	
Approach LOS		B			D			D			B	
Queue Length 50th (ft)	95	94		7	144			122			75	3
Queue Length 95th (ft)	254	208		27	300			259			167	36
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	813	1314		446	728			664			699	1196
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.55	0.26		0.11	0.45			0.42			0.26	0.25

**Intersection Summary**

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 79.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.8

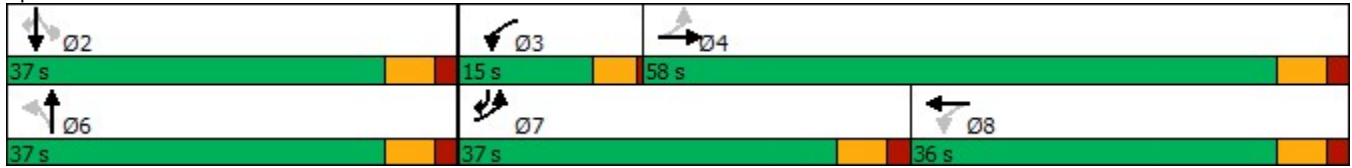
Intersection Capacity Utilization 84.7%

Intersection LOS: C

ICU Level of Service E

Analysis Period (min) 15

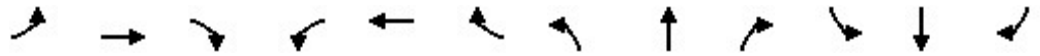
Splits and Phases: 1: NYS Route 118 & Underhill Avenue





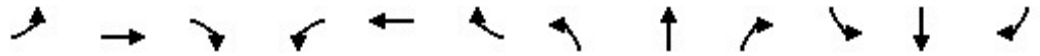


2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turning Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Future Volume (vph)	431	277	58	48	275	41	46	189	35	23	151	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.974			0.981			0.977				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	1669	1729	0	1666	1743	1546
Flt Permitted	0.302			0.553			0.652			0.523	0.995	
Satd. Flow (perm)	544	1866	0	882	1797	0	1145	1729	0	917	1736	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			9				297
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	444	286	60	49	284	42	47	195	36	24	156	297
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	444	346	0	49	326	0	47	231	0	22	158	297
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turn Right Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	41.3	35.4		24.8	16.4		14.2	14.2		14.2	14.2	39.1
Actuated g/C Ratio	0.61	0.52		0.37	0.24		0.21	0.21		0.21	0.21	0.58
v/c Ratio	0.68	0.35		0.13	0.74		0.20	0.63		0.11	0.44	0.29
Control Delay	14.5	12.4		8.5	34.8		25.7	32.5		24.8	28.5	2.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	14.5	12.4		8.5	34.8		25.7	32.5		24.8	28.5	2.0
LOS	B	B		A	C		C	C		C	C	A
Approach Delay		13.5			31.3			31.4			11.8	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	82	85		6	120		16	84		7	60	0
Queue Length 95th (ft)	#211	174		21	228		47	171		29	128	33
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	665	1327		399	898		691	1047		553	1048	1030
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.67	0.26		0.12	0.36		0.07	0.22		0.04	0.15	0.29

**Intersection Summary**

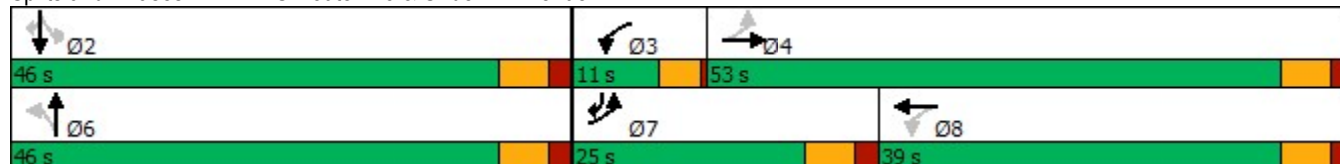
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	67.8
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.74
Intersection Signal Delay:	19.2
Intersection Capacity Utilization:	81.2%
Intersection LOS:	B
ICU Level of Service:	D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



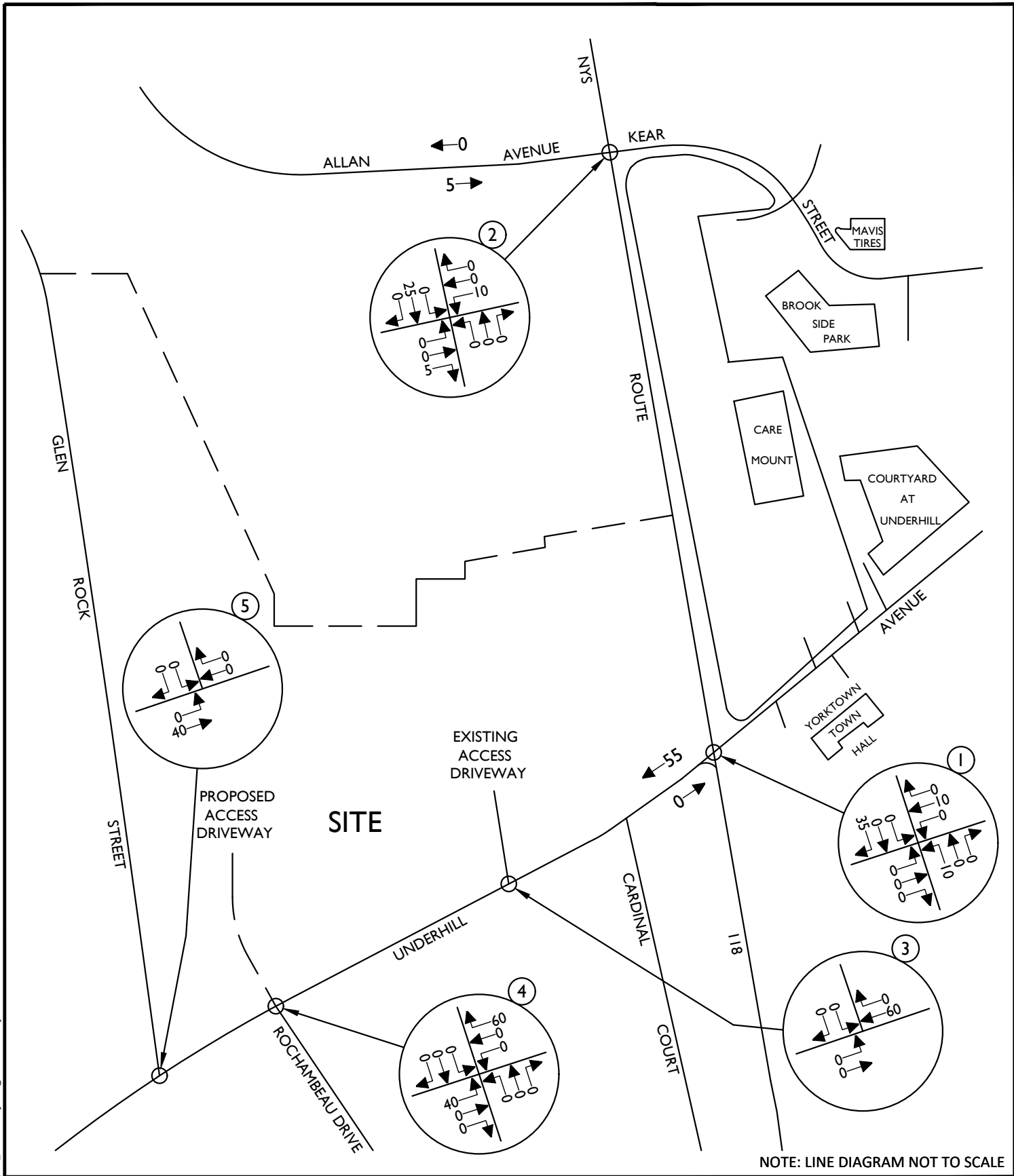


# Traffic Impact Study

## Appendix I | Sensitivity Analysis – No Traffic Through Beaver Ridge

# Figures

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\185 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com  
 Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
 RESIDENTIAL**

TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK



**PROTECT YOURSELF**  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.  
 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

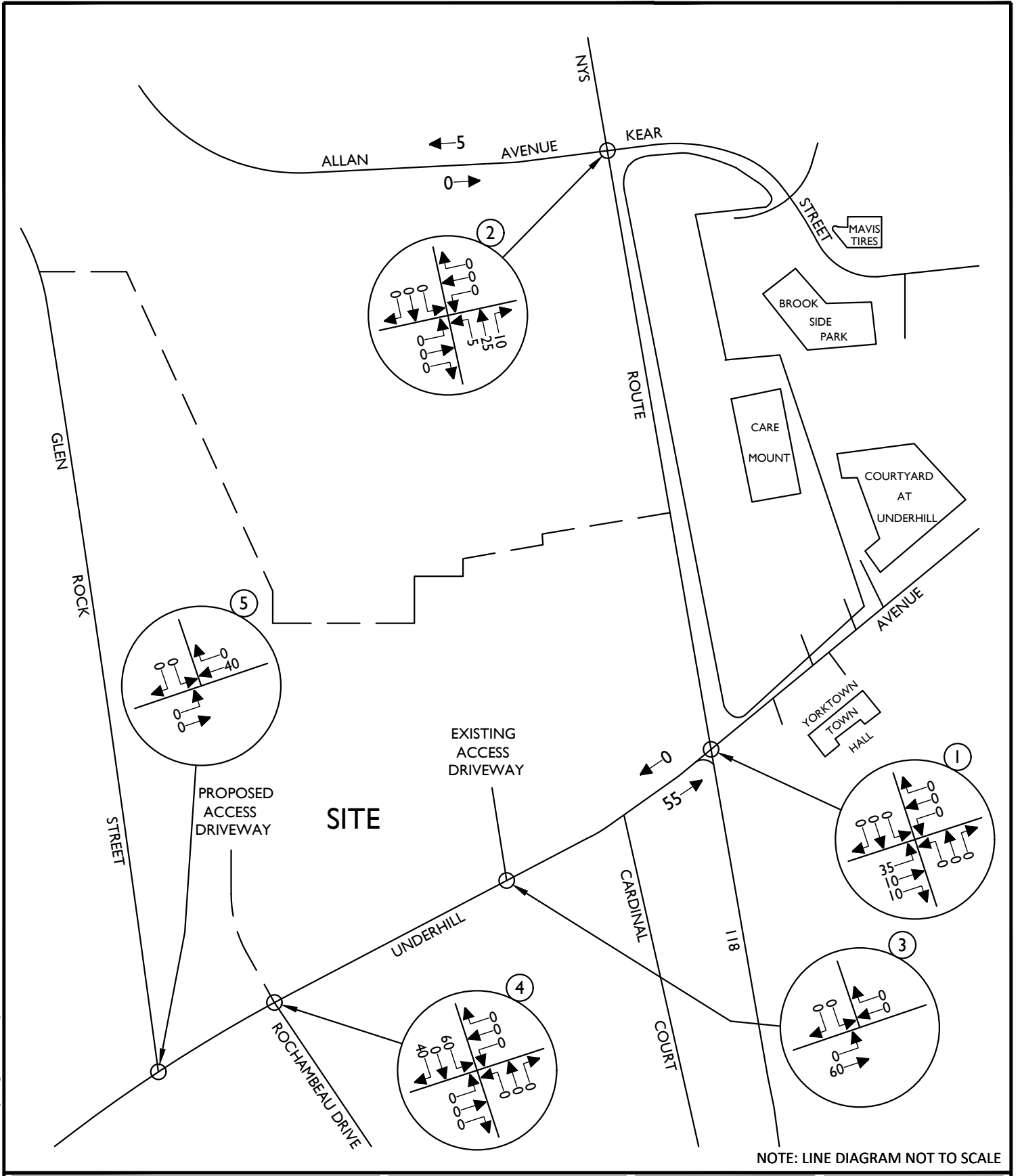


WESTCHESTER  
 400 Columbus Avenue, Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A	DRAWING NAME: 230326RGD_FIGURE_BD_SENSITIVITY		
SHEET TITLE: TOWNHOUSE ARRIVAL DISTRIBUTION (SENSITIVITY - NO BEAVER RIDGE ACCESS) (EXPRESSED AS A %)			
SHEET NUMBER:			185

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\195 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
--------------------	------------------	-------------------	-----------------------

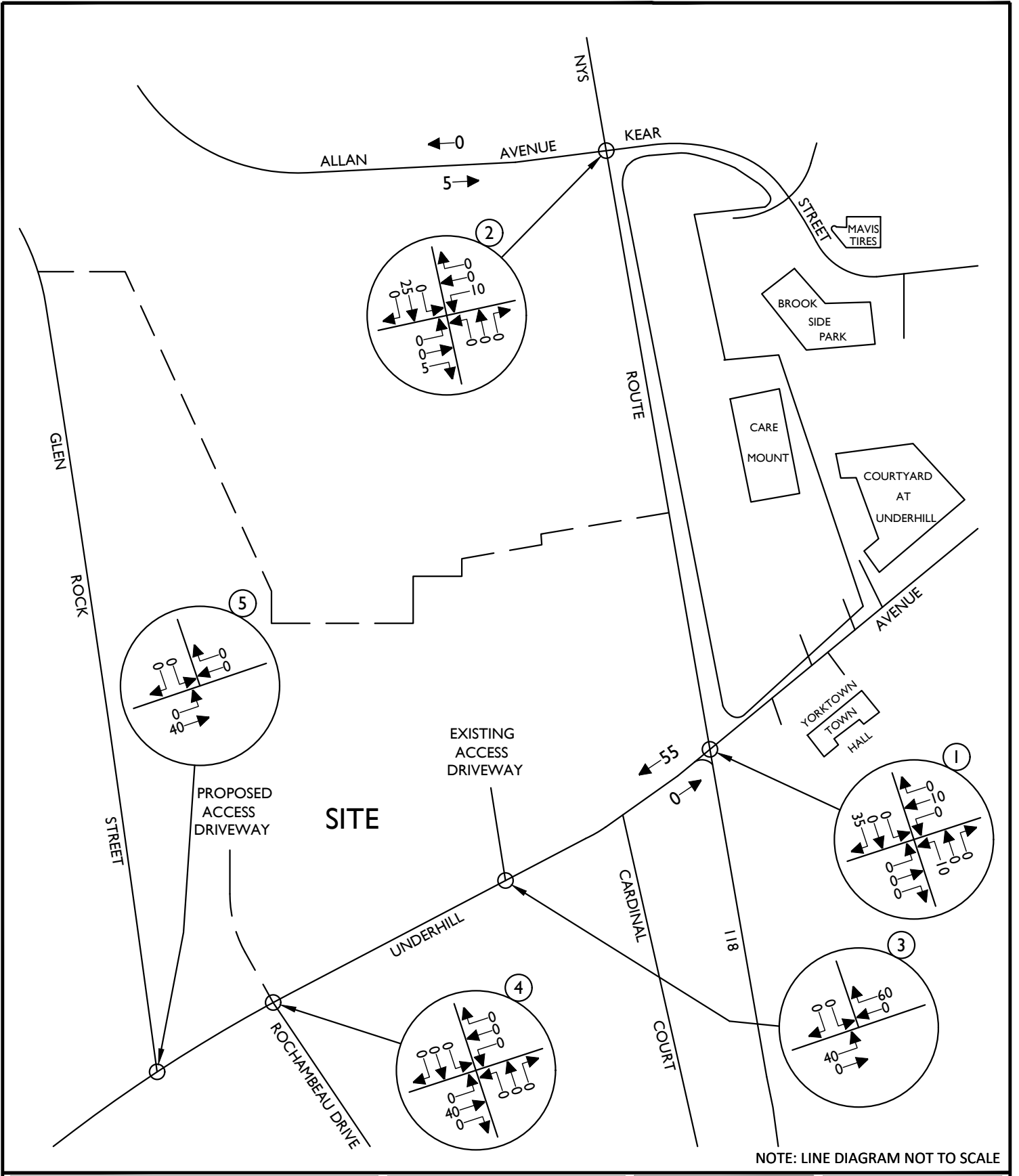
PROJECT NUMBER: 20006297A	DRAWING NAME: 230326RGD_FIGURE_BD_SENSITIVITY
------------------------------	--

SHEET TITLE: TOWNHOUSE DEPARTURE DISTRIBUTION (SENSITIVITY - NO BEAVER RIDGE ACCESS) (EXPRESSED AS A %)
---

SHEET NUMBER: 195
----------------------



V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\205 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.

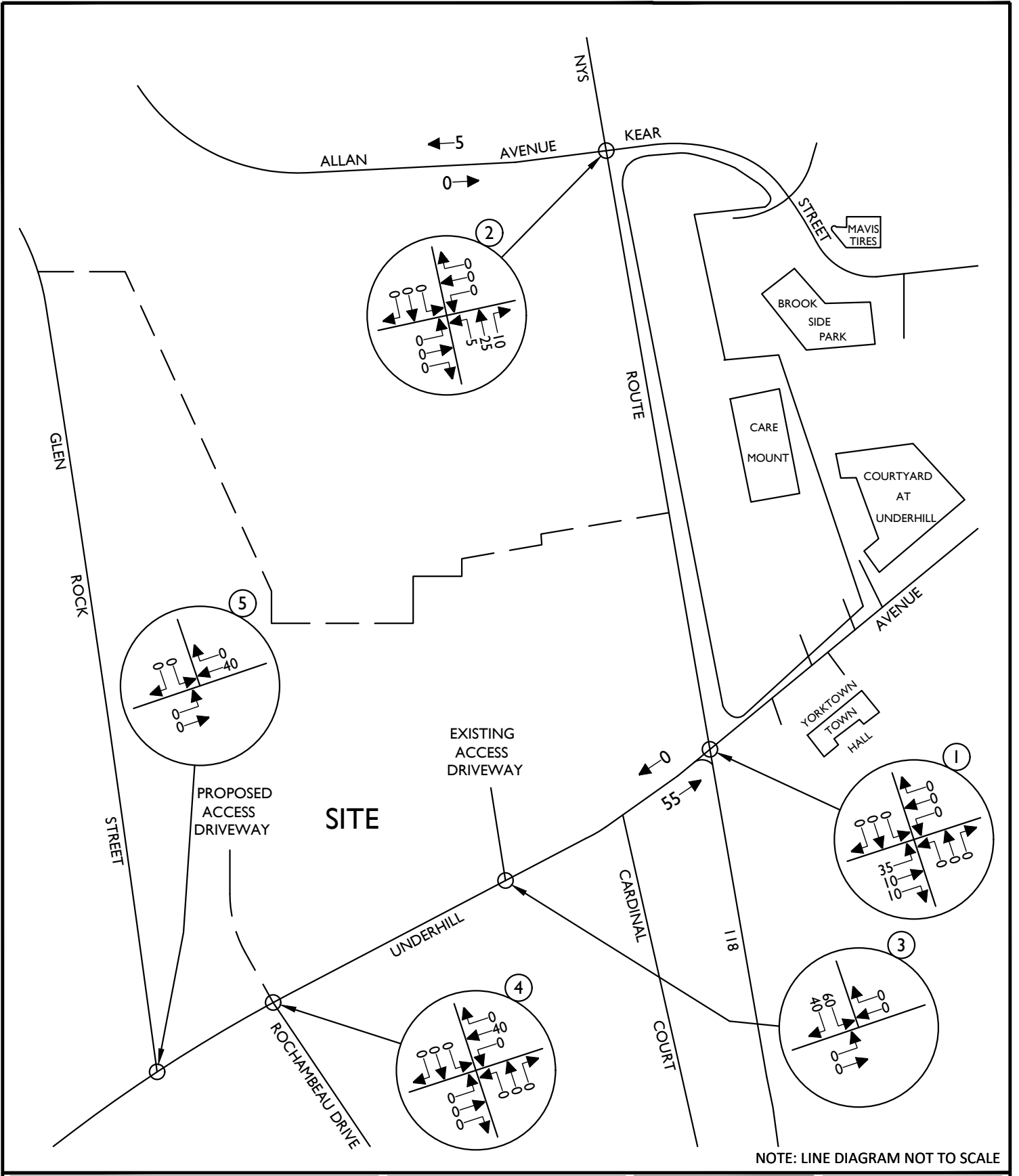
PROJECT NUMBER:	DRAWING NAME:
20006297A	230326RGD_FIGURE_BD_SENSITIVITY

SHEET TITLE:  
**APARTMENTS/CONDOS/COMMERCIAL  
ARRIVAL DISTRIBUTION  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
(EXPRESSED AS A %)**

SHEET NUMBER:

205

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\215 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

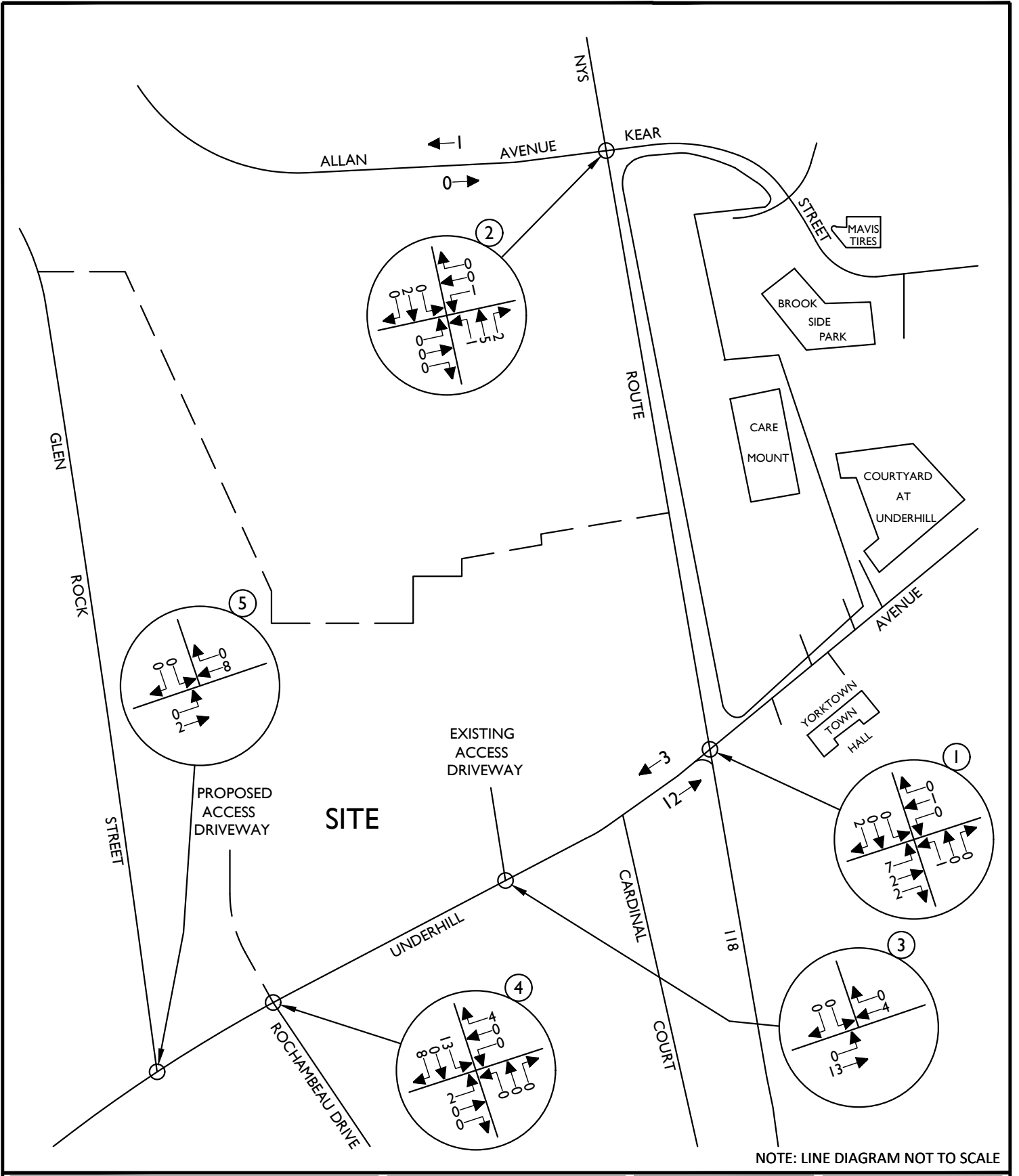
SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A		DRAWING NAME: 230326RGD_FIGURE_BD_SENSITIVITY	

SHEET TITLE:  
**APARTMENTS/CONDOS/COMMERCIAL  
DEPARTURE DISTRIBUTION  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
(EXPRESSED AS A %)**

SHEET NUMBER:

215

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\225 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

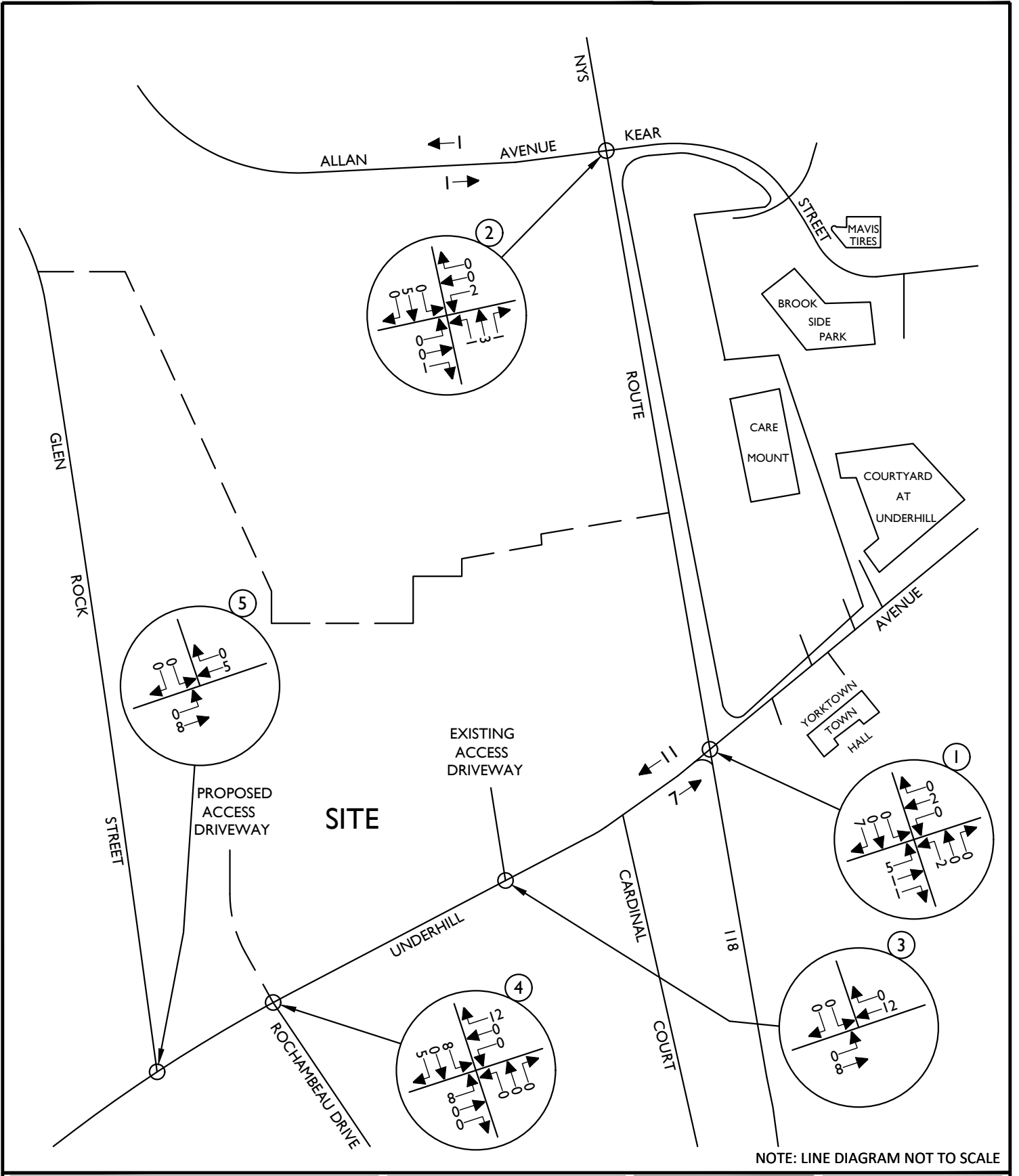
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
20006297A	230326RGD_FIGURE_BD_SENSITIVITY

SHEET TITLE:
TOWNHOUSE SITE GENERATED TRAFFIC VOLUMES (SENSITIVITY - NO BEAVER RIDGE ACCESS) WEEKDAY AM PEAK HOUR

SHEET NUMBER:
225

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\235 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

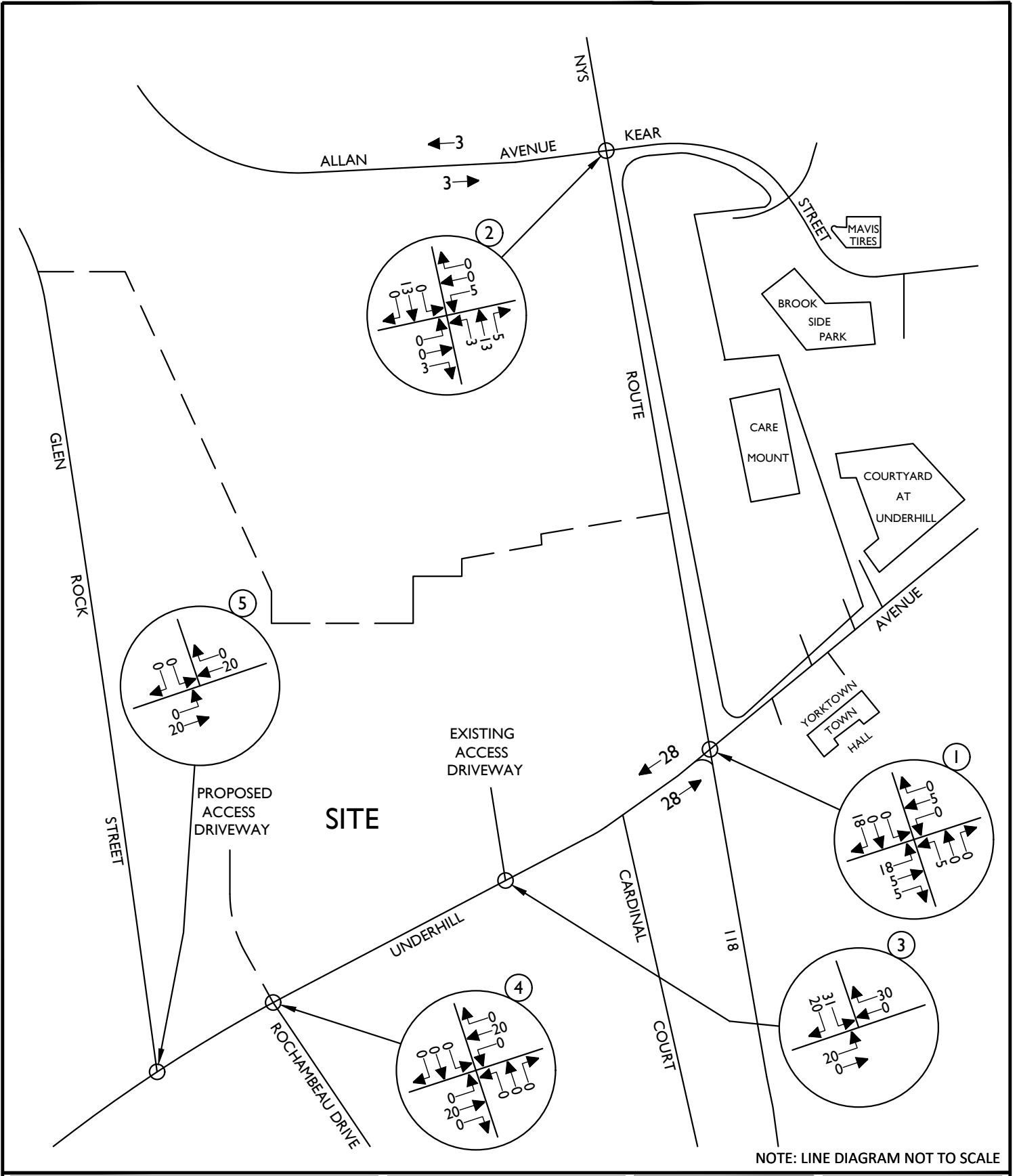
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
20006297A	230326RGD_FIGURE_BD_SENSITIVITY

SHEET TITLE:	TOWNHOUSE SITE GENERATED TRAFFIC VOLUMES (SENSITIVITY - NO BEAVER RIDGE ACCESS) WEEKDAY PEAK PM HOUR
--------------	---

SHEET NUMBER:	235
---------------	-----

AcPublish\_305201230326RGD\_FIGURE\_BD\_Sensitivity.dwg1245 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as **MASER** CONSULTANTS

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering & Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

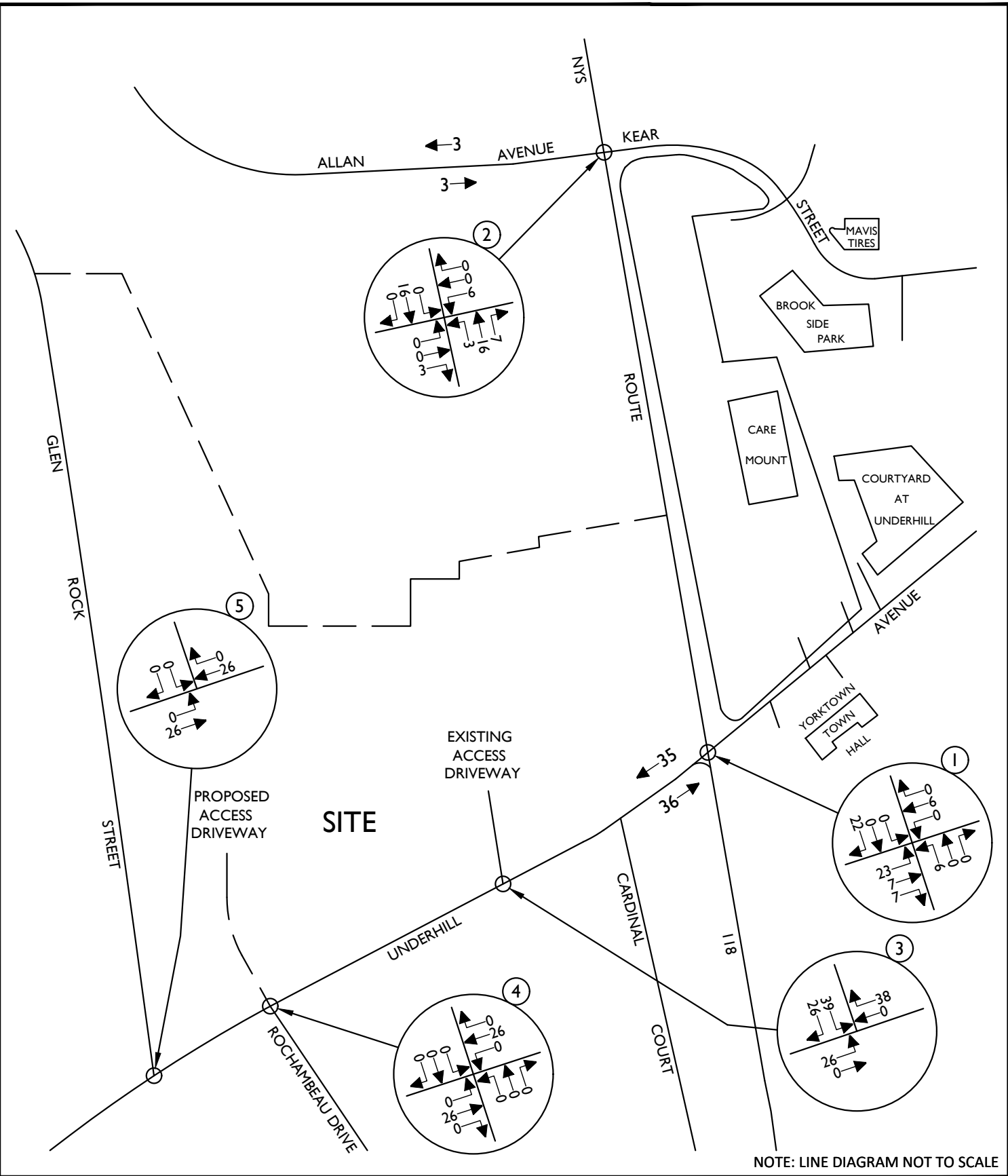
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_BD_SENSITIVITY		

SHEET TITLE:  
APARTMENTS/CONDOS/COMMERCIAL  
SITE GENERATED TRAFFIC VOLUMES  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:

245

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\25S By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

**Colliers** Engineering & Design

www.colliersengineering.com

Doing Business as

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

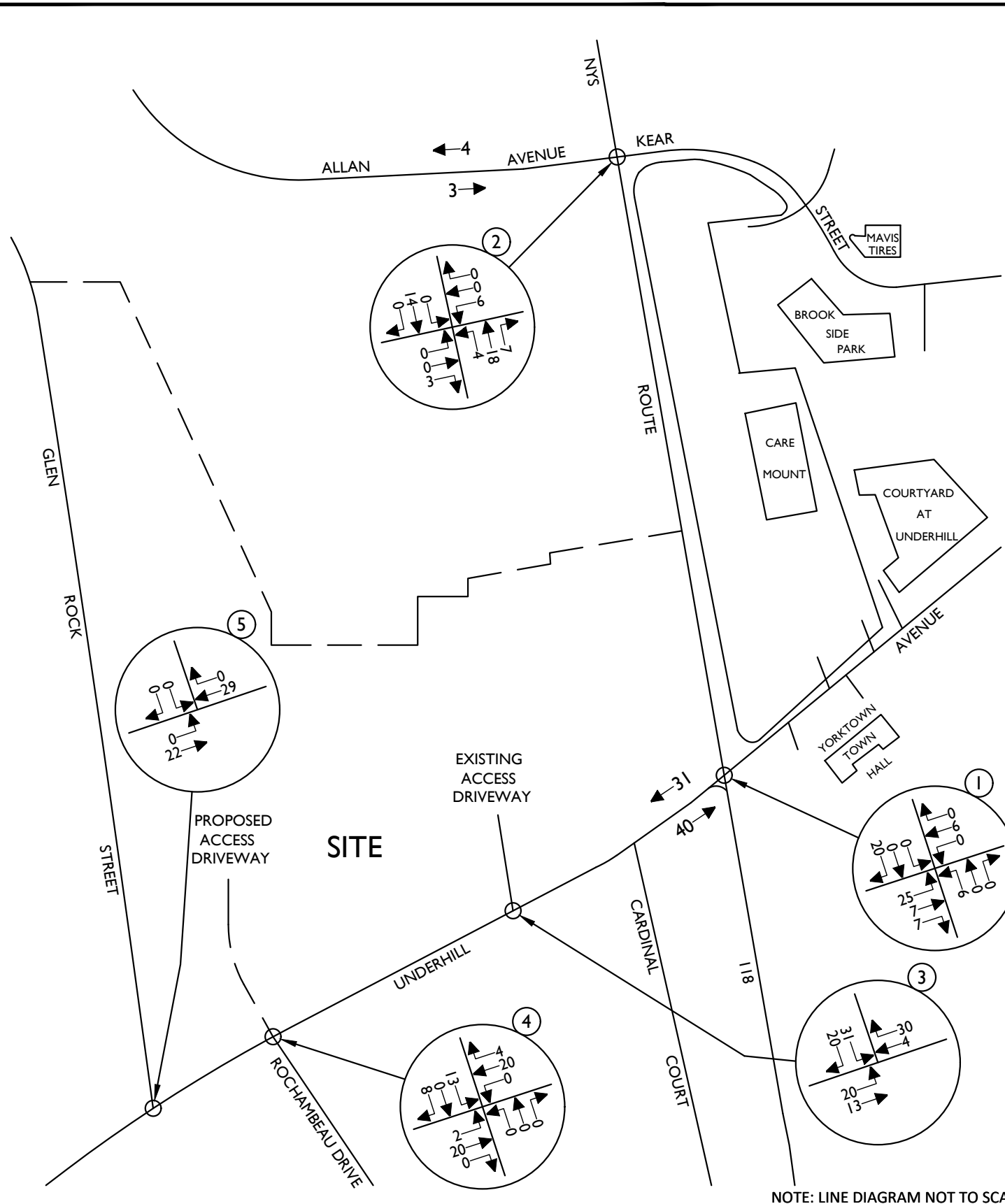
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

**WESTCHESTER**  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

**Engineering & Design**  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY			
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:		DRAWING NAME:	
20006297A		230326RGD_FIGURE_BD_SENSITIVITY	
SHEET TITLE:			
APARTMENTS/CONDOS/COMMERCIAL SITE GENERATED TRAFFIC VOLUMES (SENSITIVITY - NO BEAVER RIDGE ACCESS) WEEKDAY PEAK PM HOUR			
SHEET NUMBER:			25S

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\265 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

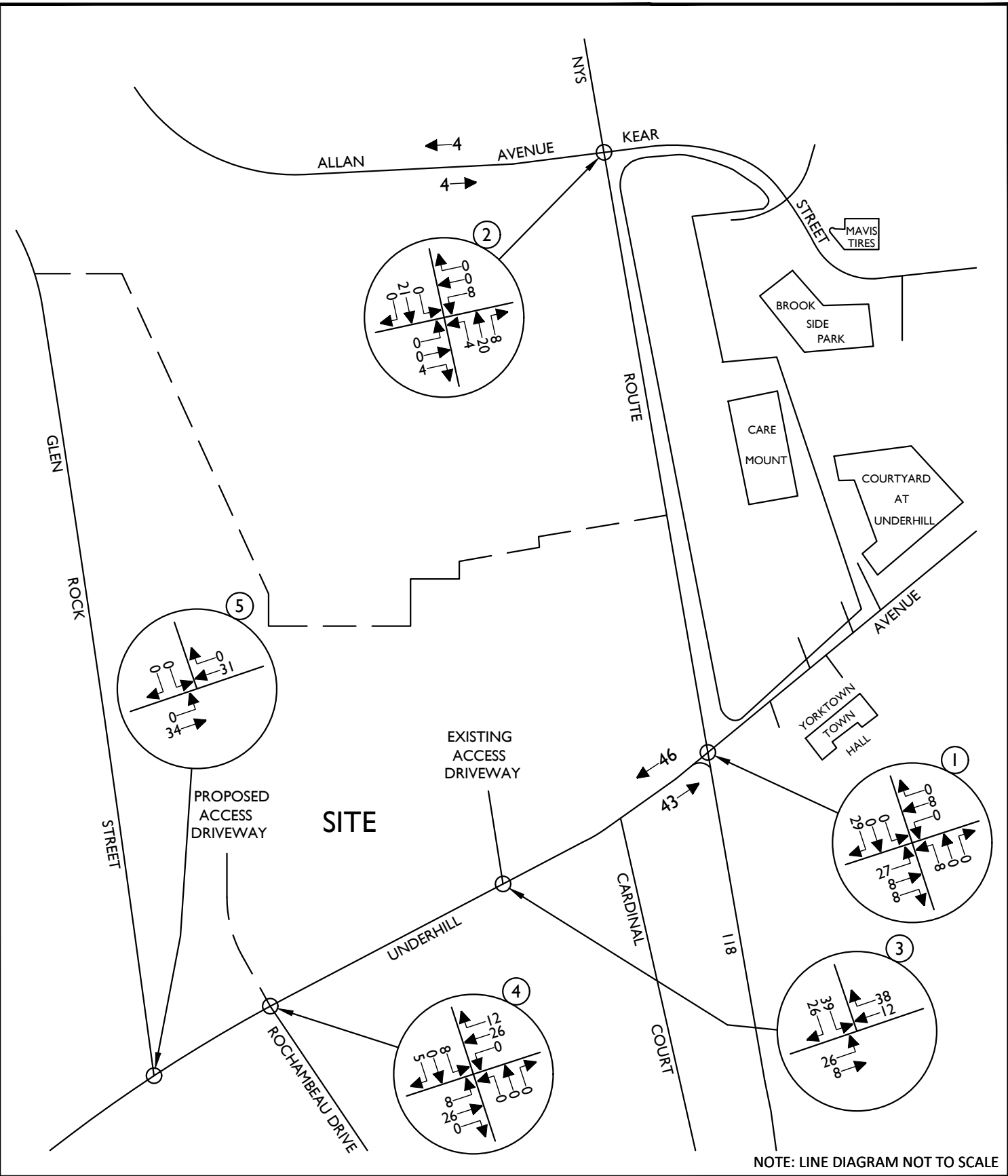
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_BD_SENSITIVITY		

SHEET TITLE:  
TOTAL SITE GENERATED  
TRAFFIC VOLUMES  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
WEEKDAY PEAK AM HOUR

SHEET NUMBER:  
265

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\275 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

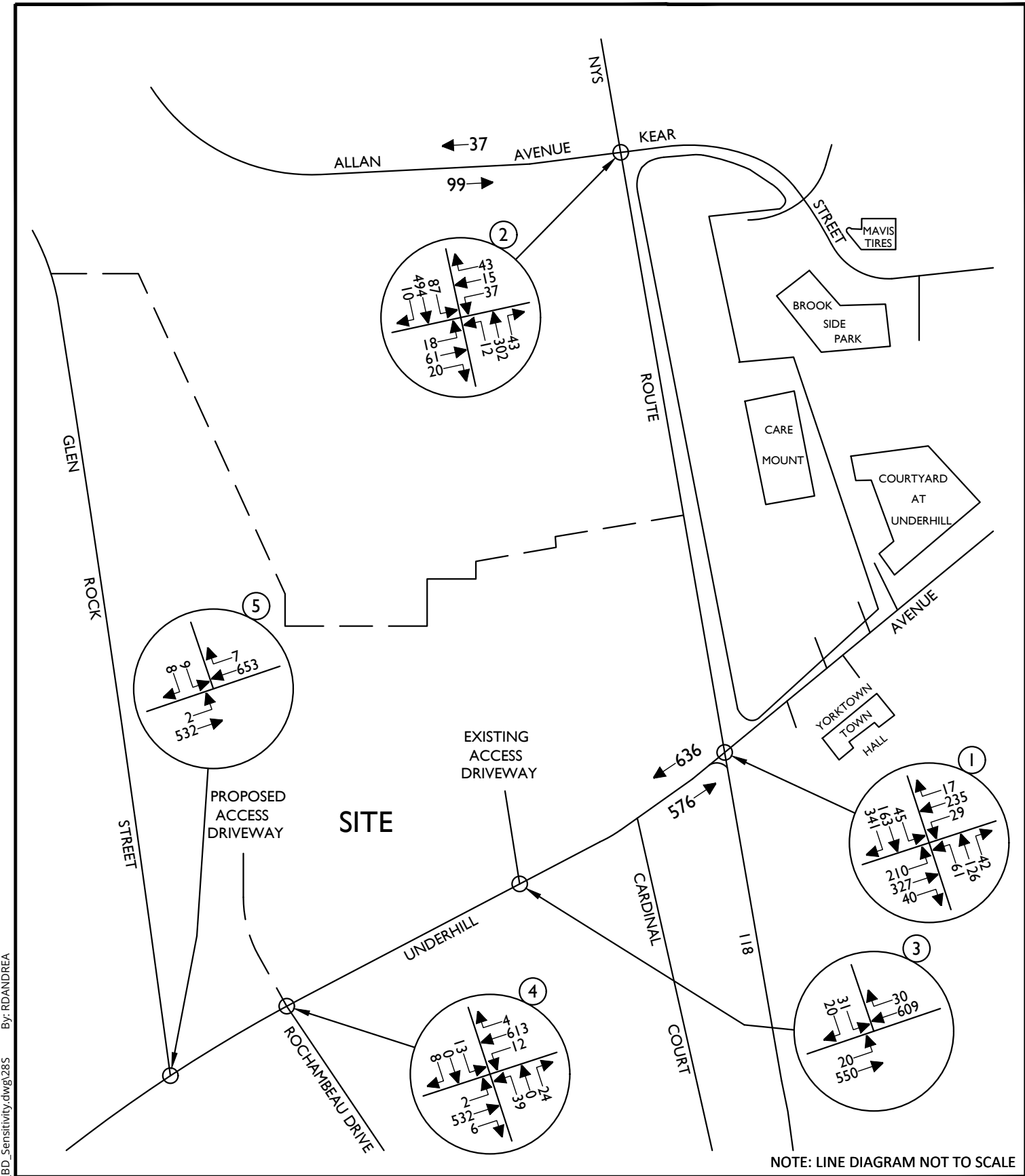
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_BD_SENSITIVITY		

SHEET TITLE:  
TOTAL SITE GENERATED  
TRAFFIC VOLUMES  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:  
275

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.





NOTE: LINE DIAGRAM NOT TO SCALE

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\285 By: RDANDREA



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM



WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

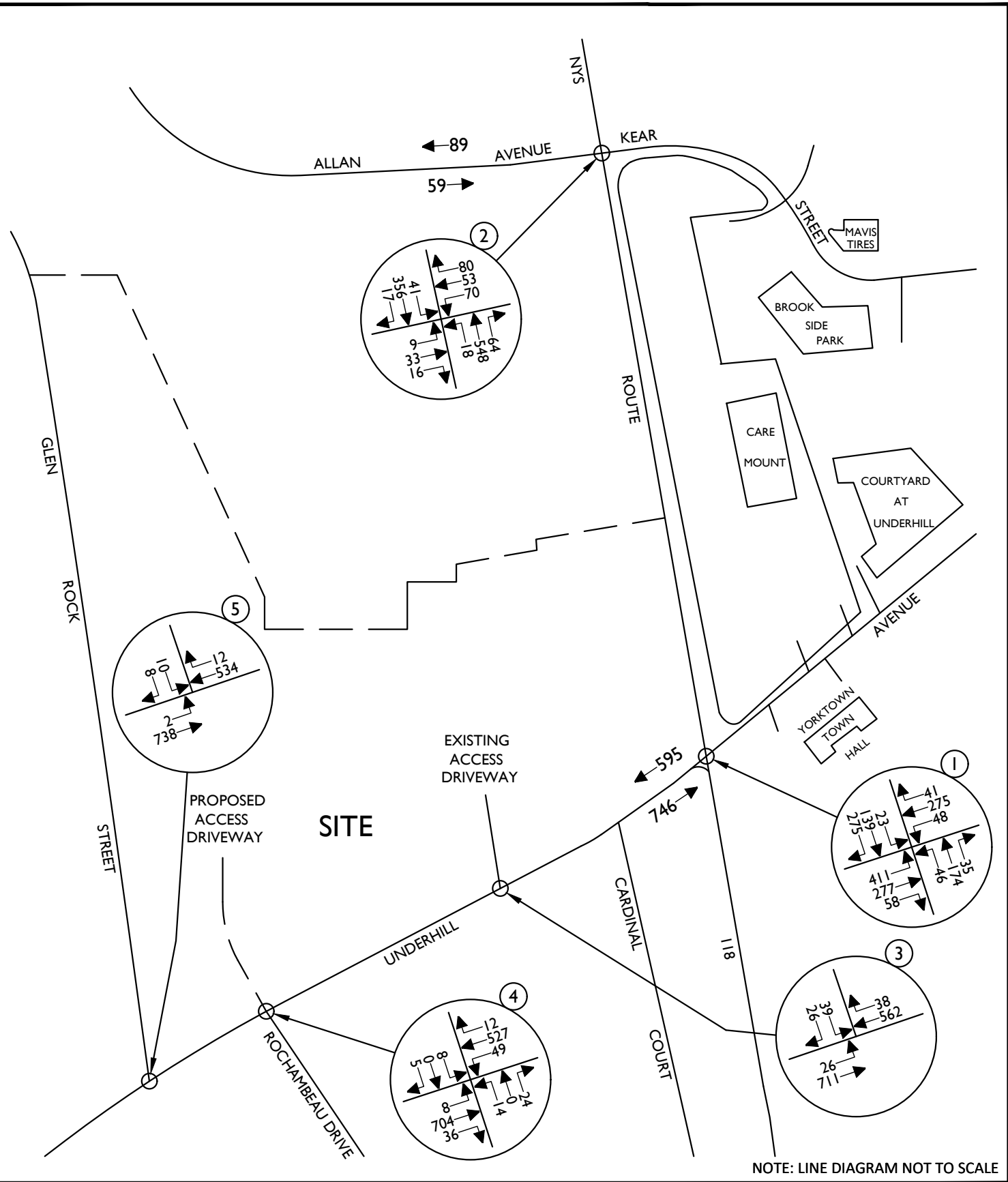
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_BD_SENSITIVITY		

SHEET TITLE:  
2025 BUILD TRAFFIC VOLUMES  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED O.D.)

SHEET NUMBER:  
**285**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\295 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE



**UNDERHILL FARM  
RESIDENTIAL**

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE  
Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

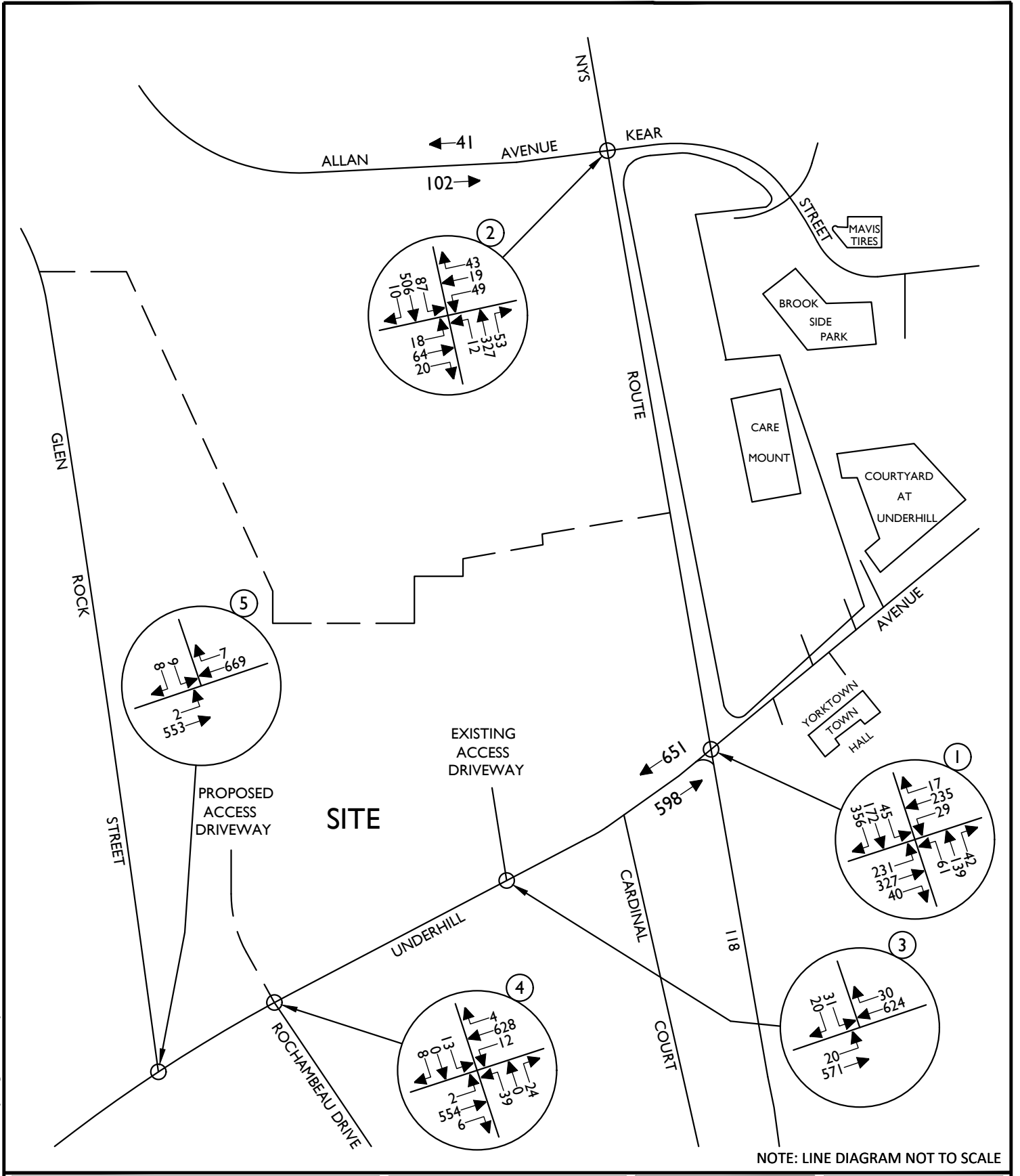


WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE: AS SHOWN	DATE: 3/26/23	DRAWN BY: R.H.	CHECKED BY: P.J.G.
PROJECT NUMBER: 20006297A		DRAWING NAME: 230326RGD_FIGURE_BD_SENSITIVITY	
SHEET TITLE: 2025 BUILD TRAFFIC VOLUMES (SENSITIVITY - NO BEAVER RIDGE ACCESS) WEEKDAY PEAK PM HOUR (W/ APPROVED O.D.)			
SHEET NUMBER:			295

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.



NOTE: LINE DIAGRAM NOT TO SCALE



www.colliersengineering.com



Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

UNDERHILL FARM  
RESIDENTIAL

TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



Engineering  
& Design

WESTCHESTER  
400 Columbus Avenue,  
Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.

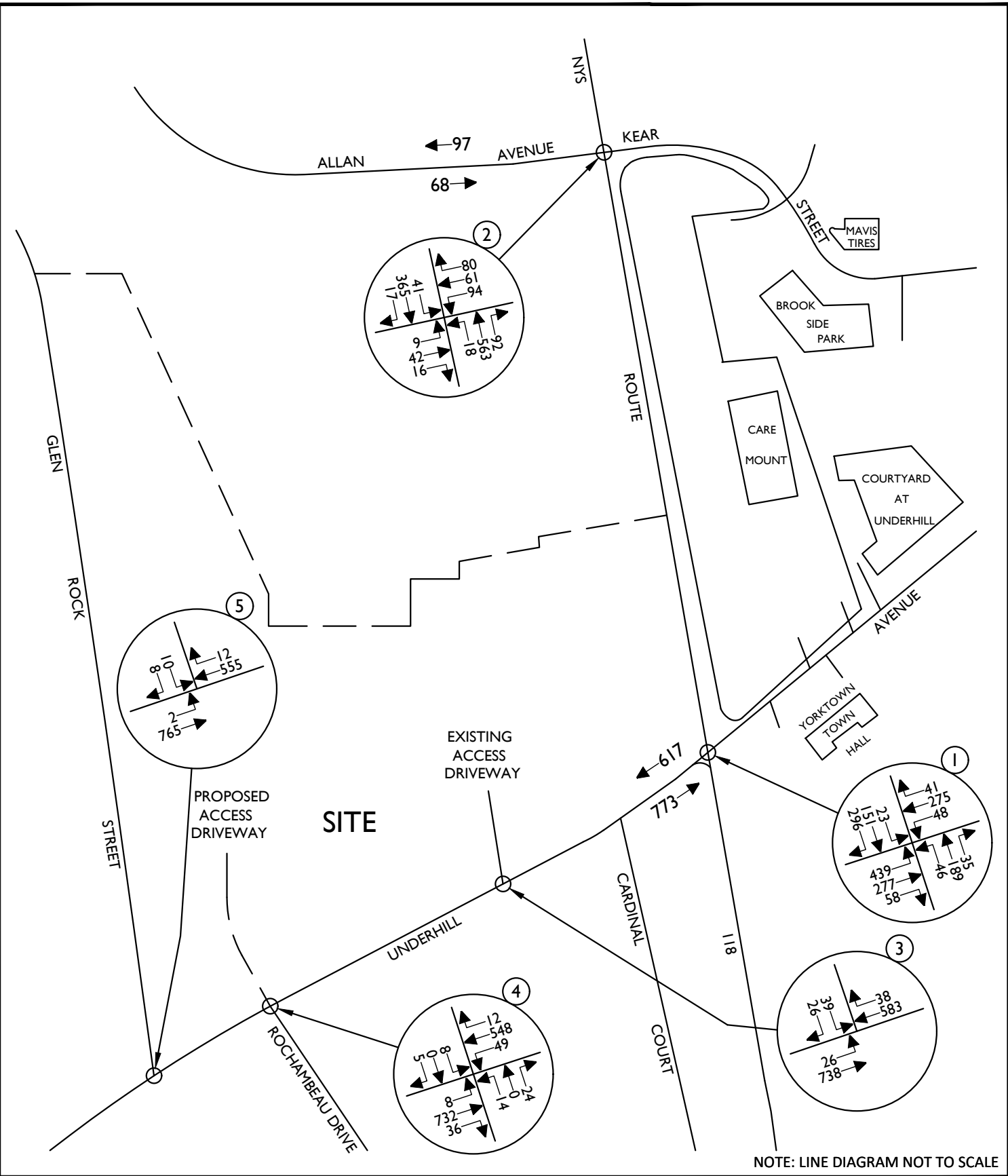
PROJECT NUMBER:	DRAWING NAME:
20006297A	230326RGD_FIGURE_BD_SENSITIVITY

SHEET TITLE:  
2025 BUILD TRAFFIC VOLUMES  
(SENSITIVITY - NO BEAVER RIDGE ACCESS)  
WEEKDAY PEAK AM HOUR  
(W/ APPROVED & POTENTIAL O.D.)

SHEET NUMBER:

405

V:\Publish\_30520\230326RGD\_FIGURE\_BD\_Sensitivity.dwg\415 By: RDANDREA



**NOTE: LINE DIAGRAM NOT TO SCALE**



**UNDERHILL FARM  
RESIDENTIAL**

**TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK**

**811**  
 PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION  
 OF EXCAVATORS, DESIGNERS, OR  
 ANY PERSON PREPARING TO  
 DISTURB THE EARTH'S SURFACE  
 ANYWHERE IN ANY STATE  
 Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
 VISIT: WWW.CALL811.COM

**Colliers**  
 Engineering & Design  
 WESTCHESTER  
 400 Columbus Avenue,  
 Suite 180E  
 Valhalla, NY 10595  
 Phone: 914.347.7500  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING  
 ENGINEERING & LAND SURVEYING

**TRAFFIC IMPACT STUDY**

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	3/26/23	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
20006297A	230326RGD_FIGURE_BD_SENSITIVITY		

SHEET TITLE:  
**2025 BUILD TRAFFIC VOLUMES  
 (SENSITIVITY - NO BEAVER RIDGE ACCESS)  
 WEEKDAY PEAK PM HOUR  
 (W/ APPROVED & POTENTIAL O.D.)**

SHEET NUMBER:  
**415**

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

# Tables

**Table No. 25**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour - Sensitivity Analysis**

	2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.					
	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay			
<b>1</b>	<b>NYS Route 118 &amp; Underhill Avenue</b>			<b>Signalized</b>														
	Underhill Avenue	EB	LT	0.70	C	22.5	0.77	C	26.1	0.83	C	30.6	0.82	C	29.8	0.89	D	37.6
			R	0.02	A	0.0	0.02	A	0.0	0.03	A	0.0	0.02	A	0.0	0.03	A	0.0
	Underhill Avenue	WB	LTR	0.73	D	47.0	0.79	D	51.8	0.76	D	49.2	0.76	D	49.7	0.78	D	51.0
	NYS Route 118	NB	LTR	0.54	C	28.5	0.59	C	30.4	0.64	C	32.9	0.61	C	31.5	0.65	C	33.4
	NYS Route 118	SB	LTR	0.88	D	41.1	0.91	D	44.9	0.93	D	48.2	0.93	D	48.3	0.94	D	50.9
			<b>Overall</b>	-	<b>C</b>	<b>33.5</b>	-	<b>D</b>	<b>37.0</b>	-	<b>D</b>	<b>39.3</b>	-	<b>D</b>	<b>39.1</b>	-	<b>D</b>	<b>42.9</b>
	<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>																	
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.42	B	12.0	-	-	-	0.45	B	12.7
			TR	-	-	-	-	-	-	0.45	B	16.2	-	-	-	0.44	B	16.4
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.09	B	10.2	-	-	-	0.09	B	10.9
			TR	-	-	-	-	-	-	0.66	C	33.3	-	-	-	0.68	D	35.9
	NYS Route 118	NB	LTR	-	-	-	-	-	-	0.66	C	30.2	-	-	-	0.68	C	32.2
	NYS Route 118	SB	LT	-	-	-	-	-	-	0.55	C	26.8	-	-	-	0.56	C	27.9
			R	-	-	-	-	-	-	0.35	A	2.4	-	-	-	0.36	A	2.5
			<b>Overall</b>	-	-	-	-	-	-	-	<b>B</b>	<b>18.6</b>	-	-	-	-	<b>B</b>	<b>19.5</b>
	<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>																	
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.39	A	8.6	-	-	-	0.42	A	9.0
			TR	-	-	-	-	-	-	0.43	B	12.6	-	-	-	0.42	B	12.5
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.08	A	7.2	-	-	-	0.08	A	7.7
			TR	-	-	-	-	-	-	0.65	C	28.1	-	-	-	0.66	C	29.7
	NYS Route 118	NB	L	-	-	-	-	-	-	0.26	C	22.9	-	-	-	0.27	C	23.9
			TR	-	-	-	-	-	-	0.52	C	24.6	-	-	-	0.56	C	26.7
	NYS Route 118	SB	L	-	-	-	-	-	-	0.18	C	21.7	-	-	-	0.18	C	22.6
			T	-	-	-	-	-	-	0.53	C	26.9	-	-	-	0.56	C	28.6
			R	-	-	-	-	-	-	0.36	A	2.1	-	-	-	0.37	A	2.3
			<b>Overall</b>	-	-	-	-	-	-	-	<b>B</b>	<b>15.5</b>	-	-	-	-	<b>B</b>	<b>16.2</b>

**Table No. 2S**  
**Level of Service Summary Table**  
**Weekday Peak AM Hour - Sensitivity Analysis**

				2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.				
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
2	NYS Route 118 & Allan Avenue/Kear Street	Unsignalized																		
			Allan Avenue	EB	LTR	0.38	C	30.6	0.39	C	31.1	0.40	C	31.1	0.42	C	31.4	0.43	C	31.4
			Kear Street	WB	LTR	0.28	C	23.1	0.33	C	22.8	0.36	C	24.4	0.43	C	27.4	0.46	C	28.7
			NYS Route 118	NB	LTR	0.25	A	4.6	0.27	A	4.8	0.30	A	5.0	0.33	A	5.5	0.35	A	5.8
			NYS Route 118	SB	LTR	0.46	A	6.4	0.52	A	7.4	0.53	A	7.7	0.58	A	8.8	0.6	A	9.1
			Overall			-	A	9.2	-	A	10.0	-	B	10.3	-	B	11.4	-	B	11.7
3	Underhill Avenue & East Site Access	Signalized																		
			Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.2	-	-	-	0.03	A	9.2
			East Site Access	SB	LR	-	-	-	-	-	-	0.27	D	27.9	-	-	-	0.28	D	29.5
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized																		
			Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.8	-	-	-	0.01	A	8.9
			Underhill Avenue	WB	LTR	0.01	A	8.4	0.01	A	8.5	0.01	A	8.9	0.01	A	8.6	0.01	A	9.0
			Rochambeau Drive	NB	LTR	0.15	C	15.0	0.17	C	15.8	0.22	C	20.1	0.17	C	16.3	0.23	C	20.9
			Site Access	SB	LTR	-	-	-	-	-	-	0.11	D	25.8	-	-	-	0.12	D	27.2
5	Underhill Avenue & Glen Rock Street	Unsignalized																		
			Underhill Avenue	EB	LT	0.01	A	8.9	0.01	A	9.0	0.01	A	9.1	0.01	A	9.1	0.01	A	9.2
			Glen Rock Street	SB	LR	0.07	C	18.7	0.07	C	20.2	0.08	C	21.4	0.08	C	21.0	0.08	C	22.1

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

**Table No. 25**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour - Sensitivity Analysis**

	2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.					
	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay			
<b>1</b>	<b>NYS Route 118 &amp; Underhill Avenue</b>			<b>Signalized</b>														
	Underhill Avenue	EB	LT	0.93	D	38.4	1.05	E	67.2	1.17	F	113.3	1.15	F	103.3	1.28	F	159.5
			R	0.03	A	0.0	0.03	A	0.0	0.07	A	4.6	0.03	A	0.0	0.07	A	5.0
	Underhill Avenue	WB	LTR	0.51	C	20.2	0.62	C	23.7	0.66	C	26.7	0.64	C	25.9	0.73	C	31.8
	NYS Route 118	NB	LTR	0.63	C	28.5	0.65	C	28.6	0.68	C	29.7	0.63	C	27.3	0.66	C	28.0
	NYS Route 118	SB	LTR	0.81	C	30.5	0.82	C	31.0	0.84	C	32.1	0.84	C	32.0	0.86	C	32.9
			<b>Overall</b>	-	<b>C</b>	<b>30.3</b>	-	<b>D</b>	<b>42.0</b>	-	<b>E</b>	<b>60.8</b>	-	<b>E</b>	<b>56.4</b>	-	<b>E</b>	<b>79.4</b>
	<u>With Underhill Avenue Left Turn Lane &amp; NYS Route 118 SB Right Turn Lane</u>																	
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.63	B	13.8	-	-	-	0.67	B	15.7
			TR	-	-	-	-	-	-	0.34	B	12.9	-	-	-	0.34	B	13.2
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.14	B	11.1	-	-	-	0.14	B	11.7
			TR	-	-	-	-	-	-	0.78	D	43.1	-	-	-	0.80	D	45.5
	NYS Route 118	NB	LTR	-	-	-	-	-	-	0.74	D	42.5	-	-	-	0.77	D	45.2
	NYS Route 118	SB	LT	-	-	-	-	-	-	0.45	C	32.5	-	-	-	0.48	C	33.7
			R	-	-	-	-	-	-	0.27	A	1.8	-	-	-	0.29	A	2.1
			<b>Overall</b>	-	-	-	-	-	-	-	<b>C</b>	<b>22.6</b>	-	-	-	-	<b>C</b>	<b>24.0</b>
	<u>With Left Turn Lanes All Approaches &amp; NYS Route 118 SB Right Turn Lane</u>																	
	Underhill Avenue	EB	L	-	-	-	-	-	-	0.65	B	12.8	-	-	-	0.69	B	15.0
			TR	-	-	-	-	-	-	0.35	B	12.1	-	-	-	0.35	B	12.3
	Underhill Avenue	WB	L	-	-	-	-	-	-	0.13	A	8.2	-	-	-	0.13	A	8.5
			TR	-	-	-	-	-	-	0.75	C	34.6	-	-	-	0.74	C	34.8
	NYS Route 118	NB	L	-	-	-	-	-	-	0.20	C	25.8	-	-	-	0.20	C	25.7
			TR	-	-	-	-	-	-	0.60	C	31.6	-	-	-	0.63	C	32.6
	NYS Route 118	SB	L	-	-	-	-	-	-	0.11	C	24.7	-	-	-	0.12	C	24.8
			T	-	-	-	-	-	-	0.41	C	28.2	-	-	-	0.44	C	28.5
			R	-	-	-	-	-	-	0.28	A	2.0	-	-	-	0.30	A	2.0
			<b>Overall</b>	-	-	-	-	-	-	-	<b>B</b>	<b>18.6</b>	-	-	-	-	<b>B</b>	<b>19.2</b>



**Table No. 2S**  
**Level of Service Summary Table**  
**Weekday Peak PM Hour - Sensitivity Analysis**

				2021 Existing			2025 No-Build with Approved O.D.			2025 Build with Approved O.D.			2025 No-Build with Approved & Potential O.D.			2025 Build with Approved & Potential O.D.				
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay		
2	NYS Route 118 & Allan Avenue/Kear Street	Unsignalized																		
			Allan Avenue	EB	LTR	0.19	C	23.3	0.19	C	23.4	0.19	C	22.1	0.19	C	23.9	0.20	C	23.0
			Kear Street	WB	LTR	0.59	C	33.6	0.63	C	34.0	0.65	D	35.2	0.69	D	36.9	0.69	D	36.9
			NYS Route 118	NB	LTR	0.51	A	8.4	0.55	A	9.4	0.58	B	10.4	0.60	B	11.5	0.64	B	12.6
			NYS Route 118	SB	LTR	0.34	A	6.6	0.39	A	7.6	0.42	A	8.1	0.41	A	8.7	0.44	A	9.3
			Overall			-	B	12.2	-	B	13.3	-	B	14.1	-	B	15.6	-	B	16.2
3	Underhill Avenue & East Site Access	Signalized																		
			Underhill Avenue	EB	LT	-	-	-	-	-	-	0.03	A	9.0	-	-	-	0.03	A	9.1
			East Site Access	SB	LR	-	-	-	-	-	-	0.40	E	37.5	-	-	-	0.43	E	41.3
4	Underhill Avenue & Rochambeau Drive/West Site Access	Unsignalized																		
			Underhill Avenue	EB	LTR	-	-	-	-	-	-	0.01	A	8.6	-	-	-	0.01	A	8.7
			Underhill Avenue	WB	LTR	0.06	A	9.6	0.06	A	9.8	0.06	A	9.5	0.07	A	9.9	0.06	A	9.7
			Rochambeau Drive	NB	LTR	0.10	C	15.4	0.11	C	16.2	0.14	C	19.1	0.12	C	16.8	0.14	C	20.1
			Site Access	SB	LTR	-	-	-	-	-	-	0.10	D	33.2	-	-	-	0.1	E	35.6
5	Underhill Avenue & Glen Rock Street	Unsignalized																		
			Underhill Avenue	EB	LT	0.01	A	8.4	0.01	A	8.6	0.01	A	8.7	0.01	A	8.6	0.01	A	8.7
			Glen Rock Street	SB	LR	0.07	C	19.2	0.08	C	21.0	0.09	C	22.6	0.09	C	22.1	0.09	C	23.9

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

# Capacity Analysis

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Future Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.975			0.916	
Flt Protected		0.981			0.995			0.987			0.996	
Satd. Flow (prot)	0	2002	1577	0	1804	0	0	1569	0	0	1645	0
Flt Permitted		0.493			0.893			0.642			0.951	
Satd. Flow (perm)	0	1006	1577	0	1619	0	0	1021	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			12			84	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	228	355	43	32	255	18	66	137	46	49	177	371
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	583	43	0	305	0	0	249	0	0	597	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 1: NYS Route 118 & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0		10.0
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0		16.0
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0		46.0
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%		41.8%
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0		40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0		4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		2.0
Recall Mode	Max	None		None	None		Min	Min		Min		Min
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		51.1	101.3		25.0			38.2				38.2
Actuated g/C Ratio		0.50	1.00		0.25			0.38				0.38
v/c Ratio		0.83	0.03		0.76			0.64				0.93
Control Delay		30.6	0.0		49.2			32.9				48.2
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		30.6	0.0		49.2			32.9				48.2
LOS		C	A		D			C				D
Approach Delay		28.5			49.2			32.9				48.2
Approach LOS		C			D			C				D
Queue Length 50th (ft)		263	0		186			124				322
Queue Length 95th (ft)		#417	0		#316			214				#545
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		703	1577		402			410				671
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		0.83	0.03		0.76			0.61				0.89

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	101.3
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	39.3
Intersection Capacity Utilization:	93.1%
Intersection LOS:	D
ICU Level of Service:	F

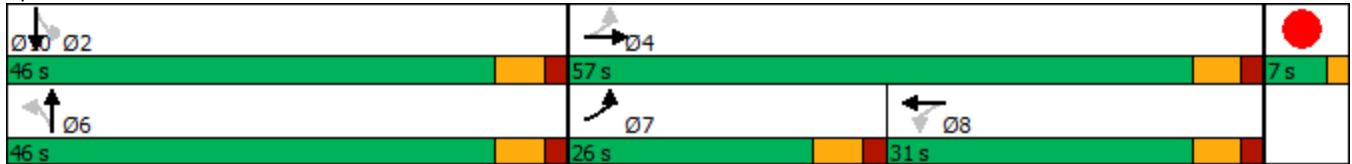
Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	18	61	20	37	15	43	12	302	43	87	494	10
Future Volume (vph)	18	61	20	37	15	43	12	302	43	87	494	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.973			0.939			0.984			0.998	
Fl <sub>t</sub> Protected		0.991			0.981			0.998			0.993	
Satd. Flow (prot)	0	1745	0	0	1896	0	0	1751	0	0	1767	0
Fl <sub>t</sub> Permitted		0.935			0.855			0.977			0.886	
Satd. Flow (perm)	0	1646	0	0	1653	0	0	1714	0	0	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			32			7			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	65	21	39	16	46	13	321	46	93	526	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	101	0	0	380	0	0	630	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 2: NYS Route 118 & Allen Avenue/Kear Street

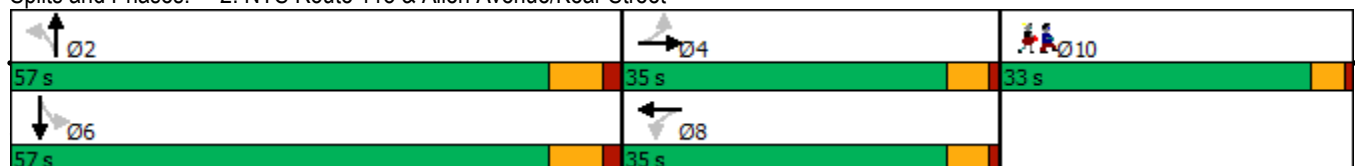
Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.8			10.8			52.2			52.2	
Actuated g/C Ratio		0.15			0.15			0.75			0.75	
v/c Ratio		0.40			0.36			0.30			0.53	
Control Delay		31.1			24.4			5.0			7.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.1			24.4			5.0			7.7	
LOS		C			C			A			A	
Approach Delay		31.1			24.4			5.0			7.7	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		40			28			53			116	
Queue Length 95th (ft)		84			70			102			226	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		720			736			1285			1180	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.15			0.14			0.30			0.53	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	69.7
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.53
Intersection Signal Delay:	10.3
Intersection Capacity Utilization	76.9%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	D

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 3: Underhill Avenue & Site Access

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	550	609	30	31	20
Future Volume (vph)	20	550	609	30	31	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.994		0.947	
Flt Protected		0.998			0.971	
Satd. Flow (prot)	0	1803	1772	0	1713	0
Flt Permitted		0.998			0.971	
Satd. Flow (perm)	0	1803	1772	0	1713	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	8%	4%	2%	2%	2%
Adj. Flow (vph)	22	611	677	33	34	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	633	710	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.1%
Analysis Period (min)	15
	ICU Level of Service B

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	20	550	609	30	31	20
Future Vol, veh/h	20	550	609	30	31	20
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	8	4	2	2	2
Mvmt Flow	22	611	677	33	34	22

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	710	0	-	0	1349 694
Stage 1	-	-	-	-	694 -
Stage 2	-	-	-	-	655 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	889	-	-	-	166 443
Stage 1	-	-	-	-	496 -
Stage 2	-	-	-	-	517 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	889	-	-	-	160 443
Mov Cap-2 Maneuver	-	-	-	-	160 -
Stage 1	-	-	-	-	478 -
Stage 2	-	-	-	-	517 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	889	-	-	-	213
HCM Lane V/C Ratio	0.025	-	-	-	0.266
HCM Control Delay (s)	9.2	0	-	-	27.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	2	532	6	12	613	4	39	0	24	13	0	8
Future Volume (vph)	2	532	6	12	613	4	39	0	24	13	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.999			0.999			0.949			0.951	
Fl <sub>t</sub> Protected					0.999			0.970			0.969	
Satd. Flow (prot)	0	1808	0	0	1764	0	0	1828	0	0	1717	0
Fl <sub>t</sub> Permitted					0.999			0.970			0.969	
Satd. Flow (perm)	0	1808	0	0	1764	0	0	1828	0	0	1717	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			173	
Travel Time (s)		5.0			9.7			7.3			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	8%	20%	17%	4%	2%	6%	2%	5%	2%	2%	2%
Adj. Flow (vph)	2	554	6	13	639	4	41	0	25	14	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	562	0	0	656	0	0	66	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	52.2%
ICU Level of Service	A
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak AM Hour  
 03/28/2023

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	532	6	12	613	4	39	0	24	13	0	8
Future Vol, veh/h	2	532	6	12	613	4	39	0	24	13	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	8	20	17	4	2	6	2	5	2	2	2
Mvmt Flow	2	554	6	13	639	4	41	0	25	14	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	643	0	0	560	0	0	1232	1230	557	1241	1231	641
Stage 1	-	-	-	-	-	-	561	561	-	667	667	-
Stage 2	-	-	-	-	-	-	671	669	-	574	564	-
Critical Hdwy	4.12	-	-	4.27	-	-	5.76	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.353	-	-	3.554	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	942	-	-	940	-	-	244	286	584	152	177	475
Stage 1	-	-	-	-	-	-	628	634	-	448	457	-
Stage 2	-	-	-	-	-	-	570	591	-	504	508	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	942	-	-	940	-	-	235	279	584	143	173	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	279	-	143	173	-
Stage 1	-	-	-	-	-	-	626	632	-	447	447	-
Stage 2	-	-	-	-	-	-	548	578	-	481	506	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			20.1			25.8		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	304	942	-	-	940	-	-	195
HCM Lane V/C Ratio	0.216	0.002	-	-	0.013	-	-	0.112
HCM Control Delay (s)	20.1	8.8	0	-	8.9	0	-	25.8
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.4

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 5: Underhill Avenue & Glen Rock Street

Peak AM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	532	653	7	9	8
Future Volume (vph)	2	532	653	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1771	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1771	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	585	718	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	587	726	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	44.8%
ICU Level of Service	A
Analysis Period (min)	15



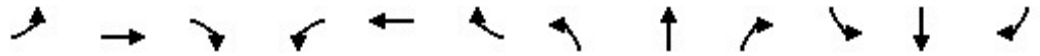
Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	532	653	7	9	8
Future Vol, veh/h	2	532	653	7	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	585	718	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	726	0	-	0	1311 722
Stage 1	-	-	-	-	722 -
Stage 2	-	-	-	-	589 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	877	-	-	-	175 407
Stage 1	-	-	-	-	481 -
Stage 2	-	-	-	-	554 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	877	-	-	-	174 407
Mov Cap-2 Maneuver	-	-	-	-	174 -
Stage 1	-	-	-	-	480 -
Stage 2	-	-	-	-	554 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.4
HCM LOS			C

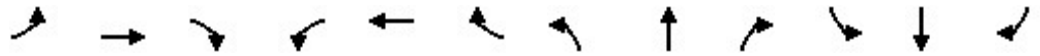
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	877	-	-	-	238
HCM Lane V/C Ratio	0.003	-	-	-	0.078
HCM Control Delay (s)	9.1	0	-	-	21.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Roundabouts) (Sensitivity: NYS Route 118 & Underhill Avenue) 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Future Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.990			0.975			0.850	
Flt Protected	0.950			0.950				0.987			0.989	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	0	1569	0	0	1657	1607
Flt Permitted	0.373			0.527				0.835			0.880	
Satd. Flow (perm)	658	1889	0	833	1826	0	0	1328	0	0	1474	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			3			10			325	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	228	355	43	32	255	18	66	137	46	49	177	371
Shared Lane Traffic (%)												
Lane Group Flow (vph)	228	398	0	32	273	0	0	249	0	0	226	371
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Right Turn Lane) (Sensit  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



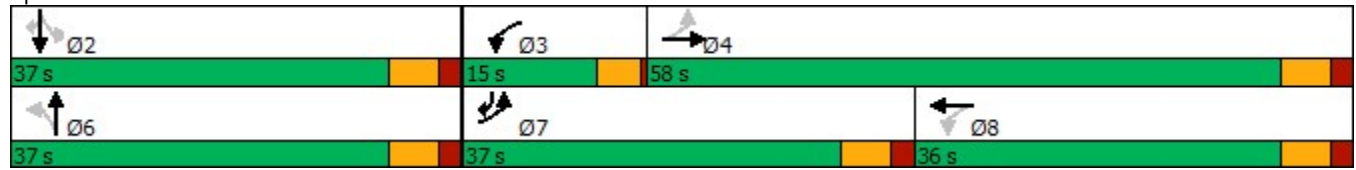
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	34.3	30.7		23.4	14.7			18.3			18.3	37.9
Actuated g/C Ratio	0.52	0.47		0.36	0.22			0.28			0.28	0.58
v/c Ratio	0.42	0.45		0.09	0.66			0.66			0.55	0.35
Control Delay	12.0	16.2		10.2	33.3			30.2			26.8	2.4
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	12.0	16.2		10.2	33.3			30.2			26.8	2.4
LOS	B	B		B	C			C			C	A
Approach Delay		14.7			30.9			30.2			11.6	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	43	80		5	94			80			73	7
Queue Length 95th (ft)	112	254		21	219			188			169	43
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	893	1534		483	895			676			745	1440
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.26	0.26		0.07	0.31			0.37			0.30	0.26

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	65.4
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	18.6
Intersection Capacity Utilization:	68.7%
Intersection LOS:	B
ICU Level of Service:	C

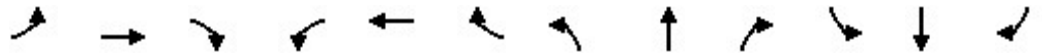
Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



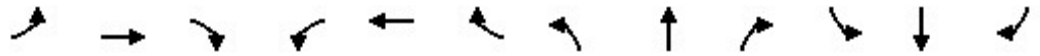


2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & Back Approaches) (Seneca Valley Approach)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Future Volume (vph)	210	327	40	29	235	17	61	126	42	45	163	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.984			0.990			0.962			0.850	
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	1669	1513	0	1617	1554	1607
Flt Permitted	0.384			0.527			0.637			0.642	0.988	
Satd. Flow (perm)	678	1889	0	833	1826	0	1119	1513	0	1093	1537	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			3			17				363
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	228	355	43	32	255	18	66	137	46	49	177	371
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	228	398	0	32	273	0	66	183	0	44	182	371
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & All Approaches) (Seneca All Approaches)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



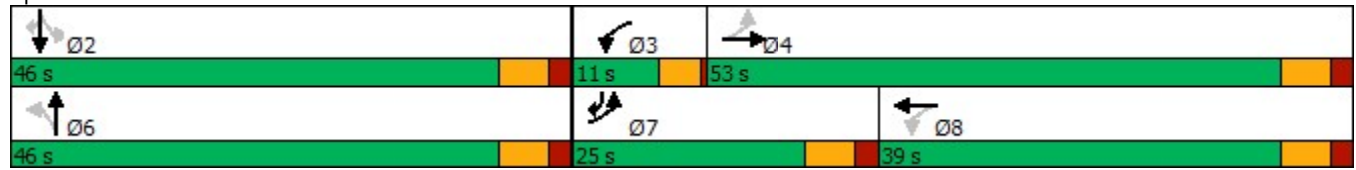
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	30.3	26.8		20.9	12.6		12.4	12.4		12.4	12.4	30.2
Actuated g/C Ratio	0.55	0.49		0.38	0.23		0.23	0.23		0.23	0.23	0.55
v/c Ratio	0.39	0.43		0.08	0.65		0.26	0.52		0.18	0.53	0.36
Control Delay	8.6	12.6		7.2	28.1		22.9	24.6		21.7	26.9	2.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	8.6	12.6		7.2	28.1		22.9	24.6		21.7	26.9	2.1
LOS	A	B		A	C		C	C		C	C	A
Approach Delay		11.2			25.9			24.2			11.1	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	31	58		3	76		17	46		11	53	1
Queue Length 95th (ft)	77	194		14	176		56	121		43	134	34
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	728	1630		418	1129		838	1137		819	1151	1224
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.31	0.24		0.08	0.24		0.08	0.16		0.05	0.16	0.30

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	55.1
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.65
Intersection Signal Delay:	15.5
Intersection Capacity Utilization:	62.8%
Intersection LOS:	B
ICU Level of Service:	B

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue







2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Future Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	11	12	12	11	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.985			0.981			0.915	
Flt Protected		0.971			0.994			0.991			0.997	
Satd. Flow (prot)	0	1989	1655	0	1777	0	0	1670	0	0	1613	0
Flt Permitted		0.490			0.847			0.775			0.971	
Satd. Flow (perm)	0	1004	1655	0	1514	0	0	1306	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50		5			10			109	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	424	286	60	49	284	42	47	179	36	24	143	284
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	710	60	0	375	0	0	262	0	0	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.07	1.02	0.99	1.04	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 1: NYS Route 118 & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	8	8		6	6		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.0	22.0	22.0	22.0		16.0	16.0		16.0	16.0	
Total Split (s)	16.0	43.0	43.0	27.0	27.0		60.0	60.0		60.0	60.0	
Total Split (%)	14.5%	39.1%	39.1%	24.5%	24.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	10.0	37.0	37.0	21.0	21.0		54.0	54.0		54.0	54.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		6.0	6.0		6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)		5.0	5.0	5.0	5.0							
Flash Dont Walk (s)		11.0	11.0	11.0	11.0							
Pedestrian Calls (#/hr)		3	3	3	3							
Act Effct Green (s)		37.3	37.3		26.2			20.4			20.4	
Actuated g/C Ratio		0.53	0.53		0.38			0.29			0.29	
v/c Ratio		1.17	0.07		0.66			0.68			0.84	
Control Delay		113.3	4.6		26.7			29.7			32.1	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		113.3	4.6		26.7			29.7			32.1	
LOS		F	A		C			C			C	
Approach Delay		104.9			26.7			29.7			32.1	
Approach LOS		F			C			C			C	
Queue Length 50th (ft)		~263	2		127			94			137	
Queue Length 95th (ft)		#677	22		#297			165			243	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		607	908		571			1020			1249	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		1.17	0.07		0.66			0.26			0.36	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	69.8
Natural Cycle:	140
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.17
Intersection Signal Delay:	60.8
Intersection Capacity Utilization:	100.5%
Intersection LOS:	E
ICU Level of Service:	G

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

Analysis Period (min) 15

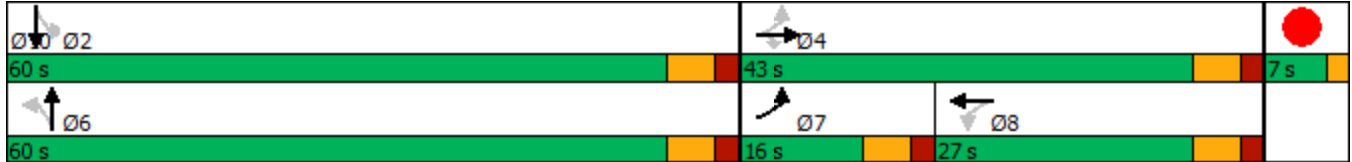
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)

Peak PM Hour

2: NYS Route 118 & Allen Avenue/Kear Street

03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	9	33	16	70	53	80	18	548	64	41	356	17
Future Volume (vph)	9	33	16	70	53	80	18	548	64	41	356	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.962			0.947			0.986			0.994	
Fl <sub>t</sub> Protected		0.993			0.983			0.999			0.995	
Satd. Flow (prot)	0	1729	0	0	1916	0	0	1756	0	0	1763	0
Fl <sub>t</sub> Permitted		0.954			0.861			0.983			0.900	
Satd. Flow (perm)	0	1661	0	0	1678	0	0	1728	0	0	1595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			24			5			2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	35	17	74	56	84	19	577	67	43	375	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	214	0	0	663	0	0	436	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	



2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 2: NYS Route 118 & Allen Avenue/Kear Street

Peak PM Hour  
 03/28/2023

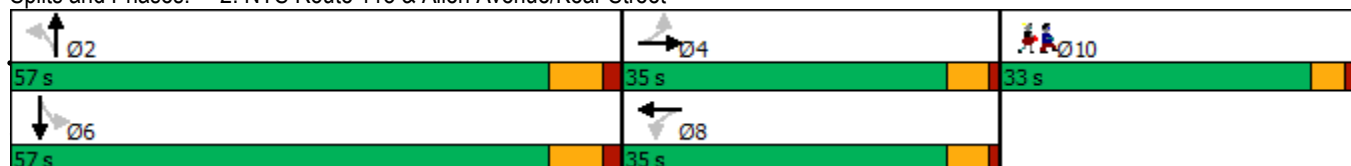


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		14.0			14.0			50.1			50.1	
Actuated g/C Ratio		0.18			0.18			0.66			0.66	
v/c Ratio		0.19			0.65			0.58			0.42	
Control Delay		22.1			35.2			10.4			8.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.1			35.2			10.4			8.1	
LOS		C			D			B			A	
Approach Delay		22.1			35.2			10.4			8.1	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		18			84			147			82	
Queue Length 95th (ft)		49			151			291			167	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		664			676			1138			1049	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.09			0.32			0.58			0.42	

**Intersection Summary**

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 76.1  
 Natural Cycle: 105  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.65  
 Intersection Signal Delay: 14.1  
 Intersection Capacity Utilization 67.4%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

**Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street**



Lane Group	Ø10
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	26%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	8.0
Flash Dont Walk (s)	21.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 3: Underhill Avenue & Site Access

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	↙
Traffic Volume (vph)	26	711	562	38	39	26
Future Volume (vph)	26	711	562	38	39	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.946	
Flt Protected		0.998			0.971	
Satd. Flow (prot)	0	1905	1800	0	1711	0
Flt Permitted		0.998			0.971	
Satd. Flow (perm)	0	1905	1800	0	1711	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	790	624	42	43	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	819	666	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	68.9%
	ICU Level of Service C
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	26	711	562	38	39	26
Future Vol, veh/h	26	711	562	38	39	26
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	790	624	42	43	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	666	0	-	0	1493 645
Stage 1	-	-	-	-	645 -
Stage 2	-	-	-	-	848 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	923	-	-	-	136 472
Stage 1	-	-	-	-	522 -
Stage 2	-	-	-	-	420 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	923	-	-	-	128 472
Mov Cap-2 Maneuver	-	-	-	-	128 -
Stage 1	-	-	-	-	493 -
Stage 2	-	-	-	-	420 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	37.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	923	-	-	-	181
HCM Lane V/C Ratio	0.031	-	-	-	0.399
HCM Control Delay (s)	9	0	-	-	37.5
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	1.8

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	8	704	36	49	527	12	14	0	24	8	0	5
Future Volume (vph)	8	704	36	49	527	12	14	0	24	8	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.993			0.997			0.916			0.948	
Fl <sub>t</sub> Protected		0.999			0.996			0.982			0.970	
Satd. Flow (prot)	0	1921	0	0	1794	0	0	1816	0	0	1713	0
Fl <sub>t</sub> Permitted		0.999			0.996			0.982			0.970	
Satd. Flow (perm)	0	1921	0	0	1794	0	0	1816	0	0	1713	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			150	
Travel Time (s)		5.0			9.7			7.3			3.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	2%	2%	2%	2%	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	8	733	38	51	549	13	15	0	25	8	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	779	0	0	613	0	0	40	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	69.9%
ICU Level of Service	C
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 4: Rochambeau Drive/Site Access & Underhill Avenue

Peak PM Hour  
 03/28/2023

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	704	36	49	527	12	14	0	24	8	0	5
Future Vol, veh/h	8	704	36	49	527	12	14	0	24	8	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	1	2	2	2	2	2	2	5	2	2	2
Mvmt Flow	8	733	38	51	549	13	15	0	25	8	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	771	0	0	1428	1432	752	1439	1445	556
Stage 1	-	-	-	-	-	-	768	768	-	658	658	-
Stage 2	-	-	-	-	-	-	660	664	-	781	787	-
Critical Hdwy	4.12	-	-	4.12	-	-	5.72	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	1009	-	-	844	-	-	196	234	469	111	132	531
Stage 1	-	-	-	-	-	-	532	554	-	453	461	-
Stage 2	-	-	-	-	-	-	584	593	-	388	403	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1009	-	-	844	-	-	179	210	469	97	119	531
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	210	-	97	119	-
Stage 1	-	-	-	-	-	-	525	546	-	447	420	-
Stage 2	-	-	-	-	-	-	527	541	-	362	397	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			19.1			33.2		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	294	1009	-	-	844	-	-	141
HCM Lane V/C Ratio	0.135	0.008	-	-	0.06	-	-	0.096
HCM Control Delay (s)	19.1	8.6	0	-	9.5	0	-	33.2
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.3

2025 Build Traffic Volumes W/Approved Other Development (Sensitivity)  
 5: Underhill Avenue & Glen Rock Street

Peak PM Hour  
 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	738	534	12	10	8
Future Volume (vph)	2	738	534	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	802	580	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	804	593	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.4%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	738	534	12	10	8
Future Vol, veh/h	2	738	534	12	10	8
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, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	802	580	13	11	9

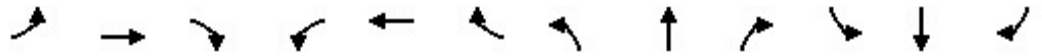
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	593	0	-	0	1393 587
Stage 1	-	-	-	-	587 -
Stage 2	-	-	-	-	806 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	983	-	-	-	156 510
Stage 1	-	-	-	-	556 -
Stage 2	-	-	-	-	439 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	983	-	-	-	155 510
Mov Cap-2 Maneuver	-	-	-	-	155 -
Stage 1	-	-	-	-	554 -
Stage 2	-	-	-	-	439 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	983	-	-	-	224
HCM Lane V/C Ratio	0.002	-	-	-	0.087
HCM Control Delay (s)	8.7	0	-	-	22.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

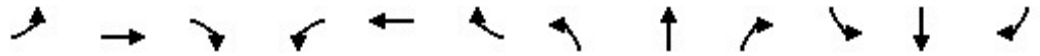


2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes & Right Turn Lane) (Sensit  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Future Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.981			0.981			0.850	
Flt Protected	0.950			0.950				0.991			0.993	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	0	1727	0	0	1833	1546
Flt Permitted	0.284			0.553				0.904			0.912	
Satd. Flow (perm)	511	1866	0	882	1797	0	0	1576	0	0	1684	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			7			7				281
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	424	286	60	49	284	42	47	179	36	24	143	284
Shared Lane Traffic (%)												
Lane Group Flow (vph)	424	346	0	49	326	0	0	262	0	0	167	284
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved Other Development (W/ Turning Lanes on Pearl Hill Ave) (Sensit  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



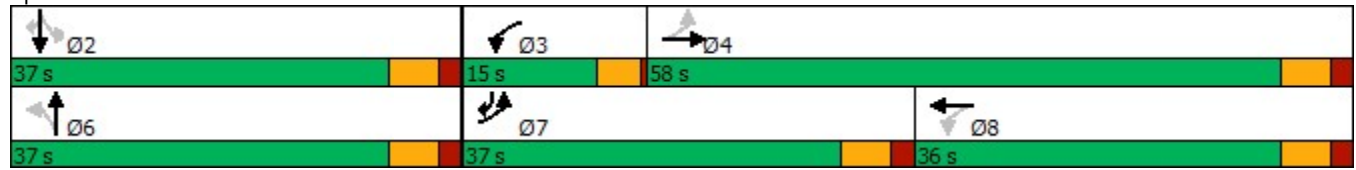
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	46.9	41.1		26.6	17.6			17.1			17.1	46.4
Actuated g/C Ratio	0.61	0.54		0.35	0.23			0.22			0.22	0.60
v/c Ratio	0.63	0.34		0.14	0.78			0.74			0.45	0.27
Control Delay	13.8	12.9		11.1	43.1			42.5			32.5	1.8
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	13.8	12.9		11.1	43.1			42.5			32.5	1.8
LOS	B	B		B	D			D			C	A
Approach Delay		13.4			39.0			42.5			13.2	
Approach LOS		B			D			D			B	
Queue Length 50th (ft)	86	91		7	137			109			67	1
Queue Length 95th (ft)	220	202		26	294			244			157	32
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	835	1357		459	756			685			728	1215
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.51	0.25		0.11	0.43			0.38			0.23	0.23

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	76.8
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.78
Intersection Signal Delay:	22.6
Intersection Capacity Utilization:	82.1%
Intersection LOS:	C
ICU Level of Service:	E

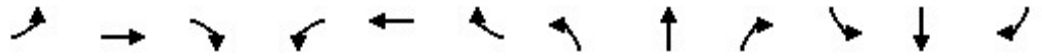
Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



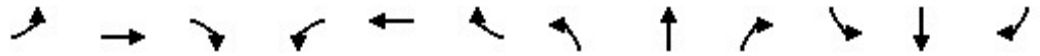


2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & Peak Approaches) (Seneca Falls Approach)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Future Volume (vph)	411	277	58	48	275	41	46	174	35	23	139	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.974			0.981			0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	1669	1724	0	1666	1743	1546
Flt Permitted	0.303			0.553			0.660			0.561	0.995	
Satd. Flow (perm)	545	1866	0	882	1797	0	1159	1724	0	984	1736	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			10				284
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	424	286	60	49	284	42	47	179	36	24	143	284
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	424	346	0	49	326	0	47	215	0	22	145	284
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved Other Development (W/ Turning Lanes & All Approaches) (Seneca Park)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



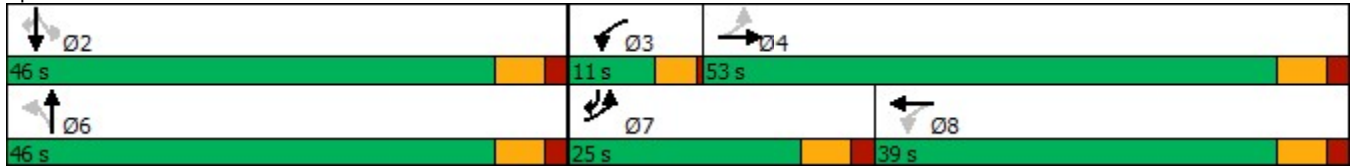
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	40.4	34.6		24.3	15.9		13.5	13.5		13.5	13.5	38.0
Actuated g/C Ratio	0.61	0.52		0.37	0.24		0.20	0.20		0.20	0.20	0.57
v/c Ratio	0.65	0.35		0.13	0.75		0.20	0.60		0.11	0.41	0.28
Control Delay	12.8	12.1		8.2	34.6		25.8	31.6		24.7	28.2	2.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	12.8	12.1		8.2	34.6		25.8	31.6		24.7	28.2	2.0
LOS	B	B		A	C		C	C		C	C	A
Approach Delay		12.5			31.2			30.5			11.5	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	73	82		6	118		16	76		7	54	0
Queue Length 95th (ft)	174	170		21	224		47	158		28	117	32
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	675	1360		403	920		717	1071		608	1074	1029
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.63	0.25		0.12	0.35		0.07	0.20		0.04	0.14	0.28

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	66.2
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.75
Intersection Signal Delay:	18.6
Intersection Capacity Utilization:	79.3%
Intersection LOS:	B
ICU Level of Service:	D

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue







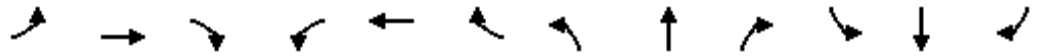
2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour  
 1: NYS Route 118 & Underhill Avenue 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Future Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992			0.976			0.916	
Flt Protected		0.980			0.995			0.988			0.996	
Satd. Flow (prot)	0	1999	1577	0	1804	0	0	1569	0	0	1644	0
Flt Permitted		0.474			0.888			0.649			0.952	
Satd. Flow (perm)	0	967	1577	0	1610	0	0	1031	0	0	1571	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		3			11			84	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	251	355	43	32	255	18	66	151	46	49	187	387
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	606	43	0	305	0	0	263	0	0	623	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour)  
 1: NYS Route 118 & Underhill Avenue 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Free	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		Free	8			6			2		
Detector Phase	7	4		8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		16.0	16.0		16.0	16.0	
Total Split (s)	26.0	57.0		31.0	31.0		46.0	46.0		46.0	46.0	
Total Split (%)	23.6%	51.8%		28.2%	28.2%		41.8%	41.8%		41.8%	41.8%	
Maximum Green (s)	20.0	51.0		25.0	25.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Max	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0											
Flash Dont Walk (s)	12.0											
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)		51.0	103.0		25.0			40.0			40.0	
Actuated g/C Ratio		0.50	1.00		0.24			0.39			0.39	
v/c Ratio		0.89	0.03		0.78			0.65			0.94	
Control Delay		37.6	0.0		51.0			33.4			50.9	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		37.6	0.0		51.0			33.4			50.9	
LOS		D	A		D			C			D	
Approach Delay		35.1			51.0			33.4			50.9	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)		278	0		186			133			348	
Queue Length 95th (ft)		#477	0		#318			230			#583	
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)			50									
Base Capacity (vph)		679	1577		393			407			661	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.89	0.03		0.78			0.65			0.94	

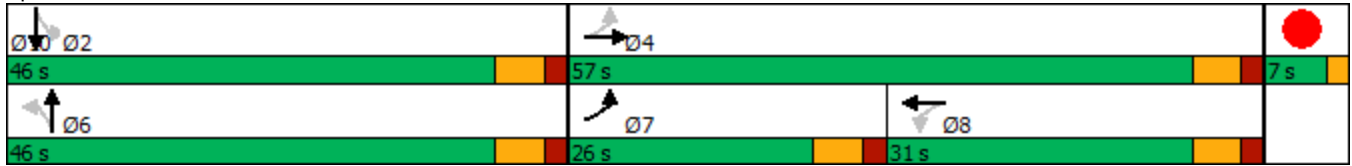
Intersection Summary	
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	103
Natural Cycle:	110
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.94
Intersection Signal Delay:	42.9
Intersection Capacity Utilization:	95.9%
Intersection LOS:	D
ICU Level of Service:	F

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

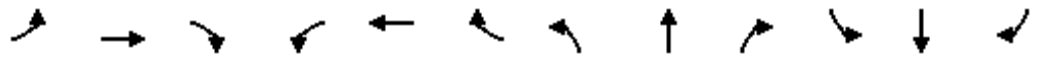
2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitive Peak AM Hour  
 1: NYS Route 118 & Underhill Avenue 03/28/2023

Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour)  
 2: NYS Route 118 & Allen Avenue/Kear Street 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	18	64	20	49	19	43	12	327	53	87	506	10
Future Volume (vph)	18	64	20	49	19	43	12	327	53	87	506	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.974			0.947			0.982			0.998	
Fl <sub>t</sub> Protected		0.991			0.978			0.998			0.993	
Satd. Flow (prot)	0	1747	0	0	1906	0	0	1747	0	0	1767	0
Fl <sub>t</sub> Permitted		0.942			0.829			0.978			0.880	
Satd. Flow (perm)	0	1660	0	0	1616	0	0	1712	0	0	1566	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			24			7			1	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	68	21	52	20	46	13	348	56	93	538	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	118	0	0	417	0	0	642	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Frnt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

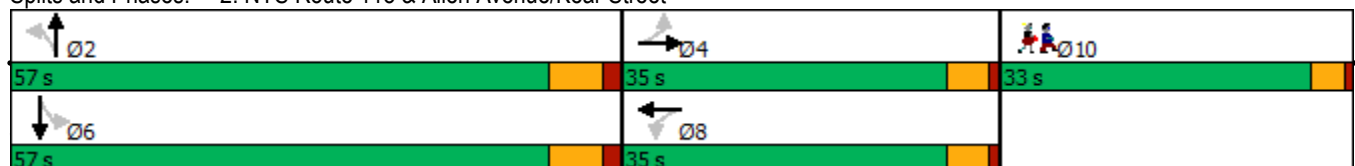
2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity) Peak AM Hour  
 2: NYS Route 118 & Allen Avenue/Kear Street 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		10.8			10.8			50.0			50.0	
Actuated g/C Ratio		0.15			0.15			0.69			0.69	
v/c Ratio		0.43			0.46			0.35			0.60	
Control Delay		31.4			28.7			5.8			9.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.4			28.7			5.8			9.1	
LOS		C			C			A			A	
Approach Delay		31.4			28.7			5.8			9.1	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		41			39			60			121	
Queue Length 95th (ft)		86			86			116			238	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		689			680			1178			1075	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.16			0.17			0.35			0.60	

<b>Intersection Summary</b>	
Area Type:	Other
Cycle Length:	125
Actuated Cycle Length:	72.8
Natural Cycle:	105
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.60
Intersection Signal Delay:	11.7
Intersection LOS:	B
Intersection Capacity Utilization:	82.0%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street





Lane Group		Ø10
Switch Phase		
Minimum Initial (s)		1.0
Minimum Split (s)		33.0
Total Split (s)		33.0
Total Split (%)		26%
Maximum Green (s)		29.0
Yellow Time (s)		3.0
All-Red Time (s)		1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		3.0
Recall Mode		None
Walk Time (s)		8.0
Flash Dont Walk (s)		21.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitive Peak AM Hour  
 3: Underhill Avenue & Site Access

03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	571	624	30	31	20
Future Volume (vph)	20	571	624	30	31	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.994		0.947	
Flt Protected		0.998			0.971	
Satd. Flow (prot)	0	1803	1772	0	1713	0
Flt Permitted		0.998			0.971	
Satd. Flow (perm)	0	1803	1772	0	1713	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	8%	4%	2%	2%	2%
Adj. Flow (vph)	22	634	693	33	34	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	656	726	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.2%
Analysis Period (min)	15
	ICU Level of Service B

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitive Peak AM Hour  
 3: Underhill Avenue & Site Access

03/28/2023

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	20	571	624	30	31	20
Future Vol, veh/h	20	571	624	30	31	20
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	8	4	2	2	2
Mvmt Flow	22	634	693	33	34	22

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	726	0	0	1388	710
Stage 1	-	-	-	710	-
Stage 2	-	-	-	678	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	877	-	-	157	434
Stage 1	-	-	-	487	-
Stage 2	-	-	-	504	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	877	-	-	151	434
Mov Cap-2 Maneuver	-	-	-	151	-
Stage 1	-	-	-	468	-
Stage 2	-	-	-	504	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	29.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	877	-	-	-	203
HCM Lane V/C Ratio	0.025	-	-	-	0.279
HCM Control Delay (s)	9.2	0	-	-	29.5
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour) 03/28/2023  
 4: Rochambeau Drive/Site Access & Underhill Avenue



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	2	554	6	12	628	4	39	0	24	13	0	8
Future Volume (vph)	2	554	6	12	628	4	39	0	24	13	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.999			0.999			0.949			0.951	
Fl <sub>t</sub> Protected					0.999			0.970			0.969	
Satd. Flow (prot)	0	1809	0	0	1765	0	0	1828	0	0	1717	0
Fl <sub>t</sub> Permitted					0.999			0.970			0.969	
Satd. Flow (perm)	0	1809	0	0	1765	0	0	1828	0	0	1717	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			173	
Travel Time (s)		5.0			9.7			7.3			3.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	8%	20%	17%	4%	2%	6%	2%	5%	2%	2%	2%
Adj. Flow (vph)	2	577	6	13	654	4	41	0	25	14	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	585	0	0	671	0	0	66	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.0%
ICU Level of Service	A
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity) Peak AM Hour  
 4: Rochambeau Drive/Site Access & Underhill Avenue 03/28/2023

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	554	6	12	628	4	39	0	24	13	0	8
Future Vol, veh/h	2	554	6	12	628	4	39	0	24	13	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	8	20	17	4	2	6	2	5	2	2	2
Mvmt Flow	2	577	6	13	654	4	41	0	25	14	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	658	0	0	583	0	0	1270	1268	580	1279	1269	656
Stage 1	-	-	-	-	-	-	584	584	-	682	682	-
Stage 2	-	-	-	-	-	-	686	684	-	597	587	-
Critical Hdwy	4.12	-	-	4.27	-	-	5.76	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.76	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.353	-	-	3.554	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	930	-	-	921	-	-	233	276	569	143	168	465
Stage 1	-	-	-	-	-	-	616	625	-	440	450	-
Stage 2	-	-	-	-	-	-	563	586	-	490	497	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	930	-	-	921	-	-	224	269	569	134	164	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	269	-	134	164	-
Stage 1	-	-	-	-	-	-	614	623	-	439	440	-
Stage 2	-	-	-	-	-	-	541	573	-	467	496	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			20.9			27.2		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	291	930	-	-	921	-	-	184
HCM Lane V/C Ratio	0.226	0.002	-	-	0.014	-	-	0.119
HCM Control Delay (s)	20.9	8.9	0	-	9	0	-	27.2
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.4

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour  
 5: Underhill Avenue & Glen Rock Street 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	553	669	7	9	8
Future Volume (vph)	2	553	669	7	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.936	
Flt Protected					0.974	
Satd. Flow (prot)	0	1804	1771	0	1501	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1804	1771	0	1501	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	8%	4%	2%	2%	14%
Adj. Flow (vph)	2	608	735	8	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	610	743	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.6%
ICU Level of Service	A
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak AM Hour  
 5: Underhill Avenue & Glen Rock Street 03/28/2023

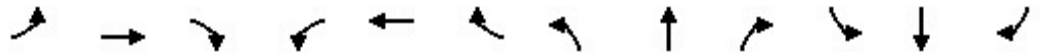
Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	553	669	7	9	8
Future Vol, veh/h	2	553	669	7	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-5	6	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	8	4	2	2	14
Mvmt Flow	2	608	735	8	10	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	743	0	-	0	1351 739
Stage 1	-	-	-	-	739 -
Stage 2	-	-	-	-	612 -
Critical Hdwy	4.12	-	-	-	6.42 6.34
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.426
Pot Cap-1 Maneuver	864	-	-	-	166 398
Stage 1	-	-	-	-	472 -
Stage 2	-	-	-	-	541 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	864	-	-	-	166 398
Mov Cap-2 Maneuver	-	-	-	-	166 -
Stage 1	-	-	-	-	471 -
Stage 2	-	-	-	-	541 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	864	-	-	-	229
HCM Lane V/C Ratio	0.003	-	-	-	0.082
HCM Control Delay (s)	9.2	0	-	-	22.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

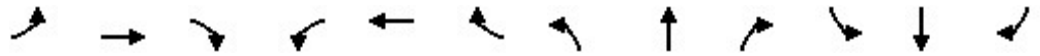
2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Right Lane) Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Future Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.990			0.976			0.850	
Flt Protected	0.950			0.950				0.988			0.990	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	0	1569	0	0	1657	1607
Flt Permitted	0.362			0.527				0.830			0.880	
Satd. Flow (perm)	639	1889	0	833	1826	0	0	1318	0	0	1473	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			3			10			325	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	251	355	43	32	255	18	66	151	46	49	187	387
Shared Lane Traffic (%)												
Lane Group Flow (vph)	251	398	0	32	273	0	0	263	0	0	236	387
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0



2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Reg Lanes) - Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



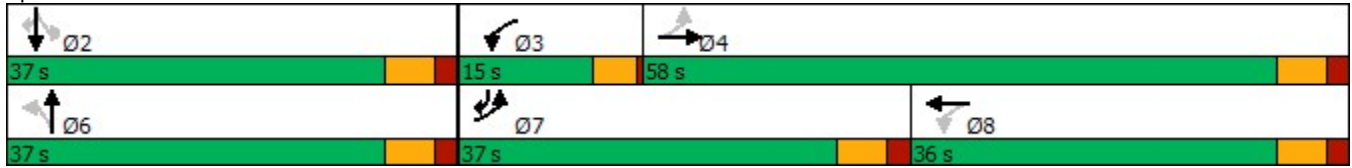
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	36.4	32.8		24.0	15.2			20.0			20.0	41.2
Actuated g/C Ratio	0.53	0.47		0.35	0.22			0.29			0.29	0.60
v/c Ratio	0.45	0.44		0.09	0.68			0.68			0.56	0.36
Control Delay	12.7	16.4		10.9	35.9			32.2			27.9	2.5
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	12.7	16.4		10.9	35.9			32.2			27.9	2.5
LOS	B	B		B	D			C			C	A
Approach Delay		15.0			33.3			32.2			12.1	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	53	89		5	106			94			84	10
Queue Length 95th (ft)	123	251		21	227			212			187	48
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	858	1462		463	846			635			704	1414
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.29	0.27		0.07	0.32			0.41			0.34	0.27

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	69.2
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	19.5
Intersection Capacity Utilization:	71.0%
Intersection LOS:	B
ICU Level of Service:	C

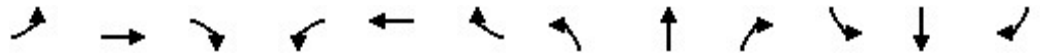
Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



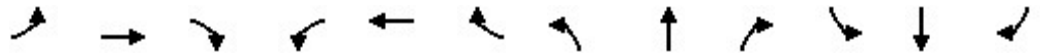


2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turning Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Future Volume (vph)	231	327	40	29	235	17	61	139	42	45	172	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.984			0.990			0.965				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1676	1889	0	1501	1826	0	1669	1517	0	1617	1554	1607
Flt Permitted	0.378			0.527			0.631			0.634	0.989	
Satd. Flow (perm)	667	1889	0	833	1826	0	1108	1517	0	1079	1538	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			3			16				363
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	5%	10%	1%	0%	3%	20%	16%	3%	17%	1%
Adj. Flow (vph)	251	355	43	32	255	18	66	151	46	49	187	387
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	251	398	0	32	273	0	66	197	0	44	192	387
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turn Right Lane) All Approvals  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



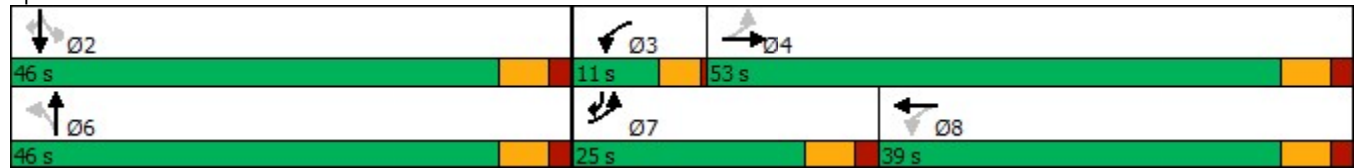
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	32.0	28.4		21.2	12.9		12.9	12.9		12.9	12.9	32.0
Actuated g/C Ratio	0.56	0.50		0.37	0.23		0.23	0.23		0.23	0.23	0.56
v/c Ratio	0.42	0.42		0.08	0.66		0.27	0.56		0.18	0.56	0.37
Control Delay	9.0	12.5		7.7	29.7		23.9	26.7		22.6	28.6	2.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	9.0	12.5		7.7	29.7		23.9	26.7		22.6	28.6	2.3
LOS	A	B		A	C		C	C		C	C	A
Approach Delay		11.2			27.4			26.0			11.8	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	36	60		4	82		19	55		12	61	3
Queue Length 95th (ft)	88	198		15	185		58	137		44	147	38
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	719	1581		407	1093		803	1103		782	1114	1205
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.35	0.25		0.08	0.25		0.08	0.18		0.06	0.17	0.32

**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	57.3
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	16.2
Intersection Capacity Utilization:	65.1%
Intersection LOS:	B
ICU Level of Service:	C

Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue





2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour  
 1: NYS Route 118 & Underhill Avenue 03/28/2023

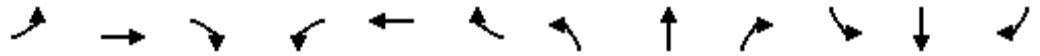


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Future Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	11	12	12	11	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	0		50	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.985			0.983			0.915	
Flt Protected		0.970			0.994			0.992			0.998	
Satd. Flow (prot)	0	1987	1655	0	1777	0	0	1675	0	0	1614	0
Flt Permitted		0.477			0.788			0.788			0.973	
Satd. Flow (perm)	0	977	1655	0	1409	0	0	1331	0	0	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50		5			10			109	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	453	286	60	49	284	42	47	195	36	24	156	305
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	739	60	0	375	0	0	278	0	0	485	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.89	0.97	1.03	1.03	1.03	1.02	1.07	1.02	0.99	1.04	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left		Right	Left			Left			Left		
Leading Detector (ft)	20	83	20	20	83		20	83		20	83	
Trailing Detector (ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Position(ft)	0	-5	0	0	-5		0	-5		0	-5	
Detector 1 Size(ft)	20	40	20	20	40		20	40		20	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43			43			43	
Detector 2 Size(ft)		40			40			40			40	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 1: NYS Route 118 & Underhill Avenue 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			6				2
Permitted Phases	4		4	8			6			2		
Detector Phase	7	4	4	8	8		6	6		2		2
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	22.0	22.0	22.0	22.0		16.0	16.0		16.0	16.0	
Total Split (s)	16.0	43.0	43.0	27.0	27.0		60.0	60.0		60.0	60.0	
Total Split (%)	14.5%	39.1%	39.1%	24.5%	24.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	10.0	37.0	37.0	21.0	21.0		54.0	54.0		54.0	54.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0			0.0			0.0	
Total Lost Time (s)		6.0	6.0		6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	Min	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)		5.0	5.0	5.0	5.0							
Flash Dont Walk (s)		11.0	11.0	11.0	11.0							
Pedestrian Calls (#/hr)		3	3	3	3							
Act Effct Green (s)		37.4	37.4		26.3			22.5				22.5
Actuated g/C Ratio		0.52	0.52		0.37			0.31				0.31
v/c Ratio		1.28	0.07		0.73			0.66				0.86
Control Delay		159.5	5.0		31.8			28.0				32.9
Queue Delay		0.0	0.0		0.0			0.0				0.0
Total Delay		159.5	5.0		31.8			28.0				32.9
LOS		F	A		C			C				C
Approach Delay		147.9			31.8			28.0				32.9
Approach LOS		F			C			C				C
Queue Length 50th (ft)		~337	2		137			101				156
Queue Length 95th (ft)		#752	24		#336			173				268
Internal Link Dist (ft)		310			219			381				978
Turn Bay Length (ft)			50									
Base Capacity (vph)		578	883		517			1010				1218
Starvation Cap Reductn		0	0		0			0				0
Spillback Cap Reductn		0	0		0			0				0
Storage Cap Reductn		0	0		0			0				0
Reduced v/c Ratio		1.28	0.07		0.73			0.28				0.40

Intersection Summary	
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	72
Natural Cycle:	140
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.28
Intersection Signal Delay:	79.4
Intersection Capacity Utilization	103.4%
Intersection LOS:	E
ICU Level of Service	G

Lane Group	Ø10
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	7.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	5.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitive Peak PM Hour)  
 1: NYS Route 118 & Underhill Avenue 03/28/2023

Analysis Period (min) 15

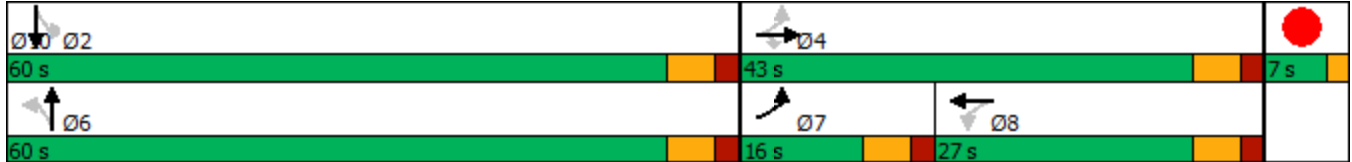
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue



2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 2: NYS Route 118 & Allen Avenue/Kear Street 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	9	42	16	94	61	80	18	563	92	41	365	17
Future Volume (vph)	9	42	16	94	61	80	18	563	92	41	365	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	16	12	12	11	12	12	11	12
Grade (%)		-1%			5%			2%			2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.967			0.954			0.982			0.995	
Fl <sub>t</sub> Protected		0.994			0.980			0.999			0.995	
Satd. Flow (prot)	0	1739	0	0	1924	0	0	1749	0	0	1765	0
Fl <sub>t</sub> Permitted		0.958			0.852			0.984			0.895	
Satd. Flow (perm)	0	1676	0	0	1673	0	0	1723	0	0	1587	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			20			8			2	
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		349			369			1058			343	
Travel Time (s)		7.9			8.4			18.0			5.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	44	17	99	64	84	19	593	97	43	384	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	247	0	0	709	0	0	445	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	1.04	0.99	1.03	0.88	1.03	1.01	1.06	1.01	1.01	1.06	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	83		20	83		20	0		20	0	
Trailing Detector (ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Position(ft)	0	-5		0	-5		0	0		0	0	
Detector 1 Size(ft)	20	40		20	40		20	0		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		43			43							
Detector 2 Size(ft)		40			40							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Lane Util. Factor	
Fr <sub>t</sub>	
Fl <sub>t</sub> Protected	
Satd. Flow (prot)	
Fl <sub>t</sub> Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 2: NYS Route 118 & Allen Avenue/Kear Street 03/28/2023

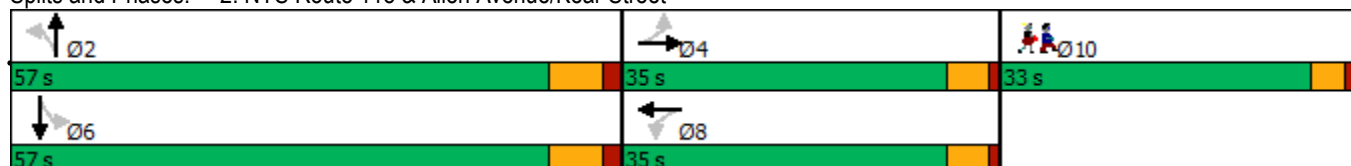


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Switch Phase</b>												
Minimum Initial (s)	10.0	10.0		10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		57.0	57.0		57.0	57.0	
Total Split (s)	35.0	35.0		35.0	35.0		57.0	57.0		57.0	57.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		45.6%	45.6%		45.6%	45.6%	
Maximum Green (s)	30.0	30.0		30.0	30.0		50.0	50.0		50.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			7.0			7.0	
<b>Lead/Lag</b>												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
<b>Walk Time (s)</b>												
Flash Dont Walk (s)												
<b>Pedestrian Calls (#/hr)</b>												
Act Effct Green (s)		15.9			15.9			50.1			50.1	
Actuated g/C Ratio		0.20			0.20			0.64			0.64	
v/c Ratio		0.20			0.69			0.64			0.44	
Control Delay		23.0			36.9			12.6			9.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.0			36.9			12.6			9.3	
LOS		C			D			B			A	
Approach Delay		23.0			36.9			12.6			9.3	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		23			103			181			94	
Queue Length 95th (ft)		56			176			361			190	
Internal Link Dist (ft)		269			289			978			263	
<b>Turn Bay Length (ft)</b>												
Base Capacity (vph)		652			656			1108			1019	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.11			0.38			0.64			0.44	

**Intersection Summary**

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 78.1  
 Natural Cycle: 105  
 Control Type: Semi Act-Uncoord  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 16.2  
 Intersection Capacity Utilization 70.1%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

**Splits and Phases: 2: NYS Route 118 & Allen Avenue/Kear Street**



Lane Group		Ø10
Switch Phase		
Minimum Initial (s)		1.0
Minimum Split (s)		33.0
Total Split (s)		33.0
Total Split (%)		26%
Maximum Green (s)		29.0
Yellow Time (s)		3.0
All-Red Time (s)		1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)		3.0
Recall Mode		None
Walk Time (s)		8.0
Flash Dont Walk (s)		21.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		



2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour  
 3: Underhill Avenue & Site Access

03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	26	738	583	38	39	26
Future Volume (vph)	26	738	583	38	39	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-5%	5%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992		0.946	
Flt Protected		0.998			0.971	
Satd. Flow (prot)	0	1905	1802	0	1711	0
Flt Permitted		0.998			0.971	
Satd. Flow (perm)	0	1905	1802	0	1711	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		425	390		188	
Travel Time (s)		9.7	8.9		4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	820	648	42	43	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	849	690	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.03	1.03	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	70.3%
ICU Level of Service	C
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour  
 3: Underhill Avenue & Site Access

03/28/2023

**Intersection**

Int Delay, s/veh 2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	26	738	583	38	39	26
Future Vol, veh/h	26	738	583	38	39	26
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, %	-	-5	5	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	820	648	42	43	29

**Major/Minor**

	Major1	Major2	Minor2		
Conflicting Flow All	690	0	0	1547	669
Stage 1	-	-	-	669	-
Stage 2	-	-	-	878	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	905	-	-	126	458
Stage 1	-	-	-	509	-
Stage 2	-	-	-	406	-
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	905	-	-	119	458
Mov Cap-2 Maneuver	-	-	-	119	-
Stage 1	-	-	-	479	-
Stage 2	-	-	-	406	-

**Approach**

	EB	WB	SB
HCM Control Delay, s	0.3	0	41.3
HCM LOS			E

**Minor Lane/Major Mvmt**

	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	905	-	-	-	169
HCM Lane V/C Ratio	0.032	-	-	-	0.427
HCM Control Delay (s)	9.1	0	-	-	41.3
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	1.9

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 4: Rochambeau Drive/Site Access & Underhill Avenue 03/28/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	8	732	36	49	548	12	14	0	24	8	0	5
Future Volume (vph)	8	732	36	49	548	12	14	0	24	8	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	12	12	12	12
Grade (%)		-6%			6%			-7%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.994			0.997			0.916			0.948	
Fl <sub>t</sub> Protected					0.996			0.982			0.970	
Satd. Flow (prot)	0	1925	0	0	1794	0	0	1816	0	0	1713	0
Fl <sub>t</sub> Permitted					0.996			0.982			0.970	
Satd. Flow (perm)	0	1925	0	0	1794	0	0	1816	0	0	1713	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			425			323			150	
Travel Time (s)		5.0			9.7			7.3			3.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	2%	2%	2%	2%	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	8	763	38	51	571	13	15	0	25	8	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	809	0	0	635	0	0	40	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.96	0.96	0.96	1.04	1.04	1.04	0.96	0.88	0.96	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	71.2%
ICU Level of Service	C
Analysis Period (min)	15

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 4: Rochambeau Drive/Site Access & Underhill Avenue 03/28/2023

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	732	36	49	548	12	14	0	24	8	0	5
Future Vol, veh/h	8	732	36	49	548	12	14	0	24	8	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-6	-	-	6	-	-	-7	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	1	2	2	2	2	2	2	5	2	2	2
Mvmt Flow	8	763	38	51	571	13	15	0	25	8	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	584	0	0	801	0	0	1480	1484	782	1491	1497	578
Stage 1	-	-	-	-	-	-	798	798	-	680	680	-
Stage 2	-	-	-	-	-	-	682	686	-	811	817	-
Critical Hdwy	4.12	-	-	4.12	-	-	5.72	5.12	5.55	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.72	4.12	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.345	3.518	4.018	3.318
Pot Cap-1 Maneuver	991	-	-	822	-	-	184	222	454	102	123	516
Stage 1	-	-	-	-	-	-	518	543	-	441	451	-
Stage 2	-	-	-	-	-	-	573	585	-	373	390	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	822	-	-	167	198	454	89	110	516
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	198	-	89	110	-
Stage 1	-	-	-	-	-	-	510	535	-	434	410	-
Stage 2	-	-	-	-	-	-	515	531	-	347	384	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.8			20.1			35.6		
HCM LOS							C			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	991	-	-	822	-	-	131
HCM Lane V/C Ratio	0.142	0.008	-	-	0.062	-	-	0.103
HCM Control Delay (s)	20.1	8.7	0	-	9.7	0	-	35.6
HCM Lane LOS	C	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.3

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour  
 5: Underhill Avenue & Glen Rock Street 03/28/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	765	555	12	10	8
Future Volume (vph)	2	765	555	12	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	10	12
Grade (%)		-5%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.939	
Flt Protected					0.973	
Satd. Flow (prot)	0	1909	1801	0	1588	0
Flt Permitted					0.973	
Satd. Flow (perm)	0	1909	1801	0	1588	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	220		392	
Travel Time (s)		6.0	5.0		8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	832	603	13	11	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	834	616	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.97	0.97	1.04	1.04	1.09	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

**Intersection Summary**

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.9%
Analysis Period (min)	15
	ICU Level of Service A

2025 Build Traffic Volumes W/Approved & Potential Other Development (Sensitivity Peak PM Hour)  
 5: Underhill Avenue & Glen Rock Street 03/28/2023

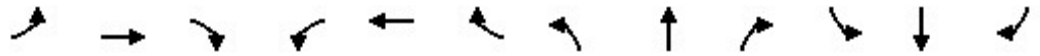
Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	765	555	12	10	8
Future Vol, veh/h	2	765	555	12	10	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-5	6	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	832	603	13	11	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	616	0	-	0	1446 610
Stage 1	-	-	-	-	610 -
Stage 2	-	-	-	-	836 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	964	-	-	-	145 494
Stage 1	-	-	-	-	542 -
Stage 2	-	-	-	-	425 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	964	-	-	-	144 494
Mov Cap-2 Maneuver	-	-	-	-	144 -
Stage 1	-	-	-	-	540 -
Stage 2	-	-	-	-	425 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.9
HCM LOS			C

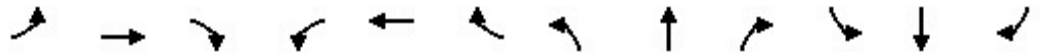
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	964	-	-	-	210
HCM Lane V/C Ratio	0.002	-	-	-	0.093
HCM Control Delay (s)	8.7	0	-	-	23.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turning Lane) - Reg Lanes - Underhill Avenue  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Future Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	12	12	12	12	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.981			0.983			0.850	
Flt Protected	0.950			0.950				0.992			0.993	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	0	1733	0	0	1833	1546
Flt Permitted	0.275			0.553				0.907			0.908	
Satd. Flow (perm)	495	1866	0	882	1797	0	0	1584	0	0	1676	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			7			7				281
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	453	286	60	49	284	42	47	195	36	24	156	305
Shared Lane Traffic (%)												
Lane Group Flow (vph)	453	346	0	49	326	0	0	278	0	0	180	305
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.02	1.02	1.02	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		1	2		1	2	2
Detector Template							Left			Left		
Leading Detector (ft)	83	83		83	83		20	83		20	83	83
Trailing Detector (ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		0	-5		0	-5	-5
Detector 1 Size(ft)	40	40		40	40		20	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43			43			43	43
Detector 2 Size(ft)	40	40		40	40			40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0

2025 Build Traffic Volumes w/Approved & Potential Other Development (W/ Turn Bay Lane Underhill Avenue)  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	37.0	58.0		15.0	36.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	33.6%	52.7%		13.6%	32.7%		33.6%	33.6%		33.6%	33.6%	33.6%
Maximum Green (s)	31.0	52.0		11.0	30.0		31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0			6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	49.2	43.4		27.1	18.1			18.0			18.0	49.2
Actuated g/C Ratio	0.61	0.54		0.34	0.23			0.22			0.22	0.61
v/c Ratio	0.67	0.34		0.14	0.80			0.77			0.48	0.29
Control Delay	15.7	13.2		11.7	45.5			45.2			33.7	2.1
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	15.7	13.2		11.7	45.5			45.2			33.7	2.1
LOS	B	B		B	D			D			C	A
Approach Delay		14.7			41.1			45.2			13.8	
Approach LOS		B			D			D			B	
Queue Length 50th (ft)	99	95		7	146			124			76	4
Queue Length 95th (ft)	266	208		27	300			259			167	39
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	808	1308		445	724			659			693	1190
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.56	0.26		0.11	0.45			0.42			0.26	0.26

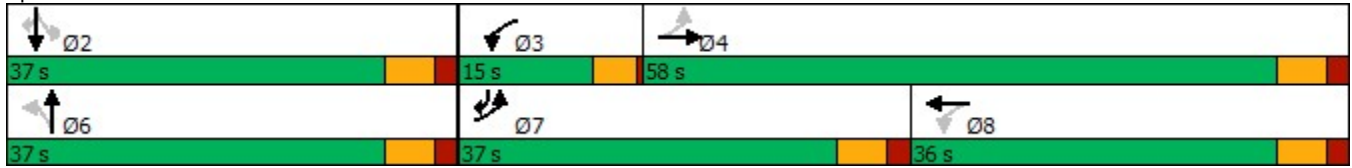
**Intersection Summary**

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	80.1
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	24.0
Intersection Capacity Utilization:	85.1%
Intersection LOS:	C
ICU Level of Service:	E



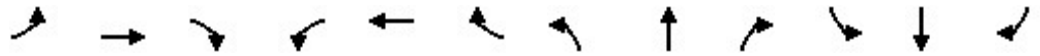
Analysis Period (min) 15

Splits and Phases: 1: NYS Route 118 & Underhill Avenue





2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turning Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Future Volume (vph)	439	277	58	48	275	41	46	189	35	23	151	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	10	12	12	11	12	12	11	12	12
Grade (%)		-5%			4%			3%			-1%	
Storage Length (ft)	200		0	0		0	0		0	0		200
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.974			0.981			0.977				0.850
Flt Protected	0.950			0.950			0.950			0.950	0.999	
Satd. Flow (prot)	1710	1866	0	1515	1797	0	1669	1729	0	1666	1743	1546
Flt Permitted	0.301			0.553			0.652			0.522	0.995	
Satd. Flow (perm)	542	1866	0	882	1797	0	1145	1729	0	915	1736	1546
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			9				305
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		390			299			461			1058	
Travel Time (s)		8.9			6.8			7.9			18.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	2%	0%	9%	1%	6%	3%	5%	10%	0%	4%	5%
Adj. Flow (vph)	453	286	60	49	284	42	47	195	36	24	156	305
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	453	346	0	49	326	0	47	231	0	22	158	305
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.06	0.97	0.97	1.12	1.03	1.03	1.07	1.02	1.02	1.04	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2		2	2		2	2		2	2	2
Detector Template												
Leading Detector (ft)	83	83		83	83		83	83		83	83	83
Trailing Detector (ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5		-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43		43	43		43	43		43	43	43
Detector 2 Size(ft)	40	40		40	40		40	40		40	40	40
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0

2025 Build Traffic Volumes W/Approved & Potential Other Development (W/ Turn Right Lane) All Approaches  
 1: NYS Route 118 & Underhill Avenue 03/29/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			6			2	7
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		6	6		2	2	7
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	5.0		10.0	10.0		10.0	10.0	5.0
Minimum Split (s)	11.0	22.0		8.0	22.0		16.0	16.0		16.0	16.0	11.0
Total Split (s)	25.0	53.0		11.0	39.0		46.0	46.0		46.0	46.0	25.0
Total Split (%)	22.7%	48.2%		10.0%	35.5%		41.8%	41.8%		41.8%	41.8%	22.7%
Maximum Green (s)	19.0	47.0		7.0	33.0		40.0	40.0		40.0	40.0	19.0
Yellow Time (s)	4.0	4.0		3.5	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		4.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Min	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)		5.0			5.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		3			3							
Act Effct Green (s)	41.5	35.6		24.8	16.4		14.2	14.2		14.2	14.2	39.3
Actuated g/C Ratio	0.61	0.52		0.36	0.24		0.21	0.21		0.21	0.21	0.58
v/c Ratio	0.69	0.35		0.13	0.74		0.20	0.63		0.12	0.44	0.30
Control Delay	15.0	12.3		8.5	34.8		25.7	32.6		24.8	28.5	2.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	15.0	12.3		8.5	34.8		25.7	32.6		24.8	28.5	2.0
LOS	B	B		A	C		C	C		C	C	A
Approach Delay		13.8			31.4			31.5			11.7	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	84	85		6	120		16	84		7	60	0
Queue Length 95th (ft)	#237	174		21	228		47	171		29	128	33
Internal Link Dist (ft)		310			219			381			978	
Turn Bay Length (ft)	200											200
Base Capacity (vph)	664	1320		398	893		687	1042		549	1042	1030
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.68	0.26		0.12	0.37		0.07	0.22		0.04	0.15	0.30

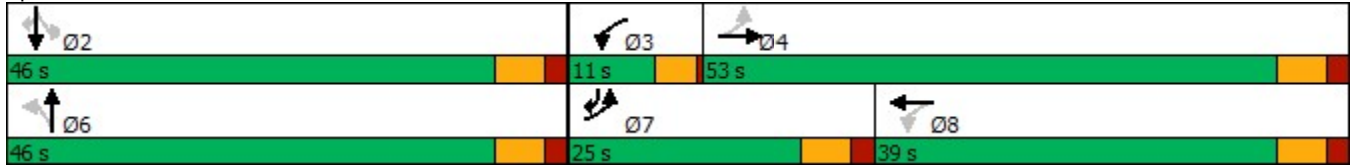
Intersection Summary	
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	68
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.74
Intersection Signal Delay:	19.2
Intersection Capacity Utilization:	81.7%
Intersection LOS:	B
ICU Level of Service:	D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: NYS Route 118 & Underhill Avenue





# Traffic Impact Study

## Appendix J | Traffic Volume Backup Data

LOCATION: UNDERHILL AVENUE & GLEN ROCK STREET PROJECT: UNICORN - SOUNDVIEW  
 DATE OF COUNT: 12/03/20 DAY: THURSDAY JCE JOB #: 20006297A START TIME : 06:30 **AM**

ENTER 15-MINUTE COUNT VOLUMES BY MOVEMENT

AM PEAK HOUR	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			total		
	1	2	3	4	5	6	7	8	9	10	11	12			
06:30 AM 06:45 AM	0	34			89	1				1		3	128	A	
06:45 AM 07:00 AM	1	34			95	0				2		2	134	A	
07:00 AM 07:15 AM	2	52			104	0				0		2	160	A	
07:15 AM 07:30 AM	0	52			126	0				2		1	181	A	603
07:30 AM 07:45 AM	0	84			119	2				1		1	207	X	682
07:45 AM 08:00 AM	0	127			96	0				3		2	228	X	776
08:00 AM 08:15 AM	1	90			109	2				1		1	204	X	820
08:15 AM 08:30 AM	1	73			108	2				3		3	190	X	829
08:30 AM 08:45 AM	0	63			82	1				1		1	148	A	770
08:45 AM 09:00 AM	1	80			76	2				0		1	160	A	702
09:00 AM 09:15 AM	0	65			72	2				2		0	141	A	639
09:15 AM 09:30 AM	0	50			82	0				4		2	138	A	587
09:30 AM 09:45 AM													0	A	439
09:45 AM 10:00 AM													0	A	279
10:00 AM 10:15 AM													0	A	138
10:15 AM 10:30 AM													0	A	0

CALCULATED PEAK 15-MINUTE VOLUMES

06:30 AM 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:45 AM 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:00 AM 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:15 AM 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:30 AM 07:45 AM	0	84	0	0	119	2	0	0	0	1	0	1	207		
07:45 AM 08:00 AM	0	127	0	0	96	0	0	0	0	3	0	2	228		
08:00 AM 08:15 AM	1	90	0	0	109	2	0	0	0	1	0	1	204		
08:15 AM 08:30 AM	1	73	0	0	108	2	0	0	0	3	0	3	190		
08:30 AM 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
08:45 AM 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:00 AM 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:15 AM 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:30 AM 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:45 AM 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
10:00 AM 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
10:15 AM 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		

7	0	8	^	6	6
12	11	10	<	5	432
<	v	>	v	4	0
2	1	^	<	^	>
374	2	>	7	8	9
0	3	v	0	0	0

CALCULATED PEAK HOUR VOLUMES

AM PEAK HOUR	1	2	3	4	5	6	7	8	9	10	11	12	total	PHF
07:30 AM 08:30 AM	2	374	0	0	432	6	0	0	0	8	0	7	829	0.908991
PHF BY MOVEMENT	0.50	0.74	#DIV/0!	#DIV/0!	0.91	0.75	#DIV/0!	#DIV/0!	#DIV/0!	0.67	#DIV/0!	0.58		
PHF BY APPROACH		0.74			0.90			#DIV/0!			0.63			



LOCATION: UNDERHILL AVENUE & GLEN ROCK STREET PROJECT: UNICORN - SOUNDVIEW  
 DATE OF COUNT: 12/03/20 DAY: THURSDAY JCE JOB #: 20006297A START TIME : 15:30 **PM**

**ENTER 15-MINUTE COUNT VOLUMES BY MOVEMENT**

PM PEAK HOUR	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			total		
	1	2	3	4	5	6	7	8	9	10	11	12			
03:30 PM 03:45 PM	0	130			106	3				2		3	244	X	
03:45 PM 04:00 PM	1	165			89	2				4		2	263	X	
04:00 PM 04:15 PM	0	120			112	3				2		2	239	X	
04:15 PM 04:30 PM	1	137			85	2				1		0	226	X	972
04:30 PM 04:45 PM	1	120			111	2				3		1	238	2	966
04:45 PM 05:00 PM	2	137			108	5				2		0	254	A	957
05:00 PM 05:15 PM	0	123			103	3				1		2	232	A	950
05:15 PM 05:30 PM	1	124			102	2				1		1	231	A	955
05:30 PM 05:45 PM	1	136			93	5				4		1	240	A	957
05:45 PM 06:00 PM	4	112			85	4				8		0	213	A	916
06:00 PM 06:15 PM	1	106			78	2				4		0	191	A	875
06:15 PM 06:30 PM	0	85			64	3				2		2	156	A	800
06:30 PM 06:45 PM													0	A	560
06:45 PM 07:00 PM													0	A	347
07:00 PM 07:15 PM													0	A	156
07:15 PM 07:30 PM													0	A	0

**CALCULATED PEAK 15-MINUTE VOLUMES**

03:30 PM 03:45 PM	0	130	0	0	106	3	0	0	0	2	0	3	244		
03:45 PM 04:00 PM	1	165	0	0	89	2	0	0	0	4	0	2	263		
04:00 PM 04:15 PM	0	120	0	0	112	3	0	0	0	2	0	2	239		
04:15 PM 04:30 PM	1	137	0	0	85	2	0	0	0	1	0	0	226		
04:30 PM 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:45 PM 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:00 PM 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:15 PM 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:30 PM 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:45 PM 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:00 PM 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:15 PM 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:30 PM 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:45 PM 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:00 PM 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:15 PM 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		

7	0	9	^	6	10
12	11	10	<	5	392
<	v	>	v	4	0
2	1	^	<	^	>
552	2	>	7	8	9
0	3	v	0	0	0

**CALCULATED PEAK HOUR VOLUMES**

PM PEAK HOUR	1	2	3	4	5	6	7	8	9	10	11	12	total	PHF
03:30 PM 04:30 PM	2	552	0	0	392	10	0	0	0	9	0	7	972	0.923954
PHF BY MOVEMENT	0.50	0.84	#DIV/0!	#DIV/0!	0.88	0.83	#DIV/0!	#DIV/0!	#DIV/0!	0.56	#DIV/0!	0.58		
PHF BY APPROACH		0.83			0.87			#DIV/0!			0.67			

# Colliers Engineering

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_900410\_11-16-2021

Site Code :

Start Date : 11/16/2021

Page No : 1

## Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30 AM	70	16	2	0	88	0	27	6	0	33	1	9	9	1	20	3	28	20	0	51	192
06:45 AM	57	15	2	0	74	0	33	2	0	35	3	12	13	0	28	2	46	24	0	72	209
Total	127	31	4	0	162	0	60	8	0	68	4	21	22	1	48	5	74	44	0	123	401
07:00 AM	86	20	1	0	107	1	33	4	0	38	5	33	15	0	53	7	33	23	0	63	261
07:15 AM	107	25	2	0	134	0	37	4	0	41	1	20	20	0	41	6	47	39	0	92	308
07:30 AM	80	28	3	0	111	2	37	6	0	45	3	20	14	0	37	7	59	31	0	97	290
07:45 AM	82	24	13	0	119	2	44	2	0	48	9	25	14	1	49	7	94	48	0	149	365
Total	355	97	19	0	471	5	151	16	0	172	18	98	63	1	180	27	233	141	0	401	1224
08:00 AM	76	36	9	0	121	3	58	3	0	64	5	23	10	0	38	4	59	37	0	100	323
08:15 AM	66	32	15	0	113	1	41	4	0	46	2	19	8	0	29	5	67	48	0	120	308
08:30 AM	83	22	7	0	112	4	43	4	0	51	8	32	21	0	61	5	50	42	0	97	321
08:45 AM	70	28	11	0	109	1	40	8	0	49	5	32	11	0	48	7	75	54	0	136	342
Total	295	118	42	0	455	9	182	19	0	210	20	106	50	0	176	21	251	181	0	453	1294
09:00 AM	61	24	6	0	91	5	53	9	0	67	6	36	8	0	50	6	33	38	0	77	285
09:15 AM	47	18	8	0	73	4	54	14	0	72	7	18	2	0	27	8	37	45	0	90	262
Grand Total	885	288	79	0	1252	23	500	66	0	589	55	279	145	2	481	67	628	449	0	1144	3466
Apprch %	70.7	23	6.3	0		3.9	84.9	11.2	0		11.4	58	30.1	0.4		5.9	54.9	39.2	0		
Total %	25.5	8.3	2.3	0	36.1	0.7	14.4	1.9	0	17	1.6	8	4.2	0.1	13.9	1.9	18.1	13	0	33	
Lights	855	249	79	0	1183	23	459	39	0	521	45	221	141	0	407	67	603	414	0	1084	3195
% Lights	96.6	86.5	100	0	94.5	100	91.8	59.1	0	88.5	81.8	79.2	97.2	0	84.6	100	96	92.2	0	94.8	92.2
Buses	19	2	0	0	21	0	30	11	0	41	1	12	3	0	16	0	21	18	0	39	117
% Buses	2.1	0.7	0	0	1.7	0	6	16.7	0	7	1.8	4.3	2.1	0	3.3	0	3.3	4	0	3.4	3.4
Trucks	11	37	0	0	48	0	11	16	0	27	9	46	1	0	56	0	4	17	0	21	152
% Trucks	1.2	12.8	0	0	3.8	0	2.2	24.2	0	4.6	16.4	16.5	0.7	0	11.6	0	0.6	3.8	0	1.8	4.4
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.4	0	0	0	0	0	0.1

# Colliers Engineering

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_900410\_11-16-2021

Site Code :

Start Date : 11/16/2021

Page No : 2

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	82	24	13	0	119	2	44	2	0	48	9	25	14	1	49	7	94	48	0	149	365
08:00 AM	76	36	9	0	121	3	58	3	0	64	5	23	10	0	38	4	59	37	0	100	323
08:15 AM	66	32	15	0	113	1	41	4	0	46	2	19	8	0	29	5	67	48	0	120	308
08:30 AM	83	22	7	0	112	4	43	4	0	51	8	32	21	0	61	5	50	42	0	97	321
Total Volume	307	114	44	0	465	10	186	13	0	209	24	99	53	1	177	21	270	175	0	466	1317
% App. Total	66	24.5	9.5	0		4.8	89	6.2	0		13.6	55.9	29.9	0.6		4.5	57.9	37.6	0		
PHF	.925	.792	.733	.000	.961	.625	.802	.813	.000	.816	.667	.773	.631	.250	.725	.750	.718	.911	.000	.782	.902
Lights	290	99	44	0	433	10	169	11	0	190	21	75	53	0	149	21	257	161	0	439	1211
% Lights	94.5	86.8	100	0	93.1	100	90.9	84.6	0	90.9	87.5	75.8	100	0	84.2	100	95.2	92.0	0	94.2	92.0
Buses	11	1	0	0	12	0	15	1	0	16	0	6	0	0	6	0	12	9	0	21	55
% Buses	3.6	0.9	0	0	2.6	0	8.1	7.7	0	7.7	0	6.1	0	0	3.4	0	4.4	5.1	0	4.5	4.2
Trucks	6	14	0	0	20	0	2	1	0	3	3	18	0	0	21	0	1	5	0	6	50
% Trucks	2.0	12.3	0	0	4.3	0	1.1	7.7	0	1.4	12.5	18.2	0	0	11.9	0	0.4	2.9	0	1.3	3.8
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.6	0	0	0	0	0	0.1

# Colliers Engineering

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_900410\_11-16-2021

Site Code :

Start Date : 11/16/2021

Page No : 1

## Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
02:00 PM	42	27	11	0	80	10	42	8	0	60	6	28	7	0	41	4	44	51	0	99	280
02:15 PM	45	20	4	0	69	9	40	7	0	56	5	24	3	2	34	2	38	50	0	90	249
02:30 PM	49	24	5	0	78	7	49	9	0	65	9	28	4	0	41	9	38	63	0	110	294
02:45 PM	48	31	4	0	83	9	46	5	0	60	5	31	13	0	49	11	37	51	0	99	291
Total	184	102	24	0	310	35	177	29	0	241	25	111	27	2	165	26	157	215	0	398	1114
03:00 PM	63	29	7	0	99	7	41	4	0	52	6	27	4	1	38	12	33	56	0	101	290
03:15 PM	43	33	11	0	87	13	42	3	0	58	5	25	9	0	39	19	50	88	0	157	341
03:30 PM	52	28	6	0	86	9	66	6	0	81	10	25	10	0	45	10	63	78	0	151	363
03:45 PM	40	21	10	0	71	7	56	14	0	77	7	37	6	0	50	9	65	88	0	162	360
Total	198	111	34	0	343	36	205	27	0	268	28	114	29	1	172	50	211	310	0	571	1354
04:00 PM	57	26	8	0	91	12	74	11	0	97	9	36	10	1	56	12	63	74	0	149	393
04:15 PM	46	27	6	0	79	6	66	7	0	79	8	35	11	2	56	10	67	96	0	173	387
04:30 PM	62	27	2	0	91	5	49	12	0	66	2	41	6	0	49	13	51	110	0	174	380
04:45 PM	63	28	7	0	98	5	52	5	0	62	8	35	10	0	53	14	59	83	0	156	369
Total	228	108	23	0	359	28	241	35	0	304	27	147	37	3	214	49	240	363	0	652	1529
05:00 PM	45	32	1	0	78	10	74	13	0	97	7	27	10	2	46	12	40	97	0	149	370
05:15 PM	46	30	4	0	80	14	46	3	0	63	6	33	12	0	51	9	46	127	0	182	376
05:30 PM	48	22	5	0	75	7	45	4	0	56	4	52	17	0	73	5	43	127	0	175	379
05:45 PM	46	20	2	0	68	4	43	7	0	54	3	68	9	0	80	11	52	125	0	188	390
Total	185	104	12	0	301	35	208	27	0	270	20	180	48	2	250	37	181	476	0	694	1515
06:00 PM	57	21	4	0	82	5	42	5	0	52	4	48	9	1	62	11	38	96	0	145	341
06:15 PM	45	19	2	0	66	4	37	4	0	45	3	28	3	0	34	11	31	73	0	115	260
06:30 PM	52	24	0	0	76	4	28	6	0	38	5	15	8	0	28	11	31	56	0	98	240
06:45 PM	29	16	3	0	48	2	24	8	0	34	3	20	5	0	28	10	27	39	0	76	186
Total	183	80	9	0	272	15	131	23	0	169	15	111	25	1	152	43	127	264	0	434	1027
Grand Total	978	505	102	0	1585	149	962	141	0	1252	115	663	166	9	953	205	916	1628	0	2749	6539
Apprch %	61.7	31.9	6.4	0		11.9	76.8	11.3	0		12.1	69.6	17.4	0.9		7.5	33.3	59.2	0		
Total %	15	7.7	1.6	0	24.2	2.3	14.7	2.2	0	19.1	1.8	10.1	2.5	0.1	14.6	3.1	14	24.9	0	42	
Lights	957	454	101	0	1512	148	934	132	0	1214	96	623	163	0	882	202	877	1606	0	2685	6293
% Lights	97.9	89.9	99	0	95.4	99.3	97.1	93.6	0	97	83.5	94	98.2	0	92.5	98.5	95.7	98.6	0	97.7	96.2
Buses	10	12	0	0	22	0	20	4	0	24	8	8	0	0	16	2	29	9	0	40	102
% Buses	1	2.4	0	0	1.4	0	2.1	2.8	0	1.9	7	1.2	0	0	1.7	1	3.2	0.6	0	1.5	1.6
Trucks	11	39	1	0	51	1	8	5	0	14	11	32	3	0	46	1	10	13	0	24	135
% Trucks	1.1	7.7	1	0	3.2	0.7	0.8	3.5	0	1.1	9.6	4.8	1.8	0	4.8	0.5	1.1	0.8	0	0.9	2.1
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	9
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.9	0	0	0	0	0	0.1

# Colliers Engineering

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

# Colliers Engineering

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_900410\_11-16-2021

Site Code :

Start Date : 11/16/2021

Page No : 3

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	57	26	8	0	91	12	74	11	0	97	9	36	10	1	56	12	63	74	0	149	393
04:15 PM	46	27	6	0	79	6	66	7	0	79	8	35	11	2	56	10	67	96	0	173	387
04:30 PM	62	27	2	0	91	5	49	12	0	66	2	41	6	0	49	13	51	110	0	174	380
04:45 PM	63	28	7	0	98	5	52	5	0	62	8	35	10	0	53	14	59	83	0	156	369
Total Volume	228	108	23	0	359	28	241	35	0	304	27	147	37	3	214	49	240	363	0	652	1529
% App. Total	63.5	30.1	6.4	0		9.2	79.3	11.5	0		12.6	68.7	17.3	1.4		7.5	36.8	55.7	0		
PHF	.905	.964	.719	.000	.916	.583	.814	.729	.000	.784	.750	.896	.841	.375	.955	.875	.896	.825	.000	.937	.973
Lights	226	101	22	0	349	28	240	31	0	299	23	134	35	0	192	49	231	360	0	640	1480
% Lights	99.1	93.5	95.7	0	97.2	100	99.6	88.6	0	98.4	85.2	91.2	94.6	0	89.7	100	96.3	99.2	0	98.2	96.8
Buses	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	7	0	0	7	10
% Buses	0	0	0	0	0	0	0.4	2.9	0	0.7	3.7	0	0	0	0.5	0	2.9	0	0	1.1	0.7
Trucks	2	7	1	0	10	0	0	3	0	3	3	13	2	0	18	0	2	3	0	5	36
% Trucks	0.9	6.5	4.3	0	2.8	0	0	8.6	0	1.0	11.1	8.8	5.4	0	8.4	0	0.8	0.8	0	0.8	2.4
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	1.4	0	0	0	0	0	0.2

# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_807569\_01-06-2021

Site Code :

Start Date : 1/6/2021

Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30 AM	60	16	1	0	77	1	20	2	0	23	2	3	2	0	7	4	9	18	0	31	138
06:45 AM	41	20	3	0	64	1	20	3	0	24	2	9	5	0	16	1	20	13	0	34	138
Total	101	36	4	0	141	2	40	5	0	47	4	12	7	0	23	5	29	31	0	65	276
07:00 AM	46	14	5	0	65	0	28	1	0	29	0	5	8	0	13	4	36	20	0	60	167
07:15 AM	79	23	5	0	107	1	44	1	0	46	1	11	13	0	25	2	34	21	0	57	235
07:30 AM	60	26	3	0	89	0	30	5	0	35	6	11	15	0	32	5	34	26	0	65	221
07:45 AM	59	27	10	0	96	0	31	3	0	34	5	12	11	0	28	6	44	40	0	90	248
Total	244	90	23	0	357	1	133	10	0	144	12	39	47	0	98	17	148	107	0	272	871
08:00 AM	51	16	4	0	71	0	29	2	0	31	5	17	7	0	29	3	52	39	0	94	225
08:15 AM	54	18	8	0	80	3	39	2	0	44	5	12	9	0	26	5	38	36	0	79	229
08:30 AM	50	22	10	0	82	2	39	3	0	44	10	19	7	0	36	6	68	28	0	102	264
08:45 AM	40	21	10	0	71	6	40	6	0	52	5	15	5	0	25	7	55	35	0	97	245
Total	195	77	32	0	304	11	147	13	0	171	25	63	28	0	116	21	213	138	0	372	963
09:00 AM	38	19	7	0	64	4	28	15	0	47	6	18	6	1	31	7	35	31	0	73	215
09:15 AM	44	16	7	0	67	4	45	7	0	56	5	15	2	0	22	3	28	24	0	55	200
Grand Total	622	238	73	0	933	22	393	50	0	465	52	147	90	1	290	53	453	331	0	837	2525
Apprch %	66.7	25.5	7.8	0		4.7	84.5	10.8	0		17.9	50.7	31	0.3		6.3	54.1	39.5	0		
Total %	24.6	9.4	2.9	0	37	0.9	15.6	2	0	18.4	2.1	5.8	3.6	0	11.5	2.1	17.9	13.1	0	33.1	
Lights	618	180	71	0	869	22	375	26	0	423	43	119	88	0	250	52	447	321	0	820	2362
% Lights	99.4	75.6	97.3	0	93.1	100	95.4	52	0	91	82.7	81	97.8	0	86.2	98.1	98.7	97	0	98	93.5
Buses	3	3	0	0	6	0	6	5	0	11	2	2	0	0	4	0	5	5	0	10	31
% Buses	0.5	1.3	0	0	0.6	0	1.5	10	0	2.4	3.8	1.4	0	0	1.4	0	1.1	1.5	0	1.2	1.2
Trucks	1	55	2	0	58	0	12	19	0	31	7	26	2	0	35	1	1	5	0	7	131
% Trucks	0.2	23.1	2.7	0	6.2	0	3.1	38	0	6.7	13.5	17.7	2.2	0	12.1	1.9	0.2	1.5	0	0.8	5.2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.3	0	0	0	0	0	0





# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : NYS\_ROUTE\_118\_AT\_UNDERHILL\_AVE\_807569\_01-06-2021

Site Code :

Start Date : 1/6/2021

Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	NYS ROUTE 118 From North					UNDERHILL AVE From East					NYS ROUTE 118 From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:30 PM	41	17	14	0	72	12	49	5	0	66	8	31	4	1	44	10	45	48	0	103	285
03:45 PM	37	27	11	0	75	11	38	7	0	56	9	37	6	0	52	9	38	72	0	119	302
Total	78	44	25	0	147	23	87	12	0	122	17	68	10	1	96	19	83	120	0	222	587
04:00 PM	43	20	6	0	69	14	48	12	0	74	8	29	9	0	46	9	49	65	0	123	312
04:15 PM	34	30	5	0	69	8	47	7	0	62	6	32	11	0	49	11	43	67	0	121	301
04:30 PM	40	24	7	0	71	19	45	6	0	70	7	21	3	0	31	9	45	66	0	120	292
04:45 PM	27	31	7	0	65	30	24	8	0	62	10	28	4	0	42	11	54	64	0	129	298
Total	144	105	25	0	274	71	164	33	0	268	31	110	27	0	168	40	191	262	0	493	1203
05:00 PM	0	54	21	0	75	56	1	21	0	78	5	32	0	0	37	8	45	70	0	123	313
05:15 PM	0	40	11	0	51	35	1	34	0	70	11	38	0	0	49	8	40	61	0	109	279
05:30 PM	0	37	14	0	51	35	0	8	0	43	11	28	0	0	39	13	48	67	0	128	261
05:45 PM	0	36	23	0	59	36	1	11	0	48	9	21	0	0	30	7	41	75	0	123	260
Total	0	167	69	0	236	162	3	74	0	239	36	119	0	0	155	36	174	273	0	483	1113
06:00 PM	1	40	23	0	64	31	0	15	0	46	3	22	0	1	26	10	30	59	0	99	235
06:15 PM	1	31	12	0	44	26	0	18	0	44	5	22	0	0	27	8	29	64	0	101	216
Grand Total	224	387	154	0	765	313	254	152	0	719	92	341	37	2	472	113	507	778	0	1398	3354
Apprch %	29.3	50.6	20.1	0		43.5	35.3	21.1	0		19.5	72.2	7.8	0.4		8.1	36.3	55.7	0		
Total %	6.7	11.5	4.6	0	22.8	9.3	7.6	4.5	0	21.4	2.7	10.2	1.1	0.1	14.1	3.4	15.1	23.2	0	41.7	
Lights	215	377	154	0	746	308	251	148	0	707	76	330	36	0	442	113	496	772	0	1381	3276
% Lights	96	97.4	100	0	97.5	98.4	98.8	97.4	0	98.3	82.6	96.8	97.3	0	93.6	100	97.8	99.2	0	98.8	97.7
Buses	2	1	0	0	3	0	0	2	0	2	2	0	0	0	2	0	1	2	0	3	10
% Buses	0.9	0.3	0	0	0.4	0	0	1.3	0	0.3	2.2	0	0	0	0.4	0	0.2	0.3	0	0.2	0.3
Trucks	7	9	0	0	16	5	3	2	0	10	14	11	1	0	26	0	10	4	0	14	66
% Trucks	3.1	2.3	0	0	2.1	1.6	1.2	1.3	0	1.4	15.2	3.2	2.7	0	5.5	0	2	0.5	0	1	2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.4	0	0	0	0	0	0.1



# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	75	1	0	76	4	0	12	0	16	0	33	0	0	33	125
06:45 AM	0	0	0	0	0	0	92	1	0	93	7	0	4	0	11	1	36	0	0	37	141
Total	0	0	0	0	0	0	167	2	0	169	11	0	16	0	27	1	69	0	0	70	266
07:00 AM	0	0	0	0	0	0	110	3	0	113	4	0	3	0	7	0	55	0	0	55	175
07:15 AM	0	0	0	0	0	0	127	0	0	127	9	0	11	0	20	0	67	0	0	67	214
07:30 AM	0	0	0	0	0	0	119	1	0	120	5	0	9	0	14	1	87	0	0	88	222
07:45 AM	0	0	0	0	0	0	84	3	0	87	4	0	5	0	9	1	125	0	0	126	222
Total	0	0	0	0	0	0	440	7	0	447	22	0	28	0	50	2	334	0	0	336	833
08:00 AM	0	0	0	0	0	0	122	2	0	124	3	0	8	0	11	3	94	0	0	97	232
08:15 AM	0	0	0	0	0	0	105	1	0	106	8	0	6	0	14	2	83	0	0	85	205
08:30 AM	0	0	0	0	0	0	100	5	0	105	4	0	6	0	10	0	88	0	0	88	203
08:45 AM	0	0	0	0	0	0	65	1	0	66	6	0	3	0	9	5	106	0	0	111	186
Total	0	0	0	0	0	0	392	9	0	401	21	0	23	0	44	10	371	0	0	381	826
09:00 AM	0	0	0	0	0	0	85	2	0	87	3	0	9	0	12	6	56	0	0	62	161
09:15 AM	0	0	0	0	0	0	88	4	0	92	2	0	1	0	3	4	59	0	0	63	158
09:30 AM	0	0	0	0	0	0	72	2	0	74	2	0	5	0	7	1	82	0	0	83	164
09:45 AM	0	0	0	0	0	0	59	0	0	59	3	0	6	0	9	1	76	0	0	77	145
Total	0	0	0	0	0	0	304	8	0	312	10	0	21	0	31	12	273	0	0	285	628
10:00 AM	0	0	0	0	0	0	75	1	0	76	5	0	1	0	6	1	77	0	0	78	160
10:15 AM	0	0	0	0	0	0	68	7	0	75	6	0	3	0	9	3	67	0	0	70	154
10:30 AM	0	0	0	0	0	0	91	4	0	95	5	0	7	0	12	1	56	0	0	57	164
10:45 AM	0	0	0	0	0	0	58	2	0	60	8	0	3	1	12	5	63	0	0	68	140
Total	0	0	0	0	0	0	292	14	0	306	24	0	14	1	39	10	263	0	0	273	618
11:00 AM	0	0	0	0	0	0	78	1	0	79	3	0	2	0	5	0	63	0	0	63	147
11:15 AM	0	0	0	0	0	0	55	4	0	59	4	0	2	0	6	7	64	0	0	71	136
11:30 AM	0	0	0	0	0	0	65	4	0	69	12	0	4	0	16	1	68	0	0	69	154
11:45 AM	0	0	0	0	0	0	74	3	0	77	3	0	2	0	5	4	69	0	0	73	155
Total	0	0	0	0	0	0	272	12	0	284	22	0	10	0	32	12	264	0	0	276	592
12:00 PM	0	0	0	0	0	0	72	3	0	75	0	0	0	0	0	1	72	0	0	73	148
12:15 PM	0	0	0	0	0	0	73	4	0	77	7	0	0	1	8	1	67	0	0	68	153
12:30 PM	0	0	0	0	0	0	74	4	0	78	3	0	0	0	3	2	71	0	0	73	154

# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 2

Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
12:45 PM	0	0	0	0	0	0	75	3	0	78	6	0	7	0	13	1	85	0	0	86	177
Total	0	0	0	0	0	0	294	14	0	308	16	0	7	1	24	5	295	0	0	300	632
01:00 PM	0	0	0	0	0	0	75	6	0	81	9	0	2	0	11	3	70	0	0	73	165
01:15 PM	0	0	0	0	0	0	63	5	0	68	9	0	4	0	13	5	76	0	0	81	162
01:30 PM	0	0	0	0	0	0	88	7	0	95	4	0	2	0	6	1	90	0	0	91	192
01:45 PM	0	0	0	0	0	0	76	8	0	84	8	0	0	0	8	1	105	0	0	106	198
Total	0	0	0	0	0	0	302	26	0	328	30	0	8	0	38	10	341	0	0	351	717
02:00 PM	0	0	0	0	0	0	74	5	0	79	5	0	3	1	9	1	100	0	0	101	189
02:15 PM	0	0	0	0	0	0	79	6	0	85	2	0	3	0	5	4	76	0	0	80	170
02:30 PM	0	0	0	0	0	0	116	6	0	122	2	0	3	0	5	4	93	0	0	97	224
02:45 PM	0	0	0	0	0	0	94	8	0	102	7	0	5	0	12	3	99	0	0	102	216
Total	0	0	0	0	0	0	363	25	0	388	16	0	14	1	31	12	368	0	0	380	799
03:00 PM	0	0	0	0	0	0	112	7	0	119	2	0	3	0	5	5	114	0	0	119	243
03:15 PM	0	0	0	0	0	0	105	5	0	110	6	0	3	1	10	8	141	0	0	149	269
03:30 PM	0	0	0	0	0	0	103	10	0	113	6	0	2	0	8	3	138	0	0	141	262
03:45 PM	0	0	0	0	0	0	93	7	0	100	5	0	3	0	8	7	160	0	0	167	275
Total	0	0	0	0	0	0	413	29	0	442	19	0	11	1	31	23	553	0	0	576	1049
04:00 PM	0	0	0	0	0	0	108	11	0	119	4	0	3	0	7	7	120	0	0	127	253
04:15 PM	0	0	0	0	0	0	92	11	0	103	6	0	4	0	10	7	140	0	0	147	260
04:30 PM	0	0	0	0	0	0	112	9	0	121	9	0	3	0	12	7	115	0	0	122	255
04:45 PM	0	0	0	0	0	0	108	11	0	119	7	0	2	0	9	3	136	0	0	139	267
Total	0	0	0	0	0	0	420	42	0	462	26	0	12	0	38	24	511	0	0	535	1035
05:00 PM	0	0	0	0	0	0	109	11	0	120	8	0	1	0	9	6	125	0	0	131	260
05:15 PM	0	0	0	0	0	0	98	5	0	103	2	0	3	0	5	9	118	0	0	127	235
05:30 PM	0	0	0	0	0	0	90	10	0	100	3	0	4	0	7	8	137	0	0	145	252
05:45 PM	0	0	0	0	0	0	91	16	0	107	5	0	3	0	8	7	123	0	0	130	245
Total	0	0	0	0	0	0	388	42	0	430	18	0	11	0	29	30	503	0	0	533	992
06:00 PM	0	0	0	0	0	0	79	5	0	84	6	0	1	0	7	8	98	0	0	106	197
06:15 PM	0	0	0	0	0	0	63	8	0	71	6	0	3	0	9	4	93	0	0	97	177
Grand Total	0	0	0	0	0	0	4189	243	0	4432	247	0	179	4	430	163	4336	0	0	4499	9361
Apprch %	0	0	0	0	0	0	94.5	5.5	0		57.4	0	41.6	0.9		3.6	96.4	0	0		
Total %	0	0	0	0	0	0	44.7	2.6	0	47.3	2.6	0	1.9	0	4.6	1.7	46.3	0	0	48.1	
Lights	0	0	0	0	0	0	4049	237	0	4286	241	0	173	0	414	158	4209	0	0	4367	9067
% Lights	0	0	0	0	0	0	96.7	97.5	0	96.7	97.6	0	96.6	0	96.3	96.9	97.1	0	0	97.1	96.9
Buses	0	0	0	0	0	0	68	2	0	70	1	0	2	0	3	1	65	0	0	66	139
% Buses	0	0	0	0	0	0	1.6	0.8	0	1.6	0.4	0	1.1	0	0.7	0.6	1.5	0	0	1.5	1.5
Trucks	0	0	0	0	0	0	72	4	0	76	5	0	4	0	9	4	62	0	0	66	151
% Trucks	0	0	0	0	0	0	1.7	1.6	0	1.7	2	0	2.2	0	2.1	2.5	1.4	0	0	1.5	1.6

# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 3

Groups Printed- Lights - Buses - Trucks - Pedestrians

	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	4
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0.9	0	0	0	0	0	0



# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 1

## Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	75	1	0	76	4	0	12	0	16	0	33	0	0	33	125
06:45 AM	0	0	0	0	0	0	92	1	0	93	7	0	4	0	11	1	36	0	0	37	141
Total	0	0	0	0	0	0	167	2	0	169	11	0	16	0	27	1	69	0	0	70	266
07:00 AM	0	0	0	0	0	0	110	3	0	113	4	0	3	0	7	0	55	0	0	55	175
07:15 AM	0	0	0	0	0	0	127	0	0	127	9	0	11	0	20	0	67	0	0	67	214
07:30 AM	0	0	0	0	0	0	119	1	0	120	5	0	9	0	14	1	87	0	0	88	222
07:45 AM	0	0	0	0	0	0	84	3	0	87	4	0	5	0	9	1	125	0	0	126	222
Total	0	0	0	0	0	0	440	7	0	447	22	0	28	0	50	2	334	0	0	336	833
08:00 AM	0	0	0	0	0	0	122	2	0	124	3	0	8	0	11	3	94	0	0	97	232
08:15 AM	0	0	0	0	0	0	105	1	0	106	8	0	6	0	14	2	83	0	0	85	205
08:30 AM	0	0	0	0	0	0	100	5	0	105	4	0	6	0	10	0	88	0	0	88	203
08:45 AM	0	0	0	0	0	0	65	1	0	66	6	0	3	0	9	5	106	0	0	111	186
Total	0	0	0	0	0	0	392	9	0	401	21	0	23	0	44	10	371	0	0	381	826
09:00 AM	0	0	0	0	0	0	85	2	0	87	3	0	9	0	12	6	56	0	0	62	161
09:15 AM	0	0	0	0	0	0	88	4	0	92	2	0	1	0	3	4	59	0	0	63	158
Grand Total	0	0	0	0	0	0	1172	24	0	1196	59	0	77	0	136	23	889	0	0	912	2244
Apprch %	0	0	0	0	0	0	98	2	0	100	43.4	0	56.6	0	100	2.5	97.5	0	0	100	
Total %	0	0	0	0	0	0	52.2	1.1	0	53.3	2.6	0	3.4	0	6.1	1	39.6	0	0	40.6	
Lights	0	0	0	0	0	0	1121	20	0	1141	58	0	74	0	132	22	850	0	0	872	2145
% Lights	0	0	0	0	0	0	95.6	83.3	0	95.4	98.3	0	96.1	0	97.1	95.7	95.6	0	0	95.6	95.6
Buses	0	0	0	0	0	0	29	1	0	30	0	0	1	0	1	0	26	0	0	26	57
% Buses	0	0	0	0	0	0	2.5	4.2	0	2.5	0	0	1.3	0	0.7	0	2.9	0	0	2.9	2.5
Trucks	0	0	0	0	0	0	22	3	0	25	1	0	2	0	3	1	13	0	0	14	42
% Trucks	0	0	0	0	0	0	1.9	12.5	0	2.1	1.7	0	2.6	0	2.2	4.3	1.5	0	0	1.5	1.9
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
09:30 AM	0	0	0	0	0	0	72	2	0	74	2	0	5	0	7	1	82	0	0	83	164
09:45 AM	0	0	0	0	0	0	59	0	0	59	3	0	6	0	9	1	76	0	0	77	145
Total	0	0	0	0	0	0	131	2	0	133	5	0	11	0	16	2	158	0	0	160	309
10:00 AM	0	0	0	0	0	0	75	1	0	76	5	0	1	0	6	1	77	0	0	78	160
10:15 AM	0	0	0	0	0	0	68	7	0	75	6	0	3	0	9	3	67	0	0	70	154
10:30 AM	0	0	0	0	0	0	91	4	0	95	5	0	7	0	12	1	56	0	0	57	164
10:45 AM	0	0	0	0	0	0	58	2	0	60	8	0	3	1	12	5	63	0	0	68	140
Total	0	0	0	0	0	0	292	14	0	306	24	0	14	1	39	10	263	0	0	273	618
11:00 AM	0	0	0	0	0	0	78	1	0	79	3	0	2	0	5	0	63	0	0	63	147
11:15 AM	0	0	0	0	0	0	55	4	0	59	4	0	2	0	6	7	64	0	0	71	136
11:30 AM	0	0	0	0	0	0	65	4	0	69	12	0	4	0	16	1	68	0	0	69	154
11:45 AM	0	0	0	0	0	0	74	3	0	77	3	0	2	0	5	4	69	0	0	73	155
Total	0	0	0	0	0	0	272	12	0	284	22	0	10	0	32	12	264	0	0	276	592
12:00 PM	0	0	0	0	0	0	72	3	0	75	0	0	0	0	0	1	72	0	0	73	148
12:15 PM	0	0	0	0	0	0	73	4	0	77	7	0	0	1	8	1	67	0	0	68	153
Grand Total	0	0	0	0	0	0	840	35	0	875	58	0	35	2	95	26	824	0	0	850	1820
Apprch %	0	0	0	0	0	0	96	4	0		61.1	0	36.8	2.1		3.1	96.9	0	0		
Total %	0	0	0	0	0	0	46.2	1.9	0	48.1	3.2	0	1.9	0.1	5.2	1.4	45.3	0	0	46.7	
Lights	0	0	0	0	0	0	810	34	0	844	55	0	34	0	89	25	798	0	0	823	1756
% Lights	0	0	0	0	0	0	96.4	97.1	0	96.5	94.8	0	97.1	0	93.7	96.2	96.8	0	0	96.8	96.5
Buses	0	0	0	0	0	0	11	1	0	12	1	0	0	0	1	0	12	0	0	12	25
% Buses	0	0	0	0	0	0	1.3	2.9	0	1.4	1.7	0	0	0	1.1	0	1.5	0	0	1.4	1.4
Trucks	0	0	0	0	0	0	19	0	0	19	2	0	1	0	3	1	14	0	0	15	37
% Trucks	0	0	0	0	0	0	2.3	0	0	2.2	3.4	0	2.9	0	3.2	3.8	1.7	0	0	1.8	2
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	2.1	0	0	0	0	0	0.1



# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 1

## Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
12:30 PM	0	0	0	0	0	0	74	4	0	78	3	0	0	0	3	2	71	0	0	73	154
12:45 PM	0	0	0	0	0	0	75	3	0	78	6	0	7	0	13	1	85	0	0	86	177
Total	0	0	0	0	0	0	149	7	0	156	9	0	7	0	16	3	156	0	0	159	331
01:00 PM	0	0	0	0	0	0	75	6	0	81	9	0	2	0	11	3	70	0	0	73	165
01:15 PM	0	0	0	0	0	0	63	5	0	68	9	0	4	0	13	5	76	0	0	81	162
01:30 PM	0	0	0	0	0	0	88	7	0	95	4	0	2	0	6	1	90	0	0	91	192
01:45 PM	0	0	0	0	0	0	76	8	0	84	8	0	0	0	8	1	105	0	0	106	198
Total	0	0	0	0	0	0	302	26	0	328	30	0	8	0	38	10	341	0	0	351	717
02:00 PM	0	0	0	0	0	0	74	5	0	79	5	0	3	1	9	1	100	0	0	101	189
02:15 PM	0	0	0	0	0	0	79	6	0	85	2	0	3	0	5	4	76	0	0	80	170
02:30 PM	0	0	0	0	0	0	116	6	0	122	2	0	3	0	5	4	93	0	0	97	224
02:45 PM	0	0	0	0	0	0	94	8	0	102	7	0	5	0	12	3	99	0	0	102	216
Total	0	0	0	0	0	0	363	25	0	388	16	0	14	1	31	12	368	0	0	380	799
03:00 PM	0	0	0	0	0	0	112	7	0	119	2	0	3	0	5	5	114	0	0	119	243
03:15 PM	0	0	0	0	0	0	105	5	0	110	6	0	3	1	10	8	141	0	0	149	269
Grand Total	0	0	0	0	0	0	1031	70	0	1101	63	0	35	2	100	38	1120	0	0	1158	2359
Apprch %	0	0	0	0	0	0	93.6	6.4	0		63	0	35	2		3.3	96.7	0	0		
Total %	0	0	0	0	0	0	43.7	3	0	46.7	2.7	0	1.5	0.1	4.2	1.6	47.5	0	0	49.1	
Lights	0	0	0	0	0	0	986	69	0	1055	63	0	33	0	96	36	1072	0	0	1108	2259
% Lights	0	0	0	0	0	0	95.6	98.6	0	95.8	100	0	94.3	0	96	94.7	95.7	0	0	95.7	95.8
Buses	0	0	0	0	0	0	24	0	0	24	0	0	1	0	1	1	22	0	0	23	48
% Buses	0	0	0	0	0	0	2.3	0	0	2.2	0	0	2.9	0	1	2.6	2	0	0	2	2
Trucks	0	0	0	0	0	0	21	1	0	22	0	0	1	0	1	1	26	0	0	27	50
% Trucks	0	0	0	0	0	0	2	1.4	0	2	0	0	2.9	0	1	2.6	2.3	0	0	2.3	2.1
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	2	0	0	0	0	0	0.1

# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 2

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:30 PM to 03:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	0	0	0	0	0	0	116	6	0	122	2	0	3	0	5	4	93	0	0	97	224
02:45 PM	0	0	0	0	0	0	94	8	0	102	7	0	5	0	12	3	99	0	0	102	216
03:00 PM	0	0	0	0	0	0	112	7	0	119	2	0	3	0	5	5	114	0	0	119	243
03:15 PM	0	0	0	0	0	0	105	5	0	110	6	0	3	1	10	8	141	0	0	149	269
Total Volume	0	0	0	0	0	0	427	26	0	453	17	0	14	1	32	20	447	0	0	467	952
% App. Total	0	0	0	0	0	0	94.3	5.7	0		53.1	0	43.8	3.1		4.3	95.7	0	0		
PHF	.000	.000	.000	.000	.000	.000	.920	.813	.000	.928	.607	.000	.700	.250	.667	.625	.793	.000	.000	.784	.885
Lights	0	0	0	0	0	0	407	26	0	433	17	0	13	0	30	19	432	0	0	451	914
% Lights	0	0	0	0	0	0	95.3	100	0	95.6	100	0	92.9	0	93.8	95.0	96.6	0	0	96.6	96.0
Buses	0	0	0	0	0	0	12	0	0	12	0	0	1	0	1	1	8	0	0	9	22
% Buses	0	0	0	0	0	0	2.8	0	0	2.6	0	0	7.1	0	3.1	5.0	1.8	0	0	1.9	2.3
Trucks	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	15
% Trucks	0	0	0	0	0	0	1.9	0	0	1.8	0	0	0	0	0	0	1.6	0	0	1.5	1.6
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	100	3.1	0	0	0	0	0	0.1

# Maser Consulting

400 Columbus Avenue, Suite 180 E  
Valhalla, NY 10595

*Customer Loyalty through Client Satisfaction*

File Name : 1-UNDERHILL\_AVE\_&\_ROCHAMBEAU\_DR\_803547\_12-03-2020

Site Code :

Start Date : 12/3/2020

Page No : 1

## Groups Printed- Lights - Buses - Trucks - Pedestrians

Start Time	From North					UNDERHILL AVE From East					ROCHAMBEAU DR From South					UNDERHILL AVE From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:30 PM	0	0	0	0	0	0	103	10	0	113	6	0	2	0	8	3	138	0	0	141	262
03:45 PM	0	0	0	0	0	0	93	7	0	100	5	0	3	0	8	7	160	0	0	167	275
Total	0	0	0	0	0	0	196	17	0	213	11	0	5	0	16	10	298	0	0	308	537
04:00 PM	0	0	0	0	0	0	108	11	0	119	4	0	3	0	7	7	120	0	0	127	253
04:15 PM	0	0	0	0	0	0	92	11	0	103	6	0	4	0	10	7	140	0	0	147	260
04:30 PM	0	0	0	0	0	0	112	9	0	121	9	0	3	0	12	7	115	0	0	122	255
04:45 PM	0	0	0	0	0	0	108	11	0	119	7	0	2	0	9	3	136	0	0	139	267
Total	0	0	0	0	0	0	420	42	0	462	26	0	12	0	38	24	511	0	0	535	1035
05:00 PM	0	0	0	0	0	0	109	11	0	120	8	0	1	0	9	6	125	0	0	131	260
05:15 PM	0	0	0	0	0	0	98	5	0	103	2	0	3	0	5	9	118	0	0	127	235
05:30 PM	0	0	0	0	0	0	90	10	0	100	3	0	4	0	7	8	137	0	0	145	252
05:45 PM	0	0	0	0	0	0	91	16	0	107	5	0	3	0	8	7	123	0	0	130	245
Total	0	0	0	0	0	0	388	42	0	430	18	0	11	0	29	30	503	0	0	533	992
06:00 PM	0	0	0	0	0	0	79	5	0	84	6	0	1	0	7	8	98	0	0	106	197
06:15 PM	0	0	0	0	0	0	63	8	0	71	6	0	3	0	9	4	93	0	0	97	177
Grand Total	0	0	0	0	0	0	1146	114	0	1260	67	0	32	0	99	76	1503	0	0	1579	2938
Apprch %	0	0	0	0	0	0	91	9	0	100	67.7	0	32.3	0	100	4.8	95.2	0	0	100	
Total %	0	0	0	0	0	0	39	3.9	0	42.9	2.3	0	1.1	0	3.4	2.6	51.2	0	0	53.7	
Lights	0	0	0	0	0	0	1132	114	0	1246	65	0	32	0	97	75	1489	0	0	1564	2907
% Lights	0	0	0	0	0	0	98.8	100	0	98.9	97	0	100	0	98	98.7	99.1	0	0	99.1	98.9
Buses	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	9
% Buses	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0	0.3	0	0	0.3	0.3
Trucks	0	0	0	0	0	0	10	0	0	10	2	0	0	0	2	1	9	0	0	10	22
% Trucks	0	0	0	0	0	0	0.9	0	0	0.8	3	0	0	0	2	1.3	0.6	0	0	0.6	0.7
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## New York State Department of Transportation Roadway Traffic Count Hourly Report

**STATION: 870410**

ROUTE/ROAD: NY118	FROM: RT 129	TO: START 35/118/202 OLAPS	REGION-COUNTY: 8-WESTCHESTER
FED DIR CODE: 1, 5	REF. MARKER:	FUNC. CLASS: 16 - U Minor Arterial	MUNI: Yorktown-Town-0932
ST DIR CODE: 7	END MILEPOST: 4.33	FACTOR GROUP: 30	BIN:
DOT ID: 100041	LANES BY DIR: 1 North 1 South	CC STN:	RR CROSSING:
BEGIN DATE: 5/1/2014	WEEK OF YEAR: 18	ADDL DATA: CLS SPD	HPMS SAMPLE:
NOTES 1: SB TRAVEL LANE	PLACEMENT: .866MI SOUTH OF UNDERHILL	JURISDICTION: 01-NYS DOT	1 WAY CODE:
NOTES 2:			COUNT TYPE: Vehicle
TAKEN BY: TST-KAJ	PROCESSED BY: DOT-CEL	BATCH ID: DOT-R8 Wk 18	SPEED LIMIT: 55

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
5/01, Thu																283	276	288	217	173	122	80	36	23	1498		
5/02, Fri	15	6	6	6	18	33	133	247	248	189	181	211	215	236	252	309	324	316	260	183	118	85	78	65	3734	324	16-17
5/03, Sat	35	14	13	5	8	18	49	162	133	205	224	234	260	232	228	241	198	196	134	129	125	66	71	40	3020	260	12-13
5/04, Sun	28	15	13	2	7	8	20	51	91	132	171	190	199	216	228	190	180	178	133	112	69	38	27	15	2313	228	14-15
5/05, Mon	7	8	7	2	15	40	123	246	222	164	199	193	189	242	243	267	270	273	212	164	98	80	29	9	3302	273	17-18
5/06, Tue	8	12	9	7	9	40	131	282	242	218	183	178	195	240	258	266	323	276	240	159	108	69	36	16	3505	323	16-17
5/07, Wed	9	2	10	11	9	38	131	255	202	186	171	188	205	214	234	267	269	298	245	138	126	72	38	17	3335	298	17-18
5/08, Thu	18	5	7	4	21	36	134	255	230	199	189	178	182												1458		
<b>AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)</b>																								<b>AWDT</b>			
	13	6	8	7	14	37	130	257	229	191	185	190	193	232	245	271	285	284	229	159	114	75	35	16	3402		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY				ESTIMATED AADT				
				Roadway High Hour	% of day	North High Hour	% of day	South High Hour	% of day	Roadway	North	South
7	166	4	100	285	8.4	177	10.2	146	8.8	3157	1612	1545

**FACTOR**

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

## New York State Department of Transportation NB Traffic Count Hourly Report

**STATION: 870410**

ROUTE/ROAD: NY118	FROM: RT 129	TO: START 35/118/202 OLAPS	REGION-COUNTY: 8-WESTCHESTER
FED DIR CODE: 1	REF. MARKER:	FUNC. CLASS: 16 - U Minor Arterial	MUNI: Yorktown-Town-0932
ST DIR CODE: 7	END MILEPOST: 4.33	FACTOR GROUP: 30	BIN:
DOT ID: 100041	LANES BY DIR: 1 North	CC STN:	RR CROSSING:
BEGIN DATE: 5/1/2014	WEEK OF YEAR: 18	ADDL DATA: CLS SPD	HPMS SAMPLE:
NOTES 1: SB TRAVEL LANE	PLACEMENT: .866MI SOUTH OF UNDERHILL	JURISDICTION: 01-NYS DOT	1 WAY CODE:
NOTES 2:			COUNT TYPE: Vehicle
TAKEN BY: TST-KAJ	PROCESSED BY: DOT-CEL	BATCH ID: DOT-R8 Wk 18	SPEED LIMIT: 55

DATE	DAILY HIGH HIGH																							TOTAL	COUNT	HIGH HOUR	
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23				23-24
5/01, Thu															159	187	180	119	92	53	34	27	15	866			
5/02, Fri	8	4	0	2	9	16	63	106	123	87	95	116	109	110	136	167	186	187	124	95	54	44	42	40	1923	187	17-18
5/03, Sat	25	6	5	2	2	9	22	84	65	112	118	129	128	117	126	107	111	99	71	63	57	33	43	19	1553	129	11-12
5/04, Sun	15	11	4	1	4	4	10	32	51	67	94	97	98	107	118	103	81	81	75	55	38	17	17	6	1186	118	14-15
5/05, Mon	5	2	1	0	7	24	49	102	104	80	114	98	90	111	131	138	148	181	118	81	49	38	10	5	1686	181	17-18
5/06, Tue	3	6	5	5	3	16	62	130	115	112	87	82	86	107	132	144	195	167	136	82	50	30	14	8	1777	195	16-17
5/07, Wed	6	1	3	6	2	16	62	111	97	76	92	100	102	99	112	144	152	180	129	70	64	39	15	6	1684	180	17-18
5/08, Thu	9	2	1	3	8	15	54	106	105	92	82	93	105												675		
<b>AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)</b>																							<b>AWDT</b>				
	7	3	2	4	6	16	58	111	109	89	94	98	96	106	125	146	171	177	126	81	54	35	17	9	1737		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY				ESTIMATED AADT				
				Roadway High Hour	% of day	North High Hour	% of day	South High Hour	% of day	Roadway	North	South
7	166	4	100	285	8.4	177	10.2	146	8.8	3157	1612	1545

**FACTOR**

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00



# New York State Department of Transportation

## SB Traffic Count Hourly Report

**STATION: 870410**

ROUTE/ROAD: NY118	FROM: RT 129	TO: START 35/118/202 OLAPS	REGION-COUNTY: 8-WESTCHESTER
FED DIR CODE: 5	REF. MARKER:	FUNC. CLASS: 16 - U Minor Arterial	MUNI: Yorktown-Town-0932
ST DIR CODE: 7	END MILEPOST: 4.33	FACTOR GROUP: 30	BIN:
DOT ID: 100041	LANES BY DIR: 1 South	CC STN:	RR CROSSING:
BEGIN DATE: 5/1/2014	WEEK OF YEAR: 18	ADDL DATA: CLS SPD	HPMS SAMPLE:
NOTES 1: SB TRAVEL LANE	PLACEMENT: .866MI SOUTH OF UNDERHILL	JURISDICTION: 01-NYS DOT	1 WAY CODE:
NOTES 2:			COUNT TYPE: Vehicle
TAKEN BY: TST-KAJ	PROCESSED BY: DOT-CEL	BATCH ID: DOT-R8 Wk 18	SPEED LIMIT: 55

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY HIGH	HIGH	HIGH
																								TOTAL	COUNT	HOUR	
5/01, Thu																124	89	108	98	81	69	46	9	8	632		
5/02, Fri	7	2	6	4	9	17	70	141	125	102	86	95	106	126	116	142	138	129	136	88	64	41	36	25	1811	142	15-16
5/03, Sat	10	8	8	3	6	9	27	78	68	93	106	105	132	115	102	134	87	97	63	66	68	33	28	21	1467	134	15-16
5/04, Sun	13	4	9	1	3	4	10	19	40	65	77	93	101	109	110	87	99	97	58	57	31	21	10	9	1127	110	14-15
5/05, Mon	2	6	6	2	8	16	74	144	118	84	85	95	99	131	112	129	122	92	94	83	49	42	19	4	1616	144	07-08
5/06, Tue	5	6	4	2	6	24	69	152	127	106	96	96	109	133	126	122	128	109	104	77	58	39	22	8	1728	152	07-08
5/07, Wed	3	1	7	5	7	22	69	144	105	110	79	88	103	115	122	123	117	118	116	68	62	33	23	11	1651	144	07-08
5/08, Thu	9	3	6	1	13	21	80	149	125	107	107	85	77	783													
<b>AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)</b>																								<b>AWDT</b>			
	6	3	6	3	9	21	72	146	120	102	91	92	97	126	120	125	114	107	103	77	60	40	18	8	1664		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY				ESTIMATED AADT				
				Roadway High Hour	% of day	North High Hour	% of day	South High Hour	% of day	Roadway	North	South
7	166	4	100	285	8.4	177	10.2	146	8.8	3157	1612	1545

**FACTOR**

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

STATION: **871330**

**New York State Department of Transportation  
Traffic Count Hourly Report**

Page 1 of 2

ROAD #: <b>4330</b>	ROAD NAME: <b>UNDERHILL AVE</b>	FROM: <b>SR 118</b>	TO: <b>HANOVER ST</b>	COUNTY: <b>Westchester</b>
DIRECTION: <b>Eastbound</b>	FACTOR GROUP: <b>30</b>	REC. SERIAL #: <b>0024</b>	FUNC. CLASS: <b>16</b>	TOWN: <b>YORKTOWN</b>
STATE DIR CODE: <b>1</b>	WK OF YR: <b>35</b>	PLACEMENT: <b>342 FT S OF KEAR ST</b>	NHS: <b>no</b>	LION#: <b></b>
DATE OF COUNT: <b>08/27/2010</b>		@ REF MARKER: <b></b>	JURIS: <b>Town</b>	BIN: <b></b>
NOTES LANE 1: <b>WK 35 EB</b>		ADDL DATA: <b></b>	CC Stn: <b></b>	RR CROSSING: <b></b>
		COUNT TYPE: <b>AXLE PAIRS</b>	BATCH ID: <b>R08-R08CWW35bVol</b>	HPMS SAMPLE: <b></b>
COUNT TAKEN BY: <b>ORG CODE: TST INITIALS: ---</b>		PROCESSED BY: <b>ORG CODE: DOT INITIALS: jh</b>		

DATE	DAY	AM											PM											DAILY TOTAL	DAILY HIGH	DAILY HIGH HOUR		
		12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10				10 TO 11	11 TO 12
27	F											205	209	192	211	246	273	247	194	143	79	64	49	36	2200	185	11	
28	S	36	12	21	9	5	8	37	78	118	156	177	185	172	149	173	174	150	144	108	80	60	50	53	45	1747	185	12
29	S	29	16	13	13	11	3	22	45	53	96	114	131	185	146	135	132	151	125	81	76	58	46	38	28	3003	261	17
30	M	14	14	11	12	16	18	90	142	210	172	198	195	178	186	212	246	243	261	223	148	84	63	38	29	3003	261	17
31	T	19	15	11	13	15	18	90	148	215	203	194	192	202	223	203	252	255	281	242	161	93	56	39	30	3170	281	17
1	W	20	13	14	9	13	18	79	224	214	187	169	169	173	179	170	257	271	289	253	149	92	63	41	27	3093	289	17
2	T	15	11	8	9	18	19	97	216	200	203	173	161															

<b>AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)</b>																		<b>ADT</b>									
18	13	11	10	15	18	88	179	207	188	181	181	181	193	192	248	252	273	235	151	89	60	38	29	3050			
<u>DAYS Counted</u>	<u>HOURS Counted</u>	<u>WEEKDAYS Counted</u>	<u>WEEKDAY Hours</u>	<u>AVERAGE WEEKDAY</u>		<u>High Hour</u>	<u>% of day</u>	<u>Axle Adj. Factor</u>	<u>Seasonal/Weekday Adjustment Factor</u>	<b>ESTIMATED (one way)</b>							<b>AADT 2783</b>										
7	145	4	79	273	9%	0.985	1.096																				

ROAD #: <b>4330</b>	ROAD NAME: <b>UNDERHILL AVE</b>	FROM: <b>SR 118</b>	TO: <b>HANOVER ST</b>	COUNTY: <b>Westchester</b>
STATION: <b>871330</b>	STATE DIR CODE: <b>1</b>	PLACEMENT: <b>342 FT S OF KEAR ST</b>		DATE OF COUNT: <b>08/27/2010</b>

STATION: **871330**

**New York State Department of Transportation  
Traffic Count Hourly Report**

ROAD #: <b>4330</b>	ROAD NAME: <b>UNDERHILL AVE</b>	FROM: <b>SR 118</b>	TO: <b>HANOVER ST</b>	COUNTY: <b>Westchester</b>
DIRECTION: <b>Westbound</b>	FACTOR GROUP: <b>30</b>	REC. SERIAL #: <b>0024</b>	FUNC. CLASS: <b>16</b>	TOWN: <b>YORKTOWN</b>
STATE DIR CODE: <b>2</b>	WK OF YR: <b>35</b>	PLACEMENT: <b>342 FT S OF KEAR ST</b>	NHS: <b>no</b>	LION#: <b></b>
DATE OF COUNT: <b>08/27/2010</b>		@ REF MARKER: <b></b>	JURIS: <b>Town</b>	BIN: <b></b>
NOTES LANE 1: <b>WK 35 WB</b>		ADDL DATA: <b></b>	CC Str: <b></b>	RR CROSSING: <b></b>
		COUNT TYPE: <b>AXLE PAIRS</b>	BATCH ID: <b>R08-R08CWW35bVol</b>	HPMS SAMPLE: <b></b>
COUNT TAKEN BY: <b>ORG CODE: TST INITIALS: ---</b>		PROCESSED BY: <b>ORG CODE: DOT INITIALS: jh</b>		

DATE	DAY	AM											PM											DAILY TOTAL	DAILY HIGH	DAILY HIGH HOUR		
		12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10				10 TO 11	11 TO 12
27	F											213	210	204	214	230	227	243	200	138	102	63	50	25	2123	195	11	
28	S	15	7	15	6	5	11	28	57	91	142	183	195	157	175	167	144	158	151	122	91	80	58	44	21	1638	161	13
30	M	6	5	4	7	12	28	97	182	206	175	183	190	181	160	193	239	231	268	175	126	78	48	50	21	2865	268	17
31	T	11	6	3	7	16	23	92	189	204	200	156	194	211	211	192	223	240	273	176	133	91	64	39	25	2979	273	17
1	W	10	10	2	5	11	27	110	197	204	177	169	132	172	201	184	249	257	270	181	151	110	73	43	14	2959	270	17
2	T	7	7	3	4	13	28	117	186	210	202	182	176															

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)																	ADT							
9	8	3	5	13	26	102	185	203	185	169	178	185	188	187	233	239	266	174	135	92	61	43	20	2909
DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY		Axle Adj. Factor		Seasonal/Weekday Adjustment Factor		ESTIMATED (one way)														
7	145	4	79	266	9%	0.985	1.096	<b>AADT</b> <b>2654</b>																

ROAD #: <b>4330</b>	ROAD NAME: <b>UNDERHILL AVE</b>	FROM: <b>SR 118</b>	TO: <b>HANOVER ST</b>	COUNTY: <b>Westchester</b>
STATION: <b>871330</b>	STATE DIR CODE: <b>2</b>	PLACEMENT: <b>342 FT S OF KEAR ST</b>		DATE OF COUNT: <b>08/27/2010</b>

COUNT_ID	870410_06112019	COUNT_ID	870410_06112019	COUNT_ID	870410_06112019
REGION	8	REGION	8	REGION	8
REGION_CODE	8	REGION_CODE	8	REGION_CODE	8
COUNTY_CODE	7	COUNTY_CODE	7	COUNTY_CODE	7
STATION	410	STATION	410	STATION	410
RCSTA	870410	RCSTA	870410	RCSTA	870410
FUNCTIONAL_CLASSES	16	FUNCTIONAL_CLASSES	16	FUNCTIONAL_CLASSES	16
FACTOR_GROUP	30	FACTOR_GROUP	30	FACTOR_GROUP	30
LATITUDE	41.256569	LATITUDE	41.256569	LATITUDE	41.256569
LONGITUDE	-73.787215	LONGITUDE	-73.787215	LONGITUDE	-73.787215
SPECIFIC_RECORDER_PLACEMENT	1135' N OF REVERE DR	SPECIFIC_RECORDER_PLACEMENT	1135' N OF REVERE DR	SPECIFIC_RECORDER_PLACEMENT	1135' N OF REVERE DR
CHANNEL_NOTES	NB Travel Lane	CHANNEL_NOTES	SB Travel lane	CHANNEL_NOTES	
DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics
VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1
YEAR	2019	YEAR	2019	YEAR	2019
MONTH	6	MONTH	6	MONTH	6
DAY_OF_FIRST_DATA	11	DAY_OF_FIRST_DATA	11	DAY_OF_FIRST_DATA	11
FEDERAL_DIRECTION	Northbound	FEDERAL_DIRECTION	Southbound	FEDERAL_DIRECTION	Combined Total
FULL_COUNT		FULL_COUNT		FULL_COUNT	Y
AVG_WKDAY_INTERVAL_1	8	AVG_WKDAY_INTERVAL_1	9	AVG_WKDAY_INTERVAL_1	17
AVG_WKDAY_INTERVAL_2	7	AVG_WKDAY_INTERVAL_2	3	AVG_WKDAY_INTERVAL_2	10
AVG_WKDAY_INTERVAL_3	3	AVG_WKDAY_INTERVAL_3	6	AVG_WKDAY_INTERVAL_3	9
AVG_WKDAY_INTERVAL_4	5	AVG_WKDAY_INTERVAL_4	5	AVG_WKDAY_INTERVAL_4	10
AVG_WKDAY_INTERVAL_5	8	AVG_WKDAY_INTERVAL_5	6	AVG_WKDAY_INTERVAL_5	14
AVG_WKDAY_INTERVAL_6	16	AVG_WKDAY_INTERVAL_6	15	AVG_WKDAY_INTERVAL_6	31
AVG_WKDAY_INTERVAL_7	59	AVG_WKDAY_INTERVAL_7	66	AVG_WKDAY_INTERVAL_7	125
AVG_WKDAY_INTERVAL_8	124	AVG_WKDAY_INTERVAL_8	245	AVG_WKDAY_INTERVAL_8	369
AVG_WKDAY_INTERVAL_9	152	AVG_WKDAY_INTERVAL_9	220	AVG_WKDAY_INTERVAL_9	372
AVG_WKDAY_INTERVAL_10	135	AVG_WKDAY_INTERVAL_10	176	AVG_WKDAY_INTERVAL_10	311
AVG_WKDAY_INTERVAL_11	111	AVG_WKDAY_INTERVAL_11	131	AVG_WKDAY_INTERVAL_11	242
AVG_WKDAY_INTERVAL_12	129	AVG_WKDAY_INTERVAL_12	140	AVG_WKDAY_INTERVAL_12	269
AVG_WKDAY_INTERVAL_13	142	AVG_WKDAY_INTERVAL_13	141	AVG_WKDAY_INTERVAL_13	283
AVG_WKDAY_INTERVAL_14	142	AVG_WKDAY_INTERVAL_14	150	AVG_WKDAY_INTERVAL_14	292
AVG_WKDAY_INTERVAL_15	162	AVG_WKDAY_INTERVAL_15	158	AVG_WKDAY_INTERVAL_15	320
AVG_WKDAY_INTERVAL_16	151	AVG_WKDAY_INTERVAL_16	146	AVG_WKDAY_INTERVAL_16	297
AVG_WKDAY_INTERVAL_17	172	AVG_WKDAY_INTERVAL_17	125	AVG_WKDAY_INTERVAL_17	297
AVG_WKDAY_INTERVAL_18	173	AVG_WKDAY_INTERVAL_18	127	AVG_WKDAY_INTERVAL_18	300
AVG_WKDAY_INTERVAL_19	138	AVG_WKDAY_INTERVAL_19	116	AVG_WKDAY_INTERVAL_19	254
AVG_WKDAY_INTERVAL_20	90	AVG_WKDAY_INTERVAL_20	84	AVG_WKDAY_INTERVAL_20	174
AVG_WKDAY_INTERVAL_21	73	AVG_WKDAY_INTERVAL_21	62	AVG_WKDAY_INTERVAL_21	135
AVG_WKDAY_INTERVAL_22	41	AVG_WKDAY_INTERVAL_22	47	AVG_WKDAY_INTERVAL_22	88
AVG_WKDAY_INTERVAL_23	24	AVG_WKDAY_INTERVAL_23	29	AVG_WKDAY_INTERVAL_23	53
AVG_WKDAY_INTERVAL_24	14	AVG_WKDAY_INTERVAL_24	12	AVG_WKDAY_INTERVAL_24	26
AVG_WKDAY_DAILY_TRAFFIC	2079	AVG_WKDAY_DAILY_TRAFFIC	2219	AVG_WKDAY_DAILY_TRAFFIC	4298
SEASONAL_FACTOR	1.113	SEASONAL_FACTOR	1.113	SEASONAL_FACTOR	1.113
AXLE_FACTOR	1	AXLE_FACTOR	1	AXLE_FACTOR	1
AADT	1868	AADT	1994	AADT	3862
HIGH_HOUR_VALUE	173	HIGH_HOUR_VALUE	245	HIGH_HOUR_VALUE	372
HIGH_HOUR_INTERVAL	18	HIGH_HOUR_INTERVAL	8	HIGH_HOUR_INTERVAL	9
K_FACTOR		K_FACTOR		K_FACTOR	9
D_FACTOR		D_FACTOR		D_FACTOR	59
FLAG_FIELD		FLAG_FIELD		FLAG_FIELD	
BATCH_ID	345263	BATCH_ID	345263	BATCH_ID	345263

COUNT_ID	871330_06272016	COUNT_ID	871330_06272016	COUNT_ID	871330_06272016
REGION	8	REGION	8	REGION	8
REGION_CODE	8	REGION_CODE	8	REGION_CODE	8
COUNTY_CODE	7	COUNTY_CODE	7	COUNTY_CODE	7
STATION	1330	STATION	1330	STATION	1330
RCSTA	871330	RCSTA	871330	RCSTA	871330
FUNCTIONAL_CLASSES	16	FUNCTIONAL_CLASSES	16	FUNCTIONAL_CLASSES	16
FACTOR_GROUP	30	FACTOR_GROUP	30	FACTOR_GROUP	30
LATITUDE	41.26959	LATITUDE	41.26959	LATITUDE	41.26959
LONGITUDE	-73.78145	LONGITUDE	-73.78145	LONGITUDE	-73.78145
SPECIFIC_RECORDER	501' E of Saw Mill	SPECIFIC_RECORDER	501' E of Saw Mill	SPECIFIC_RECORDER	501' E of Saw Mill
R_PLACEMENT	River Pkw	R_PLACEMENT	River Pkw	R_PLACEMENT	River Pkw
CHANNEL_NOTES	EB travel lane	CHANNEL_NOTES	Wb travel lane	CHANNEL_NOTES	
DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics
VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1
YEAR	2016	YEAR	2016	YEAR	2016
MONTH	6	MONTH	6	MONTH	6
DAY_OF_FIRST_DATA	27	DAY_OF_FIRST_DATA	27	DAY_OF_FIRST_DATA	27
FEDERAL_DIRECTION	Eastbound	FEDERAL_DIRECTION	Westbound	FEDERAL_DIRECTION	Combined Total
FULL_COUNT		FULL_COUNT		FULL_COUNT	Y
AVG_WKDAY_INTERVAL_1	14	AVG_WKDAY_INTERVAL_1	8	AVG_WKDAY_INTERVAL_1	22
AVG_WKDAY_INTERVAL_2	9	AVG_WKDAY_INTERVAL_2	4	AVG_WKDAY_INTERVAL_2	13
AVG_WKDAY_INTERVAL_3	13	AVG_WKDAY_INTERVAL_3	6	AVG_WKDAY_INTERVAL_3	19
AVG_WKDAY_INTERVAL_4	23	AVG_WKDAY_INTERVAL_4	8	AVG_WKDAY_INTERVAL_4	31
AVG_WKDAY_INTERVAL_5	20	AVG_WKDAY_INTERVAL_5	16	AVG_WKDAY_INTERVAL_5	36
AVG_WKDAY_INTERVAL_6	17	AVG_WKDAY_INTERVAL_6	44	AVG_WKDAY_INTERVAL_6	61
AVG_WKDAY_INTERVAL_7	76	AVG_WKDAY_INTERVAL_7	117	AVG_WKDAY_INTERVAL_7	193
AVG_WKDAY_INTERVAL_8	145	AVG_WKDAY_INTERVAL_8	180	AVG_WKDAY_INTERVAL_8	325
AVG_WKDAY_INTERVAL_9	272	AVG_WKDAY_INTERVAL_9	251	AVG_WKDAY_INTERVAL_9	523
AVG_WKDAY_INTERVAL_10	204	AVG_WKDAY_INTERVAL_10	233	AVG_WKDAY_INTERVAL_10	437
AVG_WKDAY_INTERVAL_11	158	AVG_WKDAY_INTERVAL_11	157	AVG_WKDAY_INTERVAL_11	315
AVG_WKDAY_INTERVAL_12	170	AVG_WKDAY_INTERVAL_12	176	AVG_WKDAY_INTERVAL_12	346
AVG_WKDAY_INTERVAL_13	201	AVG_WKDAY_INTERVAL_13	177	AVG_WKDAY_INTERVAL_13	378
AVG_WKDAY_INTERVAL_14	173	AVG_WKDAY_INTERVAL_14	199	AVG_WKDAY_INTERVAL_14	372
AVG_WKDAY_INTERVAL_15	207	AVG_WKDAY_INTERVAL_15	198	AVG_WKDAY_INTERVAL_15	405
AVG_WKDAY_INTERVAL_16	228	AVG_WKDAY_INTERVAL_16	257	AVG_WKDAY_INTERVAL_16	485
AVG_WKDAY_INTERVAL_17	258	AVG_WKDAY_INTERVAL_17	223	AVG_WKDAY_INTERVAL_17	481
AVG_WKDAY_INTERVAL_18	279	AVG_WKDAY_INTERVAL_18	255	AVG_WKDAY_INTERVAL_18	534
AVG_WKDAY_INTERVAL_19	223	AVG_WKDAY_INTERVAL_19	183	AVG_WKDAY_INTERVAL_19	406
AVG_WKDAY_INTERVAL_20	160	AVG_WKDAY_INTERVAL_20	128	AVG_WKDAY_INTERVAL_20	288
AVG_WKDAY_INTERVAL_21	95	AVG_WKDAY_INTERVAL_21	92	AVG_WKDAY_INTERVAL_21	187
AVG_WKDAY_INTERVAL_22	67	AVG_WKDAY_INTERVAL_22	64	AVG_WKDAY_INTERVAL_22	131
AVG_WKDAY_INTERVAL_23	47	AVG_WKDAY_INTERVAL_23	40	AVG_WKDAY_INTERVAL_23	87
AVG_WKDAY_INTERVAL_24	29	AVG_WKDAY_INTERVAL_24	17	AVG_WKDAY_INTERVAL_24	46
AVG_WKDAY_DAILY_TRAFFIC	3088	AVG_WKDAY_DAILY_TRAFFIC	3033	AVG_WKDAY_DAILY_TRAFFIC	6121
SEASONAL_FACTOR	1.1	SEASONAL_FACTOR	1.1	SEASONAL_FACTOR	1.1
AXLE_FACTOR	1	AXLE_FACTOR	1	AXLE_FACTOR	1
AADT	2807	AADT	2757	AADT	5564
HIGH_HOUR_VALUE	279	HIGH_HOUR_VALUE	279	HIGH_HOUR_VALUE	534
HIGH_HOUR_INTERVAL	18	HIGH_HOUR_INTERVAL	18	HIGH_HOUR_INTERVAL	18
K_FACTOR		K_FACTOR		K_FACTOR	9
D_FACTOR		D_FACTOR		D_FACTOR	52
FLAG_FIELD		FLAG_FIELD		FLAG_FIELD	
BATCH_ID	190374	BATCH_ID	190374	BATCH_ID	190374



Station 871330

UNDERHILL AVE  
from NY 118 to HANOVER ST

Direction: Combined Total

Calculation Year: 2019  
AADT Type: Estimate  
AADT: 5540

Truck AADT Type: Actual  
Truck AADT: 148  
Truck Percentage: 3

NHS:  
Functional Class: 16  
Route\_ID: 204333011

Average Speed (mph): 28  
DHV: 483  
DDHV: 253  
Morning Peak: 523  
Afternoon Peak: 378  
Evening Peak: 534

Related tables:

- Volume Statistics >
- Class Statistics >
- Speed Statistics >

[Zoom to](#)



Station 871330

UNDERHILL AVE  
from NY 118 to HANOVER ST

**Direction:**

Eastbound

---

Calculation Year:	2019
AADT Type:	Estimate
AADT:	2795

---

Truck AADT Type:	Actual
Truck AADT:	79
Truck Percentage:	3

---

NHS:	
Functional Class:	16
Route_ID:	204333011

---

Average Speed (mph):	29
DHV:	
DDHV:	
Morning Peak:	272
Afternoon Peak:	201
Evening Peak:	279

Related tables:

Volume Statistics

Class Statistics

Speed Statistics

Station 871330

ENDERBILL AVE  
from NY 118 to HANOVER ST

Direction:	Westbound
Calculation Year:	2019
ADT Type:	Estimate
ADT:	2745
Truck ADT Type:	Actual
Truck ADT:	69
Truck Percentage:	3
NHS:	
Functional Class:	16
Route_ID	204333011
Average Speed (mph):	27
DHV:	
DDHV:	
Morning Peak:	251
Afternoon Peak:	199
Evening Peak:	257

Related tables:

Volume Statistics

Class Statistics

Speed Statistics

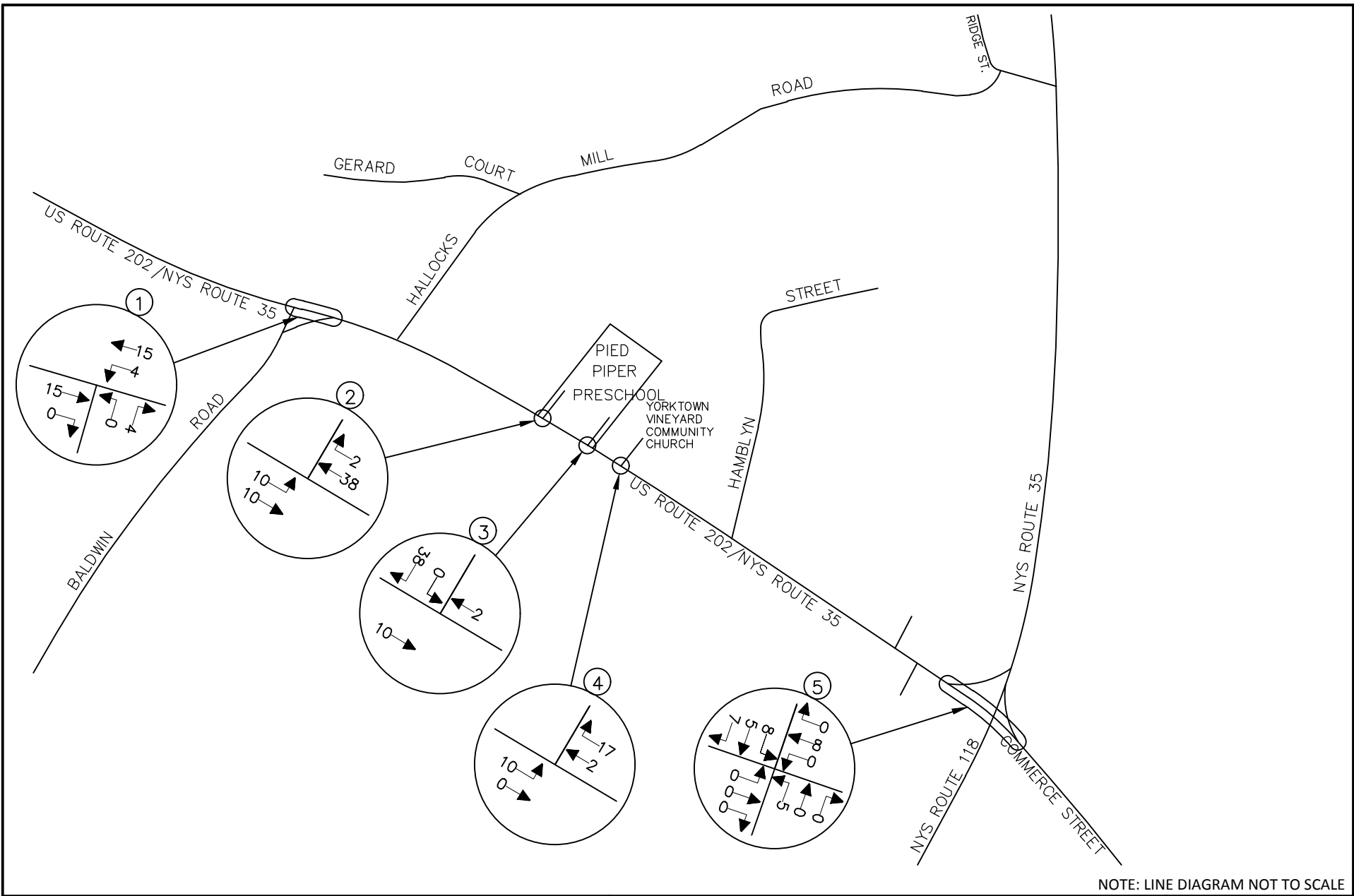


COUNT_ID	875459_07162016	COUNT_ID	875459_07162016	COUNT_ID	875459_07162016
REGION	8	REGION	8	REGION	8
REGION_CODE	8	REGION_CODE	8	REGION_CODE	8
COUNTY_CODE	7	COUNTY_CODE	7	COUNTY_CODE	7
STATION	5459	STATION	5459	STATION	5459
RCSTA	875459	RCSTA	875459	RCSTA	875459
FUNCTIONAL_CLASS	19	FUNCTIONAL_CLASS	19	FUNCTIONAL_CLASS	19
FACTOR_GROUP	30	FACTOR_GROUP	30	FACTOR_GROUP	30
LATITUDE	41.26636	LATITUDE	41.26636	LATITUDE	41.26636
LONGITUDE	-73.78444	LONGITUDE	-73.78444	LONGITUDE	-73.78444
SPECIFIC_RECORDER	483 ft S of Underhill Rd	SPECIFIC_RECORDER	483 ft S of Underhill Rd	SPECIFIC_RECORDER	483 ft S of Underhill Rd
R_PLACEMENT		R_PLACEMENT		R_PLACEMENT	
CHANNEL_NOTES		CHANNEL_NOTES		CHANNEL_NOTES	
DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics	DATA_TYPE	Volume Statistics
VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1	VEHICLE_AXLE_CODE	1
YEAR	2016	YEAR	2016	YEAR	2016
MONTH	7	MONTH	7	MONTH	7
DAY_OF_FIRST_DATA	16	DAY_OF_FIRST_DATA	16	DAY_OF_FIRST_DATA	16
FEDERAL_DIRECTION	Northbound	FEDERAL_DIRECTION	Southbound	FEDERAL_DIRECTION	Combined Total
FULL_COUNT		FULL_COUNT		FULL_COUNT	Y
AVG_WKDAY_INTERVAL_1	4	AVG_WKDAY_INTERVAL_1	12	AVG_WKDAY_INTERVAL_1	16
AVG_WKDAY_INTERVAL_2	2	AVG_WKDAY_INTERVAL_2	6	AVG_WKDAY_INTERVAL_2	8
AVG_WKDAY_INTERVAL_3	0	AVG_WKDAY_INTERVAL_3	2	AVG_WKDAY_INTERVAL_3	2
AVG_WKDAY_INTERVAL_4	2	AVG_WKDAY_INTERVAL_4	1	AVG_WKDAY_INTERVAL_4	3
AVG_WKDAY_INTERVAL_5	2	AVG_WKDAY_INTERVAL_5	1	AVG_WKDAY_INTERVAL_5	3
AVG_WKDAY_INTERVAL_6	6	AVG_WKDAY_INTERVAL_6	2	AVG_WKDAY_INTERVAL_6	8
AVG_WKDAY_INTERVAL_7	28	AVG_WKDAY_INTERVAL_7	8	AVG_WKDAY_INTERVAL_7	36
AVG_WKDAY_INTERVAL_8	52	AVG_WKDAY_INTERVAL_8	10	AVG_WKDAY_INTERVAL_8	62
AVG_WKDAY_INTERVAL_9	51	AVG_WKDAY_INTERVAL_9	15	AVG_WKDAY_INTERVAL_9	66
AVG_WKDAY_INTERVAL_10	26	AVG_WKDAY_INTERVAL_10	14	AVG_WKDAY_INTERVAL_10	40
AVG_WKDAY_INTERVAL_11	29	AVG_WKDAY_INTERVAL_11	18	AVG_WKDAY_INTERVAL_11	47
AVG_WKDAY_INTERVAL_12	25	AVG_WKDAY_INTERVAL_12	21	AVG_WKDAY_INTERVAL_12	46
AVG_WKDAY_INTERVAL_13	23	AVG_WKDAY_INTERVAL_13	22	AVG_WKDAY_INTERVAL_13	45
AVG_WKDAY_INTERVAL_14	20	AVG_WKDAY_INTERVAL_14	23	AVG_WKDAY_INTERVAL_14	43
AVG_WKDAY_INTERVAL_15	28	AVG_WKDAY_INTERVAL_15	27	AVG_WKDAY_INTERVAL_15	55
AVG_WKDAY_INTERVAL_16	28	AVG_WKDAY_INTERVAL_16	31	AVG_WKDAY_INTERVAL_16	59
AVG_WKDAY_INTERVAL_17	24	AVG_WKDAY_INTERVAL_17	45	AVG_WKDAY_INTERVAL_17	69
AVG_WKDAY_INTERVAL_18	29	AVG_WKDAY_INTERVAL_18	49	AVG_WKDAY_INTERVAL_18	78
AVG_WKDAY_INTERVAL_19	32	AVG_WKDAY_INTERVAL_19	51	AVG_WKDAY_INTERVAL_19	83
AVG_WKDAY_INTERVAL_20	27	AVG_WKDAY_INTERVAL_20	47	AVG_WKDAY_INTERVAL_20	74
AVG_WKDAY_INTERVAL_21	20	AVG_WKDAY_INTERVAL_21	42	AVG_WKDAY_INTERVAL_21	62
AVG_WKDAY_INTERVAL_22	16	AVG_WKDAY_INTERVAL_22	34	AVG_WKDAY_INTERVAL_22	50
AVG_WKDAY_INTERVAL_23	11	AVG_WKDAY_INTERVAL_23	24	AVG_WKDAY_INTERVAL_23	35
AVG_WKDAY_INTERVAL_24	7	AVG_WKDAY_INTERVAL_24	16	AVG_WKDAY_INTERVAL_24	23
AVG_WKDAY_DAILY_TRAFFIC	492	AVG_WKDAY_DAILY_TRAFFIC	521	AVG_WKDAY_DAILY_TRAFFIC	1013
SEASONAL_FACTOR	1.083	SEASONAL_FACTOR	1.083	SEASONAL_FACTOR	1.083
AXLE_FACTOR	1	AXLE_FACTOR	1	AXLE_FACTOR	1
AADT	454	AADT	481	AADT	935
HIGH_HOUR_VALUE	52	HIGH_HOUR_VALUE	52	HIGH_HOUR_VALUE	83
HIGH_HOUR_INTERVAL	8	HIGH_HOUR_INTERVAL	8	HIGH_HOUR_INTERVAL	19
K_FACTOR		K_FACTOR		K_FACTOR	8
D_FACTOR		D_FACTOR		D_FACTOR	61
FLAG_FIELD		FLAG_FIELD		FLAG_FIELD	
BATCH_ID	190386	BATCH_ID	190386	BATCH_ID	190386

# Traffic Impact Study

## Appendix K | Other Development Backup Data

# Pied Piper Daycare



NOTE: LINE DIAGRAM NOT TO SCALE



Consulting, Municipal & Environmental Engineers  
 Planners ■ Surveyors ■ Landscape Architects  
 State of N.Y. Certificate of Authorization: 0008671

New Jersey New York Pennsylvania Virginia  
 Customer Loyalty through Client Satisfaction

WESTCHESTER OFFICE

11 Bradhurst Avenue  
 Hawthorne, NY 10532  
 Phone: 914.347.7500  
 Fax: 914.347.7266

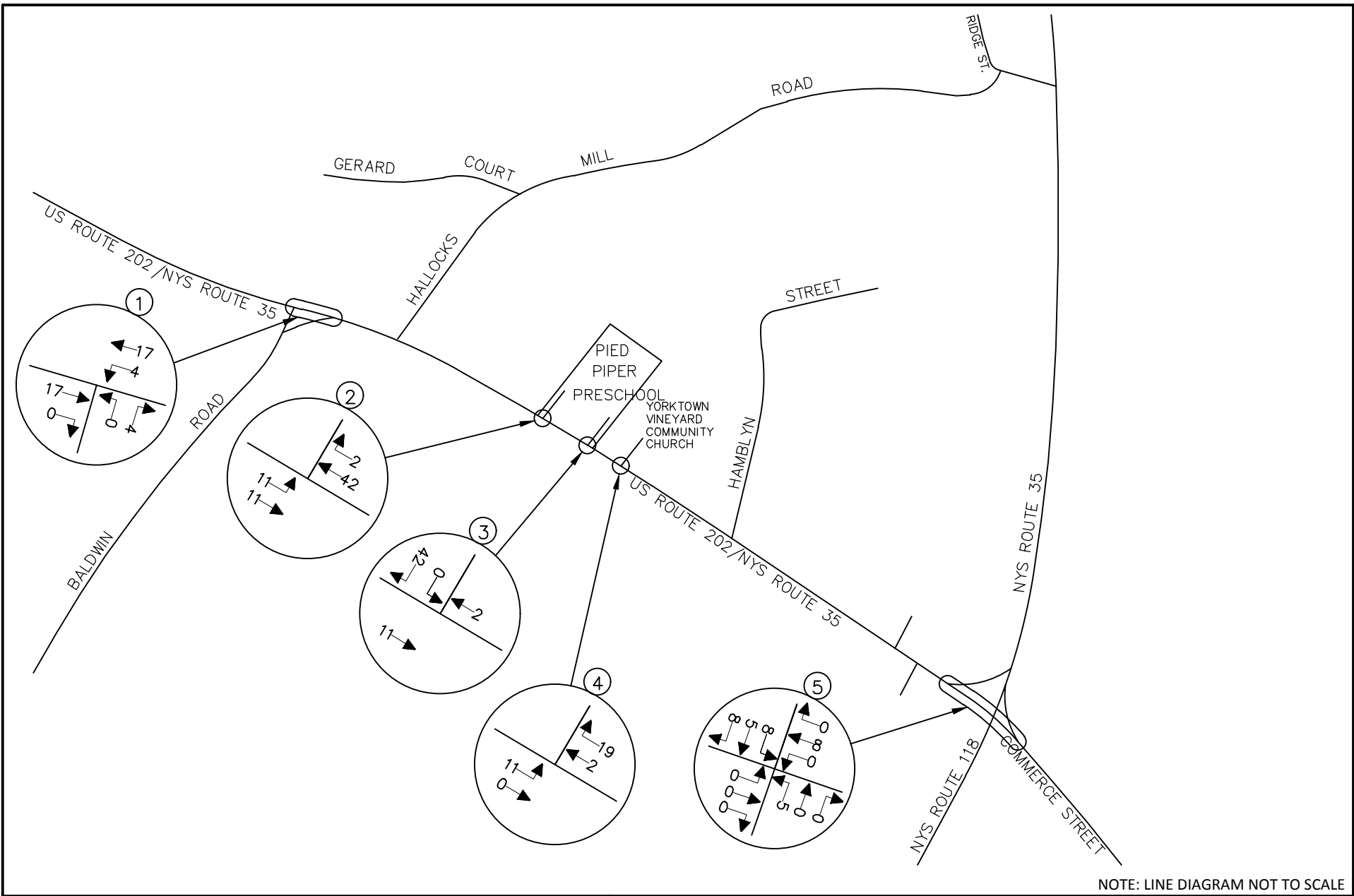
email: solutions @ maserconsulting.com

PIED PIPER PRE-SCHOOL EXPANSION  
 TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES  
 WEEKDAY PEAK AM HOUR



JOB NUMBER:	DATE:
16003228A	MAR. 2017
FIGURE NUMBER:	



NOTE: LINE DIAGRAM NOT TO SCALE



Consulting, Municipal & Environmental Engineers  
 Planners ■ Surveyors ■ Landscape Architects  
 State of N.Y. Certificate of Authorization: 0008671

New Jersey New York Pennsylvania Virginia  
 Customer Loyalty through Client Satisfaction

WESTCHESTER OFFICE

11 Bradhurst Avenue  
 Hawthorne, NY 10532  
 Phone: 914.347.7500  
 Fax: 914.347.7266

email: solutions @ maserconsulting.com

PIED PIPER PRE-SCHOOL EXPANSION  
 TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
16003228A	MAR. 2017
FIGURE NUMBER:	

**TABLE 1**

**HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED  
SITE GENERATED TRAFFIC VOLUMES**

<b>PIED PIPER PRE-SCHOOL EXPANSION TOWN OF YORKTOWN, NY</b>	ENTRY		EXIT	
	HTGR*	VOLUME	HTGR*	VOLUME
<b>PIED PIPER PRE-SCHOOL EXPANSION (136 STUDENTS)</b>				
PEAK AM HOUR	0.48	65	0.48	65
PEAK PM HOUR	0.53	72	0.53	72
<b>EXISTING PIED PIPER PRE-SCHOOL (66 STUDENTS)</b>				
PEAK AM HOUR	0.48	32	0.48	32
PEAK PM HOUR	0.53	35	0.53	35
<b>NET ADDITIONAL</b>		<b>VOLUME</b>		<b>VOLUME</b>
PEAK AM HOUR	-	33	-	33
PEAK PM HOUR	-	37	-	37

NOTES:

- 1) \* HTGR-HOURLY TRIP GENERATION RATES EXPRESSED IN TERMS OF TRIPS PER 1000 S.F. FOR LAND USES - 565-DAY CARE CENTER; BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PUBLICATION ENTITLED "TRIP GENERATION", 9TH EDITION, 2012.
- 2) RATES USED ON 136 STUDENTS EXPANSION ARE FROM ACTUAL COUNT.

# The Weyant



## Traffic Impact Study

The Weyant Residential Development  
U.S. Route 202/NYS Route 35 and Hamblyn Street  
Town of Yorktown, Westchester County, NY

May 24, 2017

*Prepared For*

Site Design Consultants  
251-F Underhill Avenue  
Yorktown Heights, NY 10598

*Prepared By*

Maser Consulting P.A.  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
914.347.7500

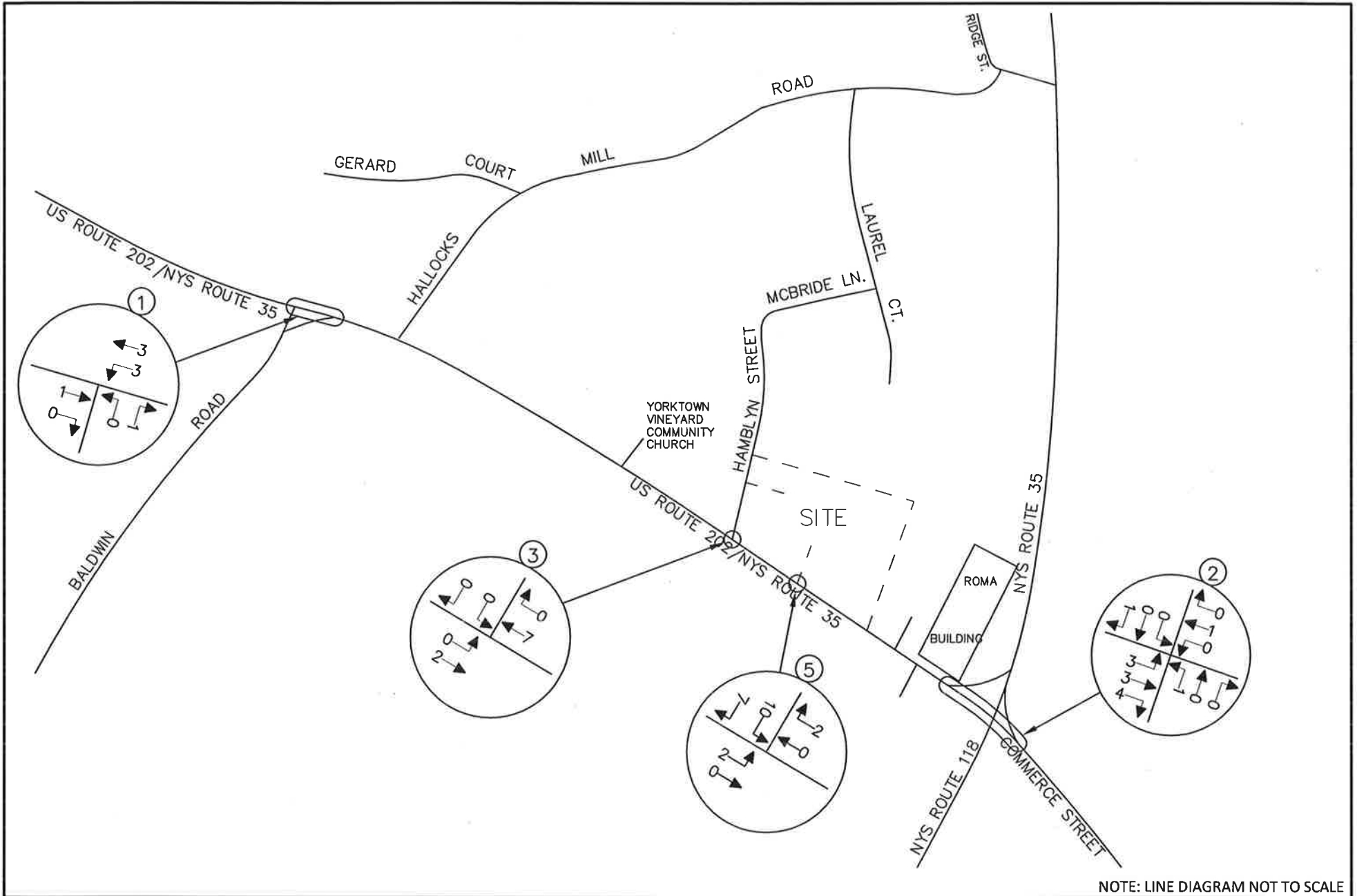
A handwritten signature in black ink, appearing to read 'Philip J. Grealy', is written over a horizontal line.

Philip J. Grealy, Ph.D., P.E., Principal  
License No. 59858

MC Project No. 17000798A







NOTE: LINE DIAGRAM NOT TO SCALE



Consulting, Municipal & Environmental Engineers  
 Planners • Surveyors • Landscape Architects  
 State of N.Y. Certificate of Authorization: 0008671

New Jersey New York Pennsylvania Virginia  
 Customer Loyalty through Client Satisfaction

**WESTCHESTER OFFICE**

11 Bradhurst Avenue  
 Hawthorne, NY 10532  
 Phone: 914.347.7500  
 Fax: 914.347.7266

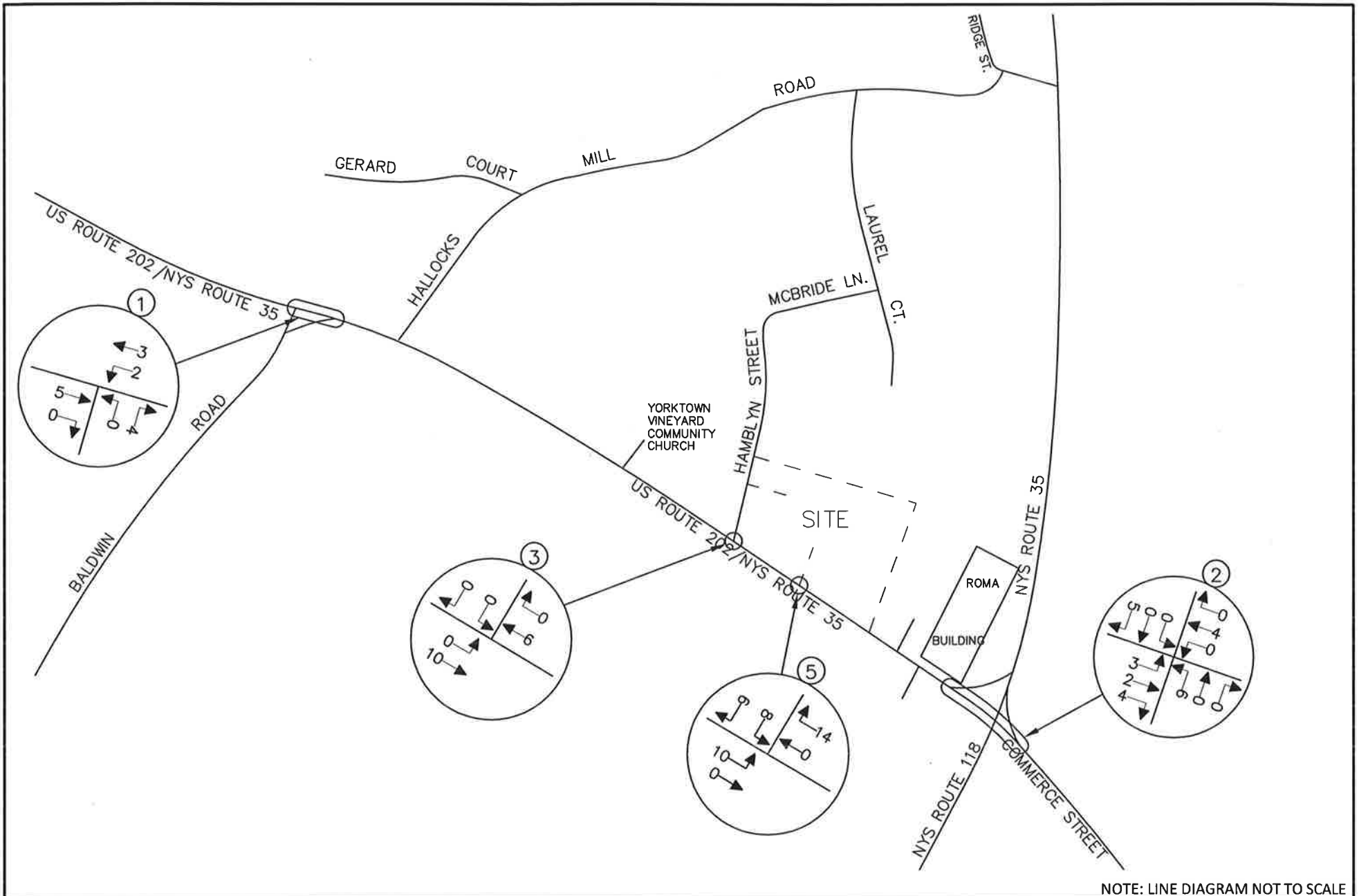
email: solutions @ maserconsulting.com

**THE WEYANT  
 TOWN OF YORKTOWN, NEW YORK**

**SITE GENERATED TRAFFIC VOLUMES  
 WEEKDAY PEAK AM HOUR  
 (ALTERNATE 2 W/ ROUTE 202/35 SITE ACCESS)**



JOB NUMBER:	DATE:
17000798A	MAY 2017
FIGURE NUMBER:	



NOTE: LINE DIAGRAM NOT TO SCALE



Consulting, Municipal & Environmental Engineers  
 Planners • Surveyors • Landscape Architects  
 State of N.Y. Certificate of Authorization: 0008671

New Jersey New York Pennsylvania Virginia  
 Customer Loyalty through Client Satisfaction

**WESTCHESTER OFFICE**

11 Bradhurst Avenue  
 Hawthorne, NY 10532  
 Phone: 914.347.7500  
 Fax: 914.347.7266

email: solutions @ maserconsulting.com

THE WEYANT  
 TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES  
 WEEKDAY PEAK PM HOUR  
 (ALTERNATE 2 W/ ROUTE 202/35 SITE ACCESS)



JOB NUMBER:	DATE:
17000798A	MAY 2017
FIGURE NUMBER:	

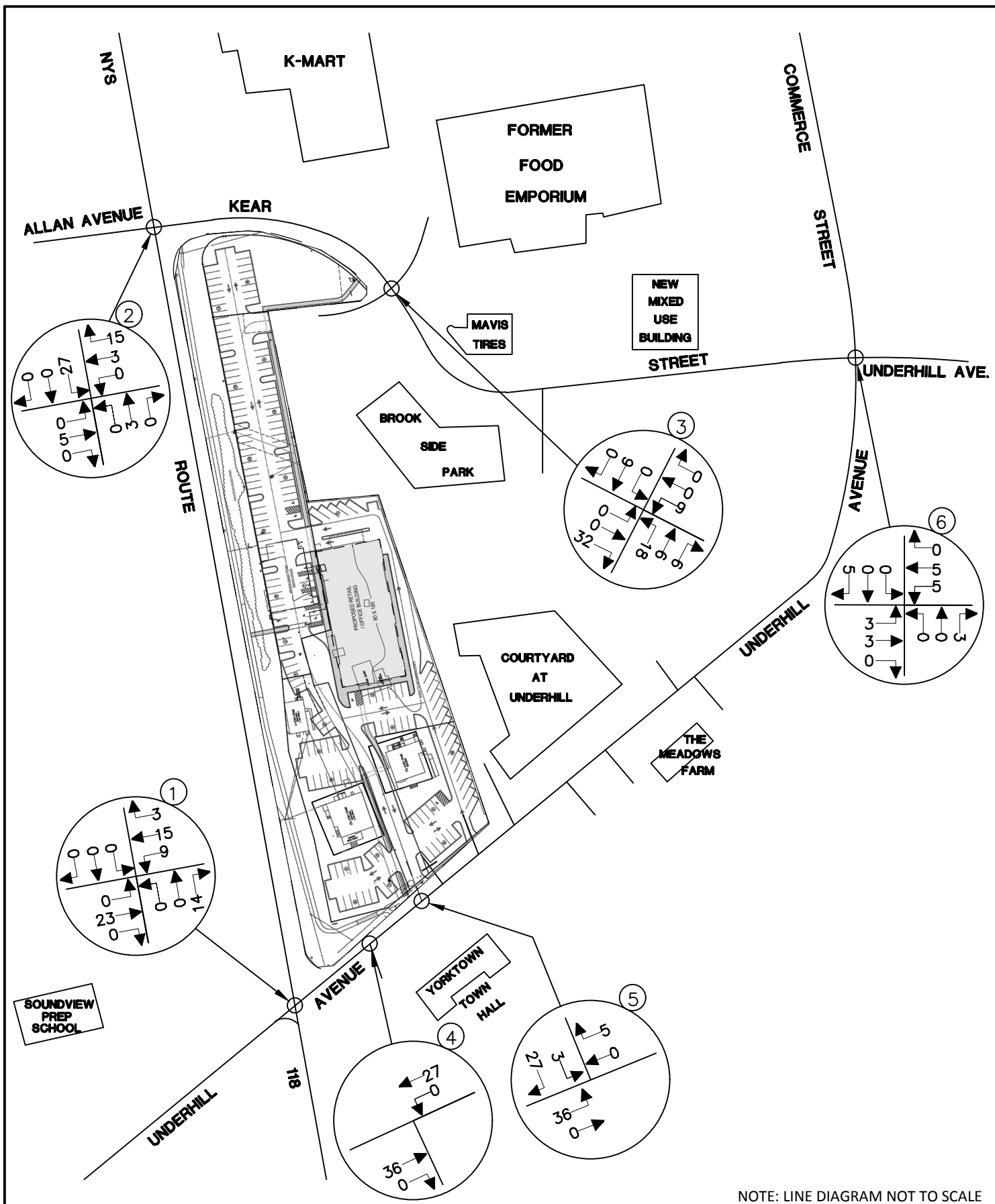
**TABLE 1**  
**HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED**  
**SITE GENERATED TRAFFIC VOLUMES**

THE WEYANT TOWN OF YORKTOWN, NY	ENTRY		EXIT	
	HTGR*	VOLUME	HTGR*	VOLUME
APARTMENT (36 DWELLING UNITS)				
PEAK AM HOUR	0.12	4	0.47	17
PEAK PM HOUR	0.68	24	0.36	14

NOTES:

- 1) \* HTGR-HOURLY TRIP GENERATION RATES EXPRESSED IN TERMS OF TRIPS PER 1000 S.F. FOR LAND USES - 220 APARTMENT;  
 BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PUBLICATION ENTITLED "TRIP GENERATION", 9TH EDITION, 2012.

# CareMount Building



NOTE: LINE DIAGRAM NOT TO SCALE

**MASER**  
CONSULTING P. A.

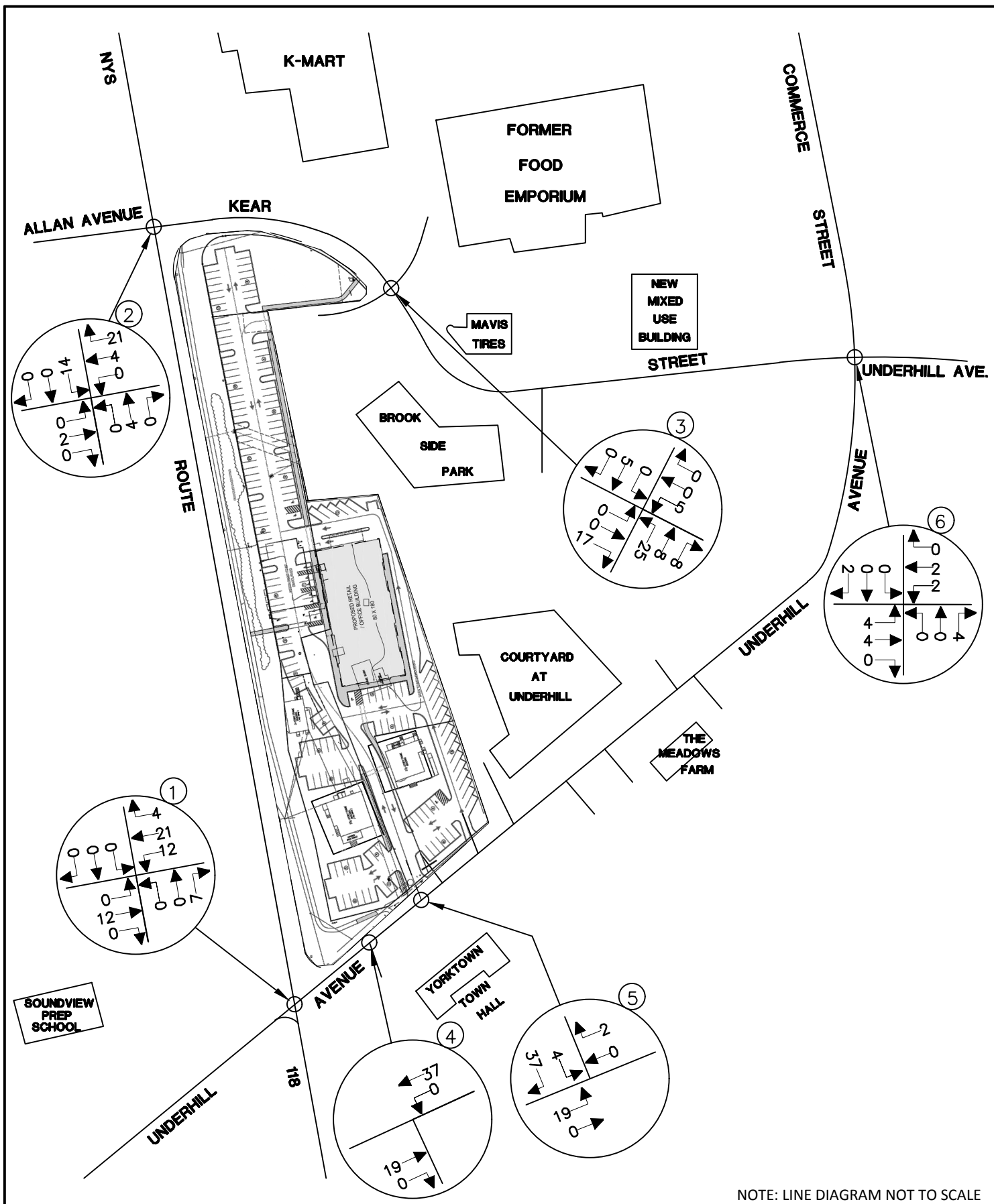
Customer Loyalty through Client Satisfaction  
www.maserconsulting.com  
Engineers ■ Planners ■ Surveyors  
Landscape Architects ■ Environmental Scientists  
State of N.Y. Certificate of Authorization: 0008671 / 0008821

**WESTCHESTER OFFICE**  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
Fax: 914.347.7266  
email: solutions @ maserconsulting.com

**MURPHY'S REDEVELOPMENT**  
YORKTOWN, NY

**SITE GENERATED TRAFFIC VOLUMES**  
WEEKDAY PEAK AM HOUR

JOB NUMBER:	DATE:
17003875A	DEC. 2017
FIGURE NUMBER:	
14	



NOTE: LINE DIAGRAM NOT TO SCALE

**MASER**  
CONSULTING P.A.

Customer Loyalty through Client Satisfaction  
www.maserconsulting.com  
Engineers ■ Planners ■ Surveyors  
Landscape Architects ■ Environmental Scientists  
State of N.Y. Certificate of Authorization: 0008671 / 0008821

**WESTCHESTER OFFICE**  
400 Columbus Avenue, Suite 180E  
Valhalla, NY 10595  
Phone: 914.347.7500  
Fax: 914.347.7266  
email: solutions @ maserconsulting.com

MURPHY'S REDEVELOPMENT  
YORKTOWN, NY

SITE GENERATED TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR



JOB NUMBER:	DATE:
17003875A	DEC. 2017
FIGURE NUMBER:	
15	

**TABLE 1**  
**HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED**  
**SITE GENERATED TRAFFIC VOLUMES**

<b>MURPHY'S REDEVELOPMENT YORKTOWN, NY</b>	ENTRY			EXIT		
	HTGR*	VOLUME	NEW TRIPS	HTGR*	VOLUME	NEW TRIPS
OFFICE (20,981 S.F.)						
PEAK AM HOUR	2.30	48	41	0.31	7	6
PEAK PM HOUR	0.31	7	6	2.30	48	41
SPECIALTY RETAIL (23,981 S.F.)						
PEAK AM HOUR	3.28	79	50	3.56	85	54
PEAK PM HOUR	3.42	82	52	3.42	82	52
LESS EXISTING						
MURPHY'S RESTAURANT EXISTING TRAFFIC						
PEAK AM HOUR	-	1	1	-	1	1
PEAK PM HOUR	-	10	10	-	11	11
SUBTOTAL		VOLUME			VOLUME	
PEAK AM HOUR	-	126	90	-	91	59
PEAK PM HOUR	-	79	48	-	119	82

NOTES:

1) \* HTGR-HOURLY TRIP GENERATION RATES EXPRESSED IN TERMS OF TRIPS PER 1000 S.F. FOR LAND USES - 710 OFFICE AND 820 SPECIALTY RETAIL CENTER; BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PUBLICATION ENTITLED "TRIP GENERATION", 9TH EDITION, 2012.

2) NEW TRIPS INCLUDE AN INTERPLAY CREDIT OF 15% FOR ALL LAND USES AND A PASS-BY CREDIT OF 25% FOR SPECIALTY RETAIL USES.

# Gardena Hotel



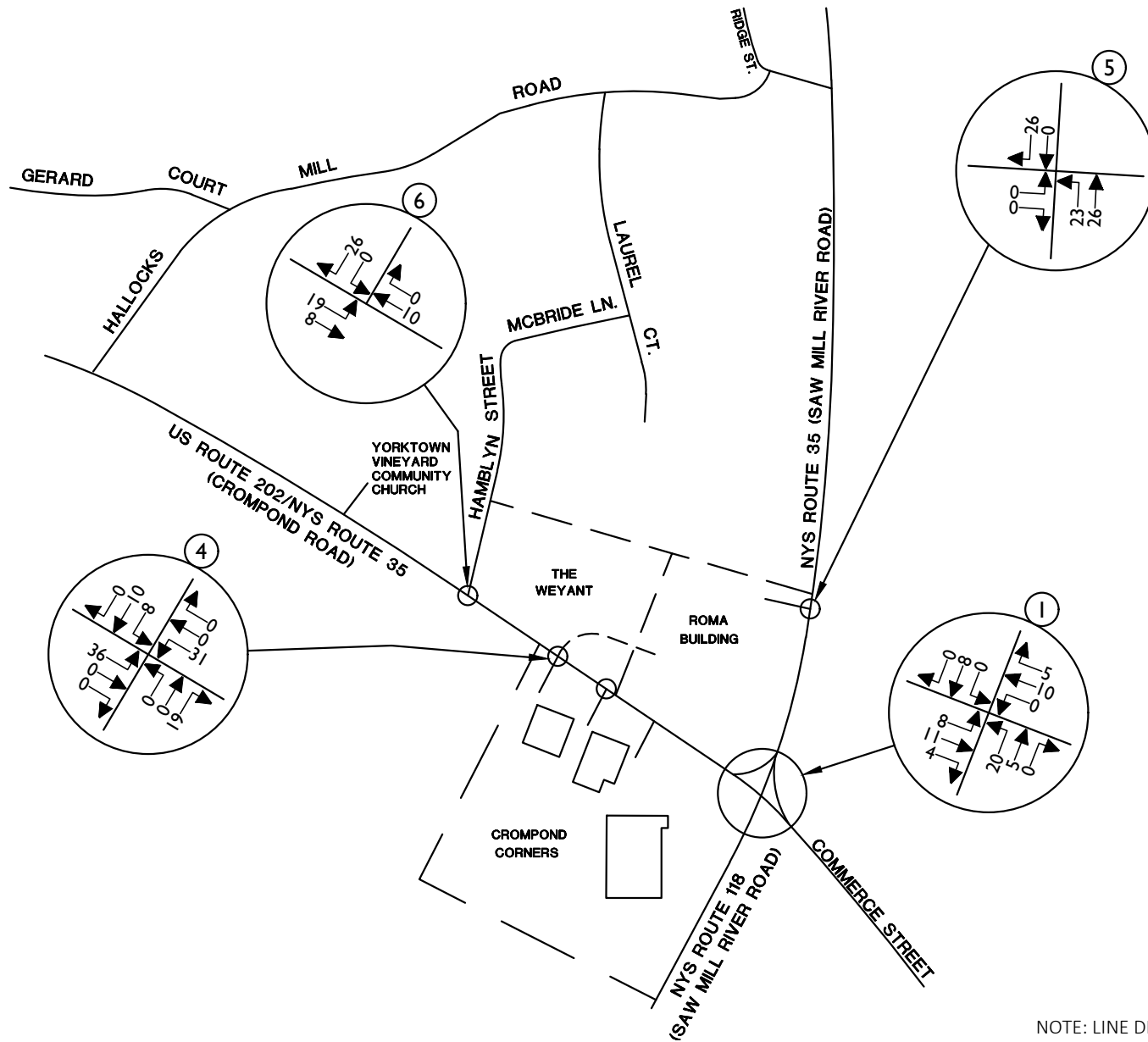
**Table OD-3  
Gardena Hotel  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes**

	Entry		Exit	
	HTGR <sup>1</sup>	Volume	HTGR <sup>1</sup>	Volume
<b>Hotel</b> (18 Rooms)				
Peak AM Hour	0.03	5	0.02	3
Peak PM Hour	0.03	5	0.04	6
<b>Restaurant</b> (100 Seats)				
Peak AM Hour	0.07	1	0.07	1
Peak PM Hour	1.27	19	0.60	9
<b>Total</b>				
Peak AM Hour	-	6	-	4
Peak PM Hour	-	24	-	15

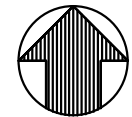
**NOTES:**

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE 310 - HOTEL AND ITE LAND USE CODE 931 - FINE DINING RESTAURANT.

# Roma Building Redevelopment



NOTE: LINE DIAGRAM NOT TO SCALE



Customer Loyalty through Client Satisfaction  
 www.maserconsulting.com  
 Engineers ■ Planners ■ Surveyors  
 Landscape Architects ■ Environmental Scientists

State of N.Y. Cert. of Authorization: 0008671/0008821

Copyright © 2018, Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting P.A.

Office Locations:

- Red Bank, NJ
- Clinton, NJ
- Hamilton, NJ
- Egg Harbor, NJ
- Montvale, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Albany, NY
- Newburgh, NY
- Westchester, NY
- Columbia, MD
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Pittsburgh, PA
- Tampa, FL
- Orlando, FL
- Miami, FL
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Charlotte, NC

REV	DATE	DRAWN BY	DESCRIPTION

THE ROMA BUILDING  
 U.S. ROUTE 202/  
 NYS ROUTE 35  
 TOWN OF YORKTOWN  
 WESTCHESTER COUNTY  
 NEW YORK



Know what's below.  
 Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
 VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION  
 OF EXCAVATORS, DESIGNERS, OR  
 ANY PERSON PREPARING TO  
 DISTURB THE EARTH'S SURFACE  
 ANYWHERE IN ANY STATE



WESTCHESTER OFFICE

400 Columbus Avenue  
 Suite 180E  
 Valhalla, NY 10595

Phone: 914.347.7500  
 Fax: 914.347.7266

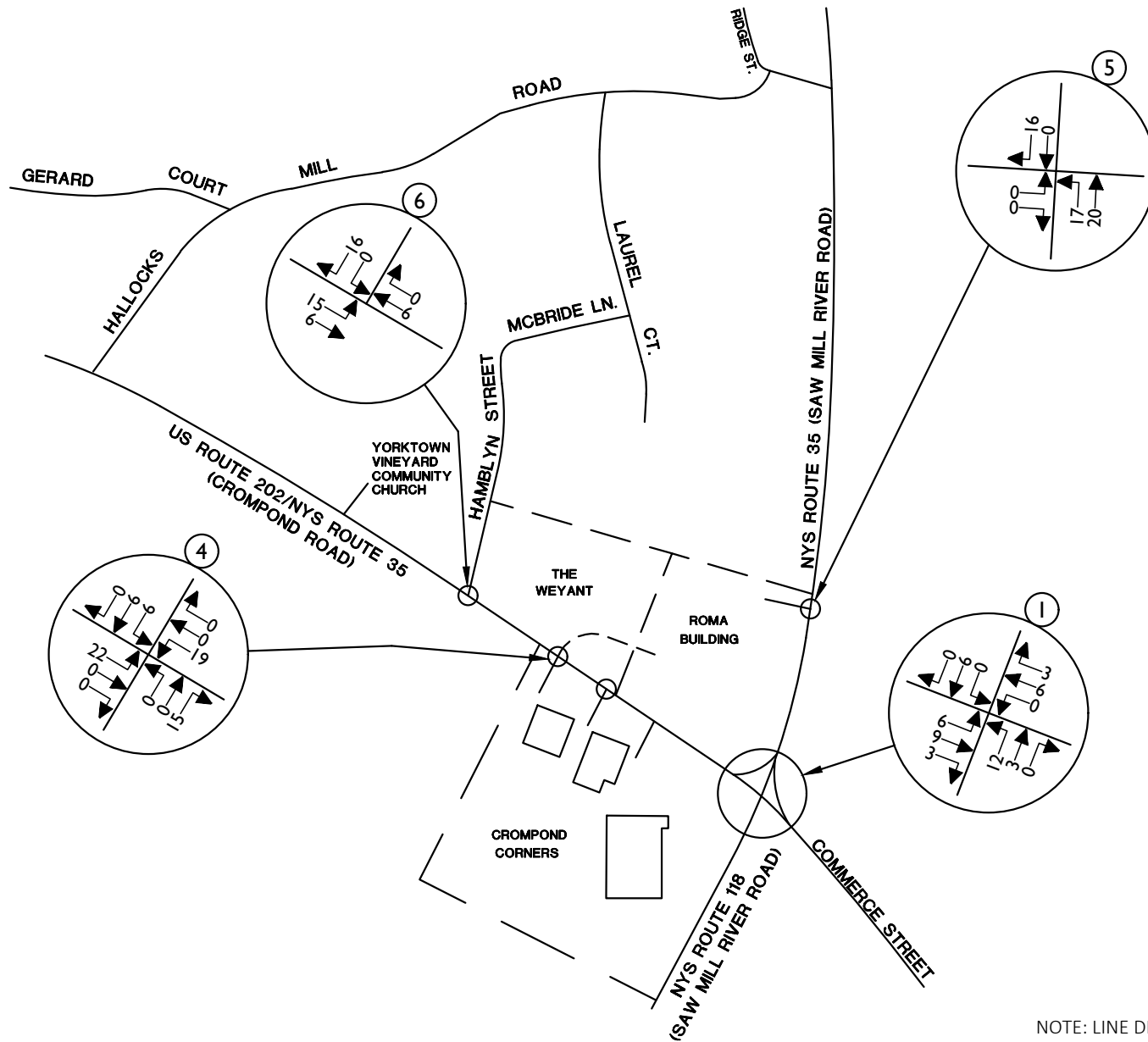
TRAFFIC IMPACT STUDY

SCALE	DATE	DRAWN BY	CHECKED BY
NTS	10/24/18	J.F.M.	P.J.G.

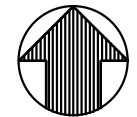
PROJECT NUMBER	DRAWING NAME
18000641A	181026RGD_FINAL FIGURES

SHEET TITLE
SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR

SHEET NUMBER:
FIGURE NO. 12



NOTE: LINE DIAGRAM NOT TO SCALE



Customer Loyalty through Client Satisfaction  
www.maserconsulting.com

Engineers ■ Planners ■ Surveyors  
Landscape Architects ■ Environmental Scientists

State of N.Y. Cert. of Authorization: 0008671/0008821

Copyright © 2018, Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting P.A.

Office Locations:

- Red Bank, NJ
- Clinton, NJ
- Hamilton, NJ
- Egg Harbor, NJ
- Montvale, NJ
- Mt. Arlington, NJ
- Mt. Laurel, NJ
- Albany, NY
- Newburgh, NY
- Westchester, NY
- Columbia, MD
- Lehigh Valley, PA
- Exton, PA
- Philadelphia, PA
- Pittsburgh, PA
- Tampa, FL
- Orlando, FL
- Miami, FL
- Sterling, VA
- Norfolk, VA
- Albuquerque, NM
- Charlotte, NC

REV	DATE	DRAWN BY	DESCRIPTION

**THE ROMA BUILDING**

U.S. ROUTE 202/  
NYS ROUTE 35  
TOWN OF YORKTOWN  
WESTCHESTER COUNTY  
NEW YORK



Know what's below.  
Call before you dig.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: WWW.CALL811.COM

**PROTECT YOURSELF**  
ALL STATES REQUIRE NOTIFICATION  
OF EXCAVATORS, DESIGNERS, OR  
ANY PERSON PREPARING TO  
DISTURB THE EARTH'S SURFACE  
ANYWHERE IN ANY STATE



**WESTCHESTER OFFICE**

400 Columbus Avenue  
Suite 180E  
Valhalla, NY 10595

Phone: 914.347.7500  
Fax: 914.347.7266

**TRAFFIC IMPACT STUDY**

SCALE	DATE	DRAWN BY	CHECKED BY
NTS	10/24/18	J.F.M.	P.J.G.

PROJECT NUMBER	DRAWING NAME
18000641A	181026RGD_FINAL FIGURES

SHEET TITLE:  
**SITE GENERATED  
TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR**

SHEET NUMBER:  
**FIGURE NO. 13**

**TABLE NO. 1**

**HOURLY TRIP GENERATION RATES  
AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES**

**THE ROMA BUILDING - TOWN OF YORKTOWN, NEW YORK**

LAND USE	ENTRY		EXIT		TOTAL	
	HTGR*	VOLUME	HTGR*	VOLUME	HTGR*	VOLUME
<b>ROMA BUILDING - RETAIL (9,150 s.f.) (1)</b>						
WEEKDAY PEAK AM HOUR	5.07	46	3.11	29	8.18	75
WEEKDAY PEAK PM HOUR	4.88	45	5.28	48	10.16	93
<b>ROMA BUILDING - RESIDENTIAL (42 UNITS) (2)</b>						
WEEKDAY PEAK AM HOUR	0.12	5	0.38	16	0.50	21
WEEKDAY PEAK PM HOUR	0.40	17	0.24	10	0.64	27
<b>ROMA BUILDING - TOTAL</b>						
WEEKDAY PEAK AM HOUR	---	51	---	45	---	96
WEEKDAY PEAK PM HOUR	---	62	---	58	---	120
<b>EXISTING ROMA BUILDING - RETAIL (26,700 s.f.) (1)</b>						
WEEKDAY PEAK AM HOUR	3.80	102	2.35	63	6.15	165
WEEKDAY PEAK PM HOUR	3.65	98	3.99	107	7.64	205

THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) - TRIP GENERATION HANDBOOK - 10TH EDITION

(1) ITE LAND USE 820 - SHOPPING CENTER

(2) ITE LAND USE 220 - MULTIFAMILY HOUSING (LOW-RISE)

# Former Turco's/Uncle Giuseppe's Supermarket

**Table OD-1  
Former Turco's/Uncle Guiseppe's Redevelopment  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes**

	Entry			Exit		
	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>
<b>Supermarket</b> (30,000 sq. ft.)						
Peak AM Hour	1.70	51	36	1.17	35	25
Peak PM Hour	4.87	146	102	4.83	145	102

NOTES:

- 1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE 850 - SUPERMARKET.
- 2) "NEW TRIPS" INCLUDE A 30% PASS-BY/DIVERTED LINK TRIP CREDIT.

# K-Mart Redevelopment



**Table OD-2  
K-Mart Redevelopment  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes**

	Entry			Exit		
	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>	HTGR <sup>1</sup>	Volume	New Trips <sup>2</sup>
<b>Multi Family Residential</b> (150 Dwelling Units)						
Peak AM Hour	0.11	17	15	0.35	52	47
Peak PM Hour	0.36	54	49	0.21	31	28
<b>Retail</b> (15,000 sq. ft.)						
Peak AM Hour	1.53	23	16	1.00	15	10
Peak PM Hour	3.47	52	35	3.47	52	35
<b>Total</b>						
Peak AM Hour	-	40	31	-	67	57
Peak PM Hour	-	106	84	-	83	63

**NOTES:**

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 11TH EDITION, 2021. ITE LAND USE CODE 220 - MULTI FAMILY HOUSING (LOW-RISE) AND ITE LAND USE CODE 822 - STRIP RETAIL PLAZA (<40K).

2) "NEW TRIPS" INCLUDE A 10% INTERNAL TRIP CREDIT AND 30% PASS-BY/DIVERTED LINK TRIP CREDIT APPLIED TO THE RETAIL.



## Engineering & Design

Colliers Engineering & Design is a trusted provider of multi-discipline engineering, design and consulting services providing customized solutions for public and private clients through a network of offices nationwide.

For a full listing of our office locations, please visit [colliersengineering.com](http://colliersengineering.com)

1 877 627 3772



*Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial  
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy*