

# Executive Summary – Underhill Farm

April 26, 2022

Project No. 20006297A

## Background

A detailed Traffic Impact Study has been prepared evaluating existing (see Figure No. 3 for existing PM peak 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 Table No. 1 and Figure No. 13 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, and the re-occupancy of the 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.

## 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 from 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.

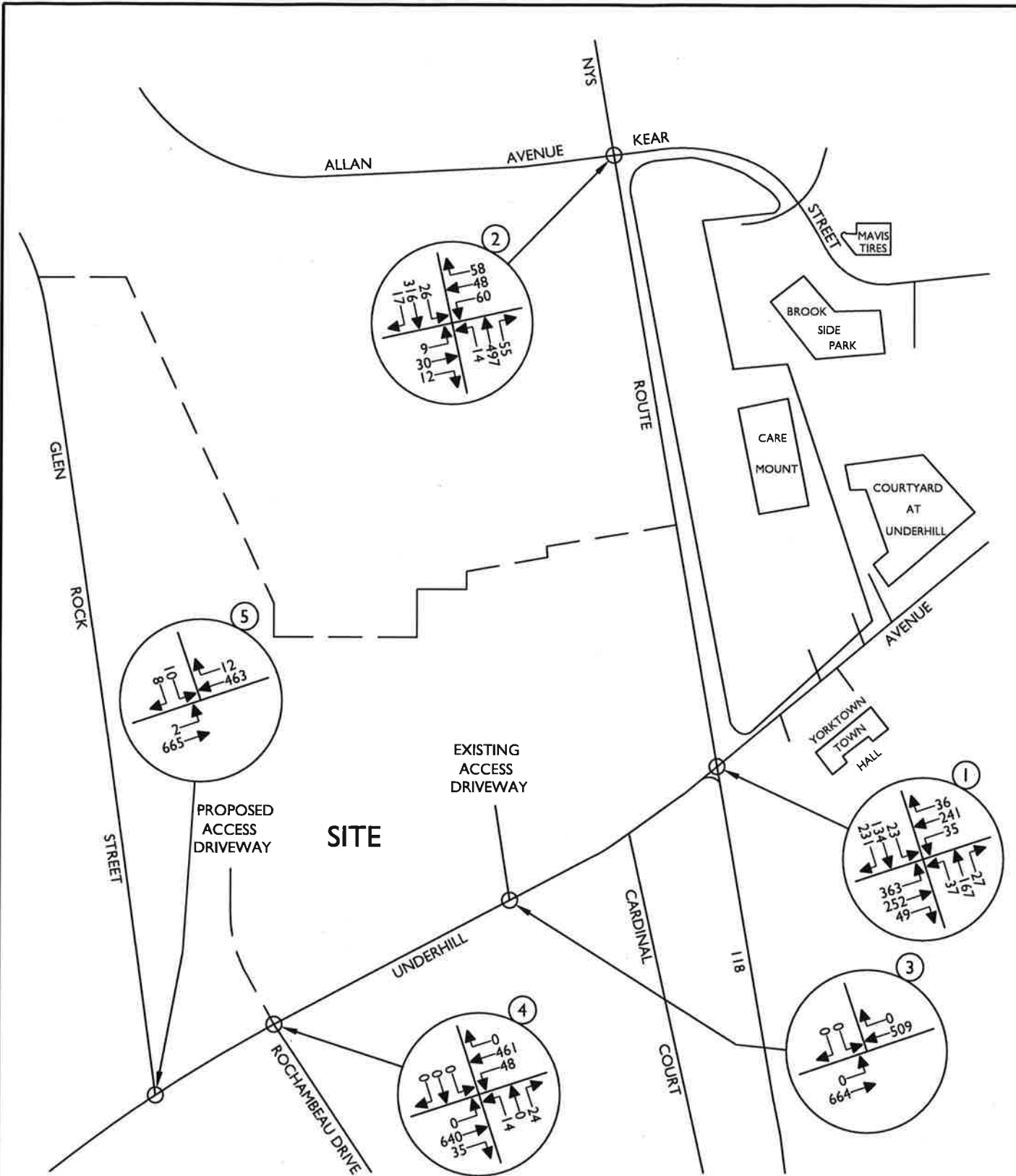
- Coordination with the Town Highway and Police Departments regarding the addition of signing and related speed control or traffic calming measures to help reduce travel speeds along Underhill Avenue approaching this area.
- Traffic signal timing and equipment upgrades including new video camera detection 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.

In addition to those improvements that are proposed to be completed as part of the Underhill Farm Project as listed above, which have an estimated cost of approximately \$150,000.00, the Applicant has also committed to providing funding up to \$450,000.00 towards the design and future reconstruction of the NYS Route 118 and Underhill Avenue intersection to address other area development traffic, as described in the next section.

### **Future Improvements to Accommodate Other Potential Developments**

The attached excerpts from 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.

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NOTE: LINE DIAGRAM NOT TO SCALE

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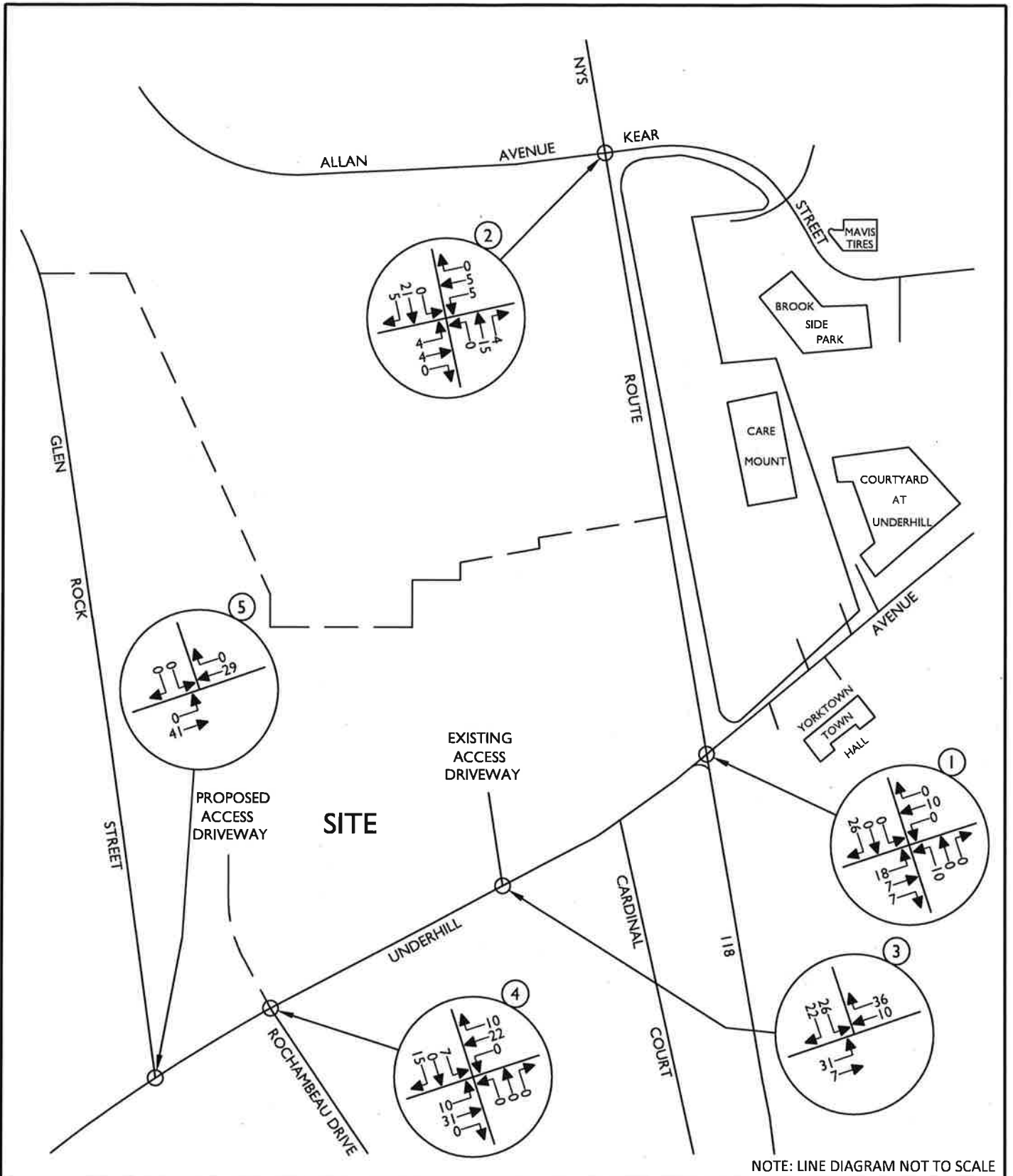
TRAFFIC IMPACT STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/8/22	R.H.	P.J.G.
PROJECT NUMBER:	DRAWING NAME:		
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SHEET TITLE:  
2021 EXISTING TRAFFIC VOLUMES  
WEEKDAY PEAK PM HOUR

SHEET NUMBER:  
3

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PROJECT NUMBER:	DRAWING NAME:		
20006297A	220408RH_FIGURE APPROVED G.D.		

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

SHEET NUMBER:  
**13**

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**Table No. 1-FB  
Hourly Trip Generation Rates (HTGR) and  
Anticipated Site Generated Traffic Volumes**

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</b> (5,500 Sq. Ft.)						
Peak AM Hour	1.57	9	9	1.04	6	6
Peak PM Hour	0.73	4	4	1.43	8	8
<b>Commercial - Retail</b> (5,500 Sq. Ft.)						
Peak AM Hour	1.41	12	7	2.36	8	5
Peak PM Hour	4.63	25	15	4.63	25	15
<b>Inn</b> (8 Rooms)						
Peak AM Hour	0.23	2	2	0.23	2	2
Peak PM Hour	0.33	3	3	0.27	3	3
<b>Quality Restaurant</b> (5,000 Sq. Ft.)						
Peak AM Hour	0.44	2	2	0.30	2	2
Peak PM Hour	5.23	26	20	2.57	13	10
<b>Total</b>						
Peak AM Hour		44	39		79	76
Peak PM Hour		121	102		87	73

**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 - QUALITY RESTAURANT, ITE LAND USE CODE - 712 - SMALL OFFICE, ITE LAND USE CODE - 822 - RETAIL AND ITE LAND USE CODE - 310 - HOTEL.

2) "NEW TRIPS" INCLUDE A 40% PASS-BY/DIVERTED LINK TRIP CREDIT FOR THE RETAIL AND 25% FOR THE RESTAURANT AS WELL AS FOR THE RESTAURANT USE.

# Traffic Impact Study

## Appendix F | Proposed Traffic and Pedestrian Improvement Plans









# Traffic Impact Study

## Appendix G | Potential Future Intersection Improvement Plans



