



Memorandum

To: Mr. Thomas Moses
40 Westminster Street, 9th Floor
Providence, RI 02903

Date: June 8, 2026

Project #: 204294.00

From: Robert J. Clinton, PE
Senior Project Manager -
Transportation

Re: Multi-Family Residential
1055 Tiogue Avenue
Coventry, RI
Traffic Assessment

VHB has performed a qualitative assessment of traffic impacts of the proposed residential development located at 1055 Tiogue Avenue in Coventry, Rhode Island. The current site consists of a vacant commercial lot. The proposal is to construct up to 400 new residential units.

Existing Conditions

The project is located at 1055 Tiogue Avenue (AP 28, Lot 3), totaling approximately 27.3 acres of land in Coventry, RI. The current condition of the site is a vacant lot that was previously used as a commercial/retail development. Access to the site is currently provided by one full access driveway on Tiogue Avenue.

Evaluation of the transportation impacts associated with the proposed redevelopment of site requires a thorough understanding of the existing transportation system in the project study area and the trip generation of the proposed modifications to the site. The existing conditions analysis consisted of an inventory of roadways in the study area and the peak hour traffic volumes generated by the proposed buildout of the site. Each of these elements is described in detail below.

Roadways

Tiogue Avenue (Route 3)

Tiogue Avenue (Route 3) is a four-lane (two lanes in each direction) undelineated roadway running in a generally east-west direction within the project area even though Route 3 is a north/south route. In this memorandum, traveling eastbound will be Route 3 North and traveling westbound will be Route 3 South. Tiogue Avenue is an urban principal arterial under Rhode Island Department of Transportation (RIDOT) jurisdiction providing access to Nooseneck Hill Road to the west and New London Avenue to the east. The speed limit on Tiogue Avenue is posted at 35 miles per hour (mph) within the project limits. Land use along Tiogue Avenue is primarily commercial/retail properties within the project limits.

Based on traffic counts performed in January 2023 at the intersection of Nooseneck Hill Road (Route 3) at Harkney Hill Road, the traffic volumes along Route 3 were approximately 12,900 vehicles per day (VPD). The peak hour traffic volumes were observed to be 960 vehicles per hour (vph) (530 westbound and 430 eastbound) during the weekday morning peak hour; 1,180 vph (590 westbound and 590 eastbound) during the weekday afternoon peak hour; and 1,170 vph (510 westbound and 660 eastbound) during the Saturday midday peak hour. Although these traffic counts were performed approximately 1.25 miles west of the proposed development and in 2023, the traffic volumes on Tiogue Avenue (Route 3) are expected to be comparable to these volumes.



Intersections

Tiogue Avenue at Site Driveway

The Site Driveway intersects Tiogue Avenue (Route 3) from the north to form an unsignalized T- intersection. The Tiogue Avenue (Route 3) eastbound approach consists of a shared left-turn/through lane and a through lane. The Tiogue Avenue westbound approach consists of a through lane and a shared through/right-turn lane. The Site Driveway southbound approach consists of a 20± foot wide exit and a 28± foot wide entrance separated by a raised median. There are no sidewalks along Tiogue Avenue.

Future Conditions

The proposed development plan is to construct up to 400 new residential units. Access to the proposed residential condominium units will be provided from Tiogue Avenue (Route 3). The existing access on the north side of Tiogue Avenue will be modified to provide two lanes (one lane entering and one lane exiting). After further analysis under the preliminary design stage of the development, it may be desirable to provide two lanes on the exit to allow right turning vehicles to get around left turning vehicles.

Future Site Generated Traffic

Under future conditions with the proposed construction of 400 new multifamily residential units the site is projected to generate 160 trips (37 entering and 123 exiting) during the weekday morning peak and 147 trips (94 entering and 53 exiting) during the weekday afternoon peak based on LUC 221 – Multifamily Housing (Mid-Rise), as shown in **Table 1**.

Table 1 Future Trip Generation

Time Period/ Movement	Future Multi-Family Housing (Mid-Rise)¹
Weekday Morning Peak	
Enter	37
Exit	<u>123</u>
Total	160
Weekday Afternoon Peak	
Enter	94
Exit	<u>53</u>
Total	147

Source: Trip Generation, 12th Edition; Institute of Transportation Engineers (ITE); Washington, D.C.

1. Based on ITE LUC 221 – Multifamily Housing (Mid-Rise) for 400 units.



It should be noted that the site is located in an area that provides regional access to I-95 by three major routes including Nooseneck Hill Road (Route 3), Hopkins Hill Road, and New London Turnpike/Arnold Road. Each of these routes provides similar travel times to/from the highway (depending on traffic conditions); therefore, traffic will be dispersed between these roadways. This distribution of traffic will be beneficial because no one route will carry all of the new traffic generated by the proposed development and traffic entering and exiting the site driveway will be distributed between right-turns/left-turns into and out of the site driveway. It should also be noted that the ongoing Missing Movements project at the I-95/Route 4 interchange may also have some impacts on the traffic patterns and volumes along Route 3 further east of the site.

It should also be noted that there are traffic signals located to the east and west of the site driveway that will create gaps in the Tiogue Avenue traffic and allow vehicles to enter/exit the site.

Sight Distance Evaluation

A sight distance evaluation was conducted for the proposed site access driveway located on the north side of Tiogue Avenue. Measurements were taken for Stopping Sight Distance (SSD) in accordance with guidelines provided by the American Association of State Highway and Transportation Officials (AASHTO).

In this respect, SSD can be considered as the minimum visibility criterion for the safe operation of an unsignalized intersection. The posted speed limit is 35 miles per hour (mph); therefore, a design speed of 40 mph was assumed. The available sight distance at the proposed driveway intersection with the Tiogue Avenue was measured to be greater than 360 feet looking right (to the west), which meets a design speed of 45 miles per hour (mph). The available sight distance at the proposed driveway intersection with Tiogue Avenue was also measured to be over 305 feet looking left (to the east) which meets a design speed of 40 mph; however, with selective clearing to ensure there are no obstructions, the sight distance can be increased to 360 feet which meets a design speed of 45 miles per hour (mph).

Summary

Access to and from the proposed development will be provided via one full access driveway on the north side of Tiogue Avenue. As discussed in this memo, the proposed development plan is projected to result in some increase in traffic during the weekday morning and afternoon peak periods when compared to the existing conditions. This increase in traffic will turn left or right out of the site driveway onto Tiogue Avenue and be dispersed between the various travel routes. The increase in traffic is not projected to have any significant impact on traffic operations. There is adequate sight distance to meet AASHTO stopping sight distance requirements. With some selective clearing at the site driveway on the north side of Tiogue Avenue, the sight distance can be further increased. There is good regional access to the site which will help distribute traffic onto the adjacent roadway network. There are traffic signals located to the east and west of the site driveway that will create gaps in the Tiogue Avenue traffic and allow vehicles to enter/exit the site.