

Vermont Agency of Transportation Traffic Safety Section

Highway Safety Improvement Program
Location Review

Location: New Haven **HSIP No.:** Review
Route: VT Route 17, Hallock Road intersection **Mile point:** 0.17
Reviewed By: Nancy Avery, Traffic Safety **Date Reviewed:** January 10, 2011
Joe Kelly, Traffic Operations

Location Map:



Observation:

- The major issue identified during this site visit was the poor corner sight and stopping sight distance to the east of Hallock Road.

The measured Stopping sight distance was 257 ft ± and the measured corner sight distance for a motorist stopped looking east from Hallock Road is 248 ft±.

According to the AASHTO 2004 edition Geometric Design of Highways and Streets for a posted speed limit of 45 mph a minimum stopping sight distance of 360 ft is recommended and the minimum recommended corner sight distance is 500 ft. Neither measured distances meet the AASHTO requirements.

- Trees near the northeast quadrant of the intersection of VT 17 and Hallock Road obstruct stopping sight distance for motorists traveling westbound along VT 17 as they approach the Hallock Road intersection.
- Brush along the north side of VT 17 from gate-posted intersection warning signs to intersection encroach into the shoulder of VT Route 17.
- Vertical curve obstructs corner and stopping sight distances for traffic traveling westbound on VT 17 approaching the Hallock Road intersection and for eastbound traffic turning left onto Hallock Road.

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- New Stop and Legal Load signs were installed on Hallock Road at VT 17 intersection during the 2010 Class 2 Highway Grant Project.
- The flashing beacon heads facing traffic on Hallock Road are pointed downward and not in direct view of the driver as they approach the intersection.
- Eastbound intersection warning sign and advisory speed plaque (25 mph) sign assembly is installed about 530 ft in advance of the intersection which is further than recommended 175 ft by the MUTCD.
- There is a skewed slip-ramp off from Quaker Hill Road that connects with VT Route 17. This roadway is at a very difficult angle for the driver to see oncoming eastbound traffic traveling on VT 17.
- Neither Hallock Road nor Quaker Hill Road are defined with pavement markings.

Crash History:

From 1992 -2010 (from 19 years of data, there have been a total of 4 crashes at this location; 2 in 1992 - (1) failure to yield the right-of-way and (1) improper action and 2 in 2006 – (2) failure to yield right-of-way. In the last 5 years, there have not been any crashes listed for VT Route 17 in New Haven at the intersection of Hallock Road and Quaker Hill Road.

Work Orders:

WO# 88-111	Hidden Drives sign installed for westbound traffic
WO# 92-523	Intersection signage revised
WO# 96-105	Flashing Beacon work order issued – installed in 1998
WO# 96-141	Install School Bus Stop Ahead signs
WO# 99-267	Flashing beacons adjusted
WO# 00-275	Stop and Legal Load and Route Markers revised
WO# 00-288	Brush removed from the northwest corner of intersection
WO# 00-337	Westbound gate-posted intersection warning signs replace with FY
WO# 06-277	Large Arrow signs replaced and relocated (west of intersection)

This area was reviewed by Traffic Safety on August 18, 2000. Speed studies were conducted on September 29, 2000 where the 85th percentile speed was calculated as 41 mph and on March 1, 2001 where the 85th percentile speed was calculated as 42 mph. The existing posted speed limit is 45 mph and was established by Traffic Committee on December 15, 1987.

Recommendations:

- To improve corner sight distance for traffic looking east from Hallack Road the trees on northeast corner of intersection (cedar, fir, and lilacs) should be removed. Also the sloping lawn between the trees and the highway should be shaved back to open up visibility at this location.

Also to improve visibility for this intersection, it's recommended that the segment of highway between the Weybridge Destination boards be lifted about one foot in height (approximately 600 feet long, mm 0.118 – mm 0.225). By lifting the highway and apron connect Hallock Road the VT Route 17 visibility of the intersection should increase. Also by lifting the road rather than shaving it off, drainage would be minimally affected.

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- Close off and remove the slip lane from Quaker Hill Road. This segment of roadway is at such an acute angle that drivers looking westward can not see over their shoulder to see traffic traveling from the west.
- Brush along the north side of VT 17, from existing gate-posted intersection warning signs to intersection should be trimmed back (mm 0.184 – 0.33).
- Replace gate-posted intersection warning signs with 30" fluorescent yellow intersection warning signs with 25 mph advisory plaques for westbound traffic approaching the Hallock Road intersection.

Also replace existing non-compliant School Bus Stop Ahead (text) warning sign assembly on a single post with a new 36" compliant School Bus Stop Ahead Symbol warning sign.

* School Bus Stop should be verified if it is still valid before new signs are installed.

- Eastbound intersection warning sign and advisory speed plaque (25 mph) sign assembly is installed about 530 ft in advance of the intersection which is further than recommended (175 ft) by the MUTCD. Remove sign and plaque from its existing location prior to the bridge in the town of Weybridge.

Install new fluorescent yellow Intersection Warning sign with and a new 36" compliant School Bus Stop Ahead Symbol warning sign with a fluorescent yellow 25 mph plaque on a 2-post assembly at the same location as the existing non-compliant School Bus Stop Ahead (text) warning sign assembly on a single post.

*School Bus Stop should be verified if it is still valid before new signs are installed.

- Adjust flashing beacon heads facing Hallock Road so they are in the line of sight for the driver approaching the intersection rather than pointing downward.
- Update pavement markings for the intersection of Quaker Hill Road and Hallock Road. Include Stop Bars, 50 feet segments of double yellow centerline for each roadway and turn radii for each intersecting roadway.