

July 12, 2016

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN**

CONFERENCE REPORT

PROJECT: OSSIPEE
X-A003(995)
29315
NH 28 / NH 171
Intersection Safety Improvements

DATE OF CONFERENCE: JUNE 1, 2016

LOCATION OF CONFERENCE: Ossipee Town Hall

ATTENDED BY: NHDOT
Emily Polychronopoulos
Michael Dugas
William Rollins – District 3

Officials
Rep. Ed Comeau
Frank Riley – Selectman
Police Chief James Eldridge
Fire Chief Michael Brownell (Center Ossipee)

Others
See attached

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

M. Dugas presented the existing conditions noting that the NH 28 corridor was built in 1960 and consists of 12-foot travel lanes and 4-foot shoulders with exclusive left turn lanes and a flashing beacon. NH 28 has a speed limit of 55 mph slowing to 40 mph at the intersection. There are existing islands on NH 171. The daily traffic during an average month is about 5,000 vehicles and that increases to about 7,000 vehicles per day during the peak month.

M. Dugas noted that this project qualifies for federal safety funding under the Highway Safety Improvement Program (HSIP) due to the intersection's crash history. There have been 39 crashes in 10 years with 16 resulting in injury. Approximately 1/3 of the crashes involved

eastbound traffic being struck by southbound traffic. Turning left onto NH 28 is difficult with an additional problem of turning signals not turning off from the next intersection at NH 28 and NH 16 having a sweeping right turn. He also noted that a road safety audit was conducted in 2012 to evaluate the intersection safety issues and propose improvement measures.

The improvement alternative that was presented would widen NH 28 southbound to provide an exclusive right turn lane. The road safety audit had shown potentially providing a northbound right turn lane as well, but this quadrant of the intersection has lower traffic volumes, better sight lines, and fewer crashes. The improvement concept would also preserve the existing traffic islands but shift them to better accommodate truck turns. Keeping the islands will also allow a second stop sign to be placed on the left side of the NH 171 approaches to the intersection. In addition, there will also be a concrete truck apron added in the northwest corner of the intersection to prevent roadside erosion due to southbound right-turning trucks. The improvements will also upgrade the existing roadside drainage within the intersection.

M. Dugas explained that other alternatives that had been discussed at the road safety audit were considered. A traffic signal alternative was evaluated, but it appears that traffic volumes are not high enough to justify this treatment. Likewise, a roundabout alternative was considered, but, due to the gradient of the roadways at the intersection, this option would require substantial earthwork and expense.

M. Dugas summarized the environmental review process that has been undertaken. There are no natural impacts anticipated, other than a small impact to wetlands at the intersection. A historic evaluation showed that two nearby houses are potentially historic; however, the proposed road improvements will not impact them. He also explained the availability of ‘consulting party’ status for any stakeholders in these historic houses. He also stated there are no right of way impacts as all the work is within the State’s Right of Way.

M. Dugas stated that if consensus can be reached on the project, it will advertise in November of this year and be constructed in the spring of 2017. The project has a construction cost of \$250,000 and will use federal funds. He then opened the floor for questions and comments.

Comments :

1. Resident 1:

- a. The sweeping right turn from NH 16 southbound to NH 28 southbound fails to cancel the turn signal of some vehicles.**

The proposed right turn lane will allow vehicles on NH 171 to determine if the approaching vehicle with a right turn signal on is actually turning by their position in either the through lane or the right turn lane. The NH 16 right turn lane is planned to be reconstructed and modified by a separate project in the near future.

- b. The existing sign on NH 28 southbound to ‘check your turn signal’ was installed by the Town and is inconspicuous due to its small size and placement. Can this be improved?**

This question has been forwarded to the Bureau of Traffic for their consideration.

- c. The proposed southbound right turn lane is a short-term fix. A more permanent solution such as a roundabout would be preferred.**

While a roundabout would be a more comprehensive improvement, it would be substantially more expensive to implement. In addition, the hilly terrain and right of way limitations may make this option infeasible.

- 2. Will the right turn lane affect the sight line of traffic stopped on NH 171 eastbound?**

The position of the right turn lane would allow the sideroad traffic to see beyond a right turning vehicle to see any following through vehicles.

- 3. There was general support for the benefit of having dual stop signs, one on each side of NH 171. It was mentioned that the left hand stop sign on NH 171 east was knocked down and has not been replaced.**

M. Dugas acknowledged that the improvement proposal would replace the missing stop sign.

- 4. Resident commented they would like to see a right turn lane on the northbound side of NH 28 in addition to southbound right turn lane.**

A right turn lane has not been proposed on NH 28 northbound because, compared to NH 28 southbound, the right turning volume is less, there are fewer crashes, and the sight distance is better.

- 5. Frank Riley, Selectman:**

Mr. Riley stated his opposition to the proposal as being inadequate to effectively improve safety. He expressed his support for a signal. Police Chief James Eldridge reiterated this opinion, and felt that a roundabout would be the best solution. Selectman Riley stated that the Town would submit a letter stating their position.

Mike Dugas replied that traffic counts undertaken for this project showed that traffic was not yet high enough to justify installing traffic signals. In response to the Town's suggestions, the Department will reinvestigate other improvement options.

- 6. Rep. Ed Comeau asked if there any interim safety measures that could be employed? Would it be possible to install construction signs to attempt to slow traffic?**

M. Dugas answered that it wouldn't be appropriate to erect construction signs if work isn't underway. The most effective interim measure would be heightened speed enforcement; however, this would be a burden on the local police force.

- 7. Could the proposed layout be signalized later?**

M. Dugas answered the proposed intersection layout could be signalized without the need for other changes.

8. Can the intersection be prepped for signals in the future?

M. Dugas answered that signal conduit could be installed as part of the current proposal.

9. If signals are the least expensive alternative why not use those?

M. Dugas reiterated that the initial traffic evaluation showed that the traffic volumes at the intersection are not high enough to justify signals, although this and other potential options will be re-evaluated. He stated also that traffic signals commonly do not reduce the overall number of crashes at an intersection. Most often, the addition of signals will change the types of crashes that occur, with fewer right-angle crashes but more rear-end crashes. As part of the traffic signal evaluation the sight line for southbound vehicles on NH 28 would need to be verified.

10. Concern if the project doesn't get approved what would happen to the money currently allocated. Will it go to another town and Ossipee be passed over?

M. Dugas stated that the money would not go away; however, any additional engineering to reinvestigate other alternatives would likely delay the advertising date (currently November 2016). It isn't known whether this delay would affect the planned start of the work in spring 2017.

Submitted by:

Emily Polychronopoulos

Emily Polychronopoulos

Design Engineer

Noted:

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