



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

October 31, 2016

Town of Alton
Board of Selectmen
PO Box 659
Alton, NH 03809

Dear Board of Selectmen:

I am writing as a follow up to the September 19, 2016 Selectmen's Meeting and the on-going concerns regarding the rumble strips along NH 28 in Alton. While the Board acknowledged the removal of the edge line rumble strips, there was still much concern about disturbance from the center line rumble strips that are planned to remain. Of particular note were concerns about passing zones and that the rumble strips on NH 28 appear deeper, louder, more aggressive and more impactful than rumble strips elsewhere. As a result of these concerns, we committed to doing further evaluation to see if there was indeed something different with the rumble strips on NH 28 that would warrant further consideration for removal.

At the meeting several members of the community indicated that they personally had been out on Route 28 measuring rumble strips. This was troubling to the Department as it is extremely dangerous for citizens to attempt to measure centerline rumble strips on a roadway of this character. Due to the pavement join in the center of the roadway, it is also possible they did not accurately measure the true depth of the rumble strip.

In response to the concerns NHDOT did measure the depth of rumble strips on several routes using a random sampling approach. To uniformly measure the depths of rumble strips a tool was used which straddled the milled rumble depression and measured the average depth in the center. Department staff analyzed the four routes that had rumble strips installed this year – Rte. 9 in Chesterfield, Rte. 102 between Hudson and Raymond, Rte. 25 in Plymouth, and NH 28 north of the Circle. The evaluation systematically measured the average rumble strip depths along these sections. All sections fell within the average 3/8" – 5/8" specification criteria with only a few isolated readings above and below the specified range. A copy of the rumble strip depth analysis is attached for your information.

Along NH 28 in Alton, the depth of the rumble strips is predominantly 1/2" to 5/8" which is within specification. After reviewing this analysis we cannot determine that there is anything appreciably different about the installed rumble strips here to consider their removal.

In response to the significant number of concerns about noise, we have removed the edge line rumble strips, recognizing that their placement directly at the white line was a significant source of

the frequency of rumble strip strikes. We believe that this action will substantially reduce the number and frequency of incidental hits and noise. With the center line rumble strips, passing maneuvers in passing zones are a continued noise concern. There was a suggestion to remove the rumble strips in the passing zones. However, our concern is that such an action would limit and diminish the safety benefits of the rumble strips. It is along the long straightaways where passing zones exist that inadvertent drifting over the centerline is as much of a concern as anywhere. As noted at the meeting, we did collect some traffic data to measure the likelihood and frequency of passing. Our data indicates that a very small percentage of the traffic is making passing maneuvers. Total passing represented 0.6 percent or less of total traffic or less than 6 passes per 1,000 traveling vehicles. Additionally, during the overnight period (10 pm – 5 am), passing drops off considerably such that only 3 – 4 % of measured passing activity occurs between hours. While we can appreciate that any disturbance is frustrating, it seems the noise associated with passing is relatively infrequent, especially overnight.

Based on this information, it is the Department's intent to maintain the centerline rumble strips along NH 28 north of the circle. As noted previously, we believe that the centerline rumble strips provide an important and worthwhile safety benefit. With roadway fatalities escalating, it is incumbent on the Department to consider all reasonable safety measures on State Highways. The centerline rumble strips are consistent with the rest of the NH 28 corridor and with the similar installations in other locations statewide. We have tried to listen and be responsive to the Town's concerns. Edge line rumble strips have been removed, non-conforming centerline rumble strips south of the traffic circle have been removed, and modifications to centerline rumble strips at intersection areas have been made. We have evaluated the installation of the rumble strips for aberrations and consistency, and assessed the prevalence of passing movements. We recognize the concerns of the Town and abutters about the noise from the rumble strips and have made reasonable and prudent modifications to address them.

We are not proposing to remove the center line rumble strips as the Town requested. I hope the Town understands our position.

Sincerely,



Victoria F. Sheehan
Commissioner

Attachments

cc: The Honorable Joe Kenney, Executive Councilor, District 1
B. Cass
R. Grandmaison
A. Hanscom