Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary and CEO
Jonathan L. Gulliver, Highway Administrator

MassDOT
Massachusetts Department of Transportation
Highway Division

March 6th, 2025

Marina Fernandes
Town Engineer
525 Canton Avenue
Milton, MA 02186

SUBJECT: MILTON – INTERSECTION IMPROVEMENTS AT ROUTE 28 AND CHICKATAWBUT ROAD - PROJECT FILE NO. 607342

Dear Town Engineer Fernandes:

Please find attached a memo regarding the recent conversations we had relating to concerns you raised about the cut through traffic during the construction phase of our project. This memo outlines our discussions and a general plan for the construction phase to identify if this becomes an issue and steps that we may agree upon can be taken to mitigate it, if necessary. MassDOT remains committed to ensuring a safe and effective implementation of our proposed design. Please let us know if you have any questions or concerns about the memo.

If you have any questions regarding this project, please contact Josh Bartus, Project Manager at (617) 620-3705.

Sincerely,

Michael J. O'Dowd
Director of Major Projects

CC: Josh Bartus, Supervising Project Manager, Major Projects

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
mass.gov/massdot

TO:	Joshua Bartus, MassDOT	DATE:	February 5, 2025
FROM:	Steven J. Tyler, P.E., HSH Hans T. Kuebler, P.E., HSH Bob Stathopoulos, P.E., PTOE, HSH	HSH PROJECT NO.:	2021055.15
SUBJECT:	Milton (607342) – Reconstruction of Randolph Avenue (Route 28) at Chickatawbut Road Traffic Management Alternatives for Local Roads		

The project, located at the intersection of Randolph Avenue (Route 28) and Chickatawbut Road in the Town of Milton, Massachusetts, is proposed to provide intersection improvements to enhance safety and operations. The limits extend from Brook Lane in the north to the Milton town line in the south at the City of Quincy. Randolph Avenue carries two lanes from the south towards the intersection with one lane in each direction. As it approaches the intersection, it opens to four-lanes with two in each direction and continues as a four-lane roadway to the north of the intersection. To the east and west of the intersection along Chickatawbut Road, the Project extends approximately 400' in each direction and carries two lanes of traffic with one in each direction.

The residents have expressed concerns to the Town regarding impacts to traffic patterns during the construction phase of the project. The Town has reached out to the project team consisting of the Massachusetts Department of Transportation (MassDOT) and ***Howard Stein Hudson (HSH)***, to relay these concerns and seek means and methods to mitigate the traffic impacts.

To construct the project in a safe and efficient manner for the public and the construction team, portions of the roadway will be closed to accommodate the workzone setups. Traffic will be shifted around these workzones, reducing effective lane width at times while maintaining the number of lanes, and at other times requiring capacity be reduced for intermittent periods to two or three lanes on Randolph Avenue and one-way alternating on Chickatawbut Road. During these periods of reduced capacity, it is anticipated traffic queues will extend beyond the limits of work, and delay times through the workzones will increase.

To bypass the project area, vehicles may choose to divert through the neighborhood to the northwest, using Hillside Street, which intersects with Randolph Avenue to the north of the intersection and Chickatawbut Road to the west of the intersection, and Forest Street, which intersects with Chickatawbut Road to the west of the intersection. This routing would increase vehicular volumes on these lower volume residential streets which are narrow two-lane roadways with no shoulders or double yellow center line. Speed humps and stop signs are currently utilized to calm traffic on Hillside Street and Forest Street. Forest Street has a posted "Do Not Enter Monday – Friday 7-9

a.m. and 3-6 p.m." sign by the Town at the intersection of Chickatawbut Road to deter traffic from entering the residential area during the morning and afternoon peak hour periods.

The Project Team met with the Town of Milton Acting Director of Public Works, Marina Fernandes, on Friday January 17, 2025, to discuss alternatives to mitigate constituent concerns with traffic on Hillside Street and Forest Street during construction of the Project. The following information is provided on the traffic mitigation alternatives discussed during our meeting or used on other projects for consideration by the Town to aid in efforts to mitigate the constituent concerns:

Traffic Counts

Traffic counts on Hillside Street at Route 28 were conducted in 2023 to establish a baseline understanding of existing traffic patterns. The Project Team could install traffic counting equipment such as radar trailers which would collect 24-hour bidirectional vehicular counts and speeds on Forest Street and Hillside Street prior to the contractor mobilization to expand the baseline data for traffic along these residential roadways. This would need to be strategically placed in locations where vehicular speeds reach their maximum between the speed humps and the roadway intersections.

Following the contractor mobilization and commencement of work, and allowing for a brief period for roadway users to adapt to the adjusted conditions, new counts could be conducted and compared with the pre-construction period. This data would be utilized to inform the Project Team and the Town of Milton of the new traffic patterns and help determine if measures are warranted to deter or slow traffic along these residential streets. With multiple stages of construction having varying effects on the roadway capacity and user patterns, the traffic count/speed detection trailers could be used following each new traffic pattern to establish new data to analyze and react to as the Project progresses.

Signal Timing Adjustments

The project team could perform additional analysis of the existing traffic conditions based upon the existing and/or additional traffic counts gathered at the Project intersection to further study the impacts of the proposed construction staging patterns. Utilizing the analysis, the Project Team could determine if it would be feasible to provide signal timing adjustments which would benefit the most impacted approaches to lessen the queuing and delays while minimizing the impacts to separate approaches.

Regulatory Signage

SPEED FEEDBACK SIGNS

Portable or permanent speed feedback signs could be installed on Hillside Street and Forest Street to provide users real-time speed notifications in an effort to slow their traveling speed.

TIME-RESTRICTED DO-NOT-ENTER SIGNS

Like Forest Street at Chickatawbut Road, time-restricted regulatory "Do-Not-Enter" signs on Hillside Street at Route 28 and at Chickatawbut Road could be installed to prohibit entrance to the residential areas during the morning and afternoon peak traffic periods when traffic is expected to be heaviest. Due to jurisdictional areas, it would be recommended the Town authorize and install all time-restricted regulatory signs within their right-of-way in accordance with local authorization and enforcement requirements. As these signs are often unenforced, they could lead to a lack of compliance by users. It would be beneficial for the Town to understand the effectiveness of the existing sign based on resident feedback.

ROAD CLOSED TO THRU TRAFFIC SIGNS

The Town mentioned that "Road Closed to Thru Traffic" signs could be posted on Hillside Street and Forest Street to prohibit access to through vehicles, discouraging the use of these roadways for cut-through traffic while maintaining local access. Local and State authorization, enforcement, and compliance of these signs may prove difficult, and these are typically used in areas where a construction area is along the traveled route beyond the posted signs, which could reduce compliance and lead to distrust in general signage by users when the expectation of the sign regulation is not met. HSH does not recommend this alternative.

GPS Navigation Restrictions

The project team could explore utilizing GPS-based navigation systems, such as Google Maps and Waze, to restrict access to the neighborhood during peak travel periods. This could only be implemented in conjunction with lawfully promulgated Town posted time restricted Do-Not-Enter signs which would establish the regulatory standards of these restricted areas.

Temporary Speed Humps

Permanent speed humps are currently installed on Hillside Street approximately 1,300' to the west of Randolph Avenue and 1,100' to the east of Chickatawbut Road. A speed hump is also currently installed on Forest Street approximately 450' to the north of Chickatawbut Road. A consideration could be to add temporary speed humps located closer to Randolph Avenue and Chickatawbut Road

on each of these residential streets to further increase their effectiveness and deter speeding and potential increased traffic. Additional speed humps could be installed along each roadway further into the neighborhood as well to tie together an effective network reducing speeds. While this would provide the benefits of reducing cut-through traffic and reducing speeds, local resident feedback would be prudent as they would encounter these anytime they leave or enter their neighborhood.

Temporary Chicane

Physical objects could be placed on Hillside Street and Forest Street to create a chicane, which is a designed curvature of the roadway like a curb bump-out, installed in the travel way requiring vehicles to maneuver around adding extra turns to slow traffic. Placing these near the intersections of Randolph Avenue and Chickatawbut Road would be the most effective locations, but additional locations could be added to further enhance the benefits. While this would provide the benefits of reducing cut-through traffic and reducing speeds, local resident feedback would be prudent as they would encounter these anytime they leave or enter their neighborhood.



Example Chicane. Source: https://www.vtcng.com/news_and_citizen/news/local_news/notch-road-opens-up-chicanes-get-tested-right-away/article_e98c8d32-1915-11ef-9293-dfe9d1a19d60.html

Next Steps

It is HSH's understanding that the Town of Milton will review and consider the effectiveness of the alternatives described in this memorandum, including meeting with residents to obtain local feedback, and then inform MassDOT which alternatives should be included in the construction contract for the Project as mandatory and/or optional to be implemented if determined necessary as the Project progresses, and based upon traffic counts and other reporting data that the Project Team will provide to MassDOT and the Town monitoring their respective effectiveness. Once the Town, MassDOT and HSH are in agreement, HSH will incorporate the necessary requirements into the construction contract.