

2019 APR -1 PM 2: 24



# Transportation Advisory Committee

## TOWN OF BELMONT

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Dana Miller - Chair  
Laurence MacDonald - Vice Chair  
Annis Sengupta - Clerk

Jessica Bennet  
David Coleman  
Clifford Gaysunas  
Charles Hamad  
Jeremy Romanul  
Jeffrey Roth

**Date:** April 1, 2019

**To:** Members – Transportation Advisory Committee

**From:** Glenn R. Clancy, Committee Liaison

**Subject:** Agenda for Meeting on April 4, 2019 at 7:00 PM in Conference Room 13 – Second Floor Homer Building. If you cannot attend the meeting, please contact me via e-mail.

**7:00 – 7:05** Approval of Minutes (March 7, 2019)

**7:05 – 7:30** Payson Road

- Crosswalk Upgrades
  - Playground / Key Intersections
- Pedestrian Improvements
  - Crosswalks
  - Sidewalks / Shoulders

**7:30 – 8:00** Common Street Bike Lanes

- Mass DOT Recommendation from Safe Routes to School Report
- Possible Bike Lane Striping
- Discussion on Public Hearing

**8:00 – 8:50** Traffic Calming Policy—Review revised draft document

**8:50 – 8:55** Old Business

- No Known Items

**8:55 – 9:00** New Business

- No Known Items

**9:00** Adjourn

Note: Times are tentative depending on the flow of the meeting, the time of any particular item may deviate ten to fifteen minutes from the schedule.

**Cc:** Patrice Garvin, Town Administrator  
Sgt Ben Mailhot, Belmont Police Department  
Jay Marcotte, Director, Department of Public Works  
Richard McLaughlin, Belmont Police Chief



## **Transportation Advisory Committee**

March 7, 2019

### **Minutes**

**Committee Members Present:** Dana Miller (Chair), Larry MacDonald (Vice Chair), Annis Sengupta (Clerk), Jessica Bennett, David Coleman, Clifford Gaysunas, Charles Hamad, Jeremy Romanul, Jeffrey Roth

**Ex Officio Committee Members Absent:** Glenn Clancy (Belmont Director of Community Development and Town Engineer)

**Ex Officio Committee Members Present:** Sergeant Ben Mailhot (Belmont Police representative to the Committee); Jay Marcotte, Director, Department of Public Works

- 7:00 pm**                      **Meeting called to order**
- 7:01 pm**                      **Minutes Approved (February 21, 2019)**
- 7:02 pm**                      **Tabled Items**

The following agenda items were tabled due to Glenn Clancy's absence:

- Examples of protected bicycle lanes on residential streets
- Update on Belmont Hill School-Belmont Waltham Mass Works Grant Applications
- Payson Road
  - Crosswalk Upgrades
  - Playground / Key Intersections Pedestrian Improvements
    - Crosswalks
    - Sidewalks / Shoulders
- Common Street Bike Lanes
  - Cost of Stanchions, both capital and maintenance costs
  - Precedent—the use of bike-lane stanchions on other residential roads

7:03 pm

## Old Business

### Bike Lanes

- Data on the comparative safety of bike lanes separated by stanchions and bike lanes delineated with painted line.
  - David Coleman presented summary of “Cycle Tracks: A Technical Review of Safety, Design, and Research,” prepared by Toole Design Group for the City of Cambridge in 2014.
    - Addresses the idea of what people perceive as safe; what are the accident rates for protected and unprotected lanes.
    - Will circulate electronic version to TAC members through Ben Mailhot.
  - TAC members discussed the variability of data in terms of construction and design of infrastructure and the variability of data on safety improvements.
  - Committee is interested in hearing from experts to increase shared understanding of bicycle issues and infrastructure.
    - Anne Lusk, Harvard professor who researches and writes about bicycle issues.
    - Laura Castelli, Bicycle/Pedestrian Project Manager at VHB; consultant and Belmont resident who presented Complete Streets.
    - Bill Desantis, Principal, VHB, Rhode Island Office; focus on Bicycle and Pedestrian Services.
  - Committee will digest the Toole Design Group study before next meeting, and TAC Chair will explore options for TAC to meet with an expert.

7:10 - 8:09 pm

### Traffic Calming Policy: Discussion of Draft Sections I - V

A review of sections I through V. (Introduction, Benefits of Traffic Calming, Traffic Calming Methods, Examples of Traffic Controls that are not Traffic Calming Devices, and Objectives) generated discussion of specific wording and opportunities to increase clarity. In some cases, these suggestions focused on adding greater specificity to the description of actors and processes, and in others focused on consolidating material to avoid redundancy. Specific action items that resulted from the conversation are as follows:

1. Request guidance from the Board of Selectmen as to wording of whom is adopting the policy - the Transportation Advisory Committee (as drafted), the Town of Belmont, or the Belmont Board of Selectmen.
2. Dana Miller and Annis Sengupta will draft language that consolidates Section II. Benefits of Traffic Calming and Section V. Objectives and organizes benefits into logical related groupings as follows:

- a. Improving safety for pedestrians, users of public transit, bicyclists and drivers by reducing dangerous driving behaviors and reducing the probability and severity of crashes;
  - b. Increasing mobility by promoting use of non-automobile modes of transportation;
  - c. Improving quality of life by making our streets and neighborhoods more appealing.
  - d. Add text to Objectives/Benefits: "Provide a clear and transparent process for addressing concerns about pedestrian, bicyclist, and driver safety."
  - e. Consolidate and simplify text about engaging residents in process.
3. Request guidance from Glenn Clancy on Section III. Traffic Calming Methods. The sub-bullets seem to be giving examples rather than categories. Explore options to link to drawings, photos, and greater detail about what examples look like.
  4. Change name of Section IV. from "Examples of Traffic Controls that are not Traffic Calming Devices" to "Regulatory Traffic Controls as Distinct from Traffic Calming."
    - a. Insert text that clarifies that requests for Regulatory Traffic Controls should be submitted to the TAC but require a separate review process through the Planning and Community Development Department. Based on findings of that evaluation, the TAC will make a recommendation to Board of Selectmen:
    - b. Change "Mass Highway and RMV" to "Mass DOT"
    - c. Clarify which regulatory controls are within the Town's purview; what is required as part of the review process; and which controls require a state approval process (speed limits and truck exclusions, for example) with links to additional information.
      - Highlight limitations of Regulatory Traffic Control review process (based on the existing speeds on the roadway rather than the preferred speed for the roadway, for example).
    - d. Include language indicating that after TAC reviews requests for Regulatory Traffic Controls, it may suggest traffic calming measures as an alternative solution.

### **Coordination with Other Town Transportation Programs**

Belmont is currently exploring transportation issues through a variety of programs including the Safe Routes to School Program, the Complete Streets Program, and the Belmont High School Traffic Working Group. TAC members expressed interest in providing clarity and transparency about the distinctions among these groups and coordination among them. Currently, representatives from the TAC are active members of these programs and committees.

In particular, the TAC discussed how to distinguish between and/or coordinate the Complete Streets Program and the Traffic Calming Policy. Because Complete Streets prioritization is being completed through a consultant, it is currently treated separately from the Traffic Calming Policy.

Future evaluation and determination of Complete Streets projects and priorities will come from the Transportation Advisory Committee.

### **Communication with Town Residents**

In addition, the committee discussed other strategies to increase clarity and transparency in Traffic Calming, including the possibility of a website that allows easy access to visual examples of traffic calming measures.

#### **8:10 - 8:45 pm      Traffic Calming Policy: Discussion of Draft Sections VI - IX.**

A review of sections VI. through IX.( Process for Initiating Requests, Submission of Traffic Calming Requests, Eligibility, and Preliminary Evaluation of Requests) generated discussion of changes increase consistency and clarity. In some cases, discussion related to Section IX. Preliminary Evaluation of Traffic Calming Requests, the TAC considered whether the draft criteria would adequately identify areas appropriate for traffic calming and how to relate eligibility scoring to prioritization. Specific action items and decisions that resulted from the conversation are as follows:

1. Across Traffic Calming Policy, indicate that Town Engineer will coordinate Town efforts, which are likely to involve the Belmont Police Department, the Department of Public Works, and the Office of Community Development.
2. Across Traffic Calming Policy, use phrase "traffic calming methods" vs. "traffic calming measures" or "traffic calming interventions."
3. Under Section VII. Submission of Traffic Calming Requests, specify a minimum number of resident signatures to initiate a request to ensure that multiple abutters are aware of and supportive of the request from the outset of the process.
  - a. TAC discussed a minimum of 10 signatures to initiate a request with need for further review in case of streets with fewer residents.
4. Under Section VIII: Roads Eligible for Traffic Calming
  - a. Proposed text revisions presented by TAC Chair were accepted by TAC.
5. Under Section IX. Preliminary Evaluation of Traffic Calming Requests, TAC agreed that the criteria need to be tested against local road conditions. Concerns were raised about the following:
  - a. Criteria do not explicitly consider whether roads are designated as pedestrian routes (e.g. by Safe Routes to School)
  - b. Criteria do not consider whether the road is a bicycle route
  - c. Would scoring for roads without continuous sidewalks inadvertently lead to traffic calming on very small, low traffic roads?
  - d. Can this scoring system reference and make use of the existing sidewalk survey, which has scored sidewalk conditions throughout town?
  - e. How well does this scoring system initiate projects in neighborhoods that are isolated from pedestrian generators by major collector roads?

6. TAC would like to see alternate scoring models and approaches as it revises this scoring system.
  - a. The VHB consultant might be able to give alternative models for different towns.

**8:45 – 8:54**

**New Business: Town-wide bike path system**

TAC discussed whether it would like to propose planning for a town-wide bicycle path. It may be possible to work with VHB on that project. The TAC Chair and BOS can submit a request to MAPC for technical assistance in developing a bicycle and pedestrian network plan.

**Recap of Current Pavement Management Program**

Related to the work of the TAC is the current structure of the Belmont Pavement Management Program. This is the program that determines how and where Pavement Management funds appropriated by Belmont Town Meeting and Chapter 90 funds appropriated by the Commonwealth are expended annually. Due to a \$63 million backlog in road repair and reconstruction in 2007, Belmont Town Meeting decided to exclude sidewalk reconstruction from Pavement Management program expenditures. Currently, the Belmont Department of Public Works is allocated \$200,000 annually for sidewalk repair and maintenance, but this is not for sidewalk construction costs. Recently, the Board of Selectmen has approved sidewalk reconstruction projects on a case-by-case basis. The TAC will need to consider the parameters of the Pavement Management Program as it develops and implements the Traffic Calming Policy.

**9:00pm**

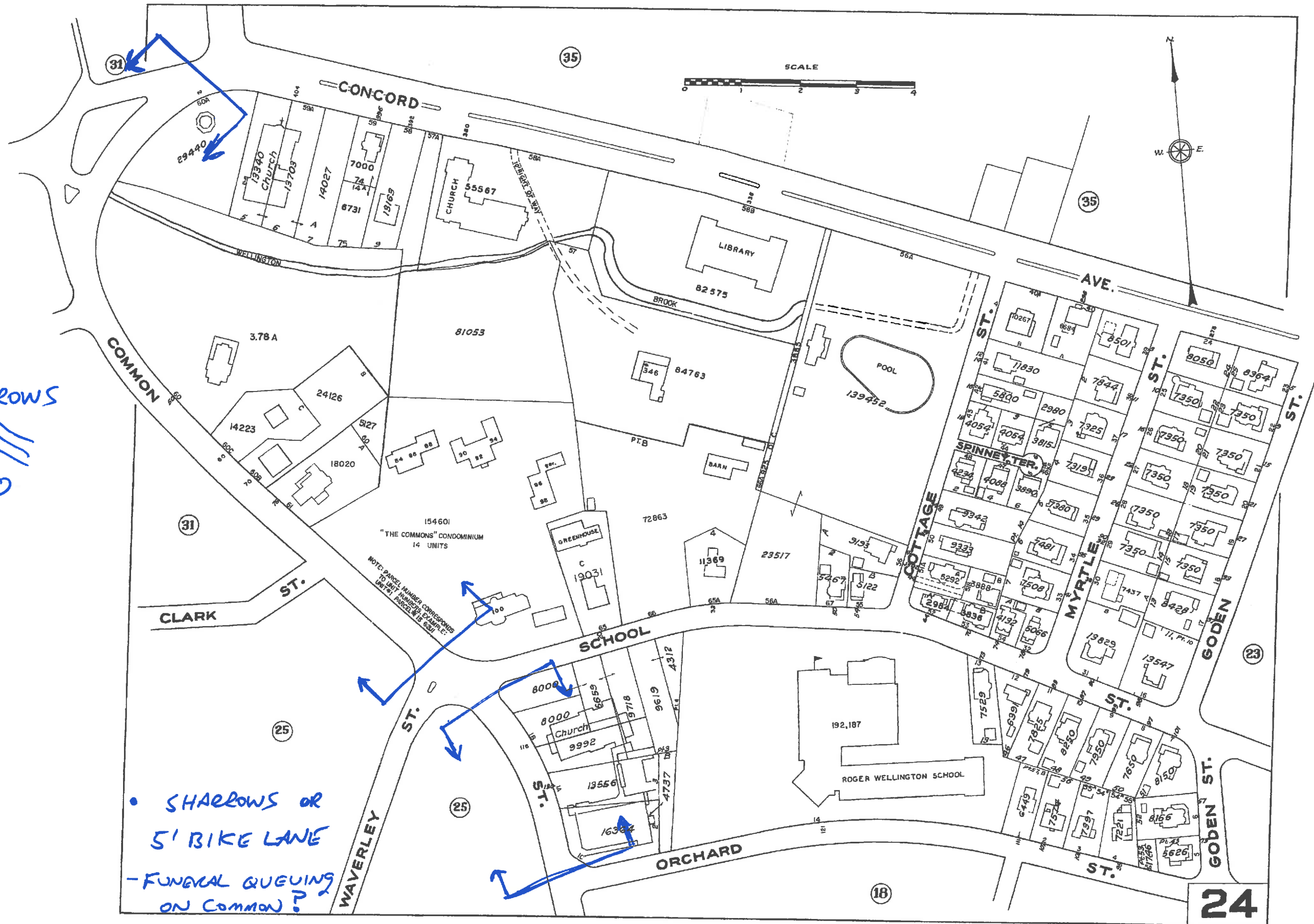
**Meeting Adjourned**



SHARROWS



- SHARROWS OR 5' BIKE LANE
- FUNERAL QUEUING ON COMMON P.







S' BIKE LANE



EXISTING BIKE LANE

SHARROWS OR 5' BIKE LANE

5' BIKE LANE

NO BIKE STRIPING THROUGH INTERSECTION



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## **4.2 Other Recommendations for Implementation by the Town of Belmont**

The MassDOT team has identified additional infrastructure improvements anticipated to improve pedestrian and bicycle access to the school property from adjacent neighborhoods. These improvements are meant as recommendations the Town could consider for future projects. There are four (4) potential improvement areas identified in addition to the recommended SRTS project and are described in this section. The proposed low cost improvements are designed to be incorporated into a District wide improvement project in addition to the proposed improvements at designated intersections. The list of potential projects for the Town of Belmont to consider includes the following:

- Upgrade Pedestrian Crossings and School Zone Signage at the Common Street / Orchard Street Intersection
- Reconstruct Sidewalk along Goden Street from School Street to Washington Street.
- Restripe Common Street Corridor from School Street to Trapelo Road for Bicycle Accommodations
- Construct Sidewalk along Hillcrest Road

While these projects will improve safety for students walking to school, they are not anticipated to experience the same level of use as the improvements included in the proposed SRTS infrastructure project. Approximately 115 students living in neighborhoods to the west of Common Street would benefit from the improvements in the proposed SRTS infrastructure project. In comparison, approximately 76 students who live north of Trapelo Road would likely walk along Common Street and cross at the intersection at Washington Street. Students will likely cross at this intersection with the aid of a crossing guard, rather than at the signalized intersection of Common Street / School Street, which is farther along their path and does not have a crossing guard.

MassDOT's current Complete Streets Guidelines recommend pedestrian and bicycle facilities on both sides of the road. In an effort to propose the physical infrastructure that would have the highest initial benefit, certain recommendations listed within this assessment consider a phased implementation of improvements that may not include facilities on both sides. As the Town considers implementation in the future, certain improvements may need to be expanded as some funding sources may encourage a higher level of Complete Street initiatives.

### **Recommendation 1 – Upgrade Pedestrian Crossings and School Zone Signage at the Common Street / Orchard Street Intersection**

One of the primary walking routes to the Wellington Elementary School consists of utilizing Orchard Street from the west. This intersection features skewed geometry and lacks ADA-compliant access ramps. The ramp located on the northwest corner of the intersection is located within the adjacent private residential driveway. Orchard Street is the primary roadway for pick-up and drop-off of students which results in a high volume of turning vehicles during arrival and dismissal. The existing school zone flasher located

at the Common Street / Glendale Road intersection is in poor condition and does not meet current MUTCD or the Massachusetts Amendment standards. The existing DO NOT ENTER signs with time restrictions are also in poor condition and does not meet current MUTCD standards.

To improve pedestrian safety along a primary walking route to the school, MassDOT recommends upgrading the sidewalks and ramps at the Common Street / Orchard Street intersection. The project would include the following major elements:

- Reconstruction of sidewalk along Common Street at intersection approaches with vertical granite curbing;
- Construction of ADA-compliant accessible ramps for perpendicular pedestrian crossings, wherever possible at each corner of the intersection;
- Application of new crosswalk and stop line pavement markings; and
- Installation of MUTCD-compliant warning and regulatory signs.

The reconstruction of sidewalks with vertical granite curb will improve pedestrian safety and accessibility by providing separation between vehicle and pedestrian traffic. The vertical granite curbing will help reduce the risk of parked vehicles blocking access to the sidewalk. Striping high visibility crosswalks and installing pedestrian crossing warning signs will improve pedestrian safety by increasing driver awareness of pedestrians crossing the roadway. The proposed signage and pavement markings will help enforce the presence of the school's crossing guard. Construction of ADA-complaint accessible ramps will enhance accessibility for pedestrians with vision and mobility impairments.

### **Recommendation 2 – Reconstruct Sidewalk along Goden Street from School Street to Washington Street**

One of the primary walking routes to the Chenery Middle School consists of utilizing Goden Street from the north. Sections of sidewalk along Goden Street are in poor condition and are lacking ADA compliant accessible ramps. While some sections of sidewalk have been recently reconstructed by the town, not all meet current ADA standards. There are other sections of sidewalk that experience heaving from tree routes and vegetation overgrowth.

To improve pedestrian safety along a primary walking route to the school, MassDOT recommends upgrading the sidewalks along Goden Street. The project would include the following major elements:

- Reconstruction of sidewalk along Goden Street from School Street to Washington Street with vertical granite curbing where as needed;
- Construction of ADA-compliant accessible ramps for perpendicular pedestrian crossings, wherever possible depending on grade limitations along the roadway;
- Application of new crosswalk and stop line pavement markings; and
- Installation of MUTCD-compliant warning and regulatory signs.

The reconstruction of sidewalks with vertical granite curb will improve pedestrian safety and accessibility by providing separation between vehicle and pedestrian traffic. The

vertical granite curbing will help reduce the risk of parked vehicles blocking access to the sidewalk. MassDOT recommends the Wellington Elementary School consider the removal of parking along Orchard Street from the drop-off driveway to Goden Street in order to effectively utilize the live parking zone. Striping high visibility crosswalks and installing pedestrian crossing warning signs will improve pedestrian safety by increasing driver awareness of pedestrians crossing the roadway. Construction of ADA-complaint accessible ramps will enhance accessibility for pedestrians with vision and mobility impairments.

### **Recommendation 3 – Restripe Common Street Corridor from School Street to Trapelo Road for Bicycle Accommodations**

Common Street is a collector roadway and a primary walking route for residential neighborhoods on either side. Although sidewalks are present along both sides of the roadway, there are no bicycle accommodations along Common Street. The lack of bicycle accommodations resins less experienced cyclists (i.e. student) to travel on the sidewalks.

To improve pedestrian and cyclist safety along a primary walking route to the school, MassDOT recommends installing bicycle lanes along Common Street. The project would include the following major elements:

- Restripe the existing roadway lane widths which vary from 12' to 15' and <1' to 4' shoulders in favor of narrower vehicle travel lanes (±10') and 5' bicycle shoulders in each direction;
- Application of new crosswalk and stop line pavement markings; and
- Installation of MUTCD-compliant warning and regulatory signs.

Striping 5' bike lanes in each direction will not only help to narrow the vehicle travel lanes on the roadway to reduce speed but will also provide a designated lane for cyclists to reduce conflict from traveling on the sidewalks. Striping high visibility crosswalks and installing pedestrian crossing warning signs will improve pedestrian safety by increasing driver awareness of pedestrians crossing the roadway. Installation of MUTCD compliant signage and pavement markings will potentially improve driver compliance with the intended messages. The Town should assess the potential impacts to on-street resident parking prior to implementing the changes.

### **Recommendation 4 – Construct Sidewalk along Hillcrest Road**

Hillcrest Road currently has a poor roadway condition and sidewalks are not available on either side of the roadway.

To improve pedestrian safety and sidewalk connectivity of the surrounding neighborhood, MassDOT recommends installing sidewalk along Hillcrest Road. The project would include the following major elements:

- Construction of 5' sidewalk along Hillcrest Road from Common Street to Goden Street with vertical granite curbing;
- Construction of ADA-compliant accessible ramps for perpendicular pedestrian crossings, wherever possible depending on grade limitations along the roadway;

- Application of new crosswalk and stop line pavement markings; and
- Installation of MUTCD-compliant warning and regulatory signs.

The construction of sidewalks with vertical granite curb will improve pedestrian safety and accessibility by providing separation between vehicle and pedestrian traffic and ensuring that parked vehicles do not block access to the sidewalk. The addition of sidewalk along Hillcrest Road will provide a more complete sidewalk network connecting Common Street and Goden Street. Striping high visibility crosswalks and installing pedestrian crossing warning signs will improve pedestrian safety by increasing driver awareness of pedestrians crossing the roadway. Construction of ADA-complaint accessible ramps will enhance accessibility for pedestrians with vision and mobility impairments.