

# Project and General Recommendations

This section outlines some project specific and general recommendations that are not site-specific.

## Project Selection and Final List

The Committee developed its final list of projects to submit to MassDOT. The key factors of safety, public health, increased livability, equity, and usability for all users of the street network, as well as overall budgeting based on an anticipated \$500,000 for construction funding, guided the committee's decision making. For the complete list of potential improvements, see **Table 4** below; for the Tier 2 list submitted to MassDOT (town projects only), see **Appendix C. Table 5** provides expanded project descriptions, cost estimates, and funding needs.

Table 4: Final Complete Streets Project Prioritization (Tier 2) List

Project #	Project Type	Project Location	Safety	ADA Accessibility	Pedestrian Mobility	Bicycle Mobility	Transit Operations and Access	Vehicular Operations	Freight Operations
PROJECT 1	Swamp Road/Main Street Pedestrian Improvements	Intersection of Swamp Road and Main Street	X	X				X	
PROJECT 2	Main Street Traffic calming/horizontal deflection	Main Street						X	
PROJECT 3	Lenox Road Speed Feedback Signs	Lenox Road	X					X	
PROJECT 4	Main Street school bus shelter	Main Street and Harris Street bridge					X		
PROJECT 5	Card Pond Area Improvements	Card Pond	X	X	X	X			
PROJECT 6	Depot Street/Center Street Intersection improvements	Intersection of Depot Street and Center Street	X		X				

PROJECT AND GENERAL RECOMMENDATIONS

Project #	Project Type	Project Location	Safety	ADA Accessibility	Pedestrian Mobility	Bicycle Mobility	Transit Ops and Access	Vehicular Operations	Freight Operations
PROJECT 7	Swamp Road/Main Street Geometry Improvements	Main Street/Swamp Road	X					X	
PROJECT 8	Town Complex Ped/Bike Connection Path	Oak Street terminus to Town Hall parking lot			X	X			
PROJECT 9	Pedestrian direction signs for Main Street, Old Gt. Barrington Road pathway	Old Gt. Barrington Road/Rt 102 intersection and Route 41/pedestrian walkway intersection, approx. 250 SW of Rt 41/102 junction			X				
PROJECT 10	Lenox Road Sidewalk Extension	7 Lenox Road to approx. 1500' north	X		X				
PROJECT 11	Swamp Road Sidewalk Extension Phase 1	Swamp Road	X		X				
PROJECT 12	Swamp Road Sidewalk Extension Phase 2	Near 45 Swamp Road to the intersection of Swamp Road/Cone Hill Road	X		X				
PROJECT 13	Williamsville Intersection Improvements	Intersection of Samantha Lane to Intersection of Long Pond Road	X					X	
PROJECT 14	Pixley Hill Road/Gt. Barrington Rd/ Housatonic Trailhead facilities	Pixley Hill Road/Gt. Barrington Road intersection			X	X			
PROJECT 15	Depot Street Municipal Parking Lot pedestrian improvements	Intersection of Main Street (Route 41) and Depot Street	X					X	

## PROJECT AND GENERAL RECOMMENDATIONS

Table 5 Project Rankings, Descriptions, and Cost Estimates

Project Basics				Funding	
Project Priority Ranking	Project Name	Project Description	Project Source	Estimated Cost Range	Funding Requested from MassDOT
1	Swamp Road/Main Street Pedestrian Improvements	Create traffic calming/gateway treatments at the T-intersection of Swamp Road and Main Street, including ADA-accessible ramp improvements to replace existing nonconforming ramps. The existing crosswalk will be removed and a new crosswalk with standard-type white markings will be installed closer to the intersection.	CS Needs Assessment	\$40,000	\$35,000
2	Main Street Traffic calming/horizontal deflection	Enhance the gateway from Interstate 90/Route 41 into the village center by installing a planted traffic diverter on Main Street. The diverter would consist of a planted central island and a brick apron for truck over-tracking.	CS Needs Assessment	\$450,000	\$400,000
3	Lenox Road Speed Feedback Signs	Installation of pole-mounted speed feedback signs along Lenox Road, approaching the thickly-settled area toward the village center.	CS Needs Assessment	\$7,200	\$7,200
4	Main Street school bus shelter	Install a wooden school bus shelter and bicycle racks on the brick pavers near the pedestrian bridge over the Williams River. An accessible 5'x8' boarding/alighting area will be provided adjacent to the shelter.	CS Needs Assessment	\$65,000	\$58,000
5	Card Pond Area Improvements	Enhanced pedestrian/bicycle amenities at Card Pond and the immediate area. New high-visibility crosswalk and RRFB where the current sidewalk terminates, bike parking, seating, or lighting	CS Needs Assessment	\$213,000	\$188,000
6	Depot Street/Center Street Intersection improvements	Install crosswalks on other intersection legs as appropriate, brick surface treatment or raised/shared intersection space.	CS Needs Assessment	\$423,000	\$376,000

## PROJECT AND GENERAL RECOMMENDATIONS

Project Priority Ranking	Project Name	Project Description	Project Source	Estimated Cost Range	Funding Requested from MassDOT
7	Swamp Road/Main Street Intersection Improvements	Based on the high reported number of left-turn roadway departures when turning from Main Street to Swamp Road, additional curb edge indication is proposed in the form of decorative bollards, along with centerline extension lines to better guide turning movements.	CS Needs Assessment	\$14,000	\$12,500
8	Town Complex Ped/Bike Connection Path	Design and install a 12-foot wide, bituminous asphalt multi-use path that connects the Town Hall complex to an adjoining dead-end residential street. Grades and cross-slopes will be ADA-accessible and motor vehicle access will be restricted by gates or bollards.	CS Needs Assessment	\$212,000	\$194,000
9	Pedestrian direction signs for Main Street, Old Gt. Barrington Road pathway	Provide walking directions and distances to and from Card Pond, to direct pedestrians onto improved Route 41 sidewalk and pathway. Proposed pedestrian wayfinding signs will be MUTCD-compliant.	CS Needs Assessment	\$2,000	\$2,000
10	Lenox Road Sidewalk Extension	Build a 5-foot wide concrete sidewalk beginning at the existing sidewalk terminus near 7 Lenox Road and continuing approximately 1500' north through the thickly-settled area, terminating at an ADA-accessible curb ramp.	CS Needs Assessment	\$141,000	\$130,000
11	Swamp Road Sidewalk Extension Phase 1	Approx. 0.5 miles of 5- foot wide concrete sidewalk on the west side of the roadway to extend through the dense residential area north of the village center, terminating near 45 Swamp Road with an ADA-accessible curb ramp.	CS Needs Assessment	\$492,000	\$452,000

## PROJECT AND GENERAL RECOMMENDATIONS

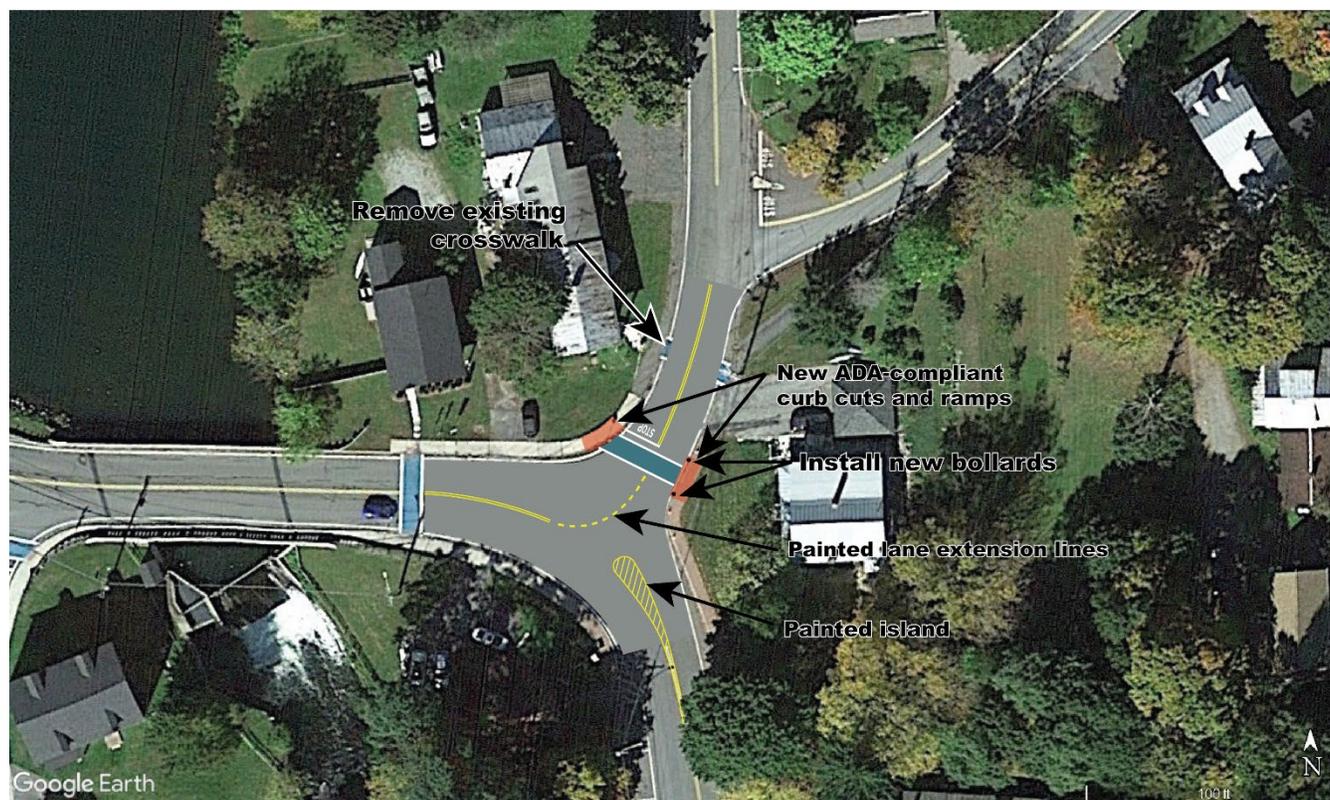
Project Priority Ranking	Project Name	Project Description	Project Source	Estimated Cost Range	Funding Requested from MassDOT
12	Swamp Road Sidewalk Extension Phase 2	Install 5-foot wide concrete sidewalk on the west side of Swamp Road from the terminus of Phase 1, continuing north approx. 1800' to the junction of Swamp Road and Cone Hill Road, terminating with an ADA-accessible curb ramp.	CS Needs Assessment	\$488,000	\$448,000
13	Williamsville Intersection Improvements	Installation of pole-mounted speed feedback signs and warning signs approaching intersection of Route 41/Water Street. Consider advisory speed limit, flashing yellow light, edge hardening, sidewalk or shoulder widening between Long Pond and Samantha Lane.	CS Needs Assessment	\$7,000	\$7,000
14	Pixley Hill Road/Gt. Barrington Rd/ Housatonic Trailhead facilities	Improve the current town-owned cleared area near the crossing of the Housatonic Rail Trail and Pixley Hill Road. Install bicycle parking, seating, and map board on poured concrete pad, placed at-grade. Improvements to the trail itself are not in the scope for this project.	CS Needs Assessment	\$42,000	\$37,000
15	Depot Street Municipal Parking Lot pedestrian improvements	Construct additional pedestrian amenities adjoining the municipal parking lot at the junction of Depot Street and Route 102. Includes: re-alignment of crosswalk across Rte 102. Any new sidewalk segments would consist of 5-foot wide concrete sections.	CS Needs Assessment	\$60,000	\$55,000

## Project Descriptions and Concepts

### Swamp Road/Main Street Pedestrian and Intersection Improvements

This project would consist of relocating the crosswalk on the northern leg of the Swamp Road/Route 102 intersection and installing Americans with Disabilities Act (ADA) compliant curb cuts and ramps. Currently, the crosswalk is set back from the intersection corner by about forty feet. This creates extra travel time and distance for pedestrians walking along the northern side of Route 102. Moving the crosswalk south to the corner of the intersection will reduce the walking distance required to stay within the crosswalk. See **Figure 12** below for an illustration, for conceptual purposes only.

Figure 12: Main Street/Swamp Road



### Main Street traffic calming/horizontal deflection

The village center of West Stockbridge serves as a gateway to western and southern areas of Berkshire County. The westernmost exit of the Massachusetts Turnpike serves West Stockbridge, and it is also the convergence of regional arterial routes 41 and 102. Regional traffic passing through the area and local traffic generated from residences and shops all pass through the village center while traveling on Route 41 and 102, or when exiting Interstate 90 and continuing north or east. It is important to signal to traffic passing through the village center that slower speeds and more care are expected. While it may be a short segment on a longer journey for many travelers, the sustained presence of traffic through the village center that is traveling at speeds deemed to high presents an opportunity to improve safety and quality of life for those who spend their time there.

The goal of the proposed Main Street traffic calming project is to provide an unmistakable cue to drivers that they are entering the village center while traveling northbound on Routes 41/102. This practice can be seen in rural areas of Europe and Scandinavia, where villages are clustered tightly and spread around the countryside. When drivers approach a densely populated area, physical characteristics of the roadway change – texture, color, width, and alignment – to indicate a renewed sense of care and attention is required beyond the more sparsely populated rural highway. Often, this change in roadway is introduced at a “gateway” which can be seen as the physical boundary between the countryside and the village center. The gateway could be a roundabout or other major intersection. If no intersection is nearby, the gateway can take the form of a *chokepoint* (narrowing of the road – see **Figure 13**), *chicane* (an artificial curve of the road – see **Figure 14**), or a speed hump or speed table (an artificial rise in the road). This project proposes to create a *chicane* gateway for Main Street.

Since a chicane gateway requires widening of the roadway to accommodate the central island, an area with adequate open space along the side of the road is required. The short stretch of Main Street immediately north of the West Stockbridge Congregational Church presents the best opportunity. Approximately 150 linear feet of Main Street would need to be widened. A central island would be constructed to create the curve effect of the chicane. The island could be planted or decorated to create an attractive, welcoming gateway to the village center. See the proposed illustration (**Figure 15**) for more detail. This illustration is for conceptual purposes only and does not represent an engineering study or drawing.

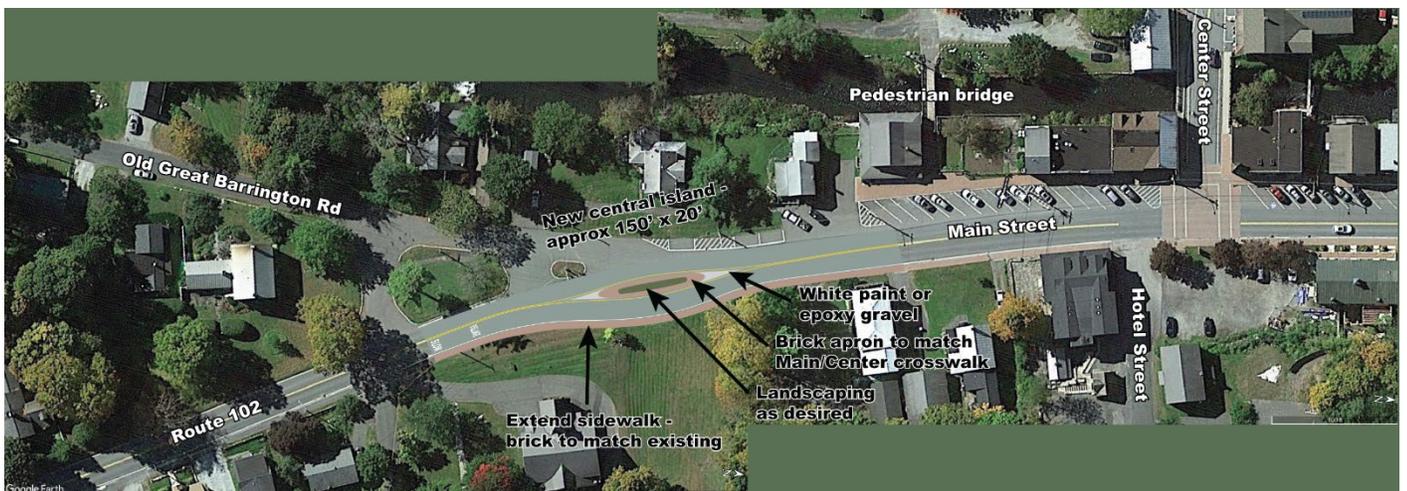
Figure 13: Chokepoint



Figure 14: Chicane



Figure 15: Main Street horizontal deflection concept



**Lenox Road speed feedback signs**

The approach into the village center of West Stockbridge via Lenox Road consists of a long descent with increasing density of houses and activity along the road. The perception and experience of many residents along this corridor is that vehicles are often traveling too fast, as illustrated by the numerous homemade signs along the road telling drivers to slow down. Digital speed feedback signs would be placed strategically along Lenox Road to alert motorists of the 25mph speed limit approaching the thickly settled area. A suggested location is approximately 1500’ northeast from the terminus of Lenox Road with Swamp Road. Exact placement will be subject to engineering review and sight distance analysis to ensure maximum effectiveness and visibility.

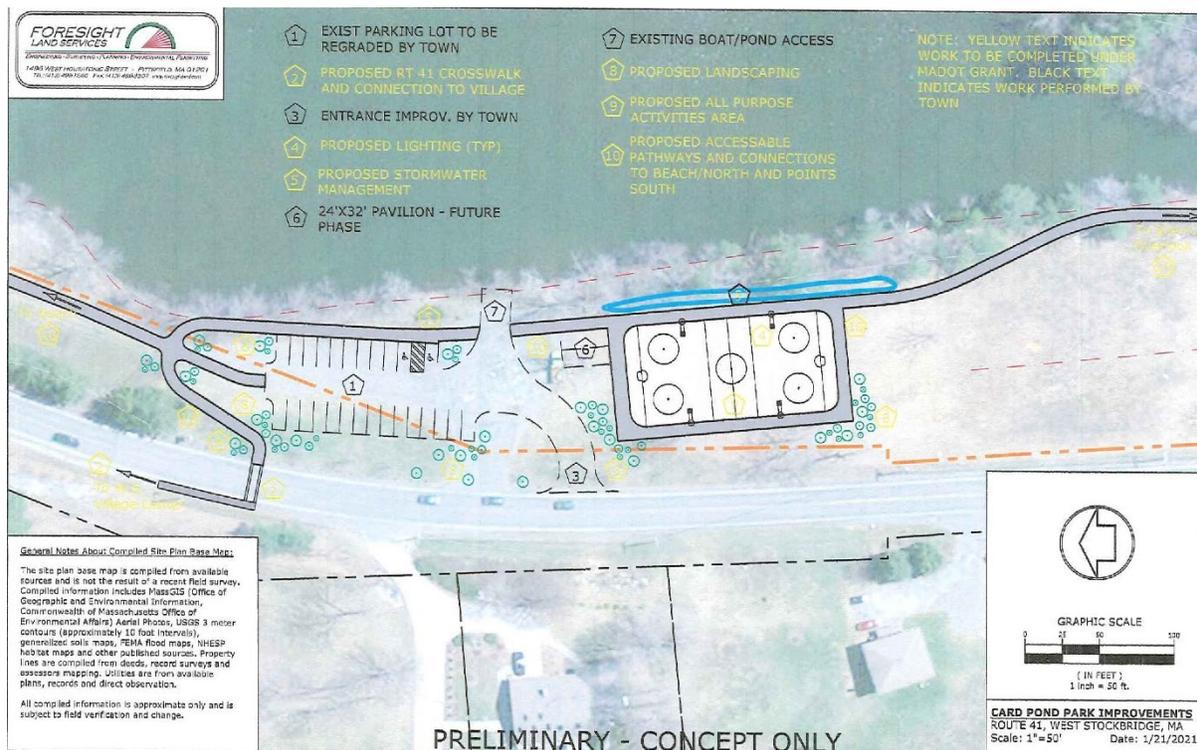
**Main Street school bus shelter**

This enhancement to the village center streetscape would include a rustic, covered, bus shelter that would be utilized as a single point of pickup and drop-off for school children who live in the vicinity. Bike racks would also be installed adjacent to the shelter. The location would serve as a focal point for cycling and transit, including if any future transit services are to be proposed through the area.

**Card Pond area improvements**

The Route 41 corridor from the Mass Pike interchange to the Card Pond recreation area was recently improved with a new sidewalk and crosswalk. This sidewalk connects to a pedestrian passage to Old Great Barrington Road and onto Main Street and beyond. This in turn creates a continuous pedestrian corridor between the village center and Card Pond recreation area. Accessibility ends at the park grounds, however, as the new sidewalk does not continue into the recreation area. This project proposes to construct a new segment of sidewalk and “trailhead” area to lead guests into the Card Pond area proper. The sidewalk would meet with the existing terminus on the eastern side of Route 41 and continue at an

Figure 16: Card Pond area concept (via Foresight)

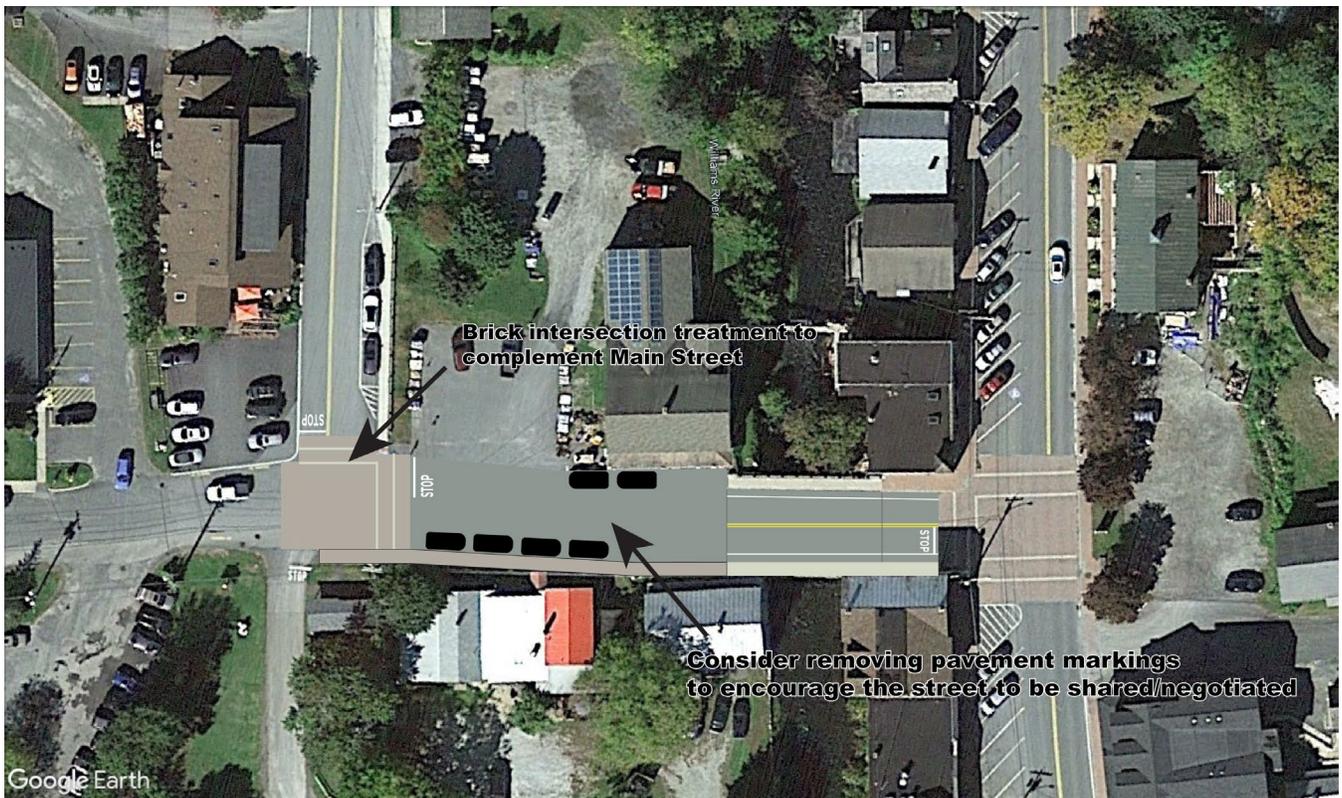


ADA-accessible slope to the park gate at Card Pond. A landing area that could serve as a “trailhead,” featuring seating, bike racks, and a community bulletin board, would also be installed. See **Figure 16** for a concept developed by Foresight Land Services incorporating these and other proposed features.

**Depot Street/Center Street intersection improvements**

This intersection forms the only corner of the village “grid” that is not along a major roadway. Both Depot and Center Streets are low-speed, local-access streets with areas of parallel parking and a low speed limit. This intersection could be further enhanced to complement the retail, event, and dining attractions around the neighborhood. A brick overlay to match the intersection of Center Street and Main Street would create a deeper sense of place and further encourage pedestrian trips across the intersection. Due to the constrained width of the right-of-way through Center Street, sidewalks are incomplete on some legs of the intersection. Removal of the yellow and white lines along the area of Center Street between Depot and the Williams River bridge could encourage greater negotiating and sharing of the space between pedestrians and vehicles. Existing parking layouts would be preserved. See **Figure 17** for an illustration, for conceptual purposes only.

Figure 17: Depot Street/Center Street area



**Swamp Road/Main Street Geometry Improvements**

In addition to improving the facilities for pedestrians at the intersection of Swamp Road and Main Street, there is also desire to create a safer environment for driving at this busy intersection. Currently, there are numerous reports of drivers making left turn maneuvers from Main Street onto Swamp Road and swinging too wide, striking the curb and sometimes mounting the sidewalk. The town currently has two orange traffic cones in place to mark the edge of the curb and provide a better visual cue. Town

officials report this strategy as being effective, but a more permanent solution is desired. It is proposed to replace the two traffic cones with permanent bollards that will provide the same visual cue for drivers turning left, and provide a more permanent, elegant look to the major intersection. In addition to the bollards, yellow centerline extensions are also proposed to provide a clearer turning path for drivers. This project is also depicted in **Figure 12** above.

**Town Complex pedestrian/bicycle connection path**

This project would create a shared-use path (SUP) connection to the West Stockbridge Town Complex from Oak Street, a dead-end street that ends behind the Town Complex property. This connection would allow passage for people walking or using bicycles and other personal conveyances between the Town Complex and village center while generally avoiding the heavier travelled arterial Routes 41 and 102. The path is proposed to access the southern area of the Town property, near existing sports fields. It would be a 10-foot wide, paved trail approximately 1200 feet in length. See **Figure 18** for a proposed layout. This illustration is for conceptual purposes only.

Figure 18: Town Complex bike/ped path



**Main Street/Old Great Barrington Road pedestrian directions**

As part of the recent resurfacing and improvement project of Route 41 in the vicinity of the Mass Pike interchange, a pedestrian sidewalk that links the West Stockbridge village center to Route 41 was also upgraded to ADA accessibility. At the same time, a degraded sidewalk was removed from the vicinity of the Route 41/Route 102 intersection to the northeast of the Mass Pike interchange. It is proposed to add pedestrian wayfinding signs to inform walkers and cyclists that a safe alternative route is available from the Card Pond area to the village center and vice versa. Signs showing walking direction and mileage and/or travel time would be mounted near the Y-intersection of Main Street and Old Great Barrington Road and at the beginning of the ramp leading to the pedestrian corridor that is separate from Route 41 right-of-way. Sign samples are shown in Figure 19.

Figure 19: Sample pedestrian wayfinding signs



**Lenox Road sidewalk extension**

Currently, a sidewalk exists on the northbound side of Lenox Road up to the driveway of the 7 Lenox Road property. This project proposes to continue the sidewalk northward along Lenox Road through the thickly settled area. The sidewalk would continue for approximately 1500 feet. A section of ledge close to the edge of the northbound side of Lenox Road could necessitate the need to cross the road and continue the crosswalk on the other side for part of this segment.

**Swamp Road sidewalk extension Phase 1**

Swamp Road is the main thoroughfare between the West Stockbridge village center and points north in Richmond and Pittsfield. Currently, a combination of sidewalk and widened shoulder extends about 400 feet north along the west side of Swamp Road. At that point, the shoulder drops and the roadbed is only as wide as the two travel lanes, plus 2-foot shoulders on either side. This project proposes installing a full sidewalk along the west side of Swamp Road for approximately a half-mile. This first phase of the project would end near 45 Swamp Road at a cleared area next to the road.

**Swamp Road sidewalk extension Phase 2**

The second segment of sidewalk along Swamp Road would join the terminus of the first phase near 45 Swamp Road. From here, the sidewalk would continue north approximately 1800 feet until ending at the Y-intersection with Cone Hill Road. The total length of both phases combined would be 4,500 feet.

**Williamsville Intersection Improvements**

This project originated from reports by residents in the Williamsville hamlet, regarding the difficulty of exiting Water Street onto Route 41 when driving. Water Street adjoins to the east side Route 41 and is a dead-end street. Route 41 northbound (approaching Water Street) has limited sight distance to Water Street due to a curve and rise in the road. Encouraging slower speeds through this hamlet will allow safer and less stressful navigation out of Water Street and lower the risk of a crash. This area is more thickly settled than the adjoining segments of Route 41, with a village character extending from the intersection

with Pixley Hill Road in the south to the intersection with Samantha Lane in the north. This segment has posted speed limits between 35 and 40mph.

There are three major intersections within the thickly settled hamlet area: Long Pond Road, Water Street, and Samantha Lane. This dense clustering of intersections prompts the consideration of traffic calming elements, especially in advance of the limited sight distance for northbound traffic. There are two main alternatives that could be considered: Sign, striping, and edge treatments (Alternative 1) and horizontal deflection (Alternative 2).

Alternative 1 would consist of complementary warning signs, striping and “edge hardening” to both visually narrow the space and provide greater emphasis on slowing travel speeds through the hamlet area. An advisory speed limit of 30mph could be posted without any regulatory changes in advance of the northbound curve. A flashing yellow light posted near Long Pond Road would alert northbound travelers that more attention is required ahead. Warning signs indicating that traffic could be entering or turning ahead would further emphasize the importance of slowing down (see Figure 20).

Figure 20: Conceptual warning installations



Alternative 2 is designed to provide a “gateway” effect into the hamlet area of Williamsville. The project would consist of a new planted island constructed in the center of the road on Route 41. The roadbed would be widened around the island to create a gentle, yet noticeable curve that will require a reduction in speed to comfortably navigate. This traffic calming gateway feature is frequently utilized in parts of Europe as a way of slowing vehicles entering a village center from a rural roadway. See Figure 21 for an example illustration, for conceptual purposes only.

Figure 21: Williamsville horizontal deflection



**Pixley Hill Rd/Great Barrington Rd Housatonic Trailhead facilities**

The Housatonic Rail Trail is a hiking and mountain biking path that utilizes the former rail bed that ran from the junction with the existing CSX rail line to the Housatonic rail line just south of the village of Housatonic. The trail intersects with and effectively terminates near the intersection of Route 41 (Great Barrington Road) and Pixley Hill Road. This project would utilize town land to create a pull-off area where visitors to the trail could park and create a trailhead area with a community sign board, map, and seating area. A similar layout can be seen along the Ashuwillticook Rail Trail in Cheshire, as seen in Figure 22.

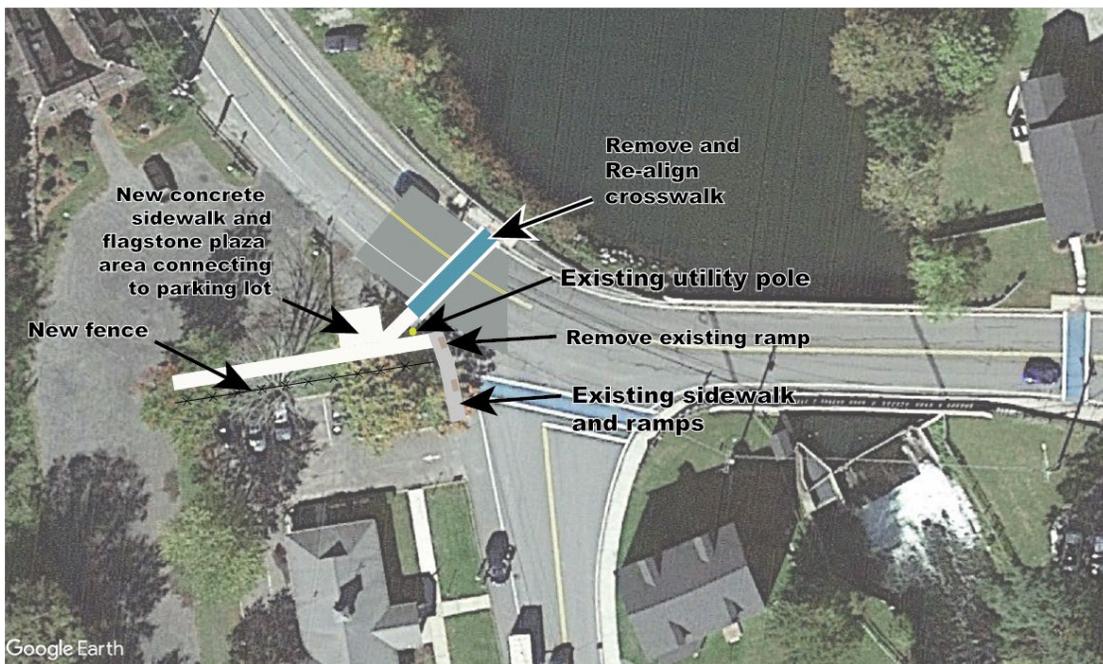
Figure 22: Existing Cheshire trailhead



**Depot Street municipal parking lot pedestrian improvements**

The town currently operates a gravel parking lot near the corner of Depot Street and Route 102/41, immediately northwest of the village center. There is no formal pathway from the parking lot that connects to surrounding sidewalks. This project proposes to create a formal connection between the parking lot and village center with a new plaza space and realigned crosswalk. Currently, the crosswalk that spans Route 102/41 directs pedestrians toward a small stub of sidewalk, which then immediately leads to a crosswalk across Depot Street. To provide direct access from the parking lot to these crosswalks, and thereby the greater sidewalk network, the Route 102/41 crosswalk would be realigned to terminate more directly in front of the parking lot. A short new section of sidewalk would then be able to tie together the two crosswalks and parking lot via a small plaza. This plaza would host a seating area, sign board, a business directory or wayfinding board, or a future gazebo. See Figure 23 below. This illustration is for conceptual purposes only.

Figure 23: Depot Street/Municipal parking lot



## General Recommendations

This section outlines some general recommendations that are not site-specific and may occur at a higher level than the project level. These recommendations are intended to outline opportunities to support Complete Streets in Otis on an ongoing basis.

### Design & Engineering

This element broadly covers some of the design and engineering recommendations that will enhance multimodal accommodations and encourage people to utilize active modes.

Complete Streets improvements can come in many forms, whether signage or entire sidewalks, the different elements are based on their context and needs. Improvements are for a variety of modes, whether motorists, cyclists, or pedestrians, Complete Streets are for everyone.

Below are recommendations for general and specific improvements to the transportation network that support Complete Streets principles and goals. Recommended projects that were also included on the town's Tier 2 list have been noted throughout this section. Any improvements will likely need design and/or engineering and it is encouraged that the town reference the following detailed best practices, as applicable, which include but are not limited to:

- MassDOT Project Development and Design Guide
- FHWA Manual of Uniform Traffic Control Devices (MUTCD)
- AASHTO A Policy on the Geometric Design of Highways and Streets
- NACTO Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- NACTO Transit Street Design Guide
- ITE Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
- US Access Board Streets and Sidewalks Guidelines
- AASHTO Guide for Planning, Designing, and Operating Pedestrian Facilities
- National Complete Streets Coalition Resources

These improvements may be paid for by a variety of funding sources, which include but are not limited to:

- MassDOT Complete Streets Funding Program
- Chapter 90 Funds
- MassWorks Grants
- Federal TIP Funds (STBGP, CMAQ, TA Set-Aside, etc.)

### Sidewalks

Sidewalks are a critical component of many small village areas and as such, ensuring pedestrian movement and access improves connectivity, improves public health and safety, and promotes increased economic development. Sidewalks should be vertically and horizontally separated from the roadway. It is desirable for a sidewalk through zone to be a minimum of 6 feet, although 5 feet is acceptable if right-of-way does not allow it. The minimum of 5 feet is due to ADA requirements, to ensure all ages and abilities can use the facility. In non-village centers it may be more advantageous to look at combining pedestrians and cyclists on a shared use path.

The town should consider sidewalks along Swamp Road in the extreme long-term, while keeping in mind a general goal to make as many locations as possible walkable within a ½-mile radius of the village center, equating to a 10-minute walk one-way.

### Implement Traffic Calming Measures in Key Locations

Traffic calming takes elements of design and landscaping together to slow down cars and increase awareness of pedestrians and cyclists. This can improve nonmotorized safety, enhanced walkability, improved stormwater management, and contribute to the beautification of the natural character in rural areas. Traffic calming comes in many different forms and may include vertical deflections (speed humps or raised intersections), horizontal shifts (traffic circle or chicane), and/or roadway narrowing (choker or center island). These treatments are often accompanied by visual enhancements like trees, plantings, wayfinding, and/or street furniture. An easy-to-implement option for traffic calming is speed feedback signs.

### Speed Feedback Signs

In West Stockbridge, the recommendation is to include speed feedback signs at key locations along Lenox Road. Speed feedback signs, particularly newer or enhanced models can also collect data about roadways, such as total number of vehicles and the number of speeding and non-speeding vehicles that pass the sign. Feedback signs can be powered via solar panel, AC power connection, or battery. In West Stockbridge, the use of solar powered speed feedback signs will reduce maintenance needs and installation costs associated with use of either battery powered or AC powered signs respectively. The Town should also ensure that trees are trimmed during sign installation so that the sign's solar panel has adequate sun exposure. See **Figure 24** for an example speed feedback sign.

Figure 24: Example Speed Feedback Sign



### View Every Repaving Project as an Opportunity to “Complete the Street”

During every repaving project, the town should assess the condition of the roadway and determine if low-cost improvements could be added to each project.

Additionally, shoulder widening and lane narrowing are crucial ways to improve cycling and walking on roadways that do not have dedicated nonmotorized facilities like sidewalks or bike lanes. Paved shoulders

have benefits for vehicle drivers, cyclists, and pedestrians.<sup>30</sup> Shoulders are often an option to accommodate nonmotorized travelers in low density areas where dedicated facilities aren't feasible. Wide shoulders are shown to increase the safety for nonmotorized travelers by separating them from the vehicle lane, although there is the potential that with wider shoulders, speeds can increase. Cyclists report feeling more comfortable having extra space that is outside the vehicle lane, and an extra 4-6 feet<sup>31</sup> can provide them with precious separation from moving vehicles.

The Town of West Stockbridge should evaluate the usage of wider shoulders to accommodate bicycle and pedestrian travelers where dedicated facilities are infeasible. Providing paved shoulders as part of routine resurfacing, restoration, rehabilitation, and/or reconstruction work on roadways is a way to implement the Town's Complete Streets Policy given consideration. Based on guidance from MassDOT, shoulder widths to accommodate pedestrians and cyclists should be at least 4' wide for a Case 4 Shared Bicycle/Pedestrian Accommodation.<sup>32</sup>

Moreover, pavement striping is one of the cheapest ways to reduce vehicle speeds<sup>33</sup>, and in areas without dedicated pedestrian and cycling facilities, help to define the road shoulder for these users. Also consider lane widths throughout town. For collector type roads, the FHWA and MassDOT note that vehicle lane widths can range from 10-12' in width<sup>34,35</sup>. For local roadways, guidance from these agencies notes that lane widths can be 9-12' in width.<sup>36</sup>

These widths are of course dependent on other local conditions such as the design speed of the road. For instance, MassDOT guidance suggests that for collector roads, 10' lane widths may be possible on roads where the design speed is below 45 mph. The town should consult with MassDOT or a traffic engineer for specific guidance on lane widths. By narrowing lanes, it may be possible to gain additional right of way for widened road shoulder or other facilities. Narrower lane widths could be easily incorporated into routine repaving or restriping projects.

### **Invest in Easy Wins to Support Local Cyclists and Bike Tourism**

Bicycle parking is a key element to the usability of bicycles for transportation, if there is nowhere to safely park a bicycle, people will be less likely to rely on it for transportation. Bicycle parking is good to have at major public facilities and at/near key town destinations; there are many options for bicycle parking, and for reference see the Association of Pedestrian and Bicycle Professionals' *Essentials of Bike Parking*.<sup>37</sup>

In West Stockbridge, the recommendation is to include bicycle racks at key locations including:

- Town Complex
- Depot Street municipal parking area

<sup>30</sup> [http://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/walkways\\_brochure/](http://safety.fhwa.dot.gov/ped_bike/tools_solve/walkways_brochure/)

<sup>31</sup> [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/multimodal\\_networks/8\\_paved\\_shoulders.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/8_paved_shoulders.pdf)

<sup>32</sup> [https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH\\_5.pdf](https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH_5.pdf)

<sup>33</sup> [http://nacto.org/docs/usdg/roadway\\_striping\\_as\\_a\\_traffic\\_calming\\_option\\_kahn.pdf](http://nacto.org/docs/usdg/roadway_striping_as_a_traffic_calming_option_kahn.pdf)

<sup>34</sup> [https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH\\_5\\_a.pdf](https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH_5_a.pdf) (See Exhibit 5-14)

<sup>35</sup> [http://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3\\_lanewidth.cfm](http://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_lanewidth.cfm) (See Table 3)

<sup>36</sup> The Vermont Agency of Transportation (VTrans) recently issued a Highway Safety and Design Engineering Instruction stating Vermont state highways "should have a maximum lane width of 11 (eleven) feet for all directions of travel." Noting that when "greater widths are used shoulder widths are typically reduced, resulting in a shoulder width that is less than ideal for bicycle traffic."

<http://vtrans.vermont.gov/sites/aot/files/highway/documents/structures/HSDEI%2015-103%20-%2011%20Foot%20Lane%20Width.pdf>

<sup>37</sup> <http://www.apbp.org/?page=publications>

- Housatonic Rail Trail entrance
- Main Street business district

To help support bike tourism in West Stockbridge, the town should also install more bike repair stations, perhaps at the Town Complex on Route 102. Adding a bench and table in this location for cyclists would also be beneficial. If constructed, the town should promote these amenities on its website and regionally so that that cyclists know about them.

## Implementation

In an effort to ensure the Town of West Stockbridge can successfully implement their Complete Streets Policy, the Complete Streets Working Group and BRPC staff developed a table which outlines annual steps that ensure timely implementation of Complete Streets projects in the Town of Otis. Annual implementation steps can be seen in **Table 5**.

**Table 5: Annual Implementation Tasks and Model Project Cycle**

Action	Responsible Party	Timeline (Annual)	Others Interested
Project Identification	Complete Streets Working Group	Spring	Select Board, Highway Dept., Community Members
Score and rank new projects, Revise Tier 2 List	Complete Streets Working Group	Late Spring	Select Board, Highway Dept., Residents
Project Budgeting	Complete Streets Working Group, Community Members	Early Spring - Early Summer	Select Board, Finance, Highway Department
Prepare RFP for design needs on identified projects requiring engineering or design	Highway Dept.	Fall	Select Board, Finance, Complete Streets Working Group
Construction	Highway Dept.	Following Spring	Select Board, Complete Streets Working Group
Evaluate and document performance (See Performance Measures section)	Complete Streets Working Group	Following Summer or Fall	Select Board, Highway Dept., Community Members

## Conclusion

The Town of West Stockbridge has great potential to invite more walking and cycling around its many community assets. Leveraging complete streets project funding is just one way to start this initiative. A good strategy to keep in mind when planning projects is the “Five E’s” of active transportation: Engineering, Education, Encouragement, Enforcement, and Evaluation.

Engineering involves the design and construction of complete streets and other safety improvements.

Education can include public and private workforces, schools, and other PSAs to communicate the value added to all users of a complete street.

Encouragement can consist of community bike rides and walks, signage, events, and branding to grow active participation and use of complete streets.

Enforcement includes communicating traffic laws to all users of the road and demonstrating how the facilities are effectively used.

Finally, Evaluation includes performance measures, like those discussed in this report, that show how effective a new street design is at accomplishing the goals of the Town leadership.

Berkshire Regional Planning Commission welcomes the opportunity to further assist town leaders in the development of future projects and will be working to ensure the success of this valuable initiative.