



April 22, 2015

Ref: 09393.01

Mr. Roy E. Sorenson, Director  
Bedford DPW  
365 The Great Road  
Bedford, MA 01730

Re: Minuteman Bikeway Project Summary to date

Dear Mr. Sorenson:

The purpose of this letter is to summarize the work to date on evaluating the design options for the Railroad Avenue section of the Minuteman Bikeway Extension project.

In 2005, the Town of Bedford solicited proposals from consulting firms to conduct a feasibility study of the extension of the Minuteman Bikeway along the former Reformatory Branch of the B&M Railroad. VHB was retained to complete a study of the off-road portion of the bikeway, between Railroad Ave, and Concord Road. The study focused on roadway crossings, drainage, environmental impacts and permitting, right of way, bikeway surface materials and construction funding options.

In 2007, the town amended the contract with VHB to include further evaluation for path surface treatment options, constructability, maintenance costs, funding options and requirements, and cross sectional width. With the results of the studies complete, the project went to town meeting for vote on the surface type to be moved for design development.

On March 23, 2010, Town Meeting approved the use of a bituminous asphalt surface for the off road section of the bikeway. On March 22, 2010, at the same Town Meeting, the meeting approved the extension of the project from Concord Road to the Concord Town Boundary.

In 2010, the town retained VHB to prepare project funding applications for submission to MassDOT and to develop the final design of the bikeway. A project need form was submitted to MassDOT for review and approval. Although it was not included in the contract scope, at the direction of the town, VHB developed 3 alternative cross sections for Rail Road Avenue. The criteria for the analysis was focused on right of way impacts, tree removals, roadway bike accommodations, and construction costs. The three options were considered for the cross section, as follows:

Option 1: 2- 6 ft sidewalks, 2- 4 ft shoulders, and 2-10 ft travel lanes

Option 2: 2-6 ft sidewalks, 2-4 ft shoulders and 2- 11 ft travel lanes.

101 Walnut Street

PO Box 9151

Engineers | Scientists | Planners | Designers

Watertown, Massachusetts 02471

P 617.924.1770

F 617.924.2286

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Option 3: 1- 6 ft sidewalk on the north side of roadway, no shoulders, 10 ft wide sidewalk with a 5 foot grass strip on the south side of road.

Due to right of way impacts, Options 2 and 3 were dismissed. On December 15, 2010, the project was presented at a Bike Committee Meeting. The committee had a number of comments that were addressed at the meeting, and was followed up with written comments dated February 25, 2011. VHB was directed by the Town to advance Option 1 to preliminary design for submission to the Town and MassDOT.

VHB was also directed to contact MassDOT to ask if they would fund the off road extension of the bikeway without the Rail Road Ave section of the bikeway from Railroad Ave to Concord Road, or allow for an alternative alignment of the path to extend along Elm Brook, and Mongo Brook, to avoid Rail Road Ave. MassDOT stated that they would consider funding an alternate alignment to connect the existing minuteman bikeway to the extension, as long as there was a connection between the end of the existing bikeway and the beginning of the new bikeway. Since the two bikeways are in close proximity to one another, MassDOT determined that the gap created would cause an unsafe condition for bikepath users, if they wanted to travel from the existing bikeway terminus to the extension:

The project was presented to the bike committee on March 2, 2011, to solicit input from the committee. Comments were received and answered at the meeting.

Due to the environmentally sensitive nature of the Elm Brook path alignment, on January 18, 2013 a meeting was held with the Town DPW, Conservation Commission, and VHB to discuss this possible route. Members of the conservation commission, as well as the agent were not in favor of the alignment along Elm Brook, due to the number of environmental impacts associated with the construction of the trail, the introduction of bike traffic along an existing passive recreation walking path, the potential of exceeding 5000 sf of wetland impacts, resulting in a required variance application to DEP for the work, and introducing a paved surface in a conservation restriction area. The conservation agent reminded the meeting attendees that the variance would not be approved unless the Railroad Ave alignment was deemed not viable. It should be noted that the right of way is privately owned along Elm Brook, and land takings would be required along the entire alignment.

In 2012, the request to submit the Project Need Form was presented to the Board of Selectmen, which approved the request, and the project need form was submitted to MassDOT for approval.

On February 6, 2013 the options were presented at a Bike Committee Meeting. Comments from the committee were responded to.

The project was presented to the Board of Selectmen on July 1, 2013. The 2 options of using Railroad Ave or the Elm Brook alignment of the future bikeway was discussed. At the meeting, VHB was directed to focus on the Railroad Ave alignment, due to the environmentally sensitive nature of the Elm Brook option.

On September 25, 2013, a neighborhood meeting was held to discuss the project. The three options that were developed in 2010 were presented to the audience, and the Town received comments at the meeting, and after the meeting. As a result of the comments, VHB was asked to develop an additional

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hybrid cross section that would combine options 2 and 3. VHB developed this option, and submitted it to the town for consideration.

VHB received comments from the bike committee dated June 6, 2014 on the options, and addressed the comments at the BOS meeting on June 9, 2014.

On April 29, 2014, MassDOT approved the project for construction funding, for a total of \$4,006,200.

A Board of Selectman's meeting was held on June 9, 2014 to present the findings of the 4 options, and to solicit comments from the BOS and audience. At the meeting, the BOS requested that a site walk be conducted to review the existing roadway features, and the town roadway layout line be staked out. The site walk with the abutters occurred in August 2014.

The Bike Committee submitted comments for the options presented for Railroad Ave to the DPW in August 2014, and contacted representatives from MAPC, and MassDOT to solicit comments on bike travel on Railroad Ave. At the request of the Town, VHB contacted MAPC on July 29, 2014 to discuss the project. VHB also contacted MassDOT on August 4, and 19, 2014 to discuss the project. VHB developed 2 additional options for consideration based on the conversations with DOT – one option was a cycle track, and the other options was to use a buffered bikeway on one side of the roadway. Both options were ruled out due to maintenance and safety reasons. VHB was also directed to measure the length of the driveways for the residential properties to determine if the use of the 10 foot wide pedestrian easement for the bikeway would impact private parking at each house lot.

A Board of Selectman's meeting was held on August 4, 2014 to discuss the options, and to solicit comments from the audience. The bike committee suggested that a shared use path be constructed on Railroad Ave. Carl Larson, son of Ken Larson, and a bike advocate presented the use of a cycle track on Railroad Ave.

A Board of Selectman's meeting was held on August 25, 2014. The Bike Committee presented an option to the BOS for an off-road bikeway on Railroad Ave. VHB was not at this BOS meeting.

The Town received comments from the legal counsel representing Bedford Charter Bus and forwarded them to VHB in August 2014.

A site walk was conducted on October 9, 2014 with representatives from MassDOT, the Town, Bike Committee and VHB to review the roadway and options for bike travel.

VHB collaborated with MassDOT to discuss multiple options for bike travel on Railroad Ave. At the suggestion of the Bike Committee and from field observations of family cyclists on Railroad Ave, MassDOT recommended the use of a separated shared use path running parallel to the roadway. VHB further developed this option and presented this option to the Board of Selectmen on November 3, 2014. Due to comments received from the audience at the meeting, the Town requested that VHB develop several additional alternatives that aligned the bikeway behind the properties on Railroad Ave, along the abandoned B&M right of way, along property lines between Taylor and Lloyd, and McDonough Electric. VHB was also requested to develop an alternative alignment through the Miller Moore Conservation Area, south of the resident on Railroad Ave. A graphic of 6 alternative alignments was prepared, along with a

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summary of impacts to private property, and environmental resources was prepared and submitted to the Town for evaluation.

A meeting was held at Town Hall on January 7, 2015 to discuss the design options for Railroad Ave with Ken Larson, representatives from Taylor and Lloyd and the Bedford Bus Charter to discuss the options prepared as a result of the BOS meeting on November 3, 2014.

The Town has received letters of concern from Taylor and Lloyd, and the Bedford Bus Charter in 2015.

On April 13, 2015, the town requested that VHB contact the Complete Streets Engineer from MassDOT to discuss the design options for Railroad Ave. The following is a summary of the conversation regarding Railroad Ave:

1. MassDOT will reject the project if no protection is given to bicyclists on Railroad Ave.
2. If the town pays for the construction of RR Ave as a complete street, and request funding from DOT for the bikeway extension, DOT will require a SUP on Railroad Ave before approving the request. He said if there were another feasible alignment that connects the existing bikeway to the extension, they would consider that option.
3. If the town requests that the bikeway extension be a separate project without Railroad Ave, DOT will require a connection from the existing Bikeway to the extension. He said if there were another feasible alignment, he would consider that option.
4. He had never heard of additional insurance requirements for a property, business, or employees adjacent to a shared use path, or public way.
5. He would be happy to attend the BOS meeting to discuss, if necessary.

Please let me know if you have any comments, or questions. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick E. Domigan".

Patrick E. Domigan, P.E.

Director Massachusetts Municipal Services  
Pdomigan@vhb.com