

# Yankee Doodle Bike Path

## Billerica, Massachusetts

PREPARED FOR  
Town of Billerica

PREPARED BY



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# Introduction

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## Project Description

The Town of Billerica has been working for over two decades to advance construction of the Yankee Doodle Bike Path throughout town. This project represents Phase 1 of the Town's ultimate alignment. The current project proposes to construct approximately 4 miles of Bike Path starting at the Billerica High School and extending south to the Narrow Gauge Bike Path at the Bedford Town line.

There are four at-grade roadway crossings within the project limits: River Street (approximately 35 feet west of Parker Street); Concord Road (at the intersection of Middlesex Turnpike); Technology Park Drive (approximately 270 feet west of Wall Street) and the Spring Road (at the intersection of Astrig Way). At Concord Road, bicycles will cross during the existing pedestrian phase. At the other crossing locations warning devices (flashing beacons) are proposed that will be activated by pushbuttons.

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Figure 1.1 Site Locus Map

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## Project Purpose

The Town of Billerica envisions a non-motorized, ADA-accessible, shared-use path to serve as a historical, recreational and alternative transportation resource for residents and visitors of all ages and abilities. The design of the path seeks to maximize the benefits of such trails for the community while minimizing its impacts on town residents and the natural environment. The path will serve walkers, joggers, bicyclists, children in strollers, wheelchair users, and others.

The path will connect the town center of Billerica to the Narrow Gauge Rail in Bedford and ultimately to the Minuteman Bikeway and will provide an alternative mode of transportation to Arlington and the many surrounding communities. The path links educational, recreational and conservation areas in the southern portion of town.

The Town of Billerica has previously completed an Alternatives Analysis for the bike path alignment and has retained VHB to prepare the 25% design for the project.

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## Project Development Process

The Yankee Doodle Bike Path has a regional significance but is being designed in the context of its community. The design of the path that is reflected in this report and the accompanying plans has been developed through a series of meetings with the Yankee Doodle Bike Path Committee and the community, where the project design components have been presented to gain input on the design of the project. The topics covered at these meetings were:

- Design criteria/landscaping/cross sections/ surface treatment
- Bridges/amenities
- People management/trail alignment/access points
- Design concerns on trail
- Environmental issues/landscaping

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# Design Criteria

The Town's vision for this shared-use path is as a connection to surrounding communities and the Minuteman Bikeway, providing an accessible, non-motorized, recreational and alternative transportation resource for residents and visitors. The path will accommodate a variety of users including pedestrians, bicyclists, and wheelchair users.

The relevant references for shared-use path design include: the 2006 Massachusetts Highway Department Project Development & Design Guide (MassDOT Design Guide); the 2015 Separated Bike Lane Planning & Design Guide; 521 CMR The Rules and Regulations of the Massachusetts Architectural Access Board; the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, 2012 edition; American Association of State Highway and Transportation Officials: A Policy on Geometric Design of Highways and Streets (The AASHTO Green Book); and the Manual on Uniform Traffic Control Devices (MUTCD).

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## Design Speed

The speed that a bicyclist travels is dependent on several factors, including the type and condition of the bicycle, the purpose of the trip, the condition and location of the bicycle path, surface type, the speed and direction of the wind, and the physical condition of the bicyclist (*AASHTO Guide, page 5-12*). Shared-use paths should be designed for speeds at least as high as the preferred speed of the faster bicyclists but not such that the path design encourages speed. Given that the trail intersects several roadways, it is anticipated that the trail will be used by a wide range of bicyclists including experienced cyclists who utilize on-road facilities and travel at higher speeds. MassDOT and AASHTO recommend a design speed of 18 mph for general paved path surfaces on the relatively flat terrain and anticipated use by experienced cyclists. Path design at intersecting roadways is configured to encourage a lower operating speed for bicyclists. Traffic calming measures such as warning signs, pushbutton activated warning beacons, and pavement markings on the approaching roadways are proposed to heighten motorists' awareness of a trail crossing.

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## Typical Section

The anticipated trail users include bicyclists and pedestrians such as walkers, joggers and in-line skaters. Maintenance vehicles are also expected to use the trail occasionally. Shared-use path widths typically range from 10 to 14 feet, depending on setting and usage. The width for the new path alignment will be built to a width of 10 feet, to minimize wetland impacts.

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## Horizontal Clearances

A 2-foot wide grass shoulder with a 6-to-1 maximum cross slope is proposed adjacent to the path surface in the typical path cross section. A minimum horizontal clearance of 2 feet will be maintained from the edge of the trail surface to all lateral obstructions such as trees, poles, walls, fences, etc.

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## Vertical Clearances

A minimum permanent vertical clearance to obstructions of 8 feet is required by 521 CMR. Existing vegetation will be trimmed to a vertical clearance of 16 feet.

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## Horizontal Alignment

A minimum curve radius of 100 feet has been used in the design, except where appropriately signed curves, approaching stop conditions warrant a lesser radius.

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## Vertical Alignment

All designs must comply with 521 CMR; thus, the path profile grades must be kept to a maximum of 5% (4.5% allowing for 0.5% construction tolerance) with the exception that if the slope of the natural topography exceeds 5% the path can follow the natural topography. The proposed path profile of all off-road sections will be designed to meet the maximum grade of 5% and on-road sections will follow the natural topography.

Changes in profile grades greater than 1% are accomplished by parabolic vertical curves. The lengths of vertical curves proposed satisfy the stopping sight distance requirements.

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## Path Surface

For shared-use paths, 521 CMR requires the surface be firm, stable and slip-resistant, without slopes greater than the maximum allowed and without level changes greater than ¼ inch.

The paved path surface is proposed as a 4 inch thick Hot Mix Asphalt (1.5-inch top course over 2.5-inch intermediate course) over an 8-inch gravel base as recommended by the MassDOT Guide for shared-use paths.

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## Sight Distances

For path crossings of public roadways, crosswalks are provided for bike path users. Pushbutton activated warning devices are proposed to alert roadway users of the presence of trail traffic. Roadway users shall yield to pedestrians within the crosswalks at at-grade intersections.

Two types of sight distance were evaluated:



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### Stopping Sight Distance

Stopping sight distance (SSD) enables a vehicle traveling at or near the design speed to come to a full controlled stop before reaching a stationary object in its path.

The SSD for bicycles traveling at 20 mph is 200 feet on a 4.5% descending grade (AASHTO Guide Figure 5-7) and 120 feet on 4.5% ascending grade (AASHTO Guide Figure 5-6). For two-way shared-use paths, the sight distance in the descending direction will dictate the stopping sight distance.

On the roadway approaches, SSD is provided to allow motor vehicles to come to a full controlled stop before reaching the crossing. The minimum SSD for motor vehicles on level terrain with a speed of 25 mph is 155 feet; for 30 mph minimum SSD is 200 feet (MassDOT PD&DG Exhibit 3-8). Stopping sight distances at the project path/roadway crossings meet or exceed the MassDOT Guidelines.



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### Intersection Sight Distance

Intersection sight distance allows a bike path user to make the crossing maneuver before an approaching vehicle reaches the intersection. The amount of intersection sight distance depends on several factors including the time needed to cross the

roadway, the distance that the approaching motor vehicle will travel in that time and the speed of the vehicle and the width of the crossing.

Path users are required to stop on reaching at-grade crossings. At-grade crossings are provided with cross walks. Vehicles approaching the bike path intersection are required to stop for pedestrians in the cross walk. Pushbutton activated warning devices are provided to signal to roadway users of the presence of bike path users and therefore requiring the roadway user to stop and allow bike path users to cross.

Sight lines are being reviewed. Tree trimming will be proposed, as appropriate, at these locations to meet sight distance requirements. Layout of the crossings is discussed in the Bike Path Crossings section of this report.

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## Design Waivers

The project was designed to meet or exceed the MassDOT, ADA and AASHTO design criteria for horizontal and vertical alignments and stopping sight distances except for the following two locations.

The first location is the crest vertical curve at Sta. 300+42. At this location the bike path intersects with the access drive off of the end of Richardson Street where there is a short vertical curve before a long downgrade section. The required SSD at this location for a bicycle is 160', and the SSD shown on the proposed profile is only 102'. The intent of the short vertical curve at the intersection is to maintain the existing gutter in the roadway and prevent runoff from flowing down the bike path. There is not enough room to lengthen the curve, and flattening the approach grade would result in a huge increase in fill and impacts to adjacent properties. We recommend installing advance warning signs, warning signs and pavement markings at the approach of this curve.

A Design Waiver for stopping sight distance at the crest vertical curve in this location is requested for the project.

The second location is the horizontal curves within the proposed truss bridge structure between Sta. 556+15 and Sta. 562+25. Due to the proposed truss structure design, tangent sections with angle points at the support piers are used to generally follow the proposed path alignment. The required stopping sight distance on the bridge structure is 189.3' for the 4.5% descending grade and 118.7' for the 4.5% ascending grade. The following is a list of the angle point locations on the bridge structure that don't meet the required stopping sight distance, and the provided SSD for the ascending and descending grades:



Angle Point	Descending Rider				Ascending Rider			
	Descending Grade	Design Speed	Req'd SSD	Actual SSD	Ascending Grade	Design Speed	Req'd SSD	Actual SSD
Pier 1	4.50%	20	189.3	139.7	4.50%	18	118.7	141.3
Pier 3	4.50%	20	189.3	122.2	4.50%	18	118.7	152.9
Pier 4	4.50%	20	189.3	210.7	4.50%	18	118.7	79.7
Pier 5	4.50%	20	189.3	97.9	4.50%	18	118.7	85.2
South Abutment	4.50%	20	189.3	70.8	4.50%	18	118.7	79.7

VHB looked at what it would take to bring the path on the bridge into compliance with the design criteria. This would involve flattening the curve of the alignment, which would extend the length and cost of the bridge structure and would increase both temporary and permanent impacts to the surrounding wetlands. In order to address the inadequate stopping sight distance, the design proposes to install advanced warning signage at the approach of the bridge curves.

A Design Waiver for stopping sight distance at the horizontal curve in this location is requested for the project.

# Traffic Conditions

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## Existing Roadway Traffic Volumes

While the majority of the proposed bikeway involves converting an existing former railroad bed to a shared use path, several sections require on-road bike lanes or adjacent to the road separated bicycle facilities. There are four locations where the bikeway crosses the roadway. A warrant analysis was conducted at these locations to determine whether specific traffic control (such as a full traffic signal or High Intensity Activated Crosswalk Signal (HAWK)) would be warranted. A review of crash data was completed for all on-road or adjacent to the road bikeway segments to determine whether any documented safety deficiencies currently exist. The traffic memo is included as an appendix to this document. Note, when the traffic memo was developed and submitted, Rectangular Rapid Flashing Beacons (RRFBs) were recommended. Recently, the FWHA has rescinded approval of these devices. In the current plans, RRFB devices have been replaced with pushbutton activated warning devices conforming to the detail and specifications provided by MassDOT as the desired replacement for RRFBs.

To identify current traffic flow characteristics and speed profiles, daily traffic volumes and vehicle speeds were collected using 72-hour automatic traffic recorders (ATRs) over a 72-hour period at five locations:

- › River Street – east of Wedgewood Avenue
- › Concord Road – south of Middlesex Turnpike
- › Middlesex Turnpike – south of Concord Road
- › Technology Park Drive – east of Concord Road
- › Spring Road – east of Concord Road.

The traffic volume counts are summarized as follows:

**Table 1 Existing Traffic Volume Summary**

Location	ADT <sup>a</sup>	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
		Volume	K Factor <sup>b</sup>	Dir. Dist. <sup>c</sup>	Volume	K Factor	Dir. Dist.
River Street east of Wedgewood Avenue	7,900	450	5.7%	53% SB	760	9.6%	54% EB
Concord Road south of Middlesex Turnpike	26,900	2,120	7.9%	60% SB	2,315	8.6%	53% SB
Middlesex Turnpike south of Concord Road	14,800	1,245	8.4%	68% SB	1,410	9.5%	69% NB
Technology Park Drive east of Concord Road	4,800	500	10.3%	94% EB	425	8.8%	78% WB
Spring Road east of Concord Road	5,100	460	9.1%	82% EB	415	8.2%	70% WB

Source: VHB based on automatic traffic recorder counts conducted in April 15-16, 2015.

Note: Peak hours do not necessarily coincide with the peak hours of turning movement counts.

- a. Average Daily Traffic volume expressed in vehicles per day.
- b. Represents the percent of daily traffic that occurs during the peak hour.
- c. Directional distribution of peak hour traffic.

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# Proposed Alignment

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## Bike Path Alignment

The Yankee Doodle Bike Path alignment was developed during an alternatives analysis process in coordination with the Yankee Doodle Bike Path Committee and the Town of Billerica. The preferred alignment is a combination of a shared use path adjacent to local road, on-road shared lane sections and an off-road shared use path that mostly follows the abandoned Boston and Maine rail road bed.

Section 1 begins at the proposed entrance of the redeveloped Billerica High School on River Street and follows on the north side of River Street to the west where it intersects the abandoned railroad alignment. It then travels west along the property line of The Inhabitants of the Town of Billerica property, parallel to the Concord River.

Section 2 runs west along the property line of the Cabot Property, parallel to the Concord River from Richardson Street Extension to Concord Road and then crosses Concord Road and runs along the Federal Street office park until it intersects the abandoned railroad alignment. Here a spur of the bike path runs north to the intersection of Middlesex Turnpike where a trail head and parking area are proposed.

Section 3 runs from the trail head at Middlesex Turnpike along the abandoned railroad ROW to junction of the abandoned railroad ROW and State Highway Layout No. 4072. The bike path then runs southeast adjacent to Route 3 through State Highway Layout No. 4072 and 3937. A bridge structure is being proposed within State Highway Layout No. 3937, behind the noise wall adjacent to Route 3, and connects to the Elliot Street/Orchard Street Bridge (B-12-026), where the path continues to Section 4.

Section 4 crosses Route 3 as a two-way separated bike lane on the north side of Elliot Street/Orchard Street to the intersection with Technology Park Drive. From this point the path splits. A spur continues, as an on-road shared facility, down Orchard Street to the entrance of the Middlesex Community College. The path also follows as a SUP (side path) on the north side of Technology Park Drive. West of the intersection with Wall Street the bike path crosses Technology Park Drive and continues down Astrig Way to the intersection with Springs Road. It then crosses

Springs Road and follows the formerly abandoned railroad ROW, owner currently unknown, to the Bedford town line.



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## Roadway Crossings – General Approach

Overall, the crossing designs and alignments encourage both motorists and trail users to conform to Commonwealth of Massachusetts traffic laws regarding motor vehicles, bicycles and pedestrians.

The MassDOT Project Development & Design Guide notes that traffic signals should be considered where trails cross roadways with traffic volumes greater than 10,000 vehicles per day.

Traffic signal warrants were performed at the four study area roadway crossings identified above using 2016 existing volumes. Based on the collected traffic, pedestrian, bicycle, and crash data, the minimum warrant criteria are not met.

Additionally, a Pedestrian Hybrid Beacon Warrant analysis was conducted. Based on the roadway volume along roadways where crossings will be provided, warrants for pedestrian hybrid beacons are not met.

At the intersections of the bike path and a public roadway, the right-of-way priority is assigned to the vehicles in the roadway with a STOP condition on the path approaches. Crosswalks will be marked on the roadway for path crossings. The path approach alignments will place path users in the path of the crosswalk where motorists normally expect them to be. Appropriate warning signs and markings are proposed on both the path and roadway approaches to alert both motorist and the path users of the crossing.

At unsignalized locations where the proposed bikeway would cross the roadway, pushbutton activated warning beacons and advance crosswalk warning signs should be installed. It is recommended the town monitor these locations for increases in pedestrian/bicycle and vehicular volume to verify if additional measures are warranted in the future. If, once the bikeway is established, pedestrian and bicycle volumes exceed expectation, a pedestrian hybrid beacon may be warranted at a future time.

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## Parking

Shared-use paths have proven to be an attraction even for users who must drive to reach them. Planned parking facilities should be established along the trail to accommodate these users and to allay neighborhood concerns regarding random on-street parking. Parking and access to the path will need to be compliant with ADA regulations. As part of this project parking facilities are proposed at the following locations:

- A new four car parking lot on the south side of Middlesex Turnpike within the Massachusetts Electric Company Easement.

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## Pavement Markings and Signage

Standard regulatory and warning signs are incorporated into the trail design to alert trail users to potential conflicts and to convey regulatory messages.

In general, uniform application of standard traffic signs, modified for use on trails as described in the MUTCD, have been utilized to the greatest extent possible to provide regulatory, warning and guidance information to path users. Over signing is not recommended as too many signs decrease the sign's effectiveness, clutter the landscape and present sign posts as fixed object hazards to bicyclists.

Dashed centerline pavement markings are proposed along the trail to separate opposing traffic flows. Solid lines are proposed to indicate where trail users should not cross the center line, such as sharper turns, intersection approaches and trail entry points.



# Structures

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## Proposed Structures

The Yankee Doodle Bike Path project will involve the construction of three boardwalk crossings over the wetlands , two stream crossings, and a bridge structure to make up the 25-foot elevation difference between the path along the Route 3 corridor and Elliot Street/Orchard Street.

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### Boardwalk

Based on the survey and site visits it is anticipated that the project will require three boardwalk crossings. The first crossing is from Station 312+70 to Station 312+40, the second is from Station 404+64 to Station 405+24, and the third crossing is from Station 531+90 to Station 533+75. The proposed boardwalk crossings are recommended to be constructed with 14-foot wide pressure treated dimensional lumber and Ipe wood decking. It is recommended that the substructures be constructed with helical piles to minimize impacts to the wetlands. The geotechnical research and design of the boardwalk will be developed in the next design phase. The design vehicle for the structure is a single H-15 (maintenance/emergency vehicle).

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### Drainage Crossings

Based on the survey and site visits it is anticipated that the project will require two stream crossings one at Sta. 220+30 and the other at Sta. 307+10. At this stage VHB has done a preliminary evaluation of the existing conditions and identified conceptual span length requirements for each location. In general, the existing crossings vary from a 36in diameter pipe culvert to open channels with roughly 25-30 feet between the tops of the banks. It is envisioned that structures will consist of one precast four-sided box culvert, and one precast three-sided structure.

The new structures are anticipated to be designed in accordance with AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges for pedestrian

loading and H10 loading, intended to represent an occasional emergency vehicle. All structures are expected to receive a 42-inch high bicycle railing. The width of the path between guardrails is expected to be 14 feet, allowing for a 10 feet travel lane and 2-foot shoulders.



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## Bridge Structure

The proposed path alignment on the east side of the Route 3 ROW is 25 feet lower than the elevation of Elliot Street/Orchard Street. An ADA compliant bridge structure needs to be designed and constructed to make up the elevation difference. A prefabricated steel truss superstructure is recommended at this location, with a maximum grade of 4.5% and level landings for turning. Geotechnical investigation will be completed during the development of the next design phase. After which the structure type will be further refined.

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# Drainage

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## Existing Conditions

The off-road sections of the Yankee Doodle Bike Path primarily follow the abandoned Railroad right-of-way. The proposed path width is generally narrower than the existing railroad top of embankment width. The existing rail bed drains off the embankment and infiltrates into the surrounding areas.

No existing drainage issues were evident or reported along the alignment.

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## Summary of Proposed Improvements

Existing drainage patterns will be maintained to the greatest extent practical. In fill sections, the trail typical section will be constructed so that drainage will flow off of the trail, through the proposed paved waterways and stone for pipe ends channels, and not collected, i.e. country style drainage. Circular pipe culverts are proposed to allow drainage to pass from one side of the trail to the downstream side, along existing drainage flow patterns.

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# Environmental Issues

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## Environmental Resources

The Designer conducted an evaluation of natural resources along the project corridor. The evaluation included several tasks, including:

- A review of existing mapping, surveys, aerial photos, and other available sources of data;
- Field survey of the project corridor with identification of significant plant communities including wetlands, rare species and exotic plant infestations; and
- An assessment of rare species habitat potential within the project area.

The purpose of the evaluation was to identify sensitive resources that could be affected by the construction and/or operational use of a shared-use trail.

Review of the project area by VHB environmental scientists and have determined a number of local, state or federal jurisdictional wetland resources are either within the vicinity of the project or will be impacted by the project. This includes crossings of several intermittent stream channels. A Notice of Intent will need to be filed with the Billerica Conservation Commission for approval of the proposed work within resource areas and buffer zone. Impacts to wetland resource areas can be reduced by the use of boardwalks to span over vegetated wetland areas.

None of the project area is within Priority and Estimated Habitat as mapped by the Massachusetts Natural Heritage and Endangered Species Program (NHESP).

Portions of the project area are in the vicinity of Nutting Lake are within the 100-year FEMA designated floodplain.

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## Contaminated Soil

An online search of MaDEP waste site cleanup records has been conducted as part of the Early Environmental Coordination. Several release sites were identified in the vicinity of the project. Contaminants of concern include No. 4 fuel oil, TCE, perchlorate, petroleum constituents, and PAHs in soil and groundwater. Of particular concern is contamination associated with CR Bard Facility at 129 Concord Avenue based on the current regulatory status of the property and the close proximity to the Project.

Should any OHM be encountered during Project excavations, this work may need to be conducted with the appropriate regulatory approvals (for instance in accordance with provisions of the MCP, 310 CMR 40.0000). Soil excavation may need to be conducted under a Release Abatement Measure (RAM) or Soil Management Plan. Should export be required, proper shipping documentation such as Material Shipping Records (MSRs), Bills of Lading (BOLs), and manifests would be needed. In addition, a site specific Health and Safety Plan (HASP) should be prepared for on-site workers, and workers that may encounter contamination should have a valid OSHA 40-Hour HAZWOPER certification.

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## Massachusetts Environmental Policy Act

The Massachusetts Environmental Policy Act (MEPA) regulations have been reviewed for thresholds pertaining to land, rare species, wetlands, waterways, and tidelands, transportation, and historical and archaeological resources. The project will use state funding for construction and does not appear to exceed any review thresholds. However, the project will cross several conservation parcels. Actions related to Article 97 or release of interest of land held for conservation will be investigated and discussed with the Town of Billerica. At this time, these actions are not anticipated. In addition, public trees are located on the plans but trunk diameter has not been identified. The issues of impact to Article 97 and conservation lands and tree removal will be further investigated and if needed, an ENF will be prepared and filed with the MEPA Office prior to the 75 percent submission.

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## Cultural Resources

As part of the Early Environmental Coordination, a description of the Project, map of the alignment and request for comments was provided to the Billerica Historic Districts Commission. Copies of the letter were also sent to the Massachusetts Historical Commission (MHC). Continued cultural resource coordination will be conducted by the Cultural Resources Unit of MassDOT.

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## Summary and Recommendations

The evaluation included several tasks to identify sensitive natural resources within the project area that could be affected by the construction and/or operational use of a shared-use trail. Though a variety of environmental resource areas are found along the ROW, none appear to be a particular constraint to the development of the trail. Recommendations for design considerations or further study include the following:

- Coordinate with the Town of Billerica to determine the status of the conservation lands to be crossed by the project and whether this triggers the need for an ENF.
- Since portions of the Project alignment are not within existing railroad embankment or other developed areas, a survey of the right-of-way may be needed for potential archaeological resources. This needs to be discussed with the MHC and suitable permitting will be needed to allow a survey along the alignment.



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# Construction Phasing

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## Construction Cost

The preliminary construction cost for the Yankee Doodle Bike Path is estimated to be \$9,280,000.00. This cost estimate includes all work (clearing, grading, pavement structure, railings, culverts, boardwalk, ramp system, walls, landscape, signs and pavement markings) associated with the complete construction of the path as shown on the 25% design plans. The cost does not include MassDOT administrative contingencies, cost of obtaining right-of-way, nor the relocation of existing utilities.

A 25% contingency has been incorporated into the cost to account for details that have yet to be designed.

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## Construction Phasing

This project is Phase 1 of the ultimate Yankee Doodle Bike Path Alignment. The Town is investigating an alignment for Phase 2 of the bikeway that will connect from this northern end of this project to the Bruce Freeman bikeway at the Chelmsford/Lowell town line.

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# Maintenance and Operations

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## Maintenance

Maintenance of the Yankee Doodle Bike Path, will be the responsibility of the Town of Billerica. The town has agreed to maintain the bike path, the parking lot and provide regular mowing of the path shoulders.

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## Operations

The Town's vision of the Yankee Doodle Bike Path is as a non-motorized shared-use facility for use by bicyclists and pedestrians. The design complies with accepted industry standards and criteria for a bicycle and pedestrian facility and encourages users to comply with uniform traffic operations and laws. Thus the signs, pavement markings and other amenities are designed to convey that message through the use of common standards of color, shape and graphics as used on typical roadway signs without "oversigning" the natural landscape.

It is recommended that trail use rules be posted at trail access points, as appropriate.

It is recommended that the Town reviews their existing by-laws as they relate to rail trails and shared-use facilities to verify if changes or additions are needed.