



Minuteman West Bikeway

Rail to Trail



Feasibility Study

Submitted to
Town of Bedford

Submitted by
Vanasse Hangen Brustlin, Inc. 

November 4, 2005

Introduction

The Town of Bedford Department of Public Works has retained VHB to complete the following feasibility study to construct a formal bike path on the West Bedford Reformatory Branch Trail. This study will identify key issues such as design and environmental constraints for the path, alternative path materials, right of way requirements, roadway crossings and treatments, regional connections, parking facilities, probable design scope and construction costs, and funding resources for the town to consider for the design and construction cost of this bike path.

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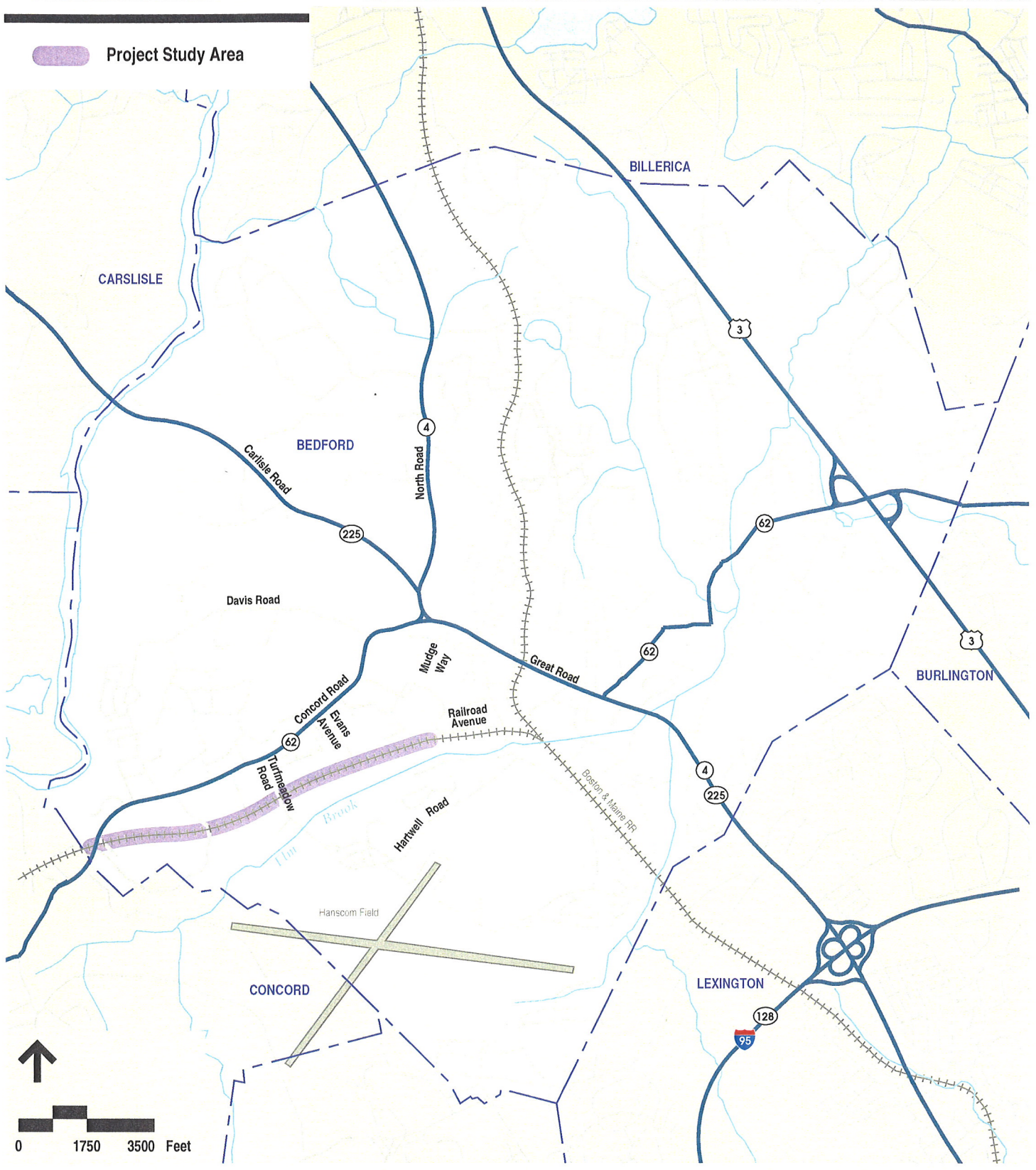
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Project Study Area
Bedford Bike Path
Feasibility Study
Bedford, Massachusetts

Figure 1

Existing Conditions

The Reformatory Branch Trail in West Bedford extends westerly from Railroad Avenue to Concord Road for an approximate length of 1.95 miles. The trail extends along the former Boston and Maine Railroad Reformatory Branch alignment through a heavily wooded area of Bedford. Currently, this trail is frequented by bicyclists and pedestrians, and is a popular recreational path for residents of Bedford. A project locus is shown on Figure 1.

As mentioned previously, the trail alignment is along the former railroad alignment. Evidence of the railroad continues to be visible such as markers, and other attributes, and should remain through design development. VHB conducted a field walk on August 16, 2005 with representatives from the Town of Bedford DPW, and the Bedford Bike Committee to determine the current condition of the path. Features such as adjacent wetlands, condition of the trail alignment, development encroachment, roadway crossings, constructability, and connectivity were examined during the site walk. The findings of the site walk are provided in this section as well as information regarding regional path links, and points of interest.

Cross section and drainage

The existing cross sectional width of the rail bed varies from 8 to 12 feet, on an elevated embankment. The profile of the rail bed is generally level. The horizontal alignment of the rail is generally straight. Abandoned drainage ditches line the path at the toe of slope along the easternmost section of the path. There is no formal drainage system along the westernmost section of the path.

There are a number of cross culverts under the embankment that hydrologically connect abutting wetlands and streams along the westernmost section of path. The culverts are constructed of either cement concrete or granite slabs. There is no obvious evidence of failure at any of the culverts observed.

Surface Condition

The trail surface is mostly gravel, with a visibly worn foot-path in various levels of repair, but as a whole, passable for foot traffic and off-road type bicyclists. Low lying vegetation has grown onto the rail bed from adjacent land areas. There is little evidence of rail or ties along most of the path alignment.

During the 1970's the town constructed a sewer main line along the rail alignment. The construction activities included the removal of the rail and ties, and also the removal of embankment that may have been potentially contaminated through rail road operations. Sewer manhole covers are visible on the surface of the rail bed.

Parking

At each end of the trail, there is a town owned gravel area that is open for off- street parking. Both areas are not signed or striped for parking, and has adequate room for vehicles to park to use this trail. During peak use times, such as summer weekends, both areas are filled to capacity with trail users.

Points of Interest

The trail passes through several points of interest. The Elm Brook Conservation Area is located on the north side of the path along South Road. The Hartwell Forest trail connects to this trail within the Elm Brook Area. The Mary Putnam Webber Wildlife Preserve extends along south side of the trail. The Dellovo Conservation Area and the Vanderhoof Conservation Area are both adjacent to the north side of the path. Figure 1 presents the location of the trail, and the adjacent points of interest.

Regional Connections

There are connections to other destinations in the path vicinity. The Reformatory trail will allow for the extension of the Minuteman Bike path to Concord Road. The two trails can be connected through the use of Railroad Avenue as an on-road link.

There are future plans to extend this path into Concord, and ultimately having a regional connection into both the Bay Circuit Trail and the Bruce Freeman Rail Trail. Due to right of way constraints along this rail line beyond Concord Road, the long term implementation plans for these connections are unknown.

The Narrow Gauge trail is also adjacent to the western end of the trail. The Bedford High School, Middle School and Library are close to the trail to the south. The town is also planning on constructing a YMCA on Railroad Avenue in the vicinity of the trail.

Right of Way and Encroachments

The Town of Bedford owns most of the railroad right of way from Railroad Avenue to Concord Road. The rail alignment is privately owned for a small section at the westernmost terminus of the trail. The Town owned right of way varies in width from 68 feet at the narrowest point to 77 ft, at the widest point. There is an existing sewer easement on the trail for the length of this project.

Since the rail line was abandoned, and the land was purchased by the town, there has been residential development constructed or planned adjacent to the trail, but not encroaching on the alignment.

The rail alignment intersects with only one public street in the project area. This intersection is with Hartwell Road and occurs at a 90 degree angle. Evans Avenue and Turf Meadow Road terminate at the railroad right of way line.

To the east of the Hartwell Road at-grade crossing, the Hartwell Road Water Treatment Plant was constructed within the rail line right of way. The driveway to the treatment plant has been constructed over the trail alignment.

Wetlands

There are extensive wetland resource areas along the alignment adjacent to the existing railroad embankment (See Figure 2). The railroad alignment includes a linear embankment consisting of fill materials that creates an elevated surface above the adjacent land area and wetland. Wetland boundaries extend to the toe of the slope on either side along much of the route. The wetlands in the vicinity of the project area abut Elm Brook and Mongo Brook and are therefore regulated as Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act (WPA). At the toes of the embankment slope are either wetlands or man-made ditches that support wetland vegetation and hydrology. The ditches and wetlands were dry at the time of the site inspection, but stained leaves on the ground surface indicate extended seasonal flooding or ponding of surface water. None of the railroad embankment appeared to be jurisdictional wetland; however, the 100-foot buffer zone from the wetland boundaries extends across the railroad embankment for much of its alignment.

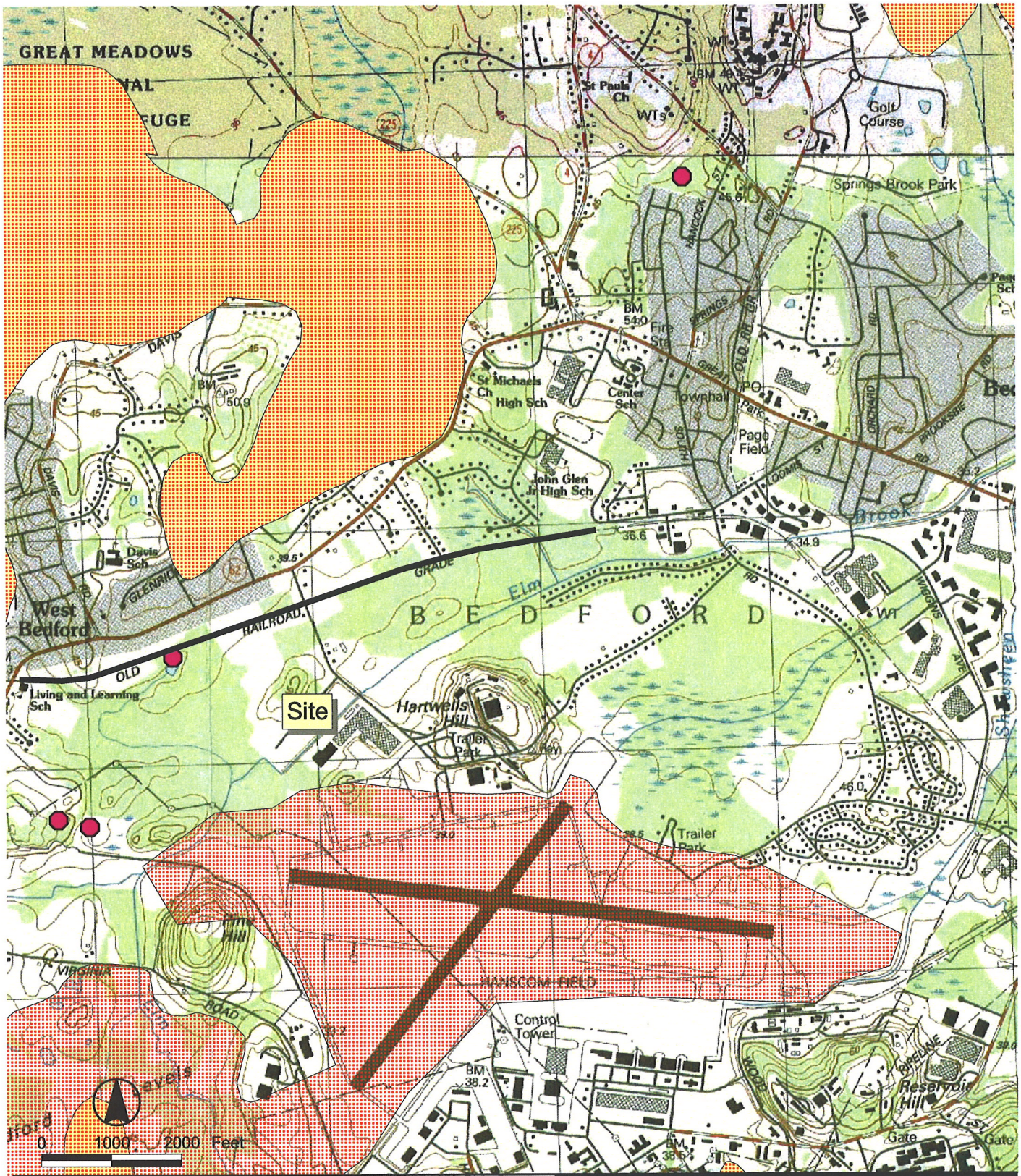
Streams: The proposed bike path roughly parallels the north side of Elm Brook for much of the alignment but is 500 feet away at its closest point by Railroad Avenue. The path crosses Mongo Brook, a tributary to Elm Brook about 900 feet west of Railroad Avenue. The Mongo Brook is conveyed under the embankment by an existing culvert crossing and water was observed flowing during the site inspection. Elm Brook and Mongo Brook are both shown as heavy blue lines on the USGS topographic map and therefore are considered perennial streams or regulatory "rivers" by the Massachusetts Department of Environmental Protection (DEP) pursuant to the Wetlands Protection Act (WPA). Several drainage ditches are present alongside the embankment. These were dry at the time of the inspection (August 2005) but may have a gradient sufficient to create a flow of water at some time during the year. In addition, several small crossing culverts were noted along the alignment connecting the drainage ditches under the railroad embankment to prevent water accumulating on the high side.

Riverfront Area: Since Elm and Mongo Brooks are rivers, Riverfront Area resource, subject to the jurisdiction of the WPA extends from the Bank or Mean Annual High Water limit of the brooks out 200 feet.

Floodplain: An extensive floodplain is associated with Elm Brook, and Mongo Brook in the vicinity. Floodplain as illustrated on FEMA floodplain mapping extends to the railroad alignment from Mongo Brook and west for approximately 1300 feet, but does not cross the railroad alignment. However, at Mongo Brook, the floodplain is illustrated as crossing the railroad for a short distance at elevation 117 feet (NGVD). The actual boundary of the 100-year floodplain should be determined based on topographic survey in the vicinity of the project. Copies of the FEMA Floodplain maps are included in the appendix.

Vernal Pools and Protected Habitat: According to the 2005 Natural Heritage and Endangered Species Program (NHESP) GIS database, none of the proposed bike path alignment is within identified priority habitat of rare species or estimated habitat of rare wildlife. However, a Certified Vernal Pool has been identified on the southern side of the alignment west of Hartwell Road. According to the NHESP mapping, the vernal pool appears to be a large open water body that is approximately 150 feet south of railroad embankment. Copies of the NHESP maps are included in the appendix.

Zone II Aquifer: Based on Massachusetts GIS mapping for Water Supply Protection Areas, nearly the entire length of the proposed project is within mapped Zone II aquifer for the Town of Bedford.



Vanasse Hangen Brustlin, Inc.

Source: MassGIS USGS Lexington, Massachusetts Quadrangle
 Massachusetts Natural Heritage Atlas 2003 Edition




-  NHESP 2005 Priority Habitats of Rare Species
-  NHESP 2005 Estimated Habitats or Rare Wildlife
-  Certified Vernal Pools

Figure 2
Natural Heritage Endangered Species Map

Design Development

Project Objective

The purpose of this study, as well as the initiative of the Bedford DPW and the Bedford Bike Committee is to reconstruct this bike trail into a bike facility that is accessible for non-motorized use. The designed facility should fit into the surrounding environment, highlighting the natural, scenic areas surrounding the path; be of a uniform and safe design, with access points and connections to other paths, destinations and parking; and to ensure safe street and driveway crossings.

Design Criteria

In order to construct a public transportation facility, certain criteria must be met. The Mass Highway Design Manual, the 1999 Mass Highway guidelines "building a better bikeway", the 1999 American Association of State Highway and Transportation Officials (AASHTO) "Guide for the Development of Bicycle Facilities, the Americans with Disability Acts of 1990, the American Access Board, The 2003 Manual on Uniform Traffic Control Devices (MUTCD) are industry standards that are applicable for the design of bicycle facilities.

When designing a bike facility, each design component should be carefully examined. Proper horizontal and vertical sight lines should be established, with special consideration for avoiding view obstructions such as signage poles, benches, etc. at the edge of the path. Bicycle design speeds should also be evaluated when designing a bike path. Shoulders for rest and stopping should be provided along the edge of the path. Roadway crossings need to be considered carefully to provide a safe means of passage for both the path users and vehicles. Surface materials should also be considered, both for functionality and long term facility maintenance.

Path Cross Section

The cross sectional width for bike paths can vary from 8 feet, where there is minimal pedestrian traffic expected to 14 feet, when accommodations must be made for users such as inline skaters, and for maintenance vehicles. Under most conditions, the width of a 2-way bike path is 10 feet.

Graded shoulders should be designed adjacent to the path on both sides, as mentioned above. At a minimum, the width of the graded shoulder area should be 2 feet. The shoulder can be either paved, or unpaved (with materials such as grass, stone dust, crushed stone), and should have a minimum of a 3 foot clear zone from the inside edge of the shoulder to any obstruction, such as trees, fences, signs, benches, guard rail, etc. Where the embankment has a vertical drop off that is

steeper than a 1 vertical to 3 horizontal slope (1:3), such as when the path is adjacent to drainage ditches, a wider clear zone (such as 5 feet) should be considered. If the embankment has a vertical drop off that is steeper than 1 vertical to 2 horizontal (1:2) then a physical barrier such as dense shrubbery, railing or fencing should be considered along the top of the embankment. The height of the barrier is recommended to be a minimum of 3.5 feet high. Figure 3 presents a typical bike path cross section for off-road paths.

In order to meet the requirements of the Americans with Disability Act (ADA) of 1990, the path cross slope can not exceed 2 percent, to avoid difficulties pedestrians using wheelchairs, walkers, canes, strollers may face with greater slopes.

Sight Distance and Design Speed

The path design must allow for bicyclists to have an opportunity to see and react to unexpected circumstances. Minimum stopping sight distance is dependent on design speed, and should be calculated at the horizontal and vertical curves of the facility, to insure safe breaking distance on shared use paths. Stopping sight distance should also be calculated at roadway crossings for both the path and the roadway.

As mentioned earlier, a bike path should be designed for a selected speed that is at least as high as the preferred speed of the fastest bicyclist using the facility. In general, a 20 mph design speed should be used. In areas where different path users frequent, such as in parks, a lower design speed should be used.

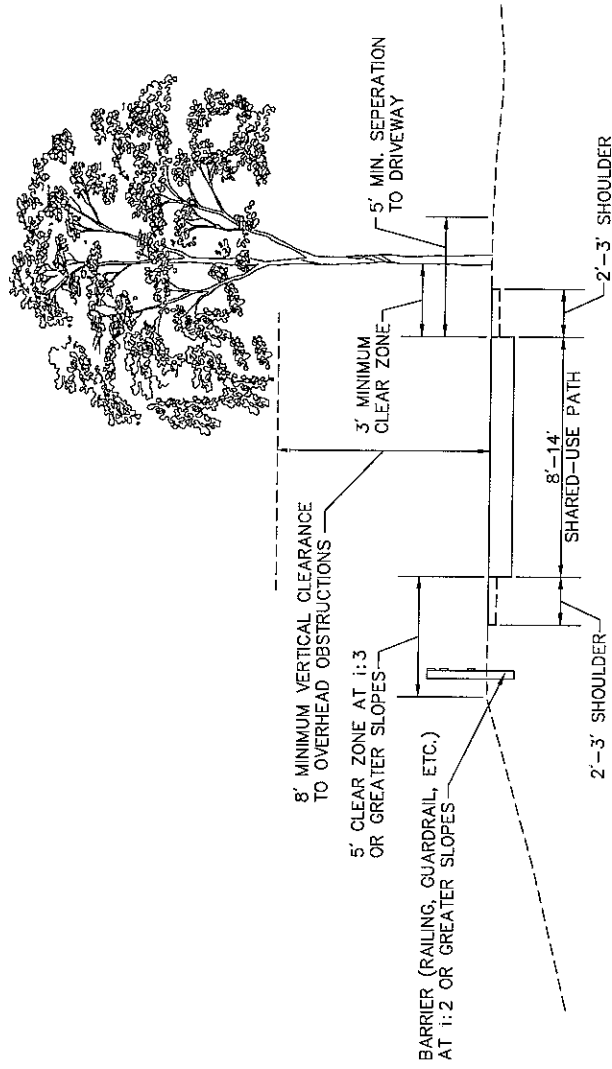
Roadway Crossings

As mentioned earlier in this report, the path intersects Hartwell Road. The existing crossing is an un-signalized, unsigned mid-block crossing. In the design development, adequate sight distance should be provided at this location along both the roadway approaches to the path, and the path approaches to the roadway. Advanced warning signs and pavement markings on both roadway and path should be provided as part of the design, in accordance with MUTCD. Careful consideration must be made when designing roadway crossings of paths, due to the potential conflicts between motorized vehicles and path users. Detail of typical roadway crossings is presented in Figure 4.

There are other options for roadway crossing treatments that may be considered as part of the design development. Options such as traffic signals, or other warning devices could be considered for crossings on high volume roadways, or on trails that have a large number of users. Upon initial review, it appears that Hartwell Road will not require a traffic signal at the path crossing.

The path alignment extends along the driveway to the Hartwell Road Water Treatment Plant. A minimum of 5 foot separation should be designed between the

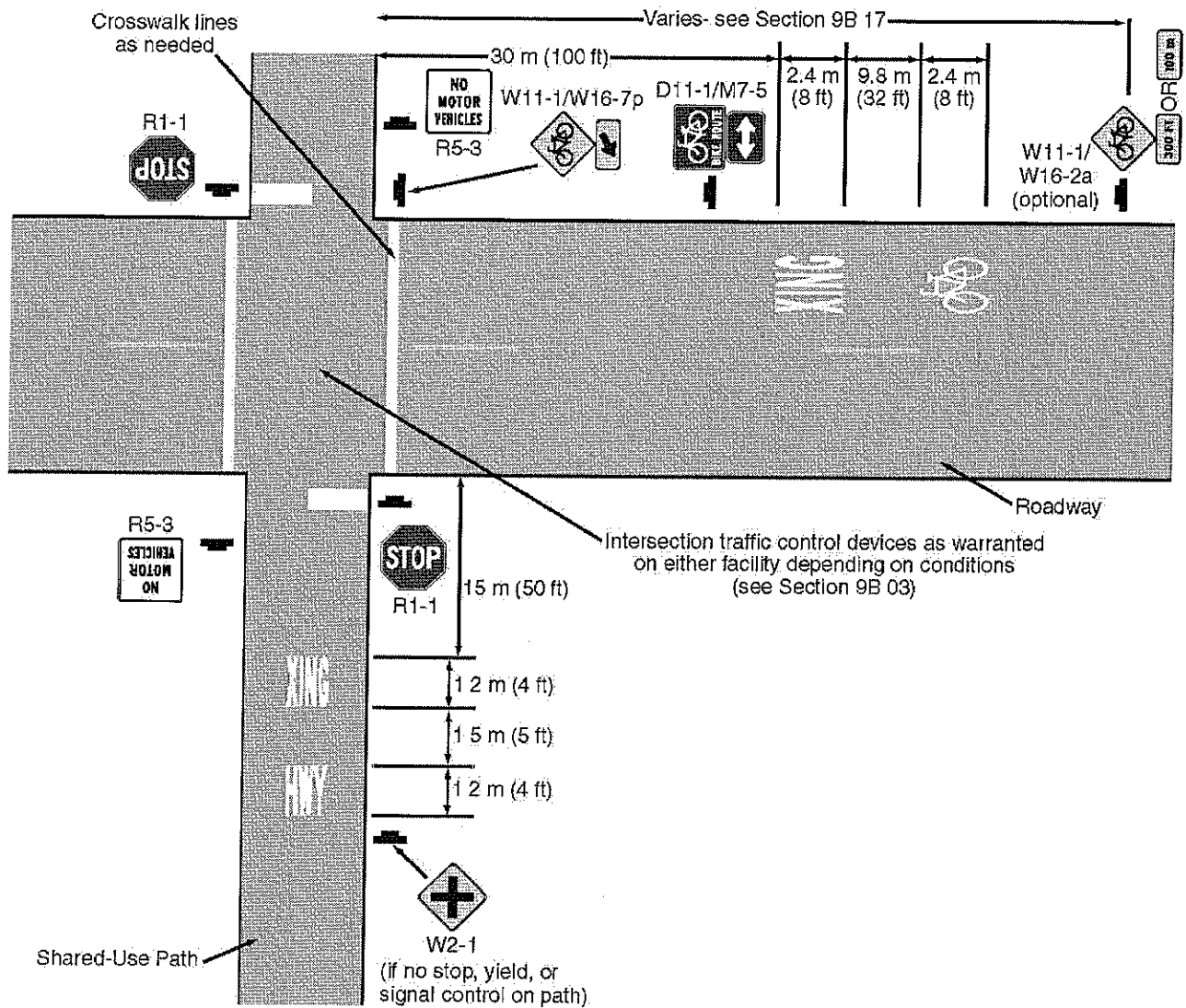
path and the driveway to this facility, to provide adequate buffers between motor vehicles and path users.



SHARED USE PATH SECTION
NTS

SHARED-USE PATH DESIGN CRITERIA DETAIL	
WEST BEDFORD BIKE PATH	
SCALE: N.T.S.	DATE: NOV 2005
DRAWN BY: JBN	
APPROVED: PGD	JOB #: 09393

Figure 9B-7. Examples of Signing and Markings for Shared-Use Paths



HARTWELL ROAD
PATH CROSSING

WEST BEDFORD
BIKE PATH

FROM: MANUAL ON UNIFORM
TRAFFIC CONTROL DEVICES,
2003 EDITION

SCALE: N.T.S.

DATE: NOV 2005

DRAWN BY: JBN

APPROVED: PGD

JOB #: 09393

Path Materials

The selection of surface materials should consider long term durability, safety, accessibility, construction cost and maintenance. The path surface should be firm, stable, and slip resistant under various weather conditions.

There are various surface materials that can be used in outdoor environments. Shared-use paths are generally paved with asphalt or concrete, but may also use prepared surfaces such as crushed stone or soil stabilizing agents mixed with native soils or aggregates. High use trails passing through developed areas or fragile environments are commonly surfaced with asphalt or concrete to maximize the longevity of the shared-use path surface and promote bicycle and inline skating use.

The surfacing material on the shared-use path significantly affects which user groups will be capable of negotiating the terrain. Shared-use paths that have been built using crushed aggregate generally are unusable by inline skaters and slow down the speed of bicyclists. Paved surfaces should be provided in areas that are subject to flooding or drainage problems, in areas with steep terrain, and in areas where bicyclists or inline skaters are the primary users.

Rest Areas

There are many vistas along the trail that should be considered as part of the design development. Path rest stops or turn outs can be designed along long uninterrupted paths, such as this bike path. The design of the turnouts can vary from a widened clear zone to allow for path users to move out of the way of other path users, to picnic and landscaped facilities with tables, benches, and trash receptacles that will allow for path users to enjoy the surrounding environment. If rest stops are part of the path design, long term maintenance costs should also be considered.

Periodic rest areas are beneficial for all shared-use path users, particularly for people with mobility impairments that expend more effort to walk than other pedestrians. Rest areas are especially crucial when grade or cross slope demands increase. The frequency of rest areas should vary depending on the terrain and intended use. Rest areas provide an opportunity for users to move off the trail, instead of remaining on the trail to stop and rest. If a rest area is only provided on one side of the trail, it should be on the uphill side. Rest areas should have the following design characteristics:

- Grades that do not exceed 5 percent;
- Cross slopes on paved surfaces that do not exceed 2 percent and cross slopes on non-paved surfaces that do not exceed 5 percent;
- A firm and stable surface;
- A width equal to or greater than the width of the trail segment leading to and from the rest area;
- A minimum length of 5 feet;

- A minimal change of grade and cross slope on the segment connecting the rest area with the main pathway; and
- Accessible designs for amenities such as benches, where provided.

Benches can be particularly important for people with disabilities, who may have difficulty getting up from a seated position on the ground. Some benches should have backrests to provide support when resting, and at least one armrest to provide support as the user resumes a standing position. Accessible seating should provide the same benefits as seating for users without disabilities. For example, providing a wheelchair space facing away from the intended view would not be appropriate.

Root Barriers

To prohibit the growth of roots into the path surface, root barriers should be included in the path design. Root barrier should be installed adjacent to the bike path pavement. The Root Barrier is to be placed into an excavated trench, adjacent to each path shoulder, held vertically, backfilled and compacted with gravel borrow sub base or acceptable material removed as a result of the trenching operations. Typical barrier materials are 0.60 mil polystyrene plastic, 36" deep, supplied or cut to a minimum of 10-foot long segments. A detail of this type of root barrier is shown on Figure 5.

Drainage

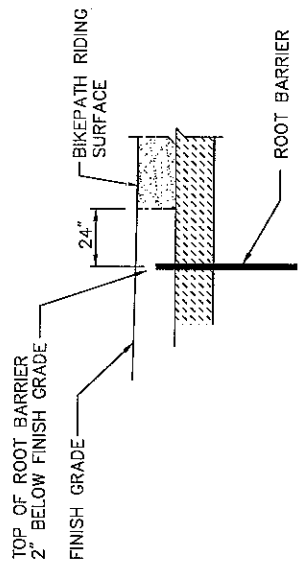
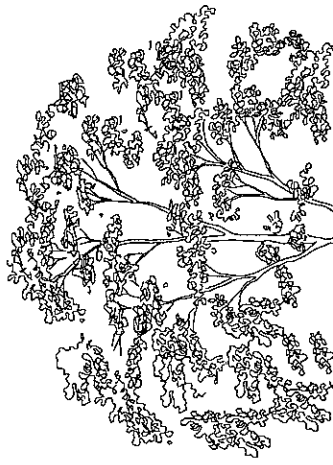
The drainage ditches on either side of the path should be designed to collect the runoff from the path surface and either infiltrate the runoff, or convey it to an existing stream, or other water bodies. Drainage structures, such as catchbasins can be used to collect drainage at roadway crossings and connected to adjacent drainage systems. Bicycle safe grates and covers should be used if catchbasins are needed in the design.

Path End Treatments and Access Points

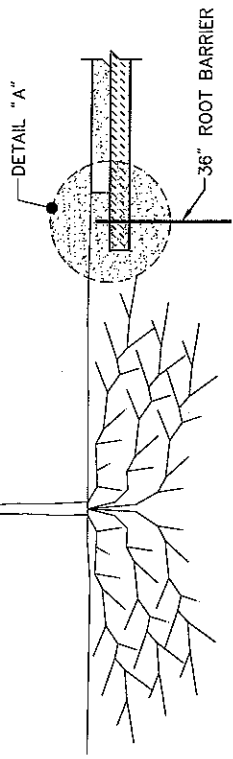
Creating a shared-use path that provides access for people with disabilities involves more than the trail itself. Ensuring that an accessible pathway leads up to the shared-use path must also be considered. In addition, all access points along the shared-use path should be accessible to people with disabilities.

Bollards or gates should be used at the path ends to prohibit motorized vehicles from entering onto the path, but allow for adequate space for the path users to enter onto the facility. If emergency vehicles require passage onto the path, the use of temporary bollards or gates should be considered at the path ends.

Signage is also essential at the path ends. Path allowed and prohibited uses, hours of operations, maps, and points of interests can be displayed at the path ends using signage.



DETAIL "A"



RB ROOT BARRIER TREATMENT
NOT TO SCALE

ROOT BARRIER DETAIL	
WEST BEDFORD BIKE PATH	
SCALE: N.T.S.	DATE: NOV 2005
DRAWN BY: JBN	
APPROVED: PGD	JOB #: 09393

Parking

Adequate parking should be provided at both ends of this trail to eliminate the potential of path visitors parking along local roads at access points. Currently, there is a gravel parking area at both ends of the trail. The parking areas should be signed, and allow enough room for vehicles to circulate to and from the parking spaces. There should be handicap accessible parking spaces in the parking area, and the surface should be sloped at a maximum of 2% for compliance to ADA, and to provide adequate drainage of the area. Features such as path and informational signage, and trash receptacles should be designed at the parking areas. Fencing or railing should also be designed around the perimeter of the parking area, to separate the parking facility from the path.

Environmental Constraints

WPA and Local Wetland Protection Bylaw

The proposed bike path extension would be constructed on an existing railroad embankment minimizing impacts to the surrounding land area and land uses. Since much of the project site is surrounded by wetland resources, the 100-foot buffer zone encompasses most of the project area. In addition, the project crosses Riverfront Area associated with Mongo Brook and Bordering Land Subject to Flooding as shown on FEMA mapping within the railroad alignment at the Mongo Brook crossing. Since a number of WPA regulated areas are within the project limits and will be altered as part of the bike path construction, authorization of the proposed bike path would require an Order of Conditions from the Bedford Conservation Commission pursuant to the WPA. If the path is constructed by the Town, then the path design and construction will need to comply with the Bedford Wetlands Protection Bylaw. If the Town receives design and construction support from Mass Highway, then the path design and construction will be exempt from complying with the Bedford Wetlands Protection Bylaw. There are no provisions in the WPA regulations (310 CMR 10.00) that provide any special status or relief for a bike path such as a "limited project". Therefore, the project will have to fully comply with the WPA regulations. Issues associated with impact to wetland resource areas will include the following:

Riverfront Area: Alternatives analysis will be needed to demonstrate there are no practicable and substantially equivalent economic alternatives to the project with less adverse effects on the interests of the WPA. The project plus mitigation must also have no significant adverse impact on the Riverfront Area and the interests of the WPA. Generally work other than redevelopment of previously altered Riverfront Area or work associated with a "limited project", alter within the first 100 feet of the Riverfront Area and can only alter 10 percent of the Riverfront Area in the second 100 feet. However, since the project will use a former railroad, it could be argued that this will be a redevelopment of previously altered Riverfront Area and could be allowed.

Bordering Land Subject to Flooding: Federal Emergency Management Agency (FEMA) mapping shows a small amount of 100-year floodplain extending into the project area. The project will need to be designed to provide the same volume of flooding after construction or compensatory storage mitigation will be needed for the

volume that is lost by filling for the project. If compensatory flood storage is needed, the lost flood storage volume must be replaced on an incremental basis (foot-by-foot).

Buffer Zone: There are no specific standards for work in the buffer zone associated with the WPA. The Bedford Wetlands Protection Bylaw includes provisions for a 25 or 50-foot buffer strip to be maintained between any work and the wetland boundary. Since the wetland boundary extends to the toe of the railroad embankment, the project would be unable to comply with this standard. The bylaw regulations allows the Commission to issue a variance of any regulation. The project will require a variance of the Buffer Strip requirement, if it is not constructed by Mass Highway.

Other Agencies

MEPA: Based on a review of the potential bike path design, it appears that none of the Massachusetts Environmental Policy Act (MEPA) thresholds would be exceeded by the bike path project. Therefore, a filing of an Environmental Notification Form (ENF) or Environmental Impact Report (EIR) with the MEPA Office is not required. However, once the project is designed, the review thresholds should be reevaluated for compliance.

DEP Water Quality Certification: Since the project will not alter any vegetated wetland areas, a Water Quality Certification from the Massachusetts Department of Environmental Protection will not be required.

U.S. Army Corps of Engineers: Since the project will not alter any vegetated wetland areas, a Section 404 permit from the Corps will not be required.

U.S. Environmental Protection Agency – National Pollutant Discharge Elimination System (NPDES): The project construction area will exceed 1 acre of disturbed surface. Therefore, construction of the project will require the filing of an NPDES Notice of Intent with the U.S. EPA and the preparation of a Storm Water Pollution Prevention Plan prior to the start of construction. This effort is completed by the contractor hired to construct the project.

Summary

The proposed bike path project will potentially alter regulated wetland resource areas. The filing of a Notice of Intent with the Bedford Conservation Commission pursuant to the WPA and the Bedford Wetlands Protection Bylaw (if applicable) will be required. The wetland filing will have to address impacts to Riverfront Area, Bordering Land Subject to Flooding and the locally regulated Buffer Strip. A variance will likely be required from the Bedford Conservation Commission for the proposed work within the Buffer Strip. Although this will require some coordination with the Bedford Conservation Commission, we believe this is obtainable and will allow approval of the project. A copy of a Notice of Intent form has been attached to this study for informational purposes.

The project will not trigger any other local or state review thresholds. A NPDES Notice of Intent with the US EPA and the preparation of a Storm Water Pollution Prevention Plan will be required to meet federal requirements.

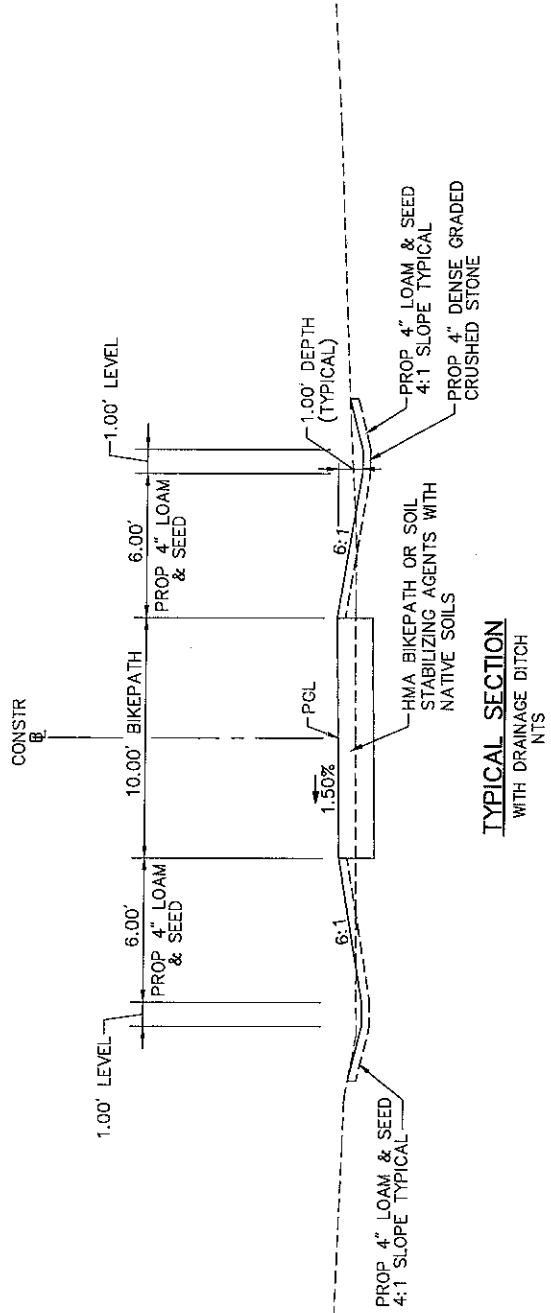
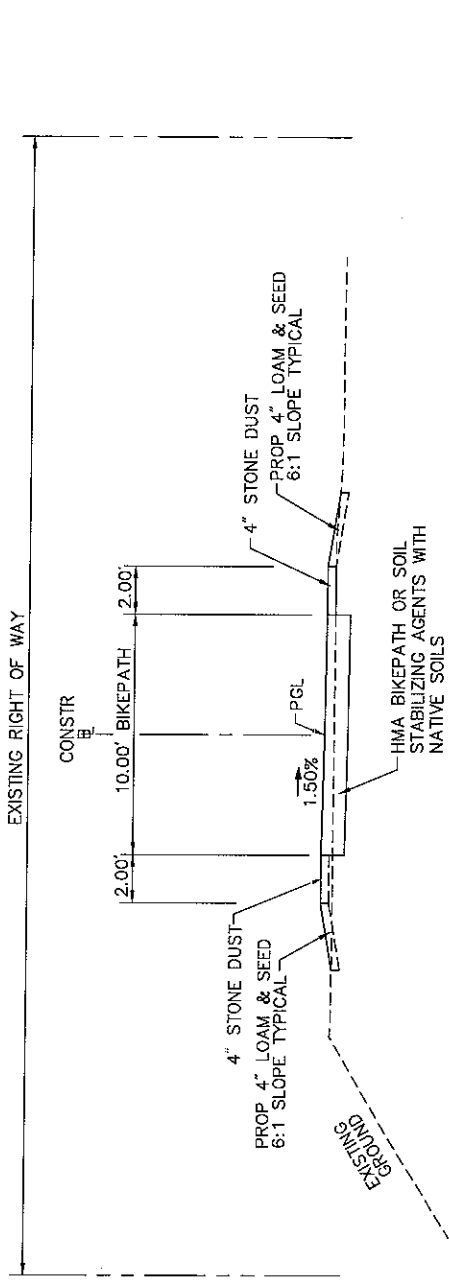
Recommended Path Design

Using the criteria stated above, the following path design is recommended:

Cross section width	10 foot
Shoulder width	2 feet
Design speed	20 mph
Path surface materials	Paved or soil stabilizing agents with native soils. Shoulders should be crushed stone or stone dust
Rest areas	At path connections such as at the Hartwell Forest and Mary Putnam Conservation Area
Drainage	Ditches along toe of slope
End treatments and access points	Bollards with pavers, or other surface to mark path entrances. Side access should be made at Evans Avenue and Turf Meadow Road
Parking	Fence along perimeter, entrance signs, and handicap accessible parking stalls marked. Trash receptacles, and informational signage should be installed
Root barrier	See detail
Hartwell Road intersection	See detail
Path along Water Treatment Plant Driveway	See Cross section

Special attention should be made through the design process to highlight the rail features that are visible on the alignment, with the use of descriptive signage, and graphics

It should be also noted that the town must secure the right of way entirely to be eligible for state or federal construction funding for this bikepath.



RECOMMENDED SECTIONS

WEST BEDFORD
BIKE PATH

SCALE: N.T.S. DATE: NOV 2005

DRAWN BY: JBN

APPROVED: PGD JOB #: 09393

Design Scope and Construction Costs

In order to achieve a proper design for this path facility, the design process should comply with Town and State requirements. Achieving public consensus for the design, developing a preliminary design, final design, environmental permitting, and preparation of construction documents should be part of design development process. The following scope of services outlines the required stages, and tasks for the proper design of this facility:

Design Scope

Description of Services

The Town of Bedford, hereinafter call the "CLIENT" has retained the "ENGINEER" to provide engineering services for the design of a 1.95 mile bikeway on the West Bedford on the Reformatory Branch Trail. Services will include the design, environmental permitting and part time construction services to implement the project from initiation through design. The following scope of services is anticipated for the completion of this effort:

PHASE 1: FIELD RECONNAISSANCE

The ENGINEER shall conduct a topographic survey within the project limits. The ENGINEER shall perform the following:

- Establish horizontal and vertical control
- Establish coordinates and closed set of base lines for streets. Reproduce historic base lines where possible.
- Locate surface detail including signs, utility poles, driveways, isolated trees with species and sizes, fences, walks, mail boxes, etc.
- Locate edge of pavement, shoulders, sidewalks, etc.
- Determine existing ground cross sections in 50-foot [20 meter] intervals and at driveways, culverts, and critical locations.
- Locate utilities that are visible or marked out in the field.
- Locate wetland flags with elevations delineating wetland boundaries.
- Obtain pipe sizes, invert and rim elevations, and detail sketches for drainage and sanitary structures.
- Reduce, check, and plot survey data at appropriate scale. Surface detail shall include buildings, doorways, curbs, sidewalks, utility poles, utility covers, rights-of-way (Rows)

Utility Research: The ENGINEER will obtain plans from private and public utilities within the project limits and plot the information on the prepared base plans. Subsurface utilities will be located based on record data and will be approximate. Utility sizes will be converted to metric units as required.

Right of Way Research: The ENGINEER will research the roadway layout within the project limits for information regarding parcel ownership deed restrictions, utility easements, restrictive covenants, etc. at the MHD, municipality, and Registry of Deeds.

PHASE 2: PRELIMINARY ENGINEERING [25 percent design]

Preliminary Design. The ENGINEER will prepare a plans based on the approved concept plan. The ENGINEER shall perform the following services:

- Prepare graphic geometrics of the bike path alignment.
- Design a typical section.
- Define project limits, construction materials, and conceptual details.
- Outline land-takings required, if any.
- Prepare right of way plans for submission to Mass Highway
- Draft letter to the Bedford Historic Commission as part of the Mass Highway Environmental Early Action directive
- Prepare traffic management plans for submission to Mass Highway

Preliminary Estimate. A preliminary construction estimate will be prepared for use in budgeting the project. Cost at this stage will be approximate only.

PHASE 3: PREPARATION OF ENVIRONMENTAL PERMIT APPLICATIONS

The ENGINEER has assumed that the proposed project will result in wetland impacts less than 5000 square feet. The scope is as follows based on this assumption:

Wetland Delineation. The ENGINEER will delineate and flag the boundaries of wetland resource areas adjacent to the project in accordance with the Massachusetts Wetland Protection Act Regulations (WPA) and the U.S. Army Corps of Engineers (ACOE) flagging procedures. The ENGINEER will prepare a technical memorandum that describes the wetland areas and details the delineation methods that were used.

Preparation of a Notice of Intent pursuant to the WPA. The ENGINEER will examine the effects of the proposed project on resource areas protected under the WPA and, based on those effects, will prepare and file a Notice-of-Intent (NOI) with the Bedford Conservation Commission and the Massachusetts Department of Environmental

Protection (DEP). A draft NOI will be submitted to the Town of Bedford and Mass Highway (if applicable) for review and all comments will be addressed before a final document is submitted to the Bedford Conservation Commission. The NOI will include the completed NOI form and an attached narrative description of the project. As part of the NOI, the ENGINEER will develop mitigation plans to avoid, minimize, and compensate for impacts to resource areas. The NOI will also include proposed measures to minimize the impact of the proposed project on water quality by developing measures to treat storm water runoff from the roadway in accordance with the DEP's Storm water Management Policy standards. The ENGINEER will attend up to 4 Conservation Commission public hearings (see, Project Meetings), and also a site walk if necessary.

Storm water Management It is assumed that this project is defined as a "Redevelopment Project" as stated in the Storm water Management Volume One: Storm water Policy Handbook, Dated March 1997, as issued by the Department of Environmental a Protection. A "Redevelopment Project" is defined as maintenance and improvements of existing roadways, including widening less than a single lane, adding a shoulder, and correcting substandard intersections and drainage or development on a previously developed site resulting in no net increase in impervious area.

PHASE 4: FINAL ENGINEERING [75 percent design, 100 percent design, and ps&e (plans, specifications, and estimate)]

Following approval, acceptance, or modification of the deliverables of the preliminary phase by the CLIENT and Mass Highway (if applicable), the ENGINEER shall proceed with Final Engineering tasks as outlined below.

Final Design - Plans and Specifications.

The ENGINEER, in the advancement of the final design for the project, shall prepare the 75 percent, 100 percent, and PS&E Design Submissions for review and comment by the CLIENT and Mass Highway. Comments made by the CLIENT and Mass Highway during each design phase shall be considered and incorporated, as appropriate, during this task.

In the development of the final design and the preparation of the Contract Plans and Specifications, the ENGINEER shall perform the following project tasks:

Provide design plans and calculations for:

- Construction/materials
- Layout
- Drainage
- Pavement markings
- Sign Summary

- Typical Sections
- Alignment
- Intersection crossings
- Construction details
- Traffic Management Plans
- Precast concrete box culvert design
- Drainage modifications
- Standard highway retaining walls

Utilities. Coordinate with municipality and private utility companies to establish relocation and/or modification procedures for existing utilities compatible with proposed improvements. [This task does not include the design of new utilities]

Special Provisions. Prepare Special Provisions to the Standard Specifications in accordance with MHD procedures and based on the Standard MHD Specifications for Highways and Bridges.

Phase 5: PROJECT MEETINGS

Various meetings are required throughout the design process. The meetings anticipated for this project are outlined below for the purpose of developing a budget.

Project Meetings The ENGINEER will attend project meetings with the CLIENT, agencies, organizations, and other groups as requested by the CLIENT. Services include preparation, travel, attendance, supporting graphics (when required) and documentation in the form of meeting notes

Public Meetings/Hearings The ENGINEER will attend public meetings/hearings with the CLIENT. Services include preparation, travel, attendance, supporting graphics (when required) and documentation in the form of meeting notes. For the purpose of this agreement, the ENGINEER has assumed attendance will be necessary for the following:

- 1 MHD design public hearing
 - 4 Conservation Commission public meeting/hearing
 - 1 Public Informational Meeting
- Total: 6 meetings, 60 hours

Phase 6: PART TIME CONSTRUCTION PHASE SERVICES

The ENGINEER shall provide construction phase services limited to the following: interpretations and clarifications of the contract documents, shop drawing review, and traffic signal equipment inspection.

Interpretations and Clarifications The ENGINEER shall issue necessary interpretations and clarifications of the Contract Documents and in connection therewith, prepare work directive changes and change orders as required.

Shop Drawings The ENGINEER shall review and approve Shop Drawings, samples, and other data that Contractor(s) are required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions and programs incident thereto.

Construction Costs

The project construction cost has been estimated based on the recommended design outlined above. The following construction cost estimate has been prepared for the town. Since this estimate is not based on the final design of this path facility, it should be used for budgeting purposes only. Cost calculations are included in Appendix B.

CONCEPTUAL COST ESTIMATE
Bedford Bike path
South Road to Concord Town Line

<u>Description</u>	<u>Unit Price</u>	<u>Quantity</u>		<u>Total Cost</u>
HMA Bike path	\$35 00/SY	9450	SY	\$330,750 00
Stone Dust Shoulders	\$9 00/SY	3780	SY	\$34,020 00
Loam and Seed	\$4 50/SY	14980	SY	\$67,410 00
Entrance Signs	\$2,000.00/EA	4	EA	\$8,000 00
Drainage Modifications	\$7,200.00/EA	8	EA	\$57,600 00
Benches and Bike Racks	\$16,500 00/LS	1	LS	\$16,500 00
Root Barrier	\$4.00/LF	17000	LF	\$68,000 00
Wood Safety Railing	\$45 00/LF	8500	LF	\$382,500 00
Parking Area - Railroad Avenue	\$36 00/SY	435	SY	\$15,660 00
Parking Area - Concord Rd	\$36.00/SY	315	SY	\$11,340 00

TOTAL:	\$991,780 00
20 %	
Contingency:	\$198,356 00
TOTAL:	\$1,190,136 00

SAY: \$1,200,000

This estimate does not consider any Right of Way acquisitions or utility pole relocations

Funding Resources

In order to complete the construction of the Reformatory Branch bike path, funding sources need to be identified, applied for, and secured. There are several funding options for the town to consider for the design and construction of this bike path. The Federal Highway Association's (FHWA) Congestion Management and Air Quality (CMAQ) program, and Enhancement Program, Chapter 90 monies, town appropriations, and private contributions name a few of the resources that are available to the town for consideration.

Due to the limitation of local monies, the reduced appropriations of Chapter 90 monies, and the extent of time required to collect private contributions, it is recommended that the town consider the use of CMAQ or enhancement program monies to fund the design and construction of this facility. Although these two programs are funded by FHWA, they are both administered by Mass Highway, and are required to comply with Mass Highway standards, review and process. If the Town chooses to use either of these funding mechanisms, Mass Highway will also be responsible for advertising, bidding, awarding the construction contract, and administering the construction of the facility.

A summary of each program is listed below:

Congestion Management and Air Quality (CMAQ) Program (excerpt from FHWA web site)

In 1990, Congress amended the Clean Air Act (CAA) to bolster America's efforts to attain the National Ambient Air Quality Standards (NAAQS). The amendments required further reductions in the amount of permissible tailpipe emissions, initiated more stringent control measures in areas that still failed to attain the NAAQS (no attainment areas), and provided for a stronger, more rigorous linkage between transportation and air quality planning. In 1991, Congress adopted the Intermodal Surface Transportation Efficiency Act (ISTEA). This law authorized the CMAQ program, and provided \$6.0 billion in funding for surface transportation and other related projects that contribute to air quality improvements and reduce congestion. The CAA amendments, ISTEA and the CMAQ program together were intended to realign the focus of transportation planning toward a more inclusive, environmentally-sensitive, and multimodal approach to addressing transportation problems.

The CMAQ program, jointly administered by the FHWA and the Federal Transit Administration (FTA), was reauthorized in 1998 under the Transportation Equity Act for the 21st Century (TEA-21). The TEA-21 CMAQ program provides over \$8.1 billion dollars in funds to State DOTs, MPOs, and transit agencies to invest in projects that reduce criteria air pollutants regulated from transportation-related sources over a period of six years (1998-2003). The TEA-21 CMAQ program is similar

to its ISTEA predecessor, but it features greater program flexibility, several new program options, an expansion of eligible activities available for funding and the statutory formula for apportioning funds was redesigned to provide a more equitable distribution.

Bicycle and Pedestrian Facilities and Programs: Bicycle and pedestrian facilities and programs are eligible projects and include:

- construction of bicycle and pedestrian facilities;
- non-construction projects related to safe bicycle use; and
- establishment and funding of State bicycle/pedestrian coordinator positions, as established in the ISTEA, for promoting and facilitating the increased use of nonmotorized modes of transportation. This includes public education, promotional, and safety programs for using such facilities.

State and MPO Responsibilities Decisions over which projects and programs to fund under CMAQ should be made through the appropriate metropolitan and/or statewide planning process which would include the involvement of State and local air quality agencies. This process serves to develop a pool of potential CMAQ projects to be considered for funding in a State's nonattainment and maintenance areas. States, MPOs (Metropolitan Planning Organizations) and transit agencies, in consultation with air quality agencies, are encouraged to cooperatively develop criteria for selection of CMAQ projects. The programming of CMAQ projects should be consistent with the appropriate metropolitan plan.

Projects to be funded with CMAQ funds must be included in the plans and IIPs that are developed by the MPOs in cooperation with the State and transit operators. Under the metropolitan planning regulations¹³, IIPs must contain a priority list of projects to be carried out in the 3-year period following adoption. As a minimum, projects must be identified by year and proposed funding source. For projects targeting CMAQ funds, priority in the IIP should be based on the projects' estimated air quality benefits.

Since the IIPs must be consistent with available funding, it is important that the State advise the MPOs of the estimated amount of CMAQ funds in a timely manner. Once CMAQ projects are included in a IIP (approved by the MPO and the Governor), and included in a FHWA/FIA approved statewide IIP, those projects in the first year may be implemented. Projects in the second or third year of the IIP could be advanced for implementation using the specified project selection procedures in the planning regulation.

It is the State's responsibility to manage its obligation authority made pursuant to title 23 to ensure that CMAQ (and other Federal-aid) funds are obligated in a timely fashion and do not lapse. Other provisions affecting the overall Federal-aid program, such as advance construction authority, apply to the CMAQ program as well.

Close coordination is needed between the State and MPO to assure that CMAQ funds are used appropriately and to maximize their effectiveness in meeting the CAA requirements. States and MPOs must fulfill this responsibility so that nonattainment and maintenance areas are able to make good-faith efforts to attain and maintain the NAAQS by the prescribed deadlines. State DOTs and MPOs should consult with State and local air quality agencies to develop an appropriate project list of CMAQ programming priorities which will have the greatest impact on air quality.

Applying for the Use of CMAQ funding. The process for applying for CMAQ funding is a two-step process: The project needs to be approved by Mass Highway, and the project must be entered onto the Transportation Improvement Program by the Metropolitan Planning Organization (MPO). A Project Request Form must be prepared and forwarded to Mass Highway District 4 for review and support. Once support is achieved through the District office, the request is forwarded to the Mass Highway Project Review Committee in Boston for approval.

The second step is to obtain approval of the project through the MPO, through the Metropolitan Area Planning Council (MAPC). A Project Information Form must be completed and forwarded to MAPC and a request for inclusion to the IIP must be completed. The project must have regional and local support before consideration is made to include it on the IIP.

Enhancement Program (excerpt from FHWA web site)

Introduction On June 9, 1998, President Clinton signed into law the Transportation Equity Act for the 21st Century (TEA-21). This legislation updates Titles 23 and 49 of the United States Code (U.S.C.) and builds on the major changes made to Federal transportation policy and programs addressed in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The legislation includes numerous provisions that address improvements and changes to the implementation of transportation enhancement (TE) activities.

Policy Federal transportation policy, as reflected in the strategic goals of the U.S. Department of Transportation (DOT), the Federal Highway Administration (FHWA) and its Environmental Policy Statement, continue to stress mobility, protection of the human and natural environment, and community preservation, sustainability, and livability. The achievement of these goals and objectives remains a high priority for the DOT and the FHWA. TEA-21 continues the opportunities to achieve these priority efforts through the further expansion and funding of the TE program activities initiated under the ISTEA.

TE activities are a sub-component of the Surface Transportation Program (STP). The policy and procedural requirements that apply to the STP program also apply to the

provisions for funding and implementation of IE activities. The laws governing traditional Federal-aid projects funded under Chapter 1 of Title 23 U.S.C., such as the National Environmental Policy Act (NEPA) and related laws, apply to transportation enhancements as well, except where the Congress expressly provided additional streamlining provisions, innovative finance, and cost sharing provisions for the IE activities.

Through the IE activities Congress provided innovative opportunities to enhance and contribute to the transportation system. This is being carried out in a non-traditional fashion through implementation of a specific list of IE activities. The focus of these actions is to improve the transportation experience in and through local communities. The FHWA seeks to broaden IE program participation, and the rates of implementation of transportation and community enhancing projects. Therefore, it is the policy of the FHWA to foster and encourage partnerships with State and local officials and public interest groups to improve the delivery of these valuable transportation enhancements. Where appropriate, public-private partnerships may also be encouraged

Qualifying Activities The list of qualifying IE activities provided in 23 U.S.C. 101(a)(35) is intended to be exclusive, not illustrative. That is, only those activities listed therein are eligible as IE activities. They are listed below. (*Items listed in italics are those amended in SAFETEA-LU*): [This paragraph and the list below were revised on November 4, 2005]

IE Activities Defined-

- Provision of facilities for pedestrians and bicycles.
- Provision of safety and educational activities for pedestrians and bicyclists.
- Acquisition of scenic easements and scenic or historic sites (*including historic battlefields*).
- Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
- Landscaping and other scenic beautification
- Historic preservation.
- Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).
- Preservation of abandoned railway corridors (including the conversion and use *of the corridors* for pedestrian or bicycle trails).
- *Inventory*, control, and removal of outdoor advertising.
- Archaeological planning and research.
- Environmental mitigation
- to address water pollution due to highway runoff; or

- reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- Establishment of transportation museums.

Many projects are a mix of elements, some on the list and some not. Only those project elements which are on the list may be counted as IE activities. For example, a rest area might include a historic site purchased and developed as an interpretive site illustrating local history. The historic site purchase and development would qualify as a transportation enhancement activity.

Activities which are not explicitly on the list may qualify if they are an integral part of a larger qualifying activity. For example, if the rehabilitation of a historic railroad station required the construction of new drainage facilities, the entire project could be considered for IE funding. Similarly, environmental analysis, project planning, design, land acquisition, and construction enhancement activities are eligible for funding.

The funded activities must be accessible to the general public or targeted to a broad segment of the general public.

Applying for the Use of Transportation Enhancement Funding . Guidelines for applying for Transportation Enhancement Funding, as well as all application forms are included in Appendix D.

Implementation Plan

To advance any project from study phase through construction completion, an implementation plan needs to be identified and followed. This plan should identify the tasks required to complete the project, milestones to achieve, permitting needed, the project budget, and schedule. This section will identify a plan for the town to consider advancing the project through construction.

Project Funding. The Town needs to determine what funding resources best suit the needs of the project, apply for, and secure the funding for the project. Consideration must be made to securing both design and construction funding for the project.

Base plan Preparation. Once the funding is secured for the project, and a design consultant has been hired to complete the design of the project, a base plan of the project needs to be completed. This base plan, completed in three dimensions will identify the existing topography and features of the trail within the project boundaries. Wetland resource areas, trees, street crossings, other features, and elevation must be surveyed and plotted on plans to advance the project. A comprehensive field check of the base plan must be completed prior to design implementation.

Preliminary Design. Based on Mass Highway and Town standards and project objectives, a preliminary design will be completed for the project. The preliminary design will present the design intent, and any impacts associated with the design. A preliminary cost estimate will be completed based on the preliminary design, and the plans must be submitted to Mass Highway and the town for review and comment.

Public Hearing. Upon receipt of comments made by Mass Highway on the preliminary design of the project, a public hearing must be scheduled. The hearing, facilitated by Mass Highway, is required to present the design of the project to the public, and to achieve public approval of the project.

Intermediate Design. When the public hearing has taken place, the project can advance to the 75% submission phase. Design details such as materials, surface treatment, cross sections, horizontal and vertical alignment calculations, a comprehensive engineer's estimate and project specifications will be completed to a 90% completion, and submitted to Mass Highway and the Town for review and comment.

Environmental Permitting. During the intermediate design stage (75% design submission), a Notice of Intent (NOI) will be prepared and filed with the Bedford Conservation Commission. The NOI will present the design of the project, identify wetland impacts associated with the design, and present mitigation for the impacts.

A conservation hearing will be held to present the project to the Conservation Commission, and upon approval, an Order of Conditions (O of C) will be issued by the Conservation Commission for the project. The O of C will outline any design and construction requirements for the project to comply with the Wetlands Protection Act.

Final Design and Contract Documents. Once Mass Highway and the Town has reviewed the 75% submission for the project, the project will advance to the 100%, and Plan Specification and Estimate (PS&E) stage. These two design iterations will allow for the project design to be 100% completed, and for comments to be incorporated into the design. Upon completion of the PS&E, Mass Highway will advertise the project for construction.

References

The Mass Highway Design Manual, draft edition
The Mass Highway guidelines "Building a Better Bikeway", dated 1999,
The American Association of State Highway and Transportation Officials (AASHTO)
"Guide for the Development of Bicycle Facilities: dated 1999,
The Americans with Disability Acts of 1990,
The American Access Board, The Manual on Uniform Traffic Control Devices, 2003
Edition
FHWA website : <http://www.fhwa.dot.gov/environment/te/guidance.htm>
<http://www.fhwa.dot.gov/environment/cmaqpgs/>

**Appendix A - Natural Heritage Endangered
Species Map**

- Notice of Intent Form

- Flood Plain Maps



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

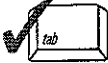
Provided by DEP:

DEP File Number _____

Document Transaction Number _____

City/Town _____

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
 Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button for GIS locator):

a. Street Address _____ b. City/Town _____ c. Zip Code _____

Latitude and Longitude: _____

d. Latitude _____ e. Longitude _____

f. Assessors Map/Plat Number _____ g. Parcel /Lot Number _____

2. Applicant:

a. First Name _____ b. Last Name _____ c. Company _____

d. Mailing Address _____

e. City/Town _____ f. State _____ g. Zip Code _____

h. Phone Number _____ i. Fax Number _____ j. Email address _____

3. Property owner (if different from applicant): Check if more than one owner

a. First Name _____ b. Last Name _____ c. Company _____

d. Mailing Address _____

e. City/Town _____ f. State _____ g. Zip Code _____

h. Phone Number _____ i. Fax Number _____ j. Email address _____

4. Representative (if any):

a. Firm _____

b. Contact Person First Name _____ c. Contact Person Last Name _____

d. Mailing Address _____

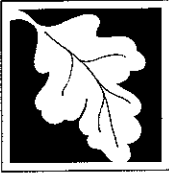
e. City/Town _____ f. State _____ g. Zip Code _____

h. Phone Number _____ i. Fax Number _____ j. Email address _____

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

a. Total Fee Paid _____ b. State Fee Paid _____ c. City/Town Fee Paid _____

6. General Project Description:



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP: _____
 DEP File Number _____
 Document Transaction Number _____
 City/Town _____

A. General Information (continued)

7. Project Type Checklist:

- a. Single Family Home
- b. Residential Subdivision
- c. Limited Project Driveway Crossing
- d. Commercial/Industrial
- e. Dock/Pier
- f. Utilities
- g. Coastal Engineering Structure
- h. Agriculture – cranberries, forestry
- i. Transportation
- j. Other

8. Property recorded at the Registry of Deeds for:

_____	_____
a. County	b. Page Number
_____	_____
c. Book	d. Certificate # (if registered land)

9. Has work been performed on the property under an Order of Resource Area Delineation involving Simplified Review within 3 years of the date of this application?

- a. Yes b. No

10. Buffer Zone Only - Is the project located only in the Buffer Zone of a bordering vegetated wetland, inland bank, or coastal resource area?

- a. Yes - answer 11 below, then skip to Section C.
- b. No - skip to Section B.

If yes, no Notice of Intent or Request for Determination of Applicability may be filed for work within the 50-foot-wide area in the Buffer Zone along the resource area during the three-year term of an Order of Resource Area Delineation, or any Extended Order, or until the applicant receives a Certificate of Compliance, whichever is later.

11. Buffer Zone Setback – For projects that involve work only in the buffer zone, select the applicable adjacent resource area (check one):

- a. BWV b. inland bank c. coastal resource area

The distance between the closest project disturbance and the associated resource area is:

d. linear feet



Provided by DEP: _____
 DEP File Number _____
 Document Transaction Number _____
 City/Town _____

B. Resource Area Effects

1. Inland Resource Areas

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a <input type="checkbox"/> Bank	1. linear feet _____	2. linear feet _____
b <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet _____	2. square feet _____
c <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet _____ 3. cubic yards dredged _____	2. square feet _____
d <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet _____ 3. cubic feet of flood storage lost _____	2. square feet _____ 4. cubic feet of flood storage replaced _____
e <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet _____ 2. cubic feet of flood storage lost _____	3. cubic feet of flood storage replaced _____
f <input type="checkbox"/> Riverfront area	1. Name of Waterway (if available) _____	

1. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

2. Total area of Riverfront Area on the site of the proposed project: _____ Square Feet

3. Proposed alteration of the Riverfront Area:

a. Total Square Feet _____ b. Square Feet within 100 ft. _____ c. Square Feet between 100 ft. and 200 ft. _____

4. Has an alternatives analysis been done and is it attached to this NOI? Yes No

5. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No



B. Resource Area Effects

2. Coastal Resource Areas:

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

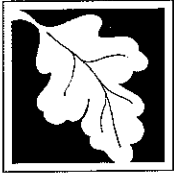
Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. Square feet _____ 2. Cubic yards dredged _____	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. Square feet _____	2. Cubic yards beach nourishment _____
e. <input type="checkbox"/> Coastal Dunes	1. Square feet _____	2. Cubic yards dune nourishment _____
f. <input type="checkbox"/> Coastal Banks	1. Linear feet _____	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. Square feet _____	
h. <input type="checkbox"/> Salt Marshes	1. Square feet _____	2. Sq ft restoration, rehab, or creation _____
i. <input type="checkbox"/> Land Under Salt Ponds	1. Square feet _____ 2. Cubic yards dredged _____	
j. <input type="checkbox"/> Land Containing Shellfish	1. Square feet _____	2. Square feet restoration, rehab. _____
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. Cubic yards dredged _____	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. Square feet _____	

3. Limited Project:

Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 or 310 CMR 10.53?

a. Yes No If yes, describe which limited project applies to this project:

b. Limited Project



Provided by DEP:

DEP File Number
Document Transaction Number
City/Town

C. Bordering Vegetated Wetland Delineation Methodology

Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department

1. Final Order of Resource Area Delineation issued by Conservation Commission or DEP (attached)
2. DEP BVW Field Data Form (attached)
3. Final Determination of Applicability issued by Conservation Commission or DEP (attached)
4. Other Methods for Determining the BVW Boundary (attach documentation):
 - a. 50% or more wetland indicator plants
 - b. Saturated/inundated conditions exist
 - c. Groundwater indicators
 - d. Direct observation
 - e. Hydric soil indicators
 - f. Credible evidence of conditions prior to disturbance
5. Other resource areas delineated: _____

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

D. Other Applicable Standards and Requirements

1. Is any portion of the proposed project located in estimated habitat as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program?

a. Yes No If yes, include proof of mailing or hand delivery of NOI to:
 Natural Heritage and Endangered Species Program
 Division of Fisheries and Wildlife
 Route 135, North Drive
 Westborough, MA 01581

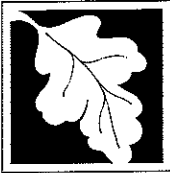
b. Date of Map _____
2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. Yes No If yes, include proof of mailing or hand delivery of NOI to:
 Division of Marine Fisheries - Southeast Marine Fisheries Station
 50A Portside Drive
 Pocasset, MA 02559

b. Not applicable – project is in inland resource area only
3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC _____



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP:

DEP File Number _____

Document Transaction Number _____

City/Town _____

D. Other Applicable Standards and Requirements

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

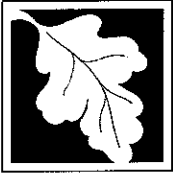
4. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
- a Yes No
5. Is any activity within any Resource Area or Buffer Zone exempt from performance standards of the wetlands regulations, 310 CMR 10.00.
- a Yes No If yes, describe which exemption applies to this project:
- b. Exemption _____
6. Is this project subject to the DEP Stormwater Policy? a Yes No
- If yes, stormwater management measures are required. Applicants should complete the Stormwater Management Form and submit it with this form.
- b. If no, explain why the project is exempt:
- _____
- _____

E. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.
3. Other material identifying and explaining the determination of resource area boundaries shown on plans (e.g., a DEP BVW Field Data Form).
4. List the titles and dates for all plans and other materials submitted with this NOI.
5. If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. Attach NOI Wetland Fee Transmittal Form
9. Attach Stormwater Management Form, if needed.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP:

DEP File Number _____

Document Transaction Number _____

City/Town _____

F. Fees

The fees for work proposed under each Notice of Intent must be calculated and submitted to the Conservation Commission and the Department (see Instructions and NOI Wetland Fee Transmittal Form).

No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

1. Municipal Check Number	2. Check date
3. State Check Number	4. Check date
5. Payor name on check: First Name	6. Payor name on check: Last Name

G. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Signature of Applicant	Date
Signature of Property Owner (if different)	Date
Signature of Representative (if any)	Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents; two copies of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For DEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents; one copy of pages 1 and 2 of the NOI Wetland Fee Transmittal Form; and a copy of the state fee payment must be sent to the DEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

Other:

If the applicant has checked the "yes" box in any part of Section D, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Applicant:

a. First Name

b. Last Name

c. Company

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

2. Property Owner (if different):

a. First Name

b. Last Name

c. Company

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

3. Project Location:

a. Street Address

b. City/Town

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

Notice of Intent (Form 3) or Abbreviated Notice of Intent (Form 4):

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

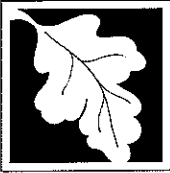
Total Project Fee:	_____	a. Total fee from Step 5
State share of filing fee:	_____	b. 1/2 total fee less \$12.50
City/Town share of filing fee:	_____	c. 1/2 total fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.
- c.) **To DEP Regional Office (see Instructions):** Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
Stormwater Management Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Property Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key



1. The proposed project is:
 - a. New development Yes No
 - b. Redevelopment Yes No
 - c. Combination Yes No (If yes, distinguish redevelopment components from new development components on plans).
2. Stormwater runoff to be treated for water quality is based on the following calculations:
 - a. 1 inch of runoff x total impervious area of post-development site for discharge to **critical areas** (Outstanding Resource Waters, recharge areas of public water supplies, shellfish growing areas, swimming beaches, cold water fisheries).
 - b. 0.5 inches of runoff x total impervious area of post-development site for other resource areas.

Note:
This November 2000 version of the Stormwater Management Form supersedes earlier versions including those contained in DEP's Stormwater Handbooks

B. Stormwater Management Standards

DEP's Stormwater Management Policy (March 1997) includes nine standards that are listed on the following pages. Check the appropriate boxes for each standard and provide documentation and additional information when applicable.

Standard #1: Untreated stormwater

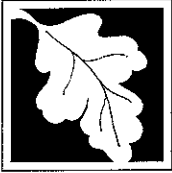
- a. The project is designed so that new stormwater point discharges do not discharge untreated stormwater into, or cause erosion to, wetlands and waters.

Standard #2: Post-development peak discharges rates

- a. Not applicable – project site contains waters subject to tidal action.

Post-development peak discharge does not exceed pre-development rates on the site at the point of discharge or downgradient property boundary for the 2-yr, 10-yr, and 100-yr, 24-hr storm.

- b. Without stormwater controls
- c. With stormwater controls designed for the 2-yr, and 10-yr storm, 24-hr storm.
- d. The project as designed will not increase off-site flooding impacts from the 100-yr, 24-hr storm.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
Stormwater Management Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Stormwater Management Standards (cont.)

Standard #3: Recharge to groundwater

Amount of impervious area (sq ft.) to be infiltrated: _____ a square feet

Volume to be recharged is based on:

b. The following Natural Resources Conservation Service hydrologic soils groups (e.g. A, B, C, D, or UA) or any combination of groups:

_____	_____	_____	_____
1. % of impervious area	2. Hydrologic soil group	3. % of impervious area	4. Hydrologic soil group
_____	_____	_____	_____
5. % of impervious area	6. Hydrologic soil group	7. % of impervious area	8. Hydrologic soil group

c. Site specific pre-development conditions: _____ 1. Recharge rate _____ 2. Volume

d. Describe how the calculations were determined:

e. List each BMP or nonstructural measure used to meet Standard #3 (e.g. dry well, infiltration trench).

Does the annual groundwater recharge for the post-development site approximate the annual recharge from existing site conditions?

f. Yes No

Standard #4: 80% TSS Removal

a. The proposed stormwater management system will remove 80% of the post-development site's average annual Total Suspended Solids (TSS) load.

b. Identify the BMP's proposed for the project and describe how the 80% TSS removal will be achieved.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
Stormwater Management Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Stormwater Management Standards (cont.)

c If the project is redevelopment, explain how much TSS will be removed and briefly explain why 80% removal cannot be achieved.

Standard #5: Higher potential pollutant loads

See Stormwater Policy Handbook Vol. I, page I-23, for land uses of high pollutant loading (see Instructions).

Does the project site contain land uses with higher potential pollutant loads

a. Yes No b. If yes, describe land uses:

c. Identify the BMPs selected to treat stormwater runoff. If infiltration measures are proposed, describe the pretreatment. (Note: If the area of higher potential pollutant loading is upgradient of a critical area, infiltration is not allowed.)

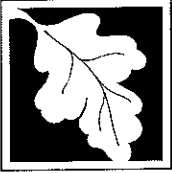
Standard #6: Protection of critical areas

See Stormwater Policy Handbook Vol. I, page I-25, for critical areas (see Instructions).

Will the project discharge to or affect a critical area?

a. Yes No b. If yes, describe areas:

c. Identify the BMPs selected for stormwater discharges in these areas and describe how BMPs meet restrictions listed on pages I-27 and I-28 of the Stormwater Policy Handbook – Vol. I:



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
Stormwater Management Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Stormwater Management Standards (cont.)

Note:
 components of
 redevelopment
 projects which
 plan to develop
 previously
 undeveloped
 areas do not fall
 under the scope
 of Standard 7.

Standard #7: Redevelopment projects

Is the proposed activity a redevelopment project?

a. Yes No

b. If yes, the following stormwater management standards have been met:

c. The following stormwater standards have not been met for the following reasons:

d. The proposed project will reduce the annual pollutant load on the site with new or improved stormwater control.

Standard #8: Erosion/sediment control

a. Erosion and sediment controls are incorporated into the project design to prevent erosion, control sediments, and stabilize exposed soils during construction or land disturbance.

Standard #9: Operation/maintenance plan

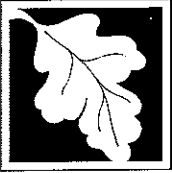
a. An operation and maintenance plan for the post-development stormwater controls have been developed. The plan includes ownership of the stormwater BMPs, parties responsible for operation and maintenance, schedule for inspection and maintenance, routine and long-term maintenance responsibilities, and provision for appropriate access and maintenance easements extending from a public right-of-way to the stormwater controls.

b. Plan/Title _____

c. Date _____

d. Plan/Title _____

e. Date _____



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
Stormwater Management Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Submittal Requirements

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

DEP recommends that applicants submit this form, as well as, supporting documentation and plans, with the Notice of Intent to provide stormwater management information for Commission review consistent with the wetland regulations (310 CMR 10.05 (6)(b)) and DEP's Stormwater Management Policy (March 1997). If a particular stormwater management standard cannot be met, information should be provided to demonstrate how equivalent water quality and water quantity protection will be provided. DEP encourages engineers to use this form to certify that the project meets the stormwater management standards as well as acceptable engineering standards. For more information, consult the Stormwater Management Policy.

D. Signatures

Applicant Name

Date

Signature

Representative (if any)

Date

Signature



APPROXIMATE SCALE
 400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
 FLOOD INSURANCE RATE MAP

TOWN OF
 BEDFORD,
 MASSACHUSETTS
 MIDDLESEX COUNTY

PANEL 6 OF 6
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
 255209 0008C

MAP REVISED:
 JULY 4, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It is for informational purposes only and does not constitute a contract. Flood insurance coverage is available through the National Flood Insurance Program. For the latest, product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.nmfs.gov





APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF
BEDFORD,
MASSACHUSETTS
MIDDLESEX COUNTY

PANEL 6 OF 6
(SEE MAP INDEX FOR PANELS NOT PRINTED)

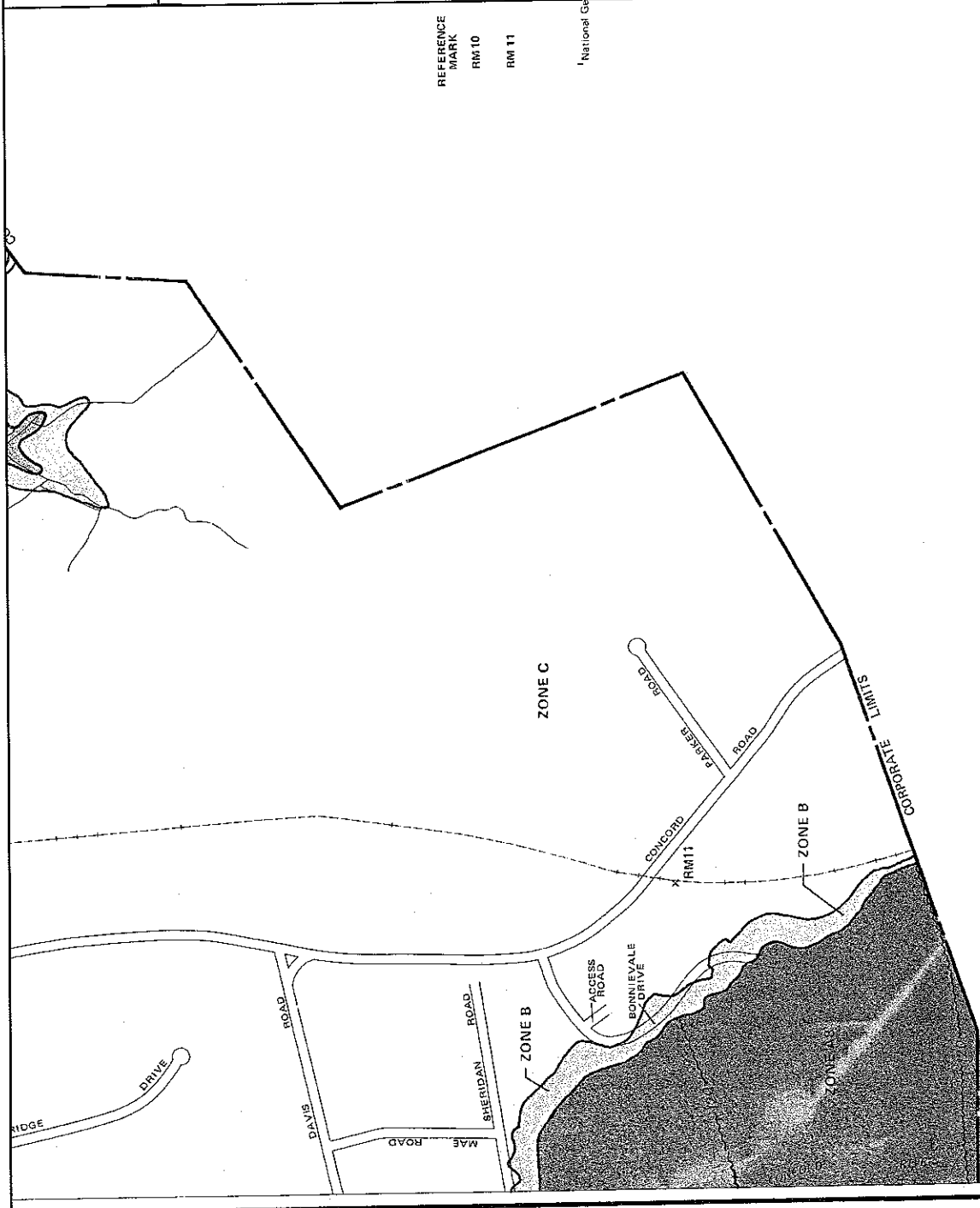
COMMUNITY-PANEL NUMBER
255209 0006C

MAP REVISED:
JULY 4, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was prepared using the Flood Insurance Rate Study (FIRS) data and information provided by the community. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.mft.fema.gov



REFERENCE
MARK
RM10
RM11
National Ge



APPROXIMATE SCALE
0 400 800 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

TOWN OF
BEDFORD,
MASSACHUSETTS
MIDDLESEX COUNTY

PANEL 4 OF 6
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
255209 0004C

MAP REVISED:
JULY 4, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It is not to be used for any purpose other than that for which it was prepared or for any purpose which may have been made subsequent to the date on this title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.maf.fema.gov



Appendix B– Construction Cost Estimate



Vanasse Hangen Brustlin, Inc.

Transportation
Land Development
Environmental
Services

101 Walnut Street
Post Office Box 9151
Watertown
Massachusetts 02471
617 924 1770

CONCEPTUAL COST ESTIMATE
Bedford Bikepath
South Road to Concord Town Line

<u>Description</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Total Cost</u>
HMA Bikepath	\$35 00 /SY	9450 SY	\$330,750 00
Stone Dust Shoulders	\$9 00 /SY	3780 SY	\$34,020 00
Loam and Seed	\$4 50 /SY	14980 SY	\$67,410 00
Entrance Signs	\$2,000.00 /EA	4 EA	\$8,000 00
Drainage Modifications	\$7,200.00 /EA	8 EA	\$57,600 00
Benches and Bike Racks	\$16,500.00 /LS	1 LS	\$16,500 00
Root Barrier	\$4.00 /LF	17000 LF	\$68,000 00
Wood Safety Railing	\$45.00 /LF	8500 LF	\$382,500 00
Parking Area - Railroad Avenue	\$36.00 /SY	435 SY	\$15,660 00
Parking Area - Concord Rd	\$36.00 /SY	315 SY	\$11,340 00

TOTAL:	\$991,780 00
20 % Contingency:	\$198,356 00
TOTAL:	\$1,190,136 00

SAY: \$1,200,000

This estimate does not consider any Right of Way acquisitions or utility pole relocations.



UNIT COSTS

Hot Mix Asphalt Bikepath

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
HMA Top Course	4.0	0.0560 Ton/SY*in	\$55.00 /Ton	\$12.32
Gravel Borrow	12.0	0.0278 Yd/in	\$30.00 /CY	\$10.01
Unclassified Excavation	16.0	0.0278 Yd/in	\$22.00 /CY	\$9.79
Fine Grading and Compacting	N/A	N/A	\$2.50 /SY	\$2.50
			per SY Total=	\$34.61

Hot Mix Asphalt Walk COST PER SY= \$35.00

Loam Borrow and Seed

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Loam Borrow	4.0	0.0278 Yd/in	\$30.00 /CY	\$3.34
Seed			\$1.00 /SY	\$1.00
			per SY Total=	\$4.34

Loam Borrow and Seed COST PER SY= \$4.50

Stone Dust Shoulder

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Stone Dust	4.0	0.0278 Yd/in	\$35.00 /CY	\$3.89
Unclassified Excavation	4.0	0.0278 Yd/in	\$22.00 /CY	\$2.45
Fine Grading and Compacting	N/A	N/A	\$2.50 /SY	\$2.50
			per SY Total=	\$8.84

Stone Dust Shoulder COST PER SY= \$9.00

Dense Graded Crushed Stone at Drainage Ditch

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Dense Graded Crushed Stone	4.0	0.0278 Yd/in	\$35.00 /CY	\$3.89
Unclassified Excavation	4.0	0.0278 Yd/in	\$22.00 /CY	\$2.45
			per SY Total=	\$6.34

Dense Graded Crush Stone COST PER SY= \$6.50

Hot Mix Asphalt Parking Lot

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
HMA Top Course	3.5	0.056 Ton/SY*in	\$100.00 /Ton	\$19.60
Gravel Borrow	8.0	0.0278 Yd/in	\$30.00 /CY	\$6.67
Unclassified Excavation	11.5	0.0278 Yd/in	\$22.00 /CY	\$7.03
Fine Grading and Compacting	N/A	N/A	\$2.50 /SY	\$2.50
			per SY Total=	\$35.81

Hot Mix Asphalt Parking Lot COST PER SY= \$36.00



UNIT COSTS

Drainage Modifications

1 2" Reinforced Concrete Pipe	\$40 00 /LF	30 /LF	\$1 200 00
1 2" Reinforced Concrete Pipe Flared End	\$700 00 /EA	1 EA	\$700 00
Catch Basin	\$2 200 00 /EA	2 EA	\$4 400 00
Stone for Pipe Ends	\$40 00 /CY	3 CY	\$120 00
Dense Graded Crushed Stone for Ditches	\$6 50 /SY	115 SY	\$747 50

Total Drainage Modifications per Location= \$7,167.50

Benches and Bike Racks

Bench	\$1 800 00 /EA	5 EA	\$9 000 00
Bike Rack	\$1 500 00 /EA	5 EA	\$7,500 00

Total Benches and Bikeracks= \$16,500.00



This estimate assumes the following.:

Drainage Modifications

Assume drainage ditch bottom is 1' 0" wide and lined with dense graded crushed stone

Assume every 1000':

- (2) catch basins connected with 20 LF 12" RCP
- additional 10 LF 12" RCP for FES
- 6'x8' stone pad for pipe ends

Benches and Bike Racks

Assume 5 benches and 5 bike racks located along bikepath

Wood Safety Railing

Assume required for 50% of bikepath length on both sides

**Appendix C– CMAQ Funding Application
(Inclusion to the Transportation Improvement
Program)**



Boston Metropolitan Planning Organization Transportation Improvement Program

SECTION A: PROJECT DESCRIPTION AND INFORMATION

A1 Project Name:
A2 Project Category:
A3 ID Number
A4 Municipality(ies):

A5 MHD District:
A6 MAPC Subregion:
A7 Location:

A8 Description: Additional Capacity

A9 Cost:

Existing Conditions

A10 Existing Pavement Condition:
Pavement Roughness (IRI):

Pavement Serviceability Rating (PSR):

A11 Degree of Bicycle/Pedestrian Provisions:

Sidewalks:

- Bicycle Shoulder Provisions
- Signed Bicycle Route
- Bicycle Trail

Safety

Crashes

Total in
Project Area

A12 Top 1000 Rank:
A13 Three Year Crash Total:
A14 Fatal Crashes:
A15 Bicycle- Involved Crashes:
A16 Pedestrian-Involved Crashes:

Mobility

A17 Project Length (Miles):
A18 Project Lane Miles:
A19 Additional Lane Miles by Project:
A20 Reduction in Vehicle Hours of Travel:
A21 Trucks Excluded from Roadway
A22 Transit Vehicles use Roadway:

Average Daily Traffic

A23 Description of Count Location:

A24 Year of Count:

A25 ADT:

A26 Source of ADT:

A27 Truck ADT:

Congestion Management System Data

A28 Average Speed

AM Peak Period:

PM Peak Period:

A29 Average Speed Index

AM Peak Period:

PM Peak Period:

A30 Average Delay - Intersections Only

AM Peak Period:

PM Peak Period:

Community Impact

A31 Located in a MPO-defined environmental justice community of concern

A32 Located in a MPO-defined environmental justice target population

A33 Located in a HUD-defined low and moderate income census tract

Environmental

A34 Located in an area of critical environmental concern

A35 Located adjacent to (within 200 feet of) a waterway

A36 Percentage of land within ½ mile corridor that is wetland:

A37 Percentage of land within ½ mile corridor that is protected open space:

Land Use

A38 Project will have no impact on adjacent land use (if checked, the A40 to A50 do not need to be answered)

A39 Percentage of land within ½ mile corridor that is previously undeveloped but developable (i.e. "greenfields"):

A40 Residential areas are zoned for at least 7 Dwelling Units (DU)/acre (suburban) to 50 DU/acre (urban) as an average for the entire developable residentially-zoned area within ½ mile of the project:

A41 A Commercial FAR that results in an estimated 50 employees/ acre (suburban) or 300 employees/acre (urban) as an average for the entire developable commercially-zoned area within ½ mile of the project:

A42 A future zoned population/employment ratio between 2.0 and 0.75 in the project area:

A43 A mix of uses is allowed within the area (only different uses within ½ mile of each other which can be accessed via sidewalks/paths count as mixed use):

A44 Zoning allows mixed uses within buildings:

A45 Maximum building frontyard setbacks of 20 feet:

A46 Maximum parking requirements (<=3/1000 sf commercial-suburban; <=1.0 -urban):

A47 Minimize the number of roadway access points/impose requirements for shared driveways:

A48 Design requirements that promote non-SOV access:

A49 For all new development, a TDM program is required that includes most of the following, components:

Ridesharing program

Parking restrictions or pricing policies

Alternative work hours

Telecommuting options

Subsidized transit use and other financial incentives

Areawide strategies such as membership in Transportation Management Associations

Subsidies for local transit service

Provide access to site and turnaround space for multi occupant vehicles up to 25 feet in length

A50 A Corridor Land Use plan has been developed and adopted by all of the corridor communities that is designed to preserve at least 50% of the new roadway capacity of the project:

A51 Overall land use rating:

Economic Development

- A52 Serves a Brownfield development site. (An Executive Office of Environmental Affairs designated 21E site is located within 1/4 mile of the proposed project):
- A53 Serves a state-designated Economic Target Area:
- A54 Serves a regionally-designated economic revitalization area or initiative:
- A55 Supports a Comprehensive Economic Development Strategy (CEDS) Priority Project:
- A56 Consistent with the Region's Comprehensive Economic Development Strategy:
 - Links economically distressed communities to the mainstream economy
 - Encourages development in commercial areas served by transit
 - Develops affordable housing accessible to employment centers

Cost Effectiveness

- A57 \$ per ADT:
 - A58 \$ per Lane Miles:
 - A59 \$ per VHI:
-
-



**Boston Metropolitan Planning Organization
Transportation Improvement Program**

SECTION C: PROJECT READINESS

C1 Project Description

ID

Municipality:

Location:

Category:

C2 Design Status

- | | Date | Date Updated |
|---|------|--------------|
| <input type="checkbox"/> Project Review Committee | | |
| 25% submitted | | |
| <input type="checkbox"/> 25% approved | | |
| 75% submitted | | |
| <input type="checkbox"/> 75% approved | | |
| 100% submitted | | |
| <input type="checkbox"/> 100% approved | | |

C3 Design Exceptions

- | Required | Approved | Approved |
|---|----------|--|
| <input type="checkbox"/> Design Speed | | <input type="checkbox"/> Stopping Sight Distance |
| <input type="checkbox"/> Lane Width | | <input type="checkbox"/> Cross Slope |
| <input type="checkbox"/> Shoulder Width | | <input type="checkbox"/> Superelevation |
| <input type="checkbox"/> Horizontal Alignment | | <input type="checkbox"/> Horizontal Clearance |
| <input type="checkbox"/> Vertical Alignment | | <input type="checkbox"/> Width |
| <input type="checkbox"/> Grades | | <input type="checkbox"/> Structural Capacity |
| | | <input type="checkbox"/> Vertical Clearance |

C4 Required Permit

- | Required | Date Expected | Date Completed |
|---|---------------|----------------|
| <input type="checkbox"/> Environmental Impact Statement | | |
| <input type="checkbox"/> Construction Engineering Checklist | | |
| <input type="checkbox"/> Clean Water Act Section 404 Permit | | |
| <input type="checkbox"/> Rivers and Harbors Act Section 10 Permit | | |
| <input type="checkbox"/> MEPA Environmental Notification Form | | |
| <input type="checkbox"/> MEPA Environmental Impact Report | | |
| <input type="checkbox"/> Massachusetts Historical Commission Approval | | |
| <input type="checkbox"/> M G L Ch 131 Wetlands Order of Conditions | | |
| <input type="checkbox"/> Concervation Commission Order of Conditions | | |
| <input type="checkbox"/> | | |
| <input type="checkbox"/> | | |

C5 Right Of Way

- None
- Required
 - Rights of Entry
 - Easment
 - Taking
- MassHighway Responsibility
- Municipal Responsibility
 - Municipal Approval

Expected:

Recorded:

Expires:

Outstanding Issues

Date Updated

C6 Additional Phase

Additional project phases or concurrent public works associated with this project:

Community Support

C7 Community Priority

C8 Subregional Priority

C9 Transportation Improvement Program History

1998 1999 2000 2001 2002 2003 2004



Commonwealth of Massachusetts
Projects for PRC Consideration

To: John Blundo, P.E., Chief Engineer

From: Patricia A. Leavenworth, P.E., District Four Highway Director

Date:

Re: Requested for Project Initiation

Project Number:

Project Description :

District 4 Project Development Section requests the above captioned project to be considered by the Project Review Committee.

Information pertinent to the project is as follows.

PART I Project Identification and Funding Information

A. Project Location:

B. Route/Streets:

C. Bridge Number: N/A

D. Is this a state numbered highway?

E. Is this a state administrated highway?

F. Location description and estimated project limits by mile marker and station:

G. Number of travel lanes: 4

H. ADT:

I. Is Proposed Project on the National Highway System?

J. What is the functional classification of the subject roadway:

Tracking No :

K. Project Type:

L. Estimated Construction Duration:

M. Estimated Construction Cost:

N. Estimated Advertising Date:

O. Is the proposed project in a Transportation Bond Bill?

If YES, which Bill:

Amount of funds authorized in Bill (If any):

P Anticipated Funding:

PART II Description of needs and responsibilities

A. District/Division priority ranking:

B. Description of need for improvements:

C. District/Division resources. Include design and data gathering:

Design Responsibility: Municipality

Boston Project Management Responsibility: Highway Engineering

D. Who is responsible for Right of Way: Municipality

E. What environmental issues may have an impact on the proposed project:

EIS/EIR probably required: no Hazardous Materials: no

ENF probably required: no Wetlands: no

Cultural Resources:

Other:

F. Is the project viable based on its projected cost, funding mechanisms available and the timing of the project in relation to others in the area? Is the project to be included in the current federal fiscal year's list of projects to be advertised?

G. Are there any known issues or concerns, which could pose a problem in designing and/or implementing this project? no

H. Scenic road? no

I. Are bicycle and pedestrian accommodations going to be met?

Pedestrians:

Bicycles:

If No, Explain why.

J. Are any design exceptions anticipated: no

K. Is there any other information regarding this project which may be useful to the Project Review Committee in reaching their decision? no

PART III Project History

Select one: A _____ B1 _____ B2 _____

- A. The District/Division has checked PROJIS for the above project and has not found the project listed.
- B. The District/Division has checked PROJIS for the above project and has found the project listed as File Number 604377.
 - 1. The District/Division feels that this entry should be made to this File Number.
 - 2. The District/Division feels that this entry should be made to a new File Number.

Explain:

If you need additional information please do not hesitate to contact Michael Galvin at (718) 641-8474.

**Appendix D– Transportation Enhancement
Program Guidelines and Forms**

COMMONWEALTH OF MASSACHUSETTS

TRANSPORTATION ENHANCEMENT PROGRAM



PROJECT IMPLEMENTATION GUIDE

Argeo Paul Cellucci
Governor

Jane Swift
Lieutenant Governor

Kevin J. Sullivan
Secretary

Matthew J. Amorello
Commissioner

January 2001



Massachusetts Highway Department
10 Park Plaza
Boston, Massachusetts 02116

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Transportation Enhancement Program

PROJECT IMPLEMENTATION GUIDE

1.0 Introduction

This guide is intended as a tool to assist applicants for Transportation Enhancement Program funding and Regional Planning Agency personnel in better understanding the MassHighway processes which affect an enhancement project once it has been approved by the Secretary of Transportation. Applicants and others can also use the guide during a project's development stage to assure the project's ability to be readily implemented once it has been approved.

Because of the nature of enhancement projects, some project applicants and proponents may be new to the procedures used by MassHighway to implement projects. This unfamiliarity with highway project implementation can lead to delays or project cost overruns. However, careful project planning and development can avoid these problems.

The implementation process for an enhancement project is similar to that of other federally aided highway projects. This does not mean that every project will follow the same path to implementation; the process will vary depending upon the nature or type of project being implemented. It is important for an applicant to remain actively involved with a project after the Secretary of Transportation has approved the proposal. Approval by the Secretary of Transportation signals the beginning of the implementation process, and the applicant must be prepared to take an active role and work closely with the Regional Planning Agency and MassHighway personnel during this phase to assure successful and timely implementation. It is the responsibility of the applicant to assure that the project is implemented in accordance with MassHighway standards and procedures.

Applicants who are unfamiliar with the process and procedures imposed upon federally aided highway projects should consult with their city or town engineer, highway superintendent, or other local official familiar with the required process and procedures. If a community does not have a municipal engineer or highway superintendent, applicants should contact their MassHighway District Projects Development Engineer or State-Aid Engineer. They are experienced in implementing highway projects, and can provide valuable insight and advice to applicants.

This section briefly describes what an applicant should expect from MassHighway upon approval of a project, and further provides information on federal and state requirements for project implementation.

Once a project has received the approval of the Secretary of Transportation, the applicant will receive a notice from MassHighway listing basic implementation requirements

necessary to begin the process. The notice will also list the name and telephone number of a MassHighway contact person.

2.0 Preparing for Implementation

Regional Planning Agencies and the Enhancement Steering Committee judge proposals, in part, on their readiness for implementation. Therefore, it is essential that applicants remain mindful of implementation requirements during the development stage of their project. Properly preparing a project for implementation begins early in the project planning and project development stages, and assures the Regional Planning Agency and the Enhancement Steering Committee that the project has ample public support, the applicant has made a significant commitment to the project, and the project's design efforts comply with all state and federal requirements.

3.0 The Implementation Process

As stated earlier, depending upon the nature of a project and the level and extent of design completed, different projects may follow different paths to implementation. One of the major factors affecting the implementation process is whether MassHighway elects to advertise the project. The decision is made on a case by case basis, solely at the discretion of MassHighway. This decision is based on a variety of factors, some of which are the size, complexity, and cost of a project.

MassHighway reserves the right to advertise any enhancement project or portion of an enhancement project. As MassHighway does not ordinarily advertise design projects, it is possible and often likely the applicant will advertise the design stage and MassHighway will advertise the construction stage of a project. The following outline addresses the two components: 1) the steps for implementing a project where the applicant is to advertise the project, and 2) the steps to implementing a project in which MassHighway elects to advertise the project. Depending upon the needs of a project, applicants may need to follow both of these procedures, therefore it is important to understand these steps to better prepare a project for implementation.

3.1 Implementation Procedures: Advertisement by Applicant

- Step 1.** The applicant receives a letter of approval from the Secretary of Transportation.
- Step 2.** Shortly thereafter, the applicant receives a letter from the Director of the Bureau of Transportation Planning and Development informing the applicant of necessary steps to implement a project. At that point in time, the applicant is instructed to contact the Transportation Enhancement Program Engineer at MassHighway.
- Step 3.** The Transportation Enhancement Program Engineer will inform the applicant that MassHighway has elected to allow the applicant to advertise the project. The Enhancement Program Engineer will serve as Project Manager and notify the applicant about submission of further information. The nature of this information differs depending upon the work category of the project.

Following are some general examples of the types of information that may be required:

- **Projects Involving Property Acquisition:** The applicant submits information about the property, appraisal(s), etc.

At this stage, if a project involves the acquisition of property rights, the applicant will be referred to a MassHighway Community Compliance Officer. The Compliance Officer will guide the applicant through MassHighway's Right of Way process. Depending upon the nature of the acquisition, applicants may be required to complete the Right of Way process before proceeding on to the next implementation steps, or the applicant may be allowed to proceed through the Right of Way process concurrently with other implementation steps. For more information on MassHighway's Right of Way process see Section 5.4.4.

- **Projects Involving Design Services:** The applicant submits a detailed project cost estimate, a detailed Scope of Work including a project design budget and schedule, etc.
- **Projects Involving Construction Services:** For a project in which design is complete and it is ready for construction or implementation, the applicant submits, in multiple copies as required by the Project Manager: all plans; construction specifications; a construction budget; an itemized project cost estimate; copies of all environmental permits; a completed Categorical Exclusion (CE) Checklist required to determine the project's compliance with federal environmental laws and regulations; etc. The design stage of a project will be coordinated as described in the *MassHighway Design Manual, 1997 Metric Edition*. Also, see Section 4.1 of this Guide for further discussion of the design process.

Step 4. MassHighway reviews all information submitted to determine compliance with appropriate design standards and compliance with any applicable laws, rules, or regulations. Projects that are found to comply are then submitted to the Federal Highway Administration for funding approval. These submissions occur each quarter of the federal fiscal year (October 1 – September 30).

The Federal Highway Administration may require any of the following documents or verifications depending upon their applicability to the project stage for which funding is sought:

- List of Department of Environmental Protection Hazardous Materials Sites
- Right of Way Certificate
- Certification that there are no substandard features within the project limits

- All required federal, state, and local permits
- Bridge work approval by MassHighway
- A scheduled advertising date
- A completed CE Checklist
- Funding programmed on Transportation Improvement Program (TIP)
- Evidence that a public hearing was held
- A detailed Scope of Work for the project
- A detailed project budget
- An itemized project cost estimate
- Certification that the project is designed in conformance with MassHighway and AASHTO standards.

Step 5. Upon approval by the Federal Highway Administration, federal funds are obligated, and MassHighway drafts an agreement and transmits it to the applicant for signature.

Step 6. When the signed agreement is returned, the agreement is submitted to the MassHighway Board of Commissioners for approval.

Step 7. After the Board of Commissioners approves the agreement, MassHighway issues a Notice To Proceed (NTP). **It is critical that applicants do not begin work prior to receiving the NTP. Any expenses incurred by the applicant prior to receiving an NTP cannot be reimbursed to the applicant.**

Upon issuance of a Notice To Proceed, applicants should be prepared to periodically pay project costs in advance of reimbursement. As a project progresses, the applicant may periodically submit documentation of costs incurred to the District Office for review. Upon approval, MassHighway will reimburse the applicant.

3.2 Implementation Procedure: Advertisement by MassHighway

Step 1. The applicant receives a letter of approval from the Secretary of Transportation.

Step 2. Shortly thereafter, the applicant receives a letter from the Director of the Bureau of Transportation Planning and Development informing the applicant of necessary steps to implement a project. At that point in time, the applicant is instructed to contact the Transportation Enhancement Program Engineer at MassHighway.

Step 3. The Transportation Enhancement Program Engineer will inform the applicant that MassHighway has elected to advertise the project. The Enhancement Program Engineer may notify the applicant to contact the appropriate MassHighway District Office to prepare the project for review by MassHighway's Project Review Committee (PRC).

It is important to keep in contact with the Enhancement Program Engineer during the PRC approval process. Once a Program Manager is assigned, he/she will then become the applicant's main contact throughout the remainder of the process.

Upon satisfactory review by the PRC, MassHighway notifies the applicant that a Project Manager has been assigned to the project. In turn, the Project Manager informs the applicant of the required submission of further information which may include:

- **Projects Involving Property Acquisition:** The applicant submits information about the property, appraisal(s), etc. Also, at this stage the applicant will be referred to a MassHighway Community Compliance Officer. The Compliance Officer will guide the applicant through MassHighway's Right of Way process. Depending upon the nature of the acquisition, applicants may be required to complete the Right of Way process before proceeding on to the next implementation steps, or the applicant may be allowed to proceed through the Right of Way process concurrently with other implementation steps. For more information on MassHighway's Right of Way process see Section 5.4.4.
- **Projects Involving Design Services:** The applicant submits a detailed project cost estimate, a detailed Scope of Work including a project design budget and schedule, etc.
- **Projects Involving Construction Services:** For a project in which design is complete and it is ready for construction or implementation, the applicant submits, in multiple copies as required by the Project Manager: all plans; construction specifications; a construction budget; an itemized project cost estimate; copies of all environmental permits; a completed Categorical Exclusion (CE) Checklist required to determine the project's compliance with federal environmental laws and regulations; etc.

Step 4. MassHighway reviews all information submitted to determine compliance with appropriate design standards and compliance with any applicable laws, rules, or regulations. Projects found to be in compliance are then submitted to the Federal Highway Administration for funding approval. This submission occurs each quarter of the federal fiscal year (October 1 – September 30).

The Federal Highway Administration may require any of the following documents depending upon their applicability to the project stage for which funding is sought.

- List of Department of Environmental Protection Hazardous Materials Sites
- Right of Way Certificate

- Certification that there are no substandard features within the project limits
- All required federal, state, and local permits
- Bridge work approval by MassHighway
- A scheduled advertising date
- A completed CE Checklist
- Funding programmed on TIP
- Evidence that a public hearing was held
- A detailed Scope of Work for the project
- A detailed project budget
- An itemized project cost estimate
- Certification that the project is designed in conformance with MassHighway and AASHTO standards.

Step 5. Upon approval by the Federal Highway Administration, federal funds are obligated, MassHighway advertises the project, and awards a contract.

4.0 Implementation Factors

Many factors must be considered in preparing a project for implementation. This section discusses some of the major factors affecting a project's ability to be readily implemented. Applicants are strongly advised to review these factors during project development to assure the project is ready to proceed to its next phase after approval. Each Regional Planning Agency and the Enhancement Steering Committee member should review these factors when determining whether a project is well prepared for implementation.

Some projects forwarded for implementation may contain components that are inconsistent with the criteria outlined in the program guidelines, or as established by the Federal Highway Administration, the Executive Office of Transportation and Construction, or MassHighway. Where ineligible components are identified, they may be paid for using a separate funding source or eliminated from the project's scope of work.

All enhancement projects must comply with applicable design standards, and all federal, state, and local environmental, historical, and cultural regulations to be eligible to receive federal and state funding.

4.1 The Design Process

Before any project is developed into an enhancement proposal, the applicant should have completed the project-planning stage. The project-planning stage is the first stage in the design process.

Where a project requiring design involves a property purchase or the need to secure a temporary or permanent easement, the applicant should contact a MassHighway Community Compliance Officer. The MassHighway Community Compliance Officer

can advise the applicant on the appropriate actions needed to resolve acquisition issues. The Enhancement Steering Committee will not consider a project ready for design unless evidence is provided that all property acquisition issues, if any, have been or will be resolved in time for construction.

The MassHighway design process is outlined in detail in the *MassHighway Design Manual, 1997 Metric Edition*. The following is a brief outline of the major phases in the design process taken, in part, from the *Design Manual*. Applicants wishing to know more about the design process should consult the *Design Manual*.

There are four major stages in the MassHighway design process: planning; project development and the 25% design stage; the 75% design stage; and the 100% design stage. Each of these steps represents an important milestone in the design process and it is important they be followed in sequence, since each phase builds upon the preceding phase.

Planning: Before a project moves into design, the parameters and feasibility of the project should have been determined, reasonable alternatives to the project should have been considered, and the project to be designed should be the applicant's preferred alternative. Sound planning also involves the provision of meaningful public involvement. Careful project planning helps to avoid unnecessary delays and unforeseen expense during a project's design and construction. All enhancement proposals must have their planning stage complete before an application for enhancement funding is submitted.

Project Development and 25% Design: In this stage, basic design parameters are established, and public concerns and environmental impacts are identified. This may include, but is not limited to: performing geodetic surveying to establish the limits of work; identification and mapping of site features and environmentally sensitive areas; drafting preliminary grading plans; determining applicability of federal, state and local environmental laws and regulations; filing an Environmental Notification Form where applicable; and beginning interagency cooperation, where appropriate.

75% Design: This stage of the design process builds upon the preliminary information provided by the 25% Design stage. More detailed plans and specifications are developed during the 75% design stage. Any permits or clearances required to implement a project are typically initiated during this stage.

100% Design: This is the final stage of the design process in which plans, specifications, cost estimates, utility agreements, traffic management plans, and other design elements are finalized. All environmental and other permits should have been obtained, with plans revised to comply with permit requirements, if necessary.

4.2 Other Design Process Factors

Applicants should be aware of the following factors prior to commencing design.

4.2.1 Eligible Design Costs

Design and engineering costs eligible for reimbursement must be outlined in the contract or agreement, as appropriate, between MassHighway and the project applicant. These costs may include professional services and direct expenses for travel, printing, public hearings/meetings, the consultant's audited overhead rate and a profit margin that is consistent with the practices currently in use by MassHighway's Consultant Contract Unit.

4.2.2 Ineligible Design Costs

Administrative costs incurred by the project applicant are not eligible for reimbursement.

4.2.3 Designer Qualifications

The applicant must select a consultant from MassHighway's pre-qualified consultant list, unless determined otherwise.

MassHighway, through its Architects and Engineers Review Board (A&E Board), maintains an active list of over 300 design consultants that are pre-qualified to do work for MassHighway in approximately 30 different categories of civil engineering, structural engineering, environmental and architectural disciplines. A majority of these firms prepare designs for MassHighway and municipalities on a regular basis. A project applicant who wishes to obtain a pre-qualified consultant list, or discuss the consultant pre-qualification process may contact MassHighway's A&E Board Secretary.

4.2.4 Consultant Selection

A competitive process must be used when selecting a consultant, architect, artist, or any other vendor to perform engineering and design related services. This process can be based on qualifications, price, or combination of the two as determined by the local authority's governing statutes.

When selecting a design consultant, the project applicant should become familiar with the firm's qualifications, experience with federally-aided projects, and performance history. These elements usually have a direct and substantial effect on the timing and efficiency of project implementation and the ability to design the project within budget.

The project applicant should consult with the appropriate legal staff (Town Counsel, Chief Legal Counsel, City Solicitor, etc.) prior to commencing the selection process, to ensure that the proper procedures are followed.

The project applicant may advertise and select a design consultant without MassHighway's consent. However, the applicant must obtain written approval by MassHighway prior to awarding the consultant a contract.

Applicants should keep comprehensive records of the consultant selection process, because MassHighway reserves the right to review all selection process documentation including the consultant's negotiated fee, scope of work, and budget

Any questions concerning the consultant selection procurement process should contact MassHighway's Contracts and Agreements Manager

4.3 The Construction Process

In order for any enhancement project to proceed to construction, the project design must be completed through the 100% Design Stage. Regardless of whether MassHighway or the applicant is to advertise a project, all enhancement projects requiring construction must go through the advertising, bid award, and contracting phases of construction.

Construction work includes labor, materials, supervision and traffic police directly related to the construction, rehabilitation, or restoration involved in an enhancement project

4.3.1 Advertising, Awarding, and Contracting for Construction

In the case where the applicant is to advertise the project, all projects must be publicly bid in accordance with governing statutes, regulations, or guidelines as set forth by the public agency, authority, or commission that is taking responsibility for constructing the project.

An applicant may advertise for a contractor and open bids without the consent of MassHighway. However, an applicant may not award a construction contract without prior written approval by MassHighway.

MassHighway reserves the right to review all documentation relative to the competitive bidding process and the contractor's qualifications.

MassHighway reserves the right, at its sole discretion, to advertise the construction of any project receiving enhancement funding.

4.3.2 Construction Options

There are three ways in which construction may be implemented:

- Option 1. Qualified municipal personnel under the supervision of a qualified municipal engineer can perform the work. The contracting mechanism for this option is typically an agreement between the applicant and MassHighway.
- Option 2. A qualified contractor who has been competitively selected by the applicant can perform the work. The contracting mechanism for this option is a standard contract between the applicant and MassHighway. The applicant would then contract directly with the contractor.

Option 3. A qualified contractor who has been competitively selected by MassHighway as part of its annual advertising program can perform the work. The contracting mechanism for this option is a standard construction contract between the contractor and MassHighway.

In all cases, qualified personnel at the discretion of MassHighway may perform construction supervision.

4.3.3 Pre-qualification of Contractors Required

For projects whose total construction cost is \$50,000 or more, certain classes of work require that the contractor be pre-qualified by MassHighway's Contractor Pre-qualification Committee. Contractors intending to submit a bid on a construction project involving work in these categories must be pre-qualified. Questions concerning pre-qualification for construction contractors or the classes of work covered are directed to MassHighway Construction Contracts and Pre-qualifications Administrator.

4.4 The Right of Way Process

Any enhancement project that seeks enhancement funds to purchase property (acquisition), obtain the temporary right to enter a property to perform work (temporary easement), or to obtain the permanent right to enter and use a property (permanent easement) must follow MassHighway's Right of Way process. Any property purchase or easement acquisition must prove to be an integral part of an enhancement project and be necessary for implementation.

Costs associated with appraisals, county/local registration or filing fees, legal fees, and title examinations are not eligible for reimbursement. However, these costs can be applied to the applicant's local share.

For all property acquired with enhancement funds, the applicant at the time of application must provide suitable verification that the property has been tested for, and does not contain, hazardous materials.

An applicant whose project involves any acquisition of a property right as described above (either temporary or permanent) must begin the Right of Way process by contacting a MassHighway Community Compliance Officer.

4.4.1 Appraisals and Certified Appraisers

MassHighway's Right of Way Bureau has compiled a list of approximately 150 certified appraisers located throughout the Commonwealth. A member on the most current issue of this list must prepare all certified appraisals for enhancement projects. Applicants should be aware that this list is updated periodically.

In all cases, appraisal submissions must comply with MassHighway standards and format for appraisals. Applicants must submit to MassHighway's Right of Way Bureau a minimum of two copies of each appraisal report.

All requests for funds **less than \$175,000** requires at least **one** certified appraisal. A Department Community Compliance Officer will be responsible for reviewing the appraisal and approving the maximum amount of reimbursement for the acquisition.

All requests for funds of **\$175,000 or more** require at least **two** certified appraisals. A Department Review Appraiser will perform the appraisal review. MassHighway may, at its discretion, forward the appraisals to the MassHighway Real Estate Review Board for approval of the maximum amount of reimbursement for the acquisition.

Applicants should note that appraisal values change over time, therefore the acquisition should be completed within six months of the date of the original appraisal to prevent the need for a new current appraisal.

4.4.2 Conformity with Regulations

Acquisitions must be done in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended (Title 42 U.S.C.). All property management issues are subject to the provisions of 49 CFR Parts 18 & 24, and 23 CFR Part 713.

4.4.3 Public Hearing/Meeting Required

The applicant is responsible for advertising and hosting a public hearing/meeting concerning the acquisition. It is important for the applicant to coordinate this event with a Community Compliance Officer whose attendance is required to represent MassHighway and explain the Right of Way process.

4.4.4 Notice To Proceed Required

No property may be acquired until a contract or agreement, as appropriate, has been executed between MassHighway and the applicant, and MassHighway has issued a Notice to Proceed to the applicant.

4.4.5 Right of Way Certificate

Once the Community Compliance Officer is satisfied that all Right of Way rights have been secured, a Right of Way Certificate will be issued.

4.5 Contact Information

MassHighway Engineering/Consultant Contracts

Guy Rezendes, Transportation Enhancement Program Engineer	(617) 973-7512
Thomas Donnelly, Transportation Enhancement Agreement Administrator	(617) 973-7511
MassHighway Consultant Contract Unit	(617) 973-7511

MassHighway Prequalification Consultant List
MassHighway Architect and Engineer Board

(617) 973-7525
(617) 973-7520

MassHighway Bureau of Transportation Planning and Development

Linda Walsh, Transportation Enhancement Program Coordinator

(617) 973-8052

MassHighway Right Of Way Bureau

Anthony Lumenello, Community Compliance Officer (Districts 1, 2 & 3)
Charles O'Brien, Community Compliance Officer (Districts 4 & 5)

(617) 973-7966
(508) 824-6633

COMMONWEALTH OF MASSACHUSETTS

TRANSPORTATION ENHANCEMENT PROGRAM



GUIDELINES

Mitt Romney
Governor

Kerry Healey
Lieutenant Governor

Daniel A. Grabauskas
Secretary of Transportation

John Cogliano
Commissioner
Massachusetts Highway Department



Massachusetts Highway Department
10 Park Plaza
Boston, Massachusetts 02116

November 2003

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SECTION 1 INTRODUCTION

The Intermodal Surface Transportation Efficiency Act created the Transportation Enhancement Program. In May 1998, the Intermodal Surface Transportation Efficiency Act was superseded by the Transportation Equity Act for the 21st Century, commonly known as TEA-21. Like the Intermodal Surface Transportation Efficiency Act legislation, TEA-21 authorizes Transportation Enhancement funds for public agencies, authorities and commissions to preserve, restore, or enhance those components of the multi-modal transportation system that have not traditionally been funded by the Federal Highway Administration. These guidelines are intended to help accomplish this purpose and to foster the preparation of well conceived projects.

Transportation Enhancements funds are a means of promoting projects and activities that relate to transportation but go beyond what is considered ordinary environmental mitigation to reduce project impacts. The National Environmental Protection Act requires all federal-aid transportation projects to mitigate their environmental impacts. Mitigation efforts include measures to avoid and minimize impacts. Where impacts are unavoidable, compensatory mitigation is provided. The Transportation Enhancement program was created to expand on this concept. However, Transportation Enhancement projects are not intended to replace mitigation currently eligible or required under regular federal-aid funded projects.

Applicants should consult their Regional Planning Agency prior to commencing project development. Regional Planning Agencies continue to play a significant role in the selection of Transportation Enhancement projects. Both Regional and Statewide Transportation Enhancement proposals must be submitted to the appropriate Regional Planning Agency for review based on eligibility and readiness implementation before a project can be forwarded to the Massachusetts Highway Department (MassHighway) and the State Transportation Enhancement Steering Committee.

MassHighway has provided each Regional Planning Agency with copies of the Transportation Enhancement Program Project Implementation Guide. The Implementation Guide is an information source intended to help applicants and Regional Planning Agencies understand the steps necessary to complete a project. Applicants are encouraged to review the Implementation Guide, especially before construction begins.

MassHighway requires applicants to use a pre-approved MassHighway consultant for project development and design, since those consultants are most familiar with MassHighway's process and standards in the MassHighway Design Manual. Applicants will be required to submit a copy of the consultant's Architects and Engineers Review Board Pre-Qualification letter. Exceptions will be made only if no MassHighway approved consultant has experience or expertise to successfully complete a project.

The Massachusetts Transportation Enhancement Program also provides a separate statewide funding category for projects of statewide significance, or for substantial projects located in more than one region. Statewide projects generally must go through a review process of the appropriate Regional Planning Agency. If a project impacts multiple cities/towns and regions,

Transportation Enhancement Program Guidelines

the project may be submitted directly to the Transportation Enhancement Program Coordinator at MassHighway and the Transportation Enhancement Steering Committee for review and recommendation.

All projects recommended for funding under the Transportation Enhancement Program by the State Transportation Enhancement Steering Committee are subject to final approval by the Secretary of Transportation. Following the Secretary's approval, each project must meet certain conditions, including the programming of adequate funding for the project by the regional Metropolitan Planning Organization. The Metropolitan Planning Organization must determine that the project is eligible for funding and programming on the regional Transportation Improvement Program in accordance with all MassHighway and Federal Highway Administration requirements.

These guidelines provide guidance on:

- how to determine project eligibility
- how to prepare an application for funding
- the application submission and project selection processes
- project funding and project phasing requirements
- the roles of various agencies

SECTION 2 ELIGIBILITY

2.1 Introduction

This section outlines the criteria for determining whether a proposed project is eligible for Transportation Enhancement funding. Although meeting eligibility requirements does not guarantee that a project will be approved for funding, it does allow the project to compete for available funding. This section also defines who can apply for Transportation Enhancement funds, the types of projects allowed, and the types of work categories the program can fund.

Before a Transportation Enhancement application is submitted to MassHighway for review, the Regional Planning Agency must determine that the project is eligible for the program as outlined in these guidelines.

2.2 Eligible Applicants

Project applications may only be submitted by a municipality (city or town), public agency, authority, or commission that can assume responsibility for the project through an executed contract or agreement with MassHighway. Throughout these guidelines, the word “applicant” is often used to refer to the municipality, public agency, authority or commission that submits an application.

A project proponent or sponsor that is not, by itself, eligible to receive Transportation Enhancement funding directly (e.g. private non-profit entities or advocacy groups) may prepare the application and/or manage the project for the municipality or other public agency. However, MassHighway will hold the municipality or other public agency accountable for the project's management and completion. This includes Youth Conservation or Service Corps.¹

Therefore, it is recommended that both the applicant and the proponent work together to prepare the application and/or manage the project. The relationship of the proponent to the municipality or public agency must be described in detail in the application. When the application involves a group of municipalities or organizations, the group must select one municipality or organization to represent it as the lead applicant.

2.3 Eligible Project Types

There are two types of projects eligible to compete for Transportation Enhancement funding: Regional projects and Statewide projects.

1 Youth Conservation or Service Corps

IEA-21 requires the U.S. DOT to encourage the use of youth conservation or service corps in the implementation of Transportation Enhancement activities where appropriate IEA-21 Sec. 1108(g). Service corps and youth conservation corps organizations have effectively worked with states, local governments, and communities to assist in Transportation Enhancement projects. Corps organizations often are able to recruit, hire, train, and provide opportunities for economically and/or educationally disadvantaged young people.

2.3.1 Regional Projects

A regional project typically affects one municipality or local area within the jurisdictional boundaries of a single Regional Planning Agency. There may be instances where a regional project could impact two or more municipalities, localities or Regional Planning Agencies. If this occurs, one municipality, locality and/or Regional Planning Agency must take the lead for the project. For example, a multi-regional pedestrian and bicycle facility would be overseen by one of the Regional Planning Agencies and would generally qualify for regional funding, not statewide funding.

2.3.2 Statewide Projects

A statewide project must demonstrate statewide importance or significance. Statewide projects must (1) protect or enhance resources that are located in more than one region; and/or (2) enhance a significant feature, landscape or artifact of statewide importance in one or more than one region. Typically, statewide projects are submitted jointly by all participating parties, with one party as the lead.

2.4 Eligible Work Categories

Four categories of work are eligible for funding under the Transportation Enhancement Program – Programs, Property Acquisition, Final Design and Construction.

General program or project planning activities, such as feasibility studies, planning studies, or master plans that serve to develop program initiatives and concepts are not eligible for Transportation Enhancement funding. Furthermore, the use of Transportation Enhancement funds for the preliminary design phase of a project will not be considered.

The Transportation Enhancement Steering Committee will not separately accept project phases for eligible work categories. For example, a proposal requesting final design, property acquisition and construction funds should be received as one project application in its entirety. (See Section 4.9 Project Phasing.)

2.4.1 Programs

Programs are projects limited to an organized sequence of activities, procedures, or events designed to enhance bicycle or pedestrian safety, or preserve historical or archeological resources.

A proposal in the Program work category must have completed its planning activities and be ready for implementation. The Program category is limited to projects that are educational forums or activities to enhance bicycle or pedestrian safety, or to preserve historical or archeological resources.

2.4.2 Property Acquisition

The primary objective of this work category is the permanent acquisition of property by purchase or easement, which is clearly related to the surface transportation system. Generally, the applicant will need to show that it can actually acquire the property provided funding is

available. Any property acquisition that is proposed as part of a project must be related to the project's primary purpose, and it must be necessary for project implementation.

A proposal in the Property Acquisition work category must have its project planning complete, including the identification of the types of property rights sought (for example: fee, temporary easement, permanent easement, etc.) for each property. The application must contain a map and listing of the properties to be affected so the Transportation Enhancement Steering Committee can identify the property in question. Any issues with landowners and/or abutters should be addressed prior to the submission of an application for property acquisition. If a project requires private or public land acquisition, there must be sufficient evidence to support the acquisition by purchase or easement, such as a letter from the landowner(s) or an affidavit from a city or town official.

Any issues with encroachments should be addressed prior to the submission of an application for property acquisition and/or disclosed at the time of application. If there are encroachment(s), the applicant must provide adequate evidence that the encroachment(s) will not interfere with the implementation of the Enhancement project. If the encroachment(s) interferes with the implementation of the Enhancement project, the applicant must resolve the encroachment issue prior to applying for Enhancement funding.

Transportation Enhancement funds may not be used to purchase land that is already in the public realm, including Massachusetts Bay Transportation Authority owned rights-of-way, or for eminent domain actions involving any hostile taking of privately owned property.

The applicant must also identify substantial support for the project and demonstrate a strong likelihood that the acquisition will take place upon final approval and allocation of the funds. Although a public meeting is not required at this time, it is encouraged. Information pertaining to any type of city council vote or municipal referendum or hearing, as well as any opposition to the project, is important to disclose in the application.

An applicant for property acquisition must also follow the MassHighway right-of-way process explained in Section 4.4 of the Transportation Enhancement Implementation Guide and ensure compliance with Title 42 USC, §4601, et. seq., under the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.

2.4.2.1 Property Acquisition for Preservation projects

At the time of application for a property acquisition for a preservation project, the applicant must identify the parcels of land necessary to complete the property acquisition, and convince MassHighway and the Transportation Enhancement Steering Committee that the property acquisition is necessary for the preservation project. The project must be clearly related to the surface transportation system.

2.4.2.2 Property Acquisition (for proposed Enhancement construction projects)

The primary objective of this work category is the permanent acquisition of property, by purchase or easement, necessary to complete the proposed Enhancement construction project.

Any property acquisition for a construction project must be necessary for project implementation.

Once the construction project is scheduled to begin, all property within the project limits must be acquired and documented. In the case of Massachusetts Bay Transportation Authority owned rights-of-way, a letter from the Massachusetts Bay Transportation Authority's Real Estate department authorizing access over the right-of-way is necessary.

2.4.3 Final Design

Final Design projects are intended to complete the final design of an eligible Transportation Enhancement project. A proposal in the Final Design work category must have its project-planning phase and any necessary feasibility studies complete. MassHighway requires that applicants use a pre-approved MassHighway consultant for project development and design. Applicants will be required to submit a copy of the consultant's Architects and Engineers Review Board Pre-Qualification letter. Each consultant must be approved for the project's required disciplines. Contact the Secretary of the Architects and Engineers (A&E) Board for information regarding disciplines and pre-qualifications. (See Appendix D.)

At the time of application for final design, the applicant shall have completed or substantially completed the 25% design phase; or the applicant shall commit in writing to fund the project development and 25% design phase pursuant to MassHighway design standards.²

After the proposed project is approved and the 25% design is complete, the applicant must contact the District office about submitting a Project Review Committee (PRC) request. After this request has been submitted along with the 25% design, a project manager for MassHighway will be assigned. Several copies of the design plans will need to be submitted, and the project manager will begin the 25% design review. (See MassHighway's Design Manual and Project Implementation Guide for more information regarding the Design process.)

² The MassHighway Design Process contains several phases with which applicants should become familiar. For the purposes of developing a Transportation Enhancement proposal, it is critical to have an understanding of the three phases described below. For more information regarding the MassHighway design process, refer to the MassHighway's Highway Design Manual, 1997 Edition; or contact the appropriate MassHighway District Office.

Project Development and the 25% Design Phase: This is the design phase where basic design parameters are established, and public concerns and environmental impacts are identified. This phase may include, but is not limited to: performing geodetic surveying to establish the limits of work; identifying and mapping site features and environmentally sensitive areas; drafting preliminary grading plans; determining applicability of federal, state and local environmental laws and regulations; filing an Environmental Notification Form where applicable; and beginning interagency cooperation, where appropriate.

75% Design Phase: This phase builds upon the preliminary information provided by the 25% Design Phase. More detailed plans and specifications are developed during this phase. Any required permits or clearances needed to implement the project are typically initiated during this phase.

100% Design Phase: This is the final design phase where plans, specifications, cost estimates, utility agreements, traffic management plans, and other design elements are finalized. All environmental and other permits should have been obtained, with plans revised to comply with permit requirements, if necessary.

MassHighway will not authorize starting the final (75%) design phase unless any right-of-way or property acquisitions are resolved and under the control of the applicant. Any known opposition to the project should have been disclosed and resolved during the 25% design phase. A public hearing, city council or town vote, and/or municipal referendum or hearing shall be conducted during the preliminary (25%) design phase.

2.4.4 Construction

A proposal in the Construction work category must have completed its planning activities, feasibility studies, property acquisitions, and design before implementation can begin. Permitting and design issues must be complete prior to the start of construction. Construction projects are those projects that are ready to be built.

Approved construction projects are those whose design has been done by a MassHighway approved design consultant, has gone through the 25%, 75%, 100% design reviews, and Planning, Specification and Estimate reviews (see MassHighway's Design Manual for more information regarding the Design process), and has been deemed ready for construction. All required permits should have been obtained, and the right-of-way, if any, shall be under the control of the applicant. Construction projects cannot begin until the design is complete. Therefore, the programming of funding for the construction should appear in the appropriate year of the Transportation Improvement Program.

Any property acquisition that is proposed as part of a construction project must be related to the project's primary purpose, and it must be necessary for project implementation. Any property acquisitions should be under the control of the applicant before construction can begin. A public hearing, city council or town vote, municipal referendum or hearing should have been conducted by this time. Any known opposition to the project should have been disclosed and adequately resolved before construction can begin.

Improvements to private property or commercial facilities are eligible for funding only if they are, at the sole discretion of MassHighway, necessary to mitigate the impacts of construction of a Transportation Enhancement project.

A visitor or welcome center, generally, should be publicly owned and open to the public. Proposals for privately owned facilities to be used for a welcome or tourist center, and leased to a public entity, will be reviewed on a case-by-case basis by both MassHighway and the Federal Highway Administration. (See Activity 4)

2.5 Project Eligibility Criteria

In addition to all other program requirements outlined in these guidelines, each Transportation Enhancement proposal submitted for review must meet Eligibility Criteria 1 through 3 as listed below to receive further consideration for funding. In addition to meeting Eligibility Criteria 1 through 3, proposals submitted as "Statewide" projects must meet the requirements in Section 2.3.2 for Statewide funding.

2.5.1 Eligibility Criterion 1: Relationship to Surface Transportation System

Transportation Enhancement activities must relate to surface transportation. Each proposed project must demonstrate a substantial relationship to the surface transportation system either by function, proximity or impact. The only exception is for Historic Preservation Projects. Historic Preservation projects are not eligible for Transportation Enhancement funding if linked to the surface transportation system by proximity alone. These projects must also be linked by impact and/or function.

Function – The project must serve, or have served, as a functional component of the intermodal surface transportation system.

Proximity – The project must be contiguous to or clearly visible from a publicly accessible transportation facility. If the relationship to the transportation system is solely by proximity the proposed activity must significantly enhance the surface transportation system.

Impact – The project must have a significant beneficial impact on the surface transportation system.

The nature of a proposed Transportation Enhancement project's relationship to surface transportation should be discussed in the project proposal. Surface transportation means all elements of the intermodal transportation system, exclusive of aviation. For the purpose of Transportation Enhancements eligibility, surface transportation includes water as well as land transportation, and it includes as eligible activities related features such as canals, lighthouses, and docks or piers connecting to ferry operations, provided the proposed Transportation Enhancement otherwise meets the basic eligibility criteria.

2.5.2 Eligibility Criterion 2: Non-Traditional Transportation Project

A fundamental purpose of the Transportation Enhancement Program is to provide funding for transportation-related projects that are not typically eligible for funding under more traditional transportation funding programs. Activities that are commonly performed or funded as routine design, construction, replacement, maintenance or ordinary environmental mitigation to reduce project impacts are not eligible for funding as a Transportation Enhancement activity. Generally, this is decided on a case-by-case basis.

Activities not eligible for Transportation Enhancement funds include, but are not limited to: ordinary sidewalks, sidewalk repair or replacement, sidewalk modifications to comply with American with Disabilities Act requirements, roadway resurfacing/widening, parking lots, upgrading of substandard highway elements (signs, guardrail, wheelchair ramps, etc.), wetland replication (1:1), or compensatory flood storage.

2.5.3 Eligibility Criterion 3: Includes a Transportation Enhancement Activity

The principal purpose of the proposed project must include at least one eligible project activity as listed on the Transportation Enhancement Activities table.

TABLE OF TRANSPORTATION ENHANCEMENT ACTIVITIES
1. Provision of facilities for pedestrians and bicycles
2. Provision of safety and educational activities for pedestrians and bicyclists
3. Acquisition of scenic easements and scenic or historic sites
4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities)
5. Landscaping and other scenic beautification
6. Historic preservation
7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals)
8. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails)
9. Control and removal of outdoor advertising
10. Archeological documentation and research
11. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
12. Establishment of transportation museums

A more detailed explanation of each activity including any applicable exceptions or special requirements follows:

Activity 1. Provision of facilities for pedestrians and bicycles

Except as provided in Section 2.5.2, this activity may either create new linkages for pedestrians and bicycles in the transportation system or improve existing facilities. Eligible projects include pedestrian and bicycle paths and roadway improvements to accommodate bicycles and related facilities. Routine maintenance of pedestrian and bicycle facilities is not eligible for Transportation Enhancement funding.

Projects whose purpose is to retrofit an existing facility solely for American with Disabilities Act conformance are not eligible to receive Transportation Enhancement funding. Each project must be consistent with the goals and objectives of the applicable Regional Transportation Plan endorsed by the Metropolitan Planning Organization at each Regional Planning Agency.

Any project submitted under this activity must comply with the requirements of the Americans with Disabilities Act, and the requirements of the Architectural Access Board, where applicable.

Proposed projects or programs must be consistent with the safety and educational objectives of the most recently approved *Massachusetts Pedestrian Transportation Plan*, or *Massachusetts Statewide Bicycle Transportation Plan*.

Activity 2. Provision of safety and educational activities for pedestrians and bicyclists

This activity includes non-construction safety-related activities such as bicycle and pedestrian safety training, cost of facilitators and classes. This activity may also include related training materials such as brochures, videotapes, and other training aids. Staff salaries will only be paid if the staff person was hired for the sole purpose of this program. For example, a summer intern or a part-time employee could be eligible, but a full-time staff person would most likely not be eligible. MassHighway reserves the right to make this decision on a case-by-case basis. Each proposal should reflect a definitive period for participation.

The Transportation Enhancement funded activities must be available to the general public or targeted to a broad segment of the general public. Project sponsors are encouraged to integrate safety messages and education opportunities for bicyclists and pedestrians into Transportation Enhancement projects through the development of campaigns, programs, education materials including maps and brochures, and pedestrian and bicycle enforcement activities. Project sponsors are also encouraged to coordinate these activities with the National Highway Traffic Safety Administration and the Governor's Highway Safety Bureau. This activity is not intended to replace or duplicate existing Section 402 funding opportunities for bicycle and pedestrian activities currently available throughout the state.

Proposed projects or programs must be consistent with the safety and educational objectives of the most recently approved *Massachusetts Pedestrian Transportation Plan*, or *Massachusetts Statewide Bicycle Transportation Plan*.

Activity 3. Acquisition of scenic easements and scenic or historic sites

This activity includes projects that enhance the transportation experience or are a significant part of a transportation corridor's view shed. Typically, these projects propose to purchase, accept donations of, transfer, or trade lands that in their current form possess significant aesthetic, cultural, historic, natural, visual or open space values.

At the time of application for Transportation Enhancement funds, an applicant must provide suitable verification that the property has been tested for, and does not contain, hazardous materials. Costs associated with appraisals, 21E site assessments, surveys, title searches, legal fees or other incidental purchase costs are not eligible for funding.

The property acquired must have a preservation covenant in accordance with Massachusetts General Laws, Chapter 184, Section 32 attached to the deed of the property to ensure that future activities on the property will respect the scenic or historic integrity of the property. Land acquired for its scenic and historic qualities must be maintained for these qualities and may not be developed or used in a manner that degrades the scenic character and quality of the site. The project sponsor must agree to enforce mechanisms to preserve the historic or scenic values of the property.

In general, public access should be provided to all acquired property. However, in cases where public access may not be appropriate, due to the nature of the property or its preservation restrictions, it is not required. Special circumstances must be clearly explained in the project application, along with appropriate documentation and justification.

Activity 4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities)

This activity includes projects that protect and enhance federal or state designated scenic highways or byways, and federal or state designated historic highways. Highways that are eligible to be designated as historic may be included in a project. Funds may be used to protect or enhance the scenic and historic integrity and visitor appreciation of the highway and adjacent area, including tourist or welcome centers. Funding may be used for projects that will enhance the scenic, historic, cultural, natural and archeological features of an existing highway and adjacent area, as well as traveler appreciation of these features.

Congress provided additional language to assist in the interpretation of its intent regarding tourist and welcome centers. The conference report language notes:

"...In order to be eligible under the Transportation Enhancement program, the tourist or welcome center (whether a new facility or existing facility) does not have to be on a designated scenic or historic byway, but there must be a clear link to scenic or historic sites."

The eligibility for tourist and welcome centers includes necessary related construction actions to provide the facility, such as interior fixtures and parking areas. Transportation Enhancement funds may be used to purchase and install items that support or interpret the scenic or historic highway program or site. Transportation Enhancement funds may not be used for staffing, operating costs, or maintenance. Transportation Enhancement funds may not be used to purchase items such as racks for advertising brochures for private businesses.

The intent of this activity is to fund activities clearly linked to scenic or historic programs or sites, not to simply repair or restore what are clearly rest areas.

A tourist and welcome center need not be located immediately adjacent to an existing federal-aid highway. However, if a proposed tourist or welcome center is not linked to such a highway, the proposal must explain its relationship to the surface transportation system. A visitor or welcome center should be publicly owned and open to the public. Proposals for privately owned facilities to be used for a welcome or tourist center, and leased to a public entity, will be considered on a case-by-case basis by MassHighway and the Federal Highway Administration.

Activity 5. Landscaping and other scenic beautification

This activity includes projects that enhance the aesthetic or ecological resources along a transportation corridor, at points of access, and on lands qualifying under other Transportation Enhancement activities. Architectural treatment of transportation structures, including bridges and highways, beyond federal and state design standards, may be considered eligible in this category.

Funding does not cover routine maintenance, soil stabilization, drainage improvements or seeding. A qualified professional, such as a registered landscape architect, must develop the

necessary plans. Plans must be submitted to and approved by MassHighway. MassHighway reserves the right to require that changes to the plans.

If proposed projects appear to be primarily park improvements with incidental Transportation Enhancement activities incorporated into the project, only the transportation element will be eligible for funding. Payment to utility companies occupying the public right-of-way, by permit or sufferance, is not eligible for funding.

Activity 6. Historic preservation

This activity includes acquisition, rehabilitation, or restoration of prehistoric or historic sites, districts, buildings, structures or landscapes that are directly related to the surface transportation system by function or impact. A historic preservation project that is linked to the surface transportation system by proximity only is not eligible to receive Transportation Enhancement funding.

Historic, cultural, and archaeological resources that are eligible to be listed, or listed in the National Register of Historic Places or listed in the State Register of Historic Places are eligible for Transportation Enhancement funding.

The State Register of Historic Places includes properties listed in or determined eligible for listing in the National Register of Historic Places by the Secretary of the Interior; properties within local historic districts; local, state, and national landmarks; state archaeological landmarks; and properties with preservation restrictions. All work must be done in compliance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation and Standards for Treatment of Historic Properties*. The historic preservation work must be carried out under the direction of professionals meeting the standards published in the Code of Federal Regulations, (36 CFR, Part 61).

Transportation Enhancement projects that include Native American sites must provide evidence through the Massachusetts Commission on Indian Affairs that appropriate Native American representatives have been consulted, agree with the project objectives, and support the project's implementation. A letter from the Massachusetts Commission on Indian Affairs must accompany the project application.

Activity 7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals)

Rehabilitation performed under this category must restore a historic transportation building, structure or facility to a condition that will allow it to function as a transportation facility while preserving its significant historic features. "Structures" include tunnels, bridges, trestles, embankments, rails, non-operational vehicles, canal viaducts, towpaths and locks, stations and other transportation features. Rehabilitation means returning the property to a state which makes possible contemporary use while preserving the significant historic features. A project may have eligible components and non-eligible components.

Historic transportation buildings, structures or facilities must be associated with the operation or construction of modes of surface transportation. Such building, structure or facility must be

listed or eligible for listing in the National Register of Historic Places or listed in the State Register of Historic Places, in order to be eligible for Transportation Enhancement funding.

Activity 8. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails)

This activity includes the acquisition, rehabilitation and development of railway corridors for conversion and use for bicycle and pedestrian trails and use. In any corridor that contains segments that are privately owned, public access must be provided and maintained in order that the corridor may be developed and rehabilitated for use as a bicycle or pedestrian facility. Transportation Enhancement funds shall not be used to purchase land that is already in the public realm or for eminent domain actions involving any hostile taking of privately owned property.

Acquisition solely for rail corridor preservation is not eligible to receive Transportation Enhancement Program funds. All rail property acquired under this program must be used for transportation purposes, primarily for bicycle or pedestrian uses.

Activity 9. Control and removal of outdoor advertising

This activity includes the control and removal of existing non-conforming outdoor advertising signs, billboards, displays, and devices. In general, a non-conforming sign is one that conformed to the law at the time it was established, but does not conform to current laws or regulations.

Projects in this activity category may not include the removal of illegal signs under Section 131 of Title 23. Whenever feasible, this activity should be incorporated as a secondary activity under the scope of broader Transportation Enhancement projects.

Any projects subject to prior legally binding agreements concerning display or removal of outdoor advertising shall not be eligible for Transportation Enhancement funds.

Activity 10. Archaeological documentation and research

This activity includes research on archeological sites, experimental activities in archaeological site preservation and interpretation, and planning to improve identification, evaluation and treatment of archaeological sites located in a transportation corridor.

This activity also includes rehabilitating archaeological excavation records and the cataloging of artifacts previously recovered along a transportation corridor. Their significance, and public appreciation for the site, may be enhanced through interpretative signs, displays, and publications. Although museum creation is not eligible under this category (see Activity 12), public exhibition of the artifacts may be eligible.

All work must be conducted in compliance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*, and must be managed under the direction of professionals meeting the standards published in the Code of Federal Regulations, 36 CFR, Part 61. The qualifications define minimum education and experience required to perform eligible historic preservation activities. In some cases, additional areas or levels of

expertise may be needed depending on the complexity of the task and the nature of the historic properties involved. Funds are not intended for normal mitigation.

Transportation Enhancement projects that include Native American sites must provide evidence that appropriate Native American representatives have been consulted, agree with the project objectives, and support the project's implementation.

Activity 11. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity

TEA-21 expanded the category under Transportation Enhancements that addresses environmental mitigation for water pollution due to highway runoff and added measures to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity. These activities can be either stand-alone projects or part of a larger existing or proposed project under the Transportation Enhancement activities as long as such activity is related to the surface transportation system.

Transportation Enhancement funds may be used to rectify current or prior impacts from transportation facilities. Examples of such projects to improve water quality include:

- Retrofitting an existing highway by creating a wetland to filter highway runoff based on water pollution impacts from the road.
- Improving streams and drainage channels through landscaping to promote filtering and improve the overall water quality conditions of receiving channels.

This category also addresses activities for the reduction of vehicle-caused wildlife mortality while maintaining habitat connectivity. This funding category is not limited to threatened and endangered species, but includes prevention of any wildlife mortality directly caused by vehicles. The criteria used to determine a need for a wildlife crossing or control project in a specific location are determined by the migration patterns, habitat use and distribution. Crossing characteristics of wildlife, as shown through data collection on safety of motorists, habitat fragmentation, and wildlife mortality, shall be provided to support an application.

Examples of projects eligible for funding in this Transportation Enhancement category include:

- Wildlife underpass or overpass projects.
- Measures proposed at areas identified as crossings for wildlife, which may include necessary fencing and other marking and mitigation techniques associated with movement of wildlife across transportation corridors.
- Bridge extensions to provide or improve wildlife passage and wildlife habitat connectivity.

If a direct measure to reduce wildlife mortality at a highway crossing area is determined to be infeasible (e.g., too expensive, geologically impossible, or unsafe for motorists), it might be possible to compensate for the loss of wildlife due to vehicle collisions by developing new habitat resources, or by improving existing habitat resources to support additional population. The results could be deemed to reduce the effects of the highway-related mortality on the long-term population stability or public benefits of wildlife. When considering this approach, coordination with appropriate wildlife management agencies must be initiated. The decision to

undertake this approach should be made in cooperation with both MassHighway and the Federal Highway Administration division office.

Activity 12. Establishment of transportation museums

Transportation museums using Transportation Enhancement funds must meet the following definition of a museum. The facility must (1) be a legally organized not-for-profit institution or part of a not-for-profit institution or governmental entity; (2) be essentially educational in nature; (3) have a formally stated mission; (4) have at least one full-time paid professional staff member who has museum knowledge and experience and is delegated authority and allocated financial resources sufficient to operate the museum effectively; (5) present regularly scheduled programs and exhibits that use and interpret objects for the public according to accepted standards; (6) have a formal and appropriate program of documentation, care, and use of collections and/or tangible objects; and (7) have a formal and appropriate program of presentations and maintenance of exhibits.

Establishment of transportation museums is intended to mean funding of capital improvements. Such funding is not intended to reconstruct, refurbish, or rehabilitate existing museums, or portions of museums, that are not for transportation purposes. They are not to cover operations or maintenance of the facility. The museum must be related to surface transportation. Establishment of transportation museums is interpreted to include the costs of the structure. Displays, segments of building, or objects not directly related to transportation may not be funded with Transportation Enhancement funds. Transportation Enhancement funds may be used to build a new facility or convert an existing building or portion for use as a transportation museum.

The museum must be open to the public and run by a public or non-profit organization meeting the definition of museums stated above in this section. If entrance fees are charged for the museum, a portion of the fee should be provided for the long-term maintenance and operation of the facility.

The legislation governing the Transportation Enhancement program specifically refers to Transportation Enhancement activities as "relating to surface transportation." Therefore, Transportation Enhancement funds are not to be used to preserve aircraft or create an airport or air museum. Objects or structures related to aviation are not normally eligible for Transportation Enhancement funds.

SECTION 3 THE APPLICATION PROCESS

Introduction

The Transportation Enhancement Program application process is comprised of two phases: the pre-application process and the final application process. All applicants for both regional and statewide project funding are required to complete the pre-application process prior to entering into the final application process. Those projects requesting statewide funding must submit a letter of intent to the Bureau of Transportation Planning and Development prior to submitting a pre-application.

If a project has been deemed eligible for statewide funding (See Section 3.3.1), the applicant should work with the appropriate Regional Planning Agency(s) or the Transportation Enhancement Program Coordinator to develop the proposal. If a project impacts two or more Regional Planning Agencies, the applicant should contact the Enhancement Program Coordinator at MassHighway directly. The applicant should provide copies to the appropriate Regional Planning Agencies of correspondence for regional and statewide projects. It is important that each applicant discuss with the appropriate Regional Planning Agency the necessary steps to secure funding for regional projects on the local Metropolitan Planning Organization's Transportation Improvement Program.

The applicant is responsible for researching information, preparing documentation, and assuring that all materials submitted to the Regional Planning Agency or the Enhancement Steering Committee are complete and correct. The applicant is expected to work closely with the Regional Planning Agency and MassHighway staff during the application process and the subsequent review process.

Step 1 - Initial Contact

Any party interested in pursuing a Transportation Enhancement project should contact the appropriate Regional Planning Agency or Transportation Enhancement Program Coordinator at MassHighway to discuss the project proposal. Regional and statewide projects will proceed through a Regional Planning Agency, and *some* Statewide projects will proceed through the Transportation Enhancement Program Coordinator. (See Section 1)

Step 2 - Letter of Intent (Statewide Projects only)

Regional project proposals should skip step 2 and proceed to step 3.

For a project presumed to be eligible under the statewide category, the applicant must submit a letter of intent to the Bureau of Transportation Planning and Development prior to beginning the pre-application process. The letter of intent must include the project name, amount of funding requested, brief description of the project, and why the project is eligible for Statewide Transportation Enhancement funding.

The applicant must note if the application will be submitted through one or more Regional Planning Agencies, with one Regional Planning Agency acting as the lead, or if the project will be submitted through the Transportation Enhancement Program Coordinator.

Upon review of the letter of intent by MassHighway and the Enhancement Steering Committee, the applicant and Regional Planning Agency may be invited to submit a pre-application.

Step 3 - Pre-Application Submission

The purpose of the pre-application process is to assist applicants with project development and to assure, prior to approval, that proposed projects can be implemented. The applicant will be required to complete the planning stage of the process, undertake most of the project development work, and identify any obvious issues of concern. Furthermore, if a feasibility study is necessary, this will be required before the pre-application stage begins.

Applicants for both regional and statewide projects are required to submit a pre-application. The pre-application process is designed to provide applicants with the technical resources and advice necessary to assure that projects are properly prepared to receive and use Transportation Enhancement funding.

Regional Planning Agencies Review Process

Each Regional Planning Agency is responsible for soliciting and screening regional and statewide project applications. If a project appears eligible for statewide funding, the applicant should continue to work with the Regional Planning Agency to develop its proposal. If a project impacts two or more Regional Planning Agencies, the applicant should contact the Enhancement Program Coordinator at MassHighway.

The Regional Planning Agency should provide applicants with information regarding programming of funds through the local Metropolitan Planning Organization. At the time of application, the Regional Planning Agency will be responsible for submitting an itemized funding schedule for each eligible work category by Transportation Improvement Program year. (Funding a project over several Transportation Improvement Program years is allowed and should not be confused with project phasing by work category in Section 4.9.)

MassHighway accepts regional and statewide applications on an open enrollment basis throughout the year. Each Regional Planning Agency may determine its own timeline for accepting regional Transportation Enhancement proposals. Statewide Transportation Enhancement proposals are accepted by both Regional Planning Agencies and MassHighway on an open enrollment basis, unless determined otherwise by the Enhancement Steering Committee. MassHighway will recommend the appropriate funding year for statewide projects on the State Transportation Improvement Program.

Although project scoring criteria have been eliminated in these guidelines, each Regional Planning Agency may develop its own scoring or evaluation method. In soliciting projects, Regional Planning Agencies should encourage the submission of projects that are not only eligible for funding under state and federal guidelines, but that are also well-prepared for

Transportation Enhancement Program Guidelines

implementation. It is essential that responsible Regional Planning Agency staff be familiar with the program requirements contained in these Guidelines and with sound project development practices.

In reviewing pre-applications, the Regional Planning Agency should assure that the application is complete, portrays a fair and accurate status of the project, and meets the criteria and requirements of these Guidelines, including identifying the source of funds for the applicant's funding share. Regional Planning Agency staff is encouraged to contact the Transportation Enhancement Program Coordinator at MassHighway with any questions regarding the pre-application.

The Regional Planning Agency is encouraged to work with project applicants to submit project applications in their entirety. (See Section 4.9 Project Phasing by work category)

In its review of pre-applications, the Regional Planning Agency must, at a minimum, assure that the review includes the following determinations:

- Compliance with these guidelines;
- Eligibility to receive Transportation Enhancement funds;
- Project's capability to comply with federal and state design standards;
- Consistency with state, regional and local plans;
- Organization, clarity and accuracy of materials submitted;
- Readiness for implementation upon receipt of funding;
- Sufficiency of the project scope of work to allow a full understanding of the project's steps to implementation.
- Appropriate itemized Transportation Improvement Program schedule for funding each phase of the project.
- Relationship of the project's budget to the scope of work, and eligibility of items in the budget to receive funding;
- Ability to secure and identify the applicant's required funding share;
- Disclosure of unresolved development issues in the pre-application (unresolved issues with right-of-way ownership or access, environmental resources, or permitting, for example);
- Adequacy of community support for the project, and
- Necessity of a site visit(s) to evaluate the project and the proposal.

MassHighway will only review those projects that Regional Planning Agencies recommend for review. The Regional Planning Agency is expected to work with members of its Metropolitan Planning Organization and recommend funding to its Metropolitan Planning Organization for programming on the regional Transportation Improvement Program.

The Regional Planning Agency is responsible for advancing projects which, in its opinion, meet the eligibility requirements, reflect a sound use of funds, are responsive to local, regional and statewide plans, and are in full compliance with all applicable laws, rules, regulations and guidelines. The regional selection committee should review projects that are feasible and implementable before submitting a project to MassHighway.

The Regional Planning Agency should construct a selection process that is fair to all applicants, open to the public, and responsive to its constituents. Upon submission of a pre-application, MassHighway should be made aware of the Regional Planning Agency's selection process. The Regional Planning Agency should deal directly with the applicant on any necessary changes to the application prior to submitting the application to MassHighway for review.

The pre-application must be complete, including all relevant attachments. It must include a complete detailed Scope of Work and an Itemized Budget for each phase of the project. The budget should identify the source of funds for the applicant's funding share. The applicant must provide evidence that the required 10% project match is secured or there is reasonable evidence that the match will be available when the project is ready to be implemented. (See Section 4.6.3) Maps and diagrams should be attached to explain the details and location of a project, as appropriate.

Although a public hearing is not required during the pre-application process, it is encouraged. Information pertaining to any type of city council or board of selectman vote or municipal referendum or hearing, and evidence of support or opposition to the project are important to disclose at this time. The pre-application should be well-written and easily understood by the reader.

Regional Planning Agencies are expected to keep on file copies of all proposals submitted for review, including any relevant correspondence. A record of the events that take place for each project application should be kept. Upon request, such records shall be made available to MassHighway and the Transportation Enhancement Steering Committee.

Upon completion of its review of the pre-application, the Regional Planning Agency should meet with the applicant to present its findings. If the Regional Planning Agency and its Regional Selection Committee support the project for submission to MassHighway, the applicant is responsible for making any necessary revisions to the pre-application in accordance with the requirements of the Regional Planning Agency. After receipt of a properly revised pre-application, the Regional Planning Agency will transmit it to the Enhancement Steering Committee.

The Regional Planning Agency will be required, as part of the project application, to submit a brief description of the Regional Selection Committee, its membership, and its review process. Any questions, concerns or objections of the Regional Selection Committee should be noted. All other relevant attachments pursuant to these guidelines should be enclosed at the time the application is submitted to MassHighway and the Enhancement Steering Committee for review.

The applicant must provide an original plus eleven (11) complete copies of each pre-application for submission to MassHighway and the Enhancement Steering Committee. Each copy must be submitted in an orderly and efficient manner. All pre-applications must be submitted using the standard MassHighway pre-application form. Each copy must contain all of the required elements of the pre-application form.

Transportation Enhancement Program Guidelines

The Transportation Enhancement Program Guidelines and forms can be obtained through each Regional Planning Agency (See Appendix D). The guidelines and forms are available as a paper copy or electronically. Please note, all applications, both pre-applications and final applications, must be submitted on the standard MassHighway application form. Any changes to or reproductions of the MassHighway application form will not be accepted. For example, the application form should not be retyped or altered in any way.

All pre-applications must be submitted to the following address:

Transportation Enhancement Steering Committee
c/o Transportation Enhancement Program Coordinator
Massachusetts Highway Department
Bureau of Transportation Planning and Development
10 Park Plaza, Room 4150
Boston, MA 02116

MassHighway's Review to the Enhancement Steering Committee

MassHighway will begin its review of the pre-application upon receipt from the Regional Planning Agency. The Enhancement Guidelines in effect at the time the pre-application is received by MassHighway will govern the project application.

MassHighway staff will conduct its review of the pre-application in a timely manner. The Transportation Enhancement Program Coordinator and Transportation Enhancement Program Engineer at MassHighway will review each pre-application. Other MassHighway staff and District staff may also review the pre-applications, when deemed necessary. MassHighway may also conduct its own site visit.

After an internal review by MassHighway, the Transportation Enhancement Program Coordinator will contact the applicant to either schedule a meeting or notify the applicant that its application will be brought before the next Enhancement Steering Committee meeting. Once the application is brought before the Enhancement Steering Committee, the Enhancement Steering Committee will review the proposal and inform the applicant and Regional Planning Agency of the Enhancement Steering Committee's findings and recommendations on how to proceed.

If additional information is requested, the applicant and Regional Planning Agency will be responsible for providing any additional information within 60 days. Upon satisfactory resolution of any outstanding issues by MassHighway and the Enhancement Steering Committee, the Enhancement Program Coordinator will invite the applicant and Regional Planning Agency to proceed to a final application.

Step 4 - Final Application Submission

The final application must be complete, including all relevant attachments. The final application should reflect any necessary changes required by the Regional Planning Agency, MassHighway and Enhancement Steering Committee during the pre-application phase. A public hearing on the proposal shall be held prior to submission of the final application. The outcome of any town or city council vote on the proposal should be part of the final application. Furthermore, it is

important to disclose any additional findings on organized opposition and support for the project. Non-disclosure of this information could jeopardize the project

The applicant, through its Regional Planning Agency, must submit one original and eleven (11) complete copies of each final application form to the Transportation Enhancement Steering Committee. Of the twelve complete sets, the original must be submitted loose leaf (e.g. three-ring binder) and the additional eleven copies must be bound. Stapled or paper clipped proposals are not acceptable and will be returned. Each copy must be compiled so that the final application and all required forms, photographs (if applicable), and other supporting documentation comprise a complete, organized package

All final applications should be submitted to the following address:

Transportation Enhancement Steering Committee
c/o Transportation Enhancement Program Coordinator
Massachusetts Highway Department
Bureau of Transportation Planning and Development
Bureau of Transportation Planning and Development
10 Park Plaza, Room 4150
Boston, MA 02116

Transportation Enhancement Steering Committee Review Process

The Transportation Enhancement Steering Committee reviews all letters of intent, pre-applications and final applications and determines feasibility and eligibility for funding. The Transportation Enhancement Steering Committee then votes to recommend or not recommend approval of projects to the Secretary of Transportation. The Transportation Enhancement Program Coordinator serves as staff to the Transportation Enhancement Steering Committee.

If the Transportation Enhancement Steering Committee determines that a proposal requires further information or clarification to evaluate the proposal and render a sound recommendation to the Secretary, it will request such information from the Regional Planning Agency and applicant. The Regional Planning Agency will have 60 days from the date of notification to respond to the Transportation Enhancement Steering Committee's request for information. A request to extend the time period to submit additional information must be submitted in writing and approved by the Bureau of Transportation Planning and Development prior to the expiration of the 60 days.

Once the Transportation Enhancement Program Coordinator has received the information, the project will be re-evaluated by the Transportation Enhancement Steering Committee at its next quarterly meeting. Should the Regional Planning Agency fail to provide the requested information within 60 days, the Transportation Enhancement Steering Committee may recommend disapproval of the proposal to the Secretary of Transportation.

Transportation Enhancement Program Guidelines

In order to recommend approval of a proposal to the Secretary of Transportation, the Transportation Enhancement Steering Committee must determine that:

- a) The proposal meets all program requirements, including eligibility criteria, as outlined in these guidelines;
- b) The proposal meets program requirements in the appropriate Transportation Improvement Program year;
- c) The proposal is consistent with the goals and objectives of regional transportation plans and policies;
- d) The proposal is well-conceived and will provide benefits to the transportation system;
- e) The proposal has adequate funding mechanisms intact for state and local shares; and
- f) The proposal is feasible and well prepared for implementation.

For a proposal to be deemed feasible and well-prepared for implementation, the Transportation Enhancement Steering Committee must determine that the application process has been followed, including all program requirements, and the proposal meets the criteria associated with its assigned category. (See Section 3.4.5 Categories of Work)

The Enhancement Steering Committee reserves the right to reconsider any previously approved Transportation Enhancement Project application.

The Transportation Enhancement Steering Committee may recommend that the Secretary of Transportation approve, approve with conditions, or deny any project submitted for consideration.

Transportation Enhancement Steering Committee Quarterly Meeting Schedule

The Transportation Enhancement Steering Committee reviews all letters of intent, pre-applications, and final applications on a quarterly basis throughout the year. Letters of intent for statewide projects will be reviewed by the Enhancement Steering Committee upon receipt. Pre-applications will be reviewed by the Enhancement Steering Committee once MassHighway has conducted its review and made its recommendations. Final applications will be reviewed after any pre-application comments have been addressed and the application is complete and ready for review by the Enhancement Steering Committee.

All requests for consideration by the Enhancement Steering Committee will be reviewed during the next scheduled meeting, provided the project is received and ready to be reviewed at least two weeks prior to the meeting.

Transportation Enhancement Program Guidelines

Following is the quarterly schedule for the Transportation Enhancement Steering Committee:

***Transportation Enhancement Steering Committee
Quarterly Schedule***

Jan., Feb., Mar.	1st quarter	
	Transportation Enhancement Steering Committee Meeting -	Last Wednesday in March
April, May, June	2nd quarter	
	Transportation Enhancement Steering Committee Meeting -	Last Wednesday in June
July, Aug., Sept.	3rd quarter	
	Transportation Enhancement Steering Committee Meeting -	Last Wednesday in Sept.
Oct., Nov., Dec.	4th quarter	
	Transportation Enhancement Steering Committee Meeting -	First Wednesday of January

NOTE: The Transportation Enhancement Steering Committee reserves the right to alter this schedule.

Step 5 - Review by the Massachusetts Secretary of Transportation

Upon receipt of the recommendations of the Transportation Enhancement Steering Committee, the Massachusetts Secretary of Transportation may, at his or her sole discretion, approve or deny any Transportation Enhancement proposal submitted for consideration. Applicants and Regional Planning Agencies will be notified in writing of final action taken on each proposal.

SECTION 4 PROJECT FUNDING AND PROJECT PHASING

4.1 Introduction

This section discusses how Transportation Enhancement projects are typically funded and the requirements regarding project phasing and project segmenting

Federal and state governments regulate project funding. There are requirements discussed in this section that Regional Planning Agencies and applicants must follow closely. Failure to comply may result in an applicant's inability to recover expenses.

4.2 Cost Estimates & Cost Overruns

It is very important to estimate accurately the cost of a Transportation Enhancement project. This could determine whether or not a project proceeds to implementation or construction.

Accurate cost estimates are very important to the Regional Planning Agency, other Metropolitan Planning Organization members, the Federal Highway Administration and MassHighway, since the amount of funding programmed for each project in the regional Transportation Improvement Program and the State Transportation Improvement Program is based upon the project applications. Therefore, inaccurate cost estimates could result in the programming of inadequate funding amounts or over-programming funds for the project at the regional and state levels. Significant inaccuracy could seriously delay or jeopardize the implementation of a Transportation Enhancement project.

A cost overrun occurs when a project is approved for one amount and it later increases. The applicant may then have two options:

1. The applicant can support the cost overrun with funds from another source that does not require programming by the Metropolitan Planning Organization; or
2. If the applicant is seeking federal or state funds and the cost overrun exceeds ten percent (10%) of the approved project cost, the applicant must:
 - a) resubmit the project to the Enhancement Steering Committee for approval by the Secretary of Transportation;
 - b) receive approval from the Metropolitan Planning Organization; and
 - c) receive approval from the MassHighway Project Review Committee, if the project had previously been reviewed by the Project Review Committee.

MassHighway reserves the right to hold the applicant responsible for any cost overruns that exceed 10% of the original project application. Therefore, cost overruns will be discussed on a case-by-case basis.

4.3 Scope Changes

Changes in scope occur when a project is submitted and approved for funding subject to one project scope and later the project scope changes and cost overruns may or may not occur. If a change in the original project scope occurs, the applicant may have to submit a request for a change in scope to the Enhancement Steering Committee for review and subsequent approval by the Secretary of Transportation.

The Chief Engineer for MassHighway and the Director of the Bureau of Transportation Planning and Development will determine whether a project scope must be returned to the Enhancement Steering Committee and Secretary of Transportation.

4.4 Project Advertisement

Generally, MassHighway will advertise and build projects involving construction. Therefore, project expenses would not be reimbursed to the applicant but reimbursed to MassHighway.

4.5 Project Funding

The Transportation Enhancement Program is a reimbursement program. Funds are reimbursed to the applicant on a project percentage-complete basis; therefore, applicants must spend their own funds initially. MassHighway will reimburse the applicant upon receipt of required documentation providing evidence that the expenses incurred have been paid by the applicant and are eligible for funding.

Regardless, any costs incurred prior to an executed contract and a written Notice to Proceed from MassHighway will not be reimbursed. Therefore, application and contract preparation costs are not eligible for funding.

4.6 Minimum Project Funding Threshold

Projects requesting a total project cost of less than \$50,000 in Transportation Enhancement funding will not be considered.

4.7 Federal Funding Share

The Federal Highway Administration will fund 80% of a Transportation Enhancement project's approved project costs. All reimbursable costs associated with Transportation Enhancement projects are subject to the final approval of MassHighway and the Federal Highway Administration.

Transportation Enhancement funds are subject to all of the requirements of Title 23, United States Code. Applicants and others unfamiliar with the kinds of costs typically incurred on Title 23 federal-aid projects should seek assistance from the State-Aid Engineer at their MassHighway District Office.

4.8 Funding Breakdown

Transportation Enhancement projects are funded as follows:

4.8.1 Federal Highway Administration Funding Share

The Federal Highway Administration will fund 80% of approved project costs.

4.8.2 State Agency Funding Share

MassHighway may fund up to 10% of approved project costs. If the applicant provides a funding share of more than 10% of the project cost, the State may take credit towards its share.

4.8.3 Other State and Federal Agency Funding Share

For all projects submitted by, on behalf of, or in conjunction with another State or Federal agency, such agency is responsible for providing at least the 20% non-federal share for the project in the form of cash or eligible in-kind services subject to the requirements set forth in Section 4.8.4. Staff time is not an eligible in-kind service.

4.8.4 Applicant Funding Share

Applicants, other than State or Federal agencies, must fund at least 10% of the approved project cost in the form of cash or eligible in-kind services. Staff time is not an eligible in-kind service.

Under both sections 4.8.3 and 4.8.4, applicants must show how their share of the project cost will be provided and evidence that it is secured. There must be reasonable evidence that the applicant share will be available when the project is ready to be implemented. If the match is in the form of cash, the applicant must provide evidence that the cash is secure and must either be appropriated in a municipal, state, or federal budget or set aside in a separate, interest bearing escrow account.

In-kind services are handled on a case-by-case basis and are only eligible if approved by both the MassHighway and the Federal Highway Administration. The Federal Highway Administration will allow consideration of the value of services as part of the non-federal share, provided the cost of the services are not incurred or expended prior to federal approval, and the non-federal share meets the requirements set forth in 23 U.S.C. 120(b) and other applicable sections of the law. (See Federal Highway Administration Final Guidance for Transportation Enhancement Activities, 23 United States Code, and TEA-21, December 17, 1999, Page 6-8). Staff time is not an eligible in-kind service.

4.9 Project Phasing

A realistic cost estimate must be provided for each phase and for the total estimated project cost to allow the Transportation Enhancement Steering Committee to understand the full scope of the project and to avoid future cost overruns.

Each phase must have a funding schedule from the appropriate Regional Planning Agency that explains in which Transportation Improvement Program year each phase will be

programmed. For example, if a project is requesting funding for Property Acquisition, Final Design and Construction, the project application must have a realistic funding schedule that outlines the Transportation Improvement Program year in which each phase will be programmed.

MassHighway and the Federal Highway Administration will only obligate funds for a particular project when it is ready to be implemented. For example, if a project is pending completion of design, the construction funds will not be obligated until the design is complete.

MassHighway does not allow phasing of projects by work category. Requests for funding of more than one of the eligible work categories must be received in a single project application.

4.10 Project Segmenting

Project segmenting is the geographic or physical division of a project area into separate parts. MassHighway will allow project segmenting for stand-alone projects that are received as a single project application for all of the relevant work categories.

An example of project segmenting is a 20-mile bike path through four towns for which funding is sought for one of the four towns and/or 5 miles of the 20-mile bike path.

Each segment must provide a benefit to the transportation system and constitute a stand-alone unit not dependent upon any other phase for its utility as a transportation project. The proposal's project description must provide a brief description to better understand the full scope of the project.

SECTION 5 AGENCIES AND THEIR ROLES

5.1 Federal Highway Administration

The Federal Highway Administration has responsibility for approving the State Transportation Improvement Program, for approving federal environmental documents, for allocating funds to the state, and for authorizing and approving Transportation Enhancement Program expenditures.

5.2 Executive Office of Transportation and Construction

The Executive Office of Transportation and Construction works with the Transportation Enhancement Steering Committee and MassHighway and interacts with the Federal Highway Administration on program issues. The Executive Office of Transportation and Construction assures that the requirements of Title 23 are met, and it has the responsibility for final acceptance of projects.

5.3 Massachusetts Highway Department (MassHighway)

MassHighway has primary responsibility for the administration of the Transportation Enhancement Program. MassHighway works with the Transportation Enhancement Steering Committee, Executive Office of Transportation and Construction and others to develop program policies and procedures. MassHighway monitors program implementation.

5.4 Regional Planning Agencies

Regional Planning Agencies are responsible for developing their own project review and acceptance policies. Each Regional Planning Agency is responsible for selecting, reviewing and submitting Transportation Enhancement proposals within their region. Each Regional Planning Agency reviews projects for eligibility and submits projects to the Transportation Enhancement Steering Committee for its review and recommendation to the Secretary of Transportation.

Regional Planning Agencies are responsible for maintaining accurate records of the review process and ensuring adequate public participation in the regional selection process. A Regional Planning Agency reviews each project to assure that it is properly prepared for implementation. Each Regional Planning Agency must also:

- Appoint a regional selection committee to review and recommend projects to the Enhancement Steering Committee.
- Work with the Massachusetts Association of Regional Planning Agencies to review program guidelines and policies.
- Work with other Metropolitan Planning Organization members and coordinate the Transportation Enhancement selection process to program Transportation Enhancement projects in the regional Transportation Improvement Program.

5.5 Transportation Enhancement Steering Committee

The Executive Office of Transportation and Construction established the Transportation Enhancement Steering Committee to assist in project selection at the state level. Appointed by the Secretary of the Executive Office of Transportation and Construction, the Transportation Enhancement Steering Committee works to develop program guidelines; evaluate regional and statewide proposals for compliance with eligibility and program requirements; and make recommendations to the Secretary of Transportation for action on all Transportation Enhancement projects.

The Transportation Enhancement Steering Committee includes one representative of each of the following state agencies and two representatives from the Massachusetts Association of Regional Planning Agencies.

Members of the Transportation Enhancement Steering Committee include representatives of the following:

- Executive Office of Transportation and Construction (1)
- Massachusetts Highway Department (1)
- Massachusetts Historical Commission (1)
- Executive Office of Environmental Affairs (1)
- Massachusetts Association of Regional Planning Agencies (2)

The Transportation Enhancement Program Coordinator at the Bureau of Transportation Planning and Development serves as staff to the Enhancement Steering Committee. The coordinator reviews and prepares project applications for review by the Enhancement Steering Committee.

5.6 Massachusetts Historical Commission

The Massachusetts Historical Commission, through the State Historic Preservation Officer, has responsibility for the administration of the historic preservation program in Massachusetts. It assists the Regional Planning Agencies, the Executive Office of Transportation and Construction, and MassHighway in the evaluation of historical, cultural, and archaeological properties. The Federal Highway Administration and MassHighway coordinate with the Massachusetts Historical Commission to ensure full compliance with Section 106 of the National Historic Preservation Act, as amended. The Massachusetts Historical Commission is the office of the State Archaeologist, who issues permits for research on publicly owned sites or properties under a preservation restriction Massachusetts General Laws, Chapter 9, Section 26A & 27C.

5.7 Executive Office of Environmental Affairs

The Executive Office of Environmental Affairs assists the Transportation Enhancement Steering Committee in selecting proposals that comply or can be made to comply with environmental laws, rules and regulations. The Executive Office of Environmental Affairs has responsibility for assuring that projects adhere to environmental regulations. Various departments and agencies under the Executive Office of Environmental Affairs jurisdiction provide for environmental review of certain projects through the Massachusetts Environmental Protection Agency Unit, and issue environmental permits as required.

5.8 Massachusetts Association of Regional Planning Agencies

The Massachusetts Association of Regional Planning Agencies is a statewide organization of the commonwealth's 13 Regional Planning Agencies. Each Regional Planning Agency, in turn, is comprised of representatives of the member cities and towns constituting its geographic region.

The Transportation Enhancement Program provides a unique opportunity to preserve, restore, or enhance components of the intermodal transportation system which are not traditionally funded by the Federal Highway Administration or the Massachusetts Highway Department. Below is a list of eligible project types:

TABLE OF TRANSPORTATION ENHANCEMENT ACTIVITIES	
1.	Facilities for bicycles and pedestrians
2.	Safety and educational programs for pedestrians and bicyclists
3.	Acquisition of scenic easements and scenic or historic sites
4.	Scenic or historic highway programs
5.	Landscaping and other scenic beautification
6.	Historic preservation
7.	Rehabilitation and operation of historic transportation buildings, structures, or facilities
8.	Preservation of abandoned railway corridors
9.	Control and removal of outdoor advertising
10.	Archeological documentation and research
11.	Mitigation of water pollution due to highway runoff or reduction of vehicle-caused wildlife mortality while maintaining habitat connectivity
12.	Establishment of transportation museums

As indicated in the program guidelines (available by request from MAPC, or at http://www.mapc.org/transportation/funding_opps/), all projects must go through a two step pre-application/final application review and approval process. MAPC's Enhancement Committee conducts a regional review of applications, prior to the State Steering Committee's review of all applications received throughout the state. The following application deadlines have been established for the 2005 calendar year:

**Applications due at MAPC
for Regional Review**

1 st quarter:	Wednesday 2/2/05
2 nd quarter:	Wednesday 5/4/05
3 rd quarter:	Wednesday 8/3/05
4 th quarter:	Wednesday 11/2/05

For additional reference information, the Federal Highway Administration's "Final Guidance on Transportation Enhancement Activities" (23 U.S.C. and TEA-21) can be accessed at <http://www.fhwa.dot.gov/environment/te/guidance.htm>. If you have any questions or would like to discuss potential projects, Please contact Scott Walker at (617) 451-2770 x2058 or swalker@mapc.org.

APPENDIX A

**COMMONWEALTH OF MASSACHUSETTS
TRANSPORTATION ENHANCEMENT PROGRAM GUIDELINES
EFFECTIVE NOVEMBER 2003**

APPLICATION FORM INSTRUCTIONS

General Instructions:

Before filling out the application form, applicants should have carefully reviewed the Transportation Enhancement Program Guidelines and contacted the appropriate Regional Planning Agency or Transportation Enhancement Program Coordinator at the Bureau of Transportation Planning and Development. A list of the 13 Regional Planning Agencies and their addresses is included in (Appendix D). Applicants should contact the appropriate Regional Planning Agency for details on its filing requirements.

This instruction sheet is keyed to the item numbers on the application form. Special guidance for completing each item on the Application Form is contained in these instructions. Please note, when filling out the electronic version of the application form, spacing is limited to the space shown on the hard copy. Contact the Regional Planning Agency regarding any questions in filling out the application or the Transportation Enhancement Program Coordinator for clarification.

**Item
Number**

1. **Project Name:** Please assign a project name to the project proposal that will be used throughout the project. If this is a phase of a project that was approved prior to these Guidelines, please maintain the same project name followed by the appropriate Roman numeral for the next phase
2. **Project Applicant:** Please refer to Section 2.2 of the Enhancement Guidelines to determine who is an eligible project applicant. Provide the applicant name, agency name, address, telephone and fax numbers, and e-mail address. *For example, applicant name, City of Waltham, and agency name, City of Waltham Planning Department, or applicant name, Executive Office of Environmental Affairs, and agency name, Department of Conservation and Recreation.* If there is more than one project applicant, please select one to be the lead project applicant and describe its relationship to each additional applicant in the project description.

3. **Applicant's Contracting Officer:** Please provide the name, title, address, telephone and fax numbers, and e-mail address of the chief official having authority to contract with MassHighway.
4. **Contact Person:** Please provide the name, title, address, telephone and fax number, and e-mail address of the person who is authorized to discuss the proposal on behalf of the applicant. If there is more than one contact person, please pick one person as the lead contact.
5. **Project Sponsor Information:** Please refer to Section 2.2 of the Enhancement Guidelines to determine who is a project sponsor. If the answer to question #5 is "yes", please provide the sponsor name, contact name, title, address, telephone and fax number, and e-mail address. Please note, appropriate procurement procedures may be necessary when contracting with a sponsor.
6. **Regional Planning Agency:** Please provide the name, address, contact person and phone number of the appropriate Regional Planning Agency(s) in which this project lies. (See Appendix D for a list of Regional Planning Agencies.) A Regional Planning Agency is responsible for screening a project application before it is submitted to the Statewide Enhancement Steering Committee.
7. **MassHighway District Office:** Please provide the District #, address, contact person and phone number of the appropriate District(s) office in which this project lies. (See Appendix D for a list of District Offices.) A MassHighway District Office should be aware of a potential project application before it is submitted to the Statewide Enhancement Steering Committee.
8. **Project Type:** Please refer to Section 2.0 of the Guidelines for the description of project types. Please indicate the project type by checking the appropriate box. Please check only one box. All regional projects should be submitted through a Regional Planning Agency.
9. **Type of Work Category:** Please refer to Section 2.0 of Guidelines for description of work categories. Please indicate the work category of the project by checking the appropriate box. Please check all that apply, including those that are part of the non-federal or applicant share. (See Section 4.9 Project Phasing.)
10. **Prior Funding:** Please indicate if this project proposal has received prior funding through the Transportation Enhancement program and in what guideline year.
11. **Brief Project Proposal Description:** Please provide a short description of the Enhancement portion of the project, and briefly explain how the project is eligible pursuant to the Transportation Enhancement Program Guidelines. Include the total cost of the project and amount of Enhancement funding the project application is requesting.
12. **Eligibility for Funding:** Please list each eligible Transportation Enhancement activity this project is qualified for pursuant to the Transportation Enhancement Program Guidelines. The primary Enhancement activity should be listed first, and any secondary activities to

follow Only one activity is required to qualify Please do not add activities that do not apply.

Please describe how the project meets the various eligibility criteria:

- A.) All projects must demonstrate a "direct and substantial relationship to the surface transportation system." Applicants must make the case that a project relates to surface transportation, and the relationship is direct and substantial by function, proximity or impact (See Section 2.5.1 of the Guidelines).
- B.) Only transportation projects that are "non-traditional" may qualify to receive Enhancement funding. Non-traditional projects are those that are not part of a traditional roadway project and propose work that does not typically qualify for federal transportation funding assistance (See Section 2.5.2 of the Guidelines).
- C.) The principal activity of the proposed project must be listed as a Transportation Enhancement Activity. Projects may have one or more than one enhancement activity. Identify the principal enhancement activity that best represents the project objective. Also, identify any other enhancement activities that are a part of the project. For example, a project's principal activity may be to rehabilitate a historic bridge, but it may also include landscaping and other scenic beautification, and mitigation of water pollution due to highway runoff (See Section 2.5.3 of the Guidelines).
- D.) Only statewide projects need to meet this criterion. Please briefly describe how the project has statewide significance or how it is multi-regional in scale. (See Section 2.3.2.)

13. Funding Breakdown: The purpose of this item is to provide project reviewers with information regarding the total cost of a Transportation Enhancement project, and how the cost is apportioned among the various project work categories. Please do not leave boxes blank. If you are unsure on how to fill out this grid, please consult the Regional Planning Agency or Enhancement Program Coordinator. If a box does not apply, please place a zero (0) in the box.

Breakdown of Funding Grid – This breakdown of funding presents three columns. Take the total cost of each work category and disperse the percentages across the grid. For instance, the federal government will always fund up to 80% of all eligible project costs, and the Commonwealth of Massachusetts will fund up to 10% of all eligible project costs. The project applicant is responsible for funding a minimum of 10% of the project cost in the form of cash or in-kind services. If the applicant can provide more than 10% of the project cost, the State will take credit for the additional share. It is important to note that the Federal Highway Administration provides 80% of the project cost, and this is necessary for bookkeeping purposes as well. If another federal or state agency submits the project, that agency is responsible for funding up to 20% of the eligible project cost. Please indicate only the amount of enhancement funding being requested for each applicable project work category.

Applicants for projects requesting funding for any of the four eligible work categories should add each column across and insert in the total funding requested column. If in-kind services are being proposed, please include them on the funding breakdown. The total funding requested column then should be added down and across to come up with the total project cost.

Indicate the percentage of funding breakdown for each column. The application should indicate what the percentage splits will be. For example, a project applicant may choose to fund more than the 10% applicant match, and therefore, a reduction in state funds would be necessary. The applicant should review both the state and federal requirements for eligible applicant shares before completing the grid, and provide an explanation of the source of its match. (See 4.8.4)

Furthermore, applicants must clearly state the source of their applicant match and the non-federal share. Design and Acquisition costs are eligible in some cases toward the non-federal share, as long as they were prepared in accordance with 23 U.S.C. A statement supporting federal requirements will be required. Please consult the Regional Planning Agency or Transportation Enhancement Program Coordinator to ensure the project meets the requirements.

14. Proposal Location/Limits: Provide a brief description of the location and its limits. Indicate the project's beginning and ending points and routes/roads/bridges/rivers/rail right-of-way, etc., the project follows or crosses.

15. Proposal Status: Please check all applicable boxes and answer all questions regardless of whether you are applying for that work category or not.

- A.) If the planning/feasibility phase is complete, include a copy of the applicable study with the project proposal.
- B.) Provide a listing of the estimated number of property takings and/or easements required for implementation of the project, if any. Note that even **temporary** construction easements require a Public Hearing/Meeting, and a "ROW Certificate" from MassHighway's Right-of-Way Bureau. Identifying and disclosing all right-of-way issues is necessary and crucial to the project's success. If you do not identify all right-of-way issues and your project is approved and later determined infeasible, the applicant will be responsible for repaying any and all federal and state funds.
- C.) If the design of the project has begun or been completed, please provide the name of the designer. Indicate whether the designer is a MassHighway-approved design consultant or some other qualified designer. Also, indicate whether the plans have been reviewed by the appropriate MassHighway District Office, and provide the date when such review took place. If the design is not completed, provide an estimated date for completion.

If the project is in the Program, Property Acquisition, or Final Design stage (See Section 2.0 of Guidelines), please provide an estimated date when construction or implementation will begin and an estimated date for completion.

- 16. Party Responsible for Future Maintenance and Operation:** Where applicable, please provide the name of the agency, department, or commission and the name, address and telephone number of the person who will be responsible for operating and maintaining the improvements requested in the proposal, such as the Departments of Planning, Public Works, Board of Selectmen, Metropolitan District Commission, etc. If applicable, the proposal must contain a letter from the official department representative stating that the official will be responsible for operating and maintaining the improvements constructed with Enhancement funding.
- 17. Americans with Disabilities Act:** Please indicate whether the project requires a waiver from the Americans with Disabilities Act. If the project does require a waiver, please include a copy of the waiver as part of the project proposal.
- 18. Public Participation:** On a separate sheet entitled "Public Participation" describe the steps taken to inform the public about the project. Please include the number of public meetings or hearings held, the issues discussed, support mentioned, or concerns raised, if any, by the participants. Also, if a public hearing has been held on the project, include a copy of the hearing minutes or notes in the proposal. Further, if the project has received any type of vote by a town meeting, city council, or agency, please include a certified copy of the vote taken.
- 19. City council, town votes or municipal referendums:** See #18.
- 20. Minutes/votes from public hearings:** See #18.
- 21. Public Support:** Applicants are encouraged to append to a project proposal letters from public agencies, elected officials, citizens groups and others who actively support the project.
- 22. Public Opposition:** Applicants are encouraged to append to a project proposal letters from public agencies, elected officials, citizens groups and others who actively oppose the project.
- 23. Project Description:** On a separate sheet titled "Project Description," describe the proposed Enhancement project. Begin by providing a brief statement about the purpose and need for the project. For example, "The purpose of the project is to provide new pedestrian walkways and other pedestrian amenities along a 1,000 foot section of Main Street in downtown Walkville. Current pedestrian walkways are too narrow and do not provide sufficient amenities to attract shoppers to the downtown area." Follow the opening statement of purpose and need with a more detailed description of the project. Use quantitative descriptions and dimensions wherever possible, i.e., project length, width, number of parking spaces, width of sidewalk, number of proposed trees, shrubs, length and height of fencing, etc. Provide pictures and diagrams if possible to better describe the project's purpose. The project description should be clearly written so the reader can easily understand exactly what the project is intended to accomplish. In more detail, describe why this project is a non-traditional transportation project and meets the eligibility requirements of the Transportation Enhancement Program Guidelines. If appropriate, applications should include color photos of the project site prior to construction.

24. **Site Plan(s):** If applicable, on an 8 ½" X 11" sheet, include as part of the proposal a site plan of the project that is at a scale sufficient to clearly identify the proposed improvements.
25. **Environmental Requirements:** Provide answers to the environmental questions asked in the attached three-page environmental questionnaire (See Appendix C) On a separate sheet, list the environmental permits the applicant has received, filed, or plans to file.
26. **Scope and Budget:** This is a very important part of the project proposal and must be completed at the time of submission. On separate sheets entitled "Proposed Project Scope" and "Proposed Project Budget", show a *detailed* scope of work and *detailed* project budget for each eligible work activity. If a consultant has already been selected for the project, the consultant should be familiar with an adequate scope and budget submission; i.e. planning, final design, property acquisition, construction. The scope and budget should include the proposed applicant match and correspond with the items identified in the project description (see item #23). If the project is approved, the scope and budget will be attached to a contract with MassHighway.
27. **Regional Planning Agency Selection Process:** On a separate sheet of paper, briefly describe the Regional Planning Agency filing requirements and selection process, including application solicitation requirements and deadlines, if any, members names and affiliations, policies and procedures outlined for project determination, and any other pertinent information.
28. **Funding Schedule by Transportation Improvement Program (IIP) year:** On a separate sheet of paper, please provide a funding schedule by TIP year of each work category eligible for Transportation Enhancement funding. For example, if a project is requesting final design, property acquisition and construction, please provide the TIP year for which each work category will be programmed. For example, Property Acquisition in FFY04 for \$x; Final Design in FFY05 for \$x; and Construction in FFY06 for \$x. A work category may be programmed over more than one TIP year depending on the extent and cost of the project and available funds.
29. **Authorizing Signature:** Please have the individual who is authorized to enter into a contract with MassHighway on behalf of the applicant sign and date the application form. Also, type the signatory's name and title in the space provided. This signature should match the information in item 3.

COMMONWEALTH OF MASSACHUSETTS

Executive Office of Transportation
Massachusetts Highway Department

APPENDIX B

FOR EOTCMHD OFFICE USE ONLY	
Project File #	_____
Total Project Cost: \$	_____
Enhancement Funds Requested: \$	_____

COMMONWEALTH OF MASSACHUSETTS
TRANSPORTATION ENHANCEMENT PROGRAM GUIDELINES
EFFECTIVE NOVEMBER 2003

APPLICATION FORM

PRE-APPLICATION

FINAL APPLICATION

(ONLY PROJECT PROPOSALS THAT HAVE SUCCESSFULLY COMPLETED THE PRE-APPLICATION PROCESS ARE ELIGIBLE FOR SUBMITTING A FINAL APPLICATION)

DATE:

Before filling out this application, please see attached Application Form Instructions (Appendix A).

All questions must be answered.

1. Project Name:

2. Project Applicant:

Applicant Name:

Agency Name:

Address:

Telephone Number:

Fax Number:

E-mail address:

Is there more than one project applicant? Yes No

3. Applicant's Contracting Officer:

Name:

Title:

Address:

Telephone Number:

Fax Number:

E-mail address:

4. Contact Person:

Name:

Title:

Address:

Telephone Number:

Fax Number:

E-mail address:

5. Is the project to be managed by a sponsor other than the applicant?

Yes

No

If yes, please give:

Sponsor Name:

Contact Name:

Title:

Address:

Telephone Number:

Fax Number:

E-mail address:

6 Regional Planning Agency(s):

Name:

Name:

Address:

Address:

Contact person:

Contact person:

Phone #:

Phone #:

7 MassHighway District Office(s):

District #:

District #:

Address:

Address:

Contact person: _____

Contact person: _____

Phone #: _____

Phone #: _____

8. Project Type: (Check Only One) Regional Statewide

9. Type of Work Category: (Include even those work category(s) that are being proposed as the non-federal share/applicant match)

Program Construction Property Acquisition Final Design

A.) Are all work categories requesting Enhancement funding included in this one application?

Yes No

If you answered "No" to 9A, please explain?

B) Are any of these work categories requesting credit toward the non-federal share and applicant match?

Yes No

If you answered "Yes" to 9B, please explain?

C) Is this project part of a larger MassHighway and/or municipal roadway project?

Yes No

If you answered "Yes" to 9C, please describe the nature of that project. (Include the type of funding, status of funding, and total project cost, including the Enhancement funding):

D) Is there funding, other than Enhancement funding, either being applied for or already approved for this project?

Yes No

If you answered "Yes" to 9D, please describe the other funding and what work categories it applies to. (Include the type of funding, status of funding, and total project cost, including the Enhancement funding):

10. Has this project proposal received prior funding approval under the Transportation Enhancement Program? Yes No

If yes, please list project proposal name:

Fiscal Year the application was approved:

Amount of approved project proposal funding:

What Work Categories were approved:

What is the present status:

11. **Brief Project Proposal Description:** (A detailed project proposal description is requested in item 23. In the space provided, describe the Enhancement component of the project only.)

12. Eligibility for Funding:

A.) Transportation Enhancement Activities:

TABLE OF TRANSPORTATION ENHANCEMENT ACTIVITIES
1) Provision of facilities for pedestrians and bicycles
2) Provision of safety and educational activities for pedestrians and bicyclists
3) Acquisition of scenic easements and scenic or historic sites
4) Scenic or historic highway programs (including the provision of tourist and welcome center facilities)
5) Landscaping and other scenic beautification
6) Historic preservation
7) Rehabilitation and operation of historic transportation buildings, Structures, or facilities (including historic railroad facilities and canals)
8) Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails)
9) Control and removal of outdoor advertising
10) Archeological planning and research
11) Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
12) Establishment of transportation museums

List only the eligible enhancement activities from the table above:

(The primary enhancement activity should be listed first and any secondary activities to follow)

(You are only required to indicate one eligible activity to qualify, so please do not add activities that do not apply)

- a)
- b)
- c)
- d)

B.) Direct and Substantial Relationship to Surface Transportation System:

In the space provided, check all relationships that apply to the project proposal and briefly describe.

Function

Proximity

Impact

C) Non-Traditional Transportation Project Proposal:

Briefly explain how the “Enhancement” project proposal is a “Non-Traditional Transportation Project Proposal”:

D) (For Statewide Project Proposals Only) Briefly explain how the project proposal meets statewide criteria:

13. Funding Breakdown for Transportation Enhancement funding:

Work Categories	Breakdown Of Funding			TOTAL for each row across
	Federal Share (80%)	State Share (10%/20%)	Applicant Share (10% min.)	
Programs				
Property Acquisition				
Final Design				
Construction				
Cash				
TOTAL				Total Project Cost:

* Applications submitted by a federal or state agency require a 20% applicant match.

Please indicated the percentage of funding shares, and explain the proposed applicant match, including its source and percentage of overall project costs: (For example, is the applicant match in the form of cash or in-kind services and explain)

- Percentage of Federal Funds requested:
- Percentage of State Funds requested:
- Percentage of applicant match:

14. Project Proposal Location/Limits: (Please be as specific as possible)

15 Project Proposal Status: (All applicants must complete the following information)

A.) Program work category, please answer the following:

Is the Planning Phase complete? Yes No

If "yes", by whom?

If "no", please explain why?

B.) Property Acquisition work category, please answer the following: (All applicants must complete the following information)

1) Is there any property acquisition necessary to complete this project? Yes No

If "yes", please explain.

2) Was there any property acquisition already completed for this project? Yes No

If "yes", please explain.

3) Has all necessary land acquisition been identified? Yes No

If "no", please explain.

4) Does the applicant have permission to all the land? Yes No

If "yes", in what way? (answer the following)

- | | | |
|----------------------|------------------------------|-----------------------------|
| Land in Fee: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Permanent Easements: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Temporary Easements: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Eminent Domain: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Please explain.

5) Will this project application impact private property in any way? Is Does any part of this project application require construction on or through private property? Yes No

If "yes", please explain?

6) Are there any encroachments? Yes No

If "yes", please explain.

7) Has there been or will there be any land takings by eminent domain? Yes No

If "yes", please explain whether they were or will be of a friendly or hostile nature?

8) Is the land acquisition for: Preservation or Construction (Check one).

C) Final Design and/or Construction Work categories, please answer the following: (All applicants must complete the following information):

1) Is the Planning/Feasibility Phase complete: Yes No

a.) If yes, by whom:

b.) If no, explain:

2) Is the Preliminary Design (25%) Phase complete: Yes No

a) If yes, by whom:

b.) What is the status of the MassHighway review? :

c.) Is the designer a MassHighway-approved consultant?: Yes No

3) Is the Final Design (75%) Phase Complete: Yes No

a.) If yes, by whom:

b.) What is the status of MassHighway review:

c.) Is the designer a MassHighway-approved consultant? Yes No

4) Is the Final Design (100%) Phase Complete: Yes No

a.) If yes, by whom:

b.) What is the status of MassHighway review:

c.) Is the designer a MassHighway-approved consultant? Yes No

5) If the designer is not a MassHighway-approved consultant, please check one of the following:

local volunteer

city or town engineer

consulting firm

Other

If the designer is not a MassHighway-approved consultant, please explain why this consultant has been selected?

- 6) If design has begun, but is not complete, please give the design status and estimated completion date:

Design Status:

Estimated completion date:

- 7) Estimated date to begin construction/implementation:

- 8) Estimated date to complete construction/implementation:

16. Party Responsible for Future Maintenance & Operation:

Department Name:

Dept Representative:

Address:

Telephone Number:

Fax No.

E-mail address:

17. Americans with Disabilities Act:

- A.) Has this project proposal received a waiver under the Americans with Disabilities Act?

No Yes

If yes, please include a copy of the waiver as an attachment.

- B.) Does this project require a waiver under the Americans with Disabilities Act?

No Yes

If yes, please explain.

C.) Is this project application requesting funding to meet ADA requirements?

No Yes

If yes, please explain

18 Public Participation:

A.) Has a public hearing been held on the project proposal? Yes No

If "no", please explain why and whether you intend to hold a public hearing.

B.) Does your proposal have an affirmative town meeting vote, city council approval or municipal referendum? Yes No

If yes, by whom:

If "no", please explain why.

C) Is there any known support to the project proposal? Yes No

If "yes", please explain who and why.

D) Is there any known opposition to the project proposal? Yes No

If "yes", please explain who and why.

E.) Have you solicited public opinion in any way? Yes No

If "yes", please explain how and to whom.

Transportation Enhancement Program

Application Form

- 19. Copies of city council, town votes or municipal referendums: To be attached
- 20. Copies of minutes from public hearings, including any votes: To be attached
- 21. Any Public Support Documentation: To be attached
- 22. Any Public Opposition Documentation: To be attached
- 23. ***“Detailed”*** Enhancement Project Proposal Description: To be attached
- 24. Any site plans and/or locus maps: To be attached
- 25. Environmental Requirements: To be attached
- 26. ***“Detailed”*** Scope and Budget: To be attached
- 27. Brief description of Regional Planning Agency Selection Process: To be attached
- 28. Funding Schedule by TIP year: To be attached

29. Authorizing Signature:

Signature : _____ Date:

Name: _____
Type Official's Name

Title: _____
Type Official's Title

Please note: the individual who is authorized to contract on behalf of the City/Town/Agency must sign Application.

APPENDIX C

**COMMONWEALTH OF MASSACHUSETTS
TRANSPORTATION ENHANCEMENT PROGRAM GUIDELINES
EFFECTIVE NOVEMBER 2003**

ENVIRONMENTAL QUESTIONNAIRE

Enhancement projects are intended to improve the transportation system through landscaping, scenic protection, historic preservation, bicycling projects, and pedestrian facilities. Although proposed projects are designed to meet the above goals, it cannot be presumed that an enhancement project automatically complies with federal and state regulations for environmental protection and historic preservation.

As federal funds are being provided to implement enhancement projects, MassHighway and the Federal Highway Administration must formally determine that a proposed enhancement project conforms to the requirements of the National Environmental Policy Act, the National Historic Preservation Act, and the Massachusetts Environmental Policy Act as well as other applicable federal and state regulatory provisions.

For many projects, MassHighway and the Federal Highway Administration can document compliance with applicable regulations by using the Categorical Exclusion Determination Checklist. MassHighway is responsible for completing and signing the Categorical Exclusion Determination Checklist but the applicant must supply the relevant information. To complete an Enhancement Application Form, the applicant must answer all of the following questions. This information will provide the basis for MassHighway's completion of the Categorical Exclusion Determination Checklist.

Project name: _____

1. Wetlands

Will bordering vegetated wetlands, saltmarsh or tidelands be dredged, filled, removed or altered by the project? Yes No

Will any work take place in a water body (pond, lake, canal, river, or ocean?) Yes No

Will any work take place within 100 feet of a wetland or water body, within 200 feet of a river or stream? Yes No

Will any work take place within 100 year floodplain? Yes No

Will drainage patterns be altered as a result of this project? Yes No

Is any portion of the site subject to a Wetlands Restriction Order pursuant to G.L. c.131, §40A or c. 130, s 105? Yes No

Is the project within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife published by the Massachusetts Natural Heritage and Endangered Species Program? Yes No

If you have answered yes to any of the above questions, review by the local Conservation Commission is required to complete this application.

Has the local Conservation Commission reviewed this project? Yes No

Has the Conservation Commission issued a Determination of Applicability or Order of Conditions for this Project? *If yes, include a copy with the Application.* Yes No

2. Water Quality

Does the project involve stormwater management? Yes No

Will the project change drainage patterns or increase paved or impervious surfaces? Yes No

Does the project involve dredging? Yes No

3. Historic and Archaeological Resources

Will the project involve work on or near a historic property or archaeological site that is eligible to be listed or listed in the National Register of Historic Places, or listed in the State Register of Historic Places? Yes No

Will the project affect a designated Scenic Road or land adjacent to a Scenic Road? Yes No

Will the project involve work on or near a historic property or impact any cultural historic or archaeological resource? Yes No

4. Scenic Roads

Will the project affect a designated Scenic Road or land adjacent to a Scenic Road? Yes No

5. Section 4(f) Lands

Does the project include work within or adjacent to a publicly owned park, Recreation area, or wildlife and waterfowl refuge, or land of a historic site? Yes No

Does the project include work within a publicly owned park or recreation area? Yes No

6. Hazardous Materials Sites

Has the project site previously been used for use, generation, transportation, storage, release, or disposal of potentially hazardous materials? Yes No

Is the project site listed or adjacent to a site listed on the most current List of Confirmed Disposal Sites and Locations to be Investigated? Yes No

7. Endangered Species

Does the project occur in an area where there are federally listed endangered or threatened species or critical habitat? Yes No

Have the U.S. Fish and Wildlife Service and the Massachusetts Natural Heritage

and Endangered Species Program made a determination in this regard?

Yes No

8. Coastal Zone

Is the project within the Massachusetts Coastal Zone?

Yes No

If yes, is the project consistent with the Massachusetts Coastal Zone Management Plan (MCZM)?

Yes No

Has CZM made a determination of concurrence?

Yes No

9. MEPA Environmental Review

Does the project exceed thresholds for filing under the Massachusetts Environmental Policy Act (MEPA)?

Yes No

Appendix D

**COMMONWEALTH OF MASSACHUSETTS
TRANSPORTATION ENHANCEMENT PROGRAM GUIDELINES
EFFECTIVE NOVEMBER 2003**

Resource List

MassHighway District Offices

District 1	(413) 637-1750	Ross Dindio, District Highway Director Richard Masse, Planning Engineer 270 Main Street Lenox, MA 01240
District 2	(413) 584-1611	Albert Stegemann, Acting District Highway Director Meryl Mandell, Planner 811 North King Street Northampton, MA 01060
District 3	(508) 754-7204	Thomas Waruzila, District Highway Director Kate Fox, Planner 403 Belmont Street Worcester, MA 01604
District 4	(781) 641-8300	Stephen O'Donnell, District Highway Director Connie Raphael, Planner 519 Appleton Street Arlington, MA 02476
District 5	(508) 824-6633	Bernard McCourt, District Highway Director Mark Carmichael, District Project Development Engineer 1000 County Street Taunton, MA 02780

MassHighway Bureau of Transportation Planning and Development

Linda Walsh, Transportation Enhancement Program Coordinator (617) 973-8052

MassHighway Engineering/Consultant Contracts

Guy Rezendes, Transportation Enhancement Program Engineer (617) 973-7512
MassHighway Consultant Contract Unit (617) 973-7511
MassHighway Pre-Qualification Consultant List (617) 973-7525
MassHighway Architect and Engineer Board (617) 973-7520

MassHighway Right Of Way Bureau

James Mullen, Community Compliance Officer Districts 1, 2 and 5 (617) 973-7951
Daniel Gentile, Community Compliance Officer Districts 3 and 4 (978) 535-8942
MassHighway Real Estate Review Board (617) 973-7930

MassHighway Cashier's Office

10 Park Plaza
Room 6261
Boston, MA 02116

MassHighway Design Manual (Purchased at the Cashier's Office) (617) 973-7695

REGIONAL PLANNING AGENCIES

Berkshire Regional Planning Commission

1 Fenn Street, Suite 201
 Pittsfield, Massachusetts 01201 - 6229
 Nathaniel Karns, Executive Director
 Andrew Lenton, Transportation Program Manager
 phone: (413) 442 - 1521
 fax: (413) 442 - 1523
 web site: www.BerkshirePlanning.org
 e-mail: alenton@berkshireplanning.org

Cape Cod Commission

PO Box 226
 Barnstable, Massachusetts 02630
 Margo Fenn, Executive Director
 Robert Mumford, Transportation Program Manager
 phone: (508) 362 - 3828
 fax: (508) 362 - 3136
 web site: www.capecodcommission.org
 e-mail: pleclerc@capecodcommission.org

Central Massachusetts Regional Planning Commission

35 Harvard Street, 2nd floor
 Worcester, Massachusetts 01609-2801
 William Newton, Executive Director
 Carl Hellstrom, Transportation Program Manager
 phone: (508) 756 - 7717
 fax: (508) 792 - 6818
 web site: www.cmrpc.org
 e-mail: chellstrom@cmrpc.org

**Franklin Regional Council of Governments
 Commission**

Court House
 425 Main Street
 Greenfield, Massachusetts 01301
 Linda Dunlavy, Executive Director
 Maureen Mullaney, Transportation Program Manager
 phone: (413) 774 - 3931
 fax: (413) 774 - 1195
 web site: www.frcog.org
 e-mail: transpor@frcog.org

Martha's Vineyard Commission

P.O. Box 1447
 Oak Bluffs, Massachusetts 02557
 Mark London, Executive Director
 David Wessling, Transportation Program Manager
 phone: (508) 693 - 3453
 fax: (508) 693 - 7984
 web site: N/A
 e-mail: wessling@mvcommission.org

Merrimack Valley Planning Commission

160 Main Street
 Haverhill, Massachusetts 01830
 Gaylord Burke, Executive Director
 Anthony Komornick, Transportation Program Manager
 phone: (978) 374-0519
 fax: (978) 372-4890
 web site: www.mvpc.org
 e-mail: akomornick@mvpc.org

Metropolitan Area Planning Council

60 Temple Place
 Boston, Massachusetts 02111
 Marc D. Draisen, Executive Director
 Barbara Lucas, Transportation Program Manager
 phone: (617) 451-2770
 fax: (617) 482-7185
 web site: www.mapc.org
 e-mail: blucas@mapc.org

Montachusett Regional Planning Commission

R 1427 Water Street
 Fitchburg, Massachusetts 01420
 Laila Michaud, Executive Director
 Brad Harris, Transportation Program Manager
 phone: (978) 345-7376
 fax: (978) 345-9867
 web site: www.mrpc.org
 e-mail: bharris@mrpc.org

Nantucket Planning & Economic Development

One East Chestnut Street
 Nantucket, Massachusetts 02554
 John D. Pagni, Executive Director
 Michael Burns, Transportation Program Manager
 phone: (508) 228-7237
 fax: (508) 228-7236
 web site: www.nantucket.net
 e-mail: m burns@town.nantucket.net

Northern Middlesex Council of Governments

Gallagher Terminal
 Floor 3B, 115 Thorndike Street
 Lowell, Massachusetts 01852
 Robert W. Flynn, Executive Director
 Beverly Woods, Transportation Program Manager
 phone: (978) 454-8021
 fax: (978) 454-8023
 web site: www.nmcog.org
 e-mail: bwoods@nmcog.org

Transportation Enhancement Program

Old Colony Planning Council

70 School Street
Brockton, Massachusetts 02401
Pasquale Ciaramella, Executive Director
Charles Kilmer, Transportation Program Manager
phone: (508) 583 - 1833
fax: (508) 559 - 8768
web site: N/A
e-mail: ocpc@ocpcrpa.org

Pioneer Valley Planning Commission

26 Central Street
West Springfield, Massachusetts 01089
Timothy Brennan, Executive Director
Dana Roscoe, Transportation Program Manager
phone: (413) 781 - 6045
fax: (413) 732 - 2593
web site: www.pvpc.org
e-mail: droscoe@pvpc.org

Southeastern Regional Planning & Economic Development District

83 Broadway
Taunton, Massachusetts 02780
Stephen Smith, Executive Director
Roland Hebert, Transportation Program manager
phone (508) 824 - 1367
fax: (508) 823-1803
web site: www.srpedd.org
e-mail: rhebert@srpedd.org

Appendix E- Letters of Support



FRIENDS OF BEDFORD DEPOT PARK, INC.
Honoring and Preserving Our Local Railroad History

June 21, 2004

Mr. Robert Sawyer
Bedford Friends of the Minuteman Bikeway
4 Andover Court
Bedford, Massachusetts 01730

Dear Bob:

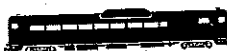
At our June 9th Board of Directors meeting, you briefed us on a proposed feasibility study for improvements to the **Reformatory Branch Rail-Trail** between Railroad Avenue and Concord Road. The board has offered its unanimous support for such a study.

Cyclists and pedestrians who visit Bedford Freight House often inquire about ways to reach Concord. We refer them to the Reformatory Branch Trail because it is a direct and scenic route to points west and is close to the Minuteman Bikeway terminus. However, the trail's usage is limited by encroaching vegetation and an unimproved dirt surface. We hope that a professional study would address ways to make the trail more accessible to the public, options for surface improvements, and cost estimates.

The Minuteman Bikeway's record of success is a good indicator of the potential popularity of the Reformatory Branch Trail. We wish you well with your application for funds to complete the feasibility study.

Sincerely yours,

Jim Shea
Chairman of the Board of Directors



BEDFORD FREIGHT HOUSE

120 South Road • Bedford, Massachusetts 01730-2344
781-687-6180 ♦ www.BedfordDepot.org ♦ E-mail: FBDP@BedfordDepot.org
Home of Boston & Maine Rail Diesel Car #6211 and America's First Two-Foot-Gauge Railway

CYCLE LOFT



Your First Source

APRIL 14, 2004

TO WHOM IT MAY CONCERN:

PLEASE CONSIDER THIS LETTER A VERY STRONG ENDORSEMENT OF AND A SHOW OF SUPPORT FOR THE FRIENDS OF THE MINUTEMAN BIKEWAY. THE FRIENDS HAVE BEEN FOR YEARS THE BEST AND THE MOST ABLE GROUP IN RUNNING WHAT IS NOW THE MOST FREQUENTLY USE BIKEWAY IN THE UNITED STATES. THEY HAVE SUCCEEDED IN EDUCATING THE PUBLIC AS TO PROPER "BIKEWAY EDIQUETTE". THEY HAVE BEEN VERY ACTIVE IN WORKING WITH THE DEPARTMENTS OF PUBLIC WORKS IN EVERY TOWN WHICH CONTAINS THE BIKEWAY. THEIR EFFORTS IN MAINTAINANCE OF THE BIKEWAY ALSO ARE OUTSTANDING

IN SHORI, THE FRIENDS OF THE MINUTEMAN BIKEWAY ARE PASSIONATE AND ENERGETIC REGARDING EVERYTHING CONCERNING THE BIKEWAY.

THEY HAVE THE UNQUALIFIED SUPPORT OF THE CYCLE LOFT AND ALL THE THOUSANDS OF CUSTOMERS WE ARE PREVIDLGED TO SERVE.

ANY QUESTIONS ABOUT THE ABOVE SHOULD BE DIRECTED TO THE UNDERSIGNED.

SINCERELY YOURS,

JERRY SLACK
PRESIDENT/CEO
THE CYCLE LOFT INC
28 CAMBRIDGE STREET
BURLINGTON, MA 01803
PH: 781-272-0870
EMAIL: JERRY@CYCLELOFT.COM

WHEELWORKS

The
New
England

BICYCLE

Source

May 4, 2004

To Whom It May Concern:

Ace and Belmont Wheel Works' staff and owners would like to offer support to the proposed MinuteMan Bikeway extension in Bedford.

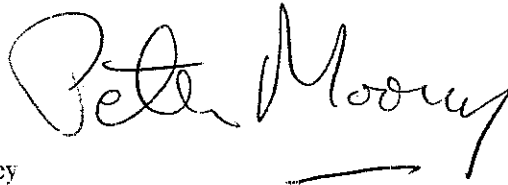
MinuteMan Bikeway provides a safe right of way for cycle commuters on route to work or school.

It promotes recreational and family cycling.

It improves the health of the community while reducing road traffic and pollution.

The MinuteMan Bikeway continues to be a huge asset to metro west.

Sincerely,



Peter Mooney

AVOID THE TRAFFIC SHOP BEDFORD BY BIKE

Dunster Rd. Path

Narrow-gage Rail Trail



Great Rd. Shops & Banks

Bedford Shopping Center

Shawsheen Ave Shops

Winthrop Ave. Path

Minuteman Bikeway Extension

Bridge St. Path

Minuteman Commuter Bikeway

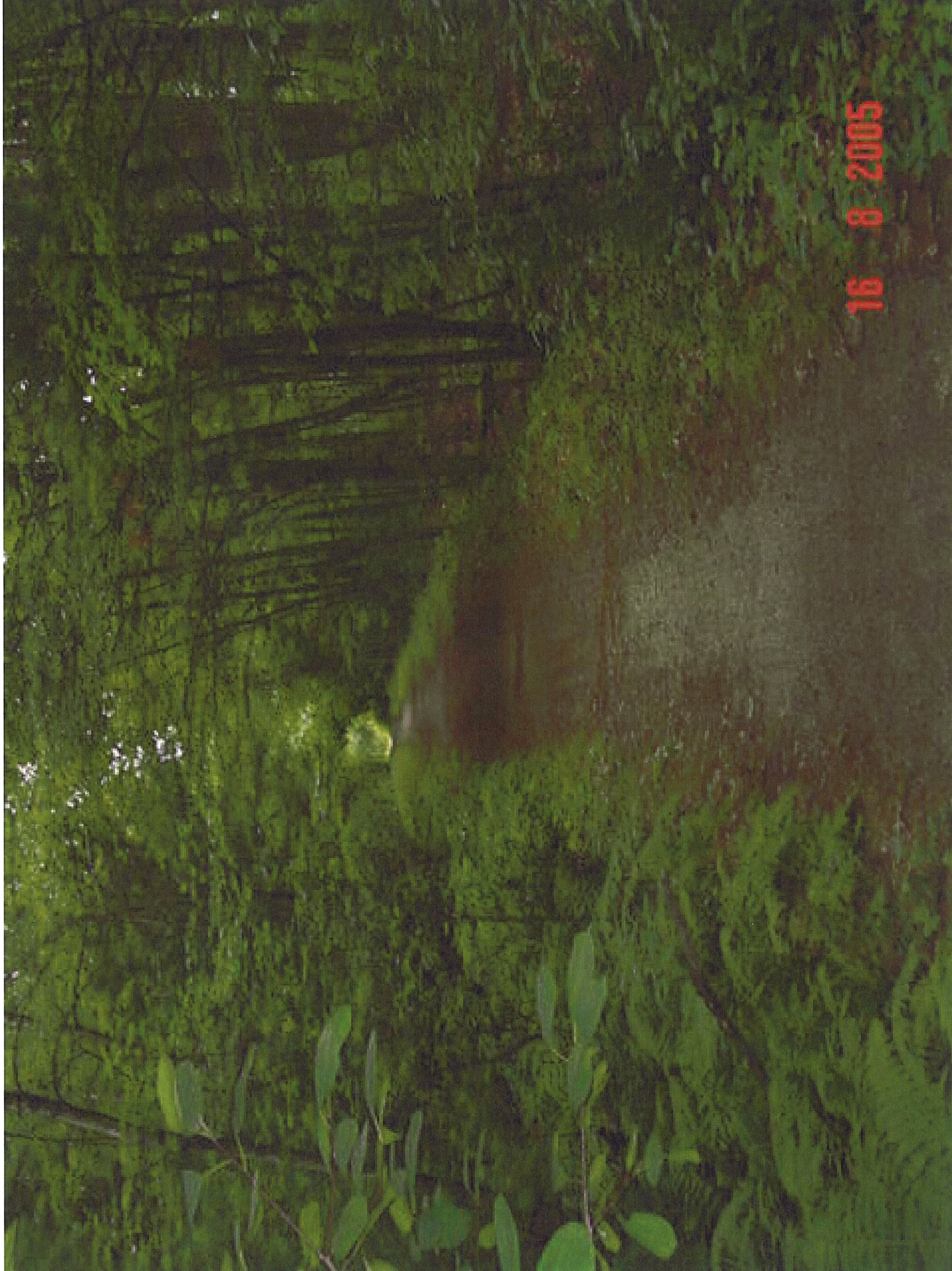
Down-town Bicycle Routes

Appendix F – Pictures of Existing Trail



16 8 2005



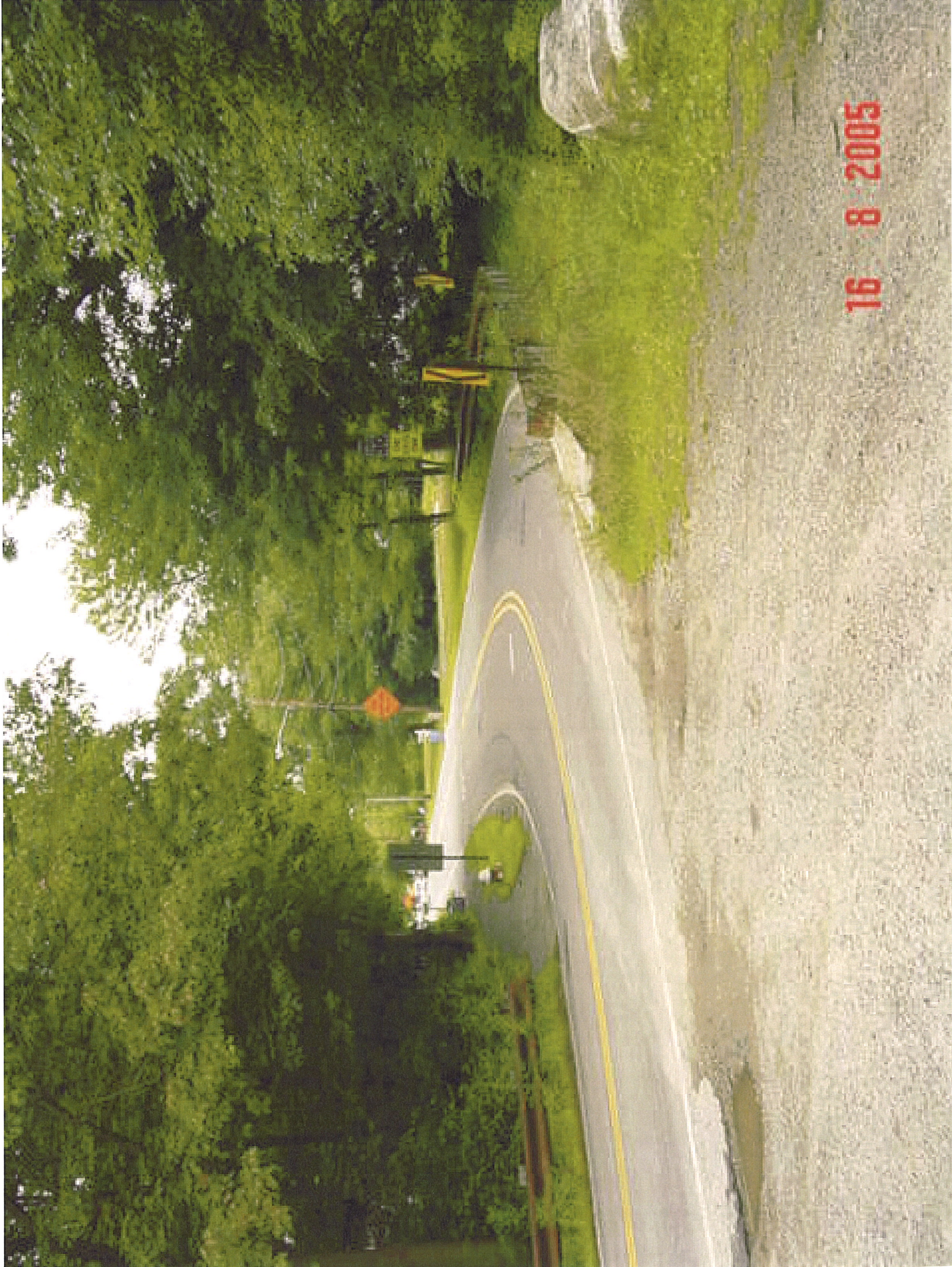


16 8 2005

ELM BROOK
Conservation Area
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