

**Walpole-Charlestown
X-A000(487)
14747**



**Final Environmental Study/
Categorical Exclusion
& Section 4(f) Evaluation**

September 2011

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- Exhibit E: Property Impacts Table
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- Exhibit I: Land and Water Conservation Fund (LWCF) Memo
- Exhibit J: Land and Community Heritage Investment Program (LCHIP) Correspondence
- Exhibit K: NH Natural Heritage Bureau (NHNHB) Memo
- Exhibit L: Connecticut River Joint Commissions Correspondence
- Exhibit M: United States Fish and Wildlife Service Memo and Correspondence
- Exhibit N: National Marine Fisheries Service Correspondence and Essential Fish Habitat Study
- Exhibit O: NH Office of Energy and Planning Memo and Flood Insurance Rate Maps (FIRM)
- Exhibit P: NHDES Drinking Water Source Protection Program Correspondence
- Exhibit Q: Environmental Justice Memo
- Exhibit R: Adverse Effect Memo
- Exhibit S: Sullivan County Railroad Historic District Maps
- Exhibit T: NH Division of Historical Resources Determination of Eligibility (DOE)
- Exhibit U: Advisory Council on Historic Preservation Correspondence
- Exhibit V: Memorandum of Agreement Submitted to the ACHP
- Exhibit W: United States Department of the Interior Correspondence
- Exhibit X: Natural Resource Agency Coordination Meeting Minutes
- Exhibit Y: Cultural Resource Agency Coordination Meeting Minutes
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- Exhibit AA: Report of the Commissioner
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Part I: Environmental Study

Introduction and Description of Project

This project involves the reconstruction of approximately 2.8 miles (14,500 ft) of NH Route 12 between the towns of Walpole and Charlestown, NH (*Exhibit B*). The roadway is located in proximity to the Connecticut River and an active railroad line (referred to as the New England Central Railroad or the Sullivan County Railroad). The current roadway is narrow and contains little to no shoulders. Several sections of the roadway embankments are showing signs of deterioration and in some locations have begun sloughing into the Connecticut River.

This project involves widening, shifting and updating NH Route 12 to accommodate for two 12-foot travel lanes and two 4-foot shoulders. This project begins at the NH Route 12/Main Street intersection in North Walpole and proceeds north approximately 2.8 miles to the intersection of NH Routes 12 and 12A (*Exhibit B*). The proposed roadway improvements will require the relocation of approximately 2.5 miles of the New England Central Railroad. The proposed project will require property acquisitions as well as permanent drainage and slope easements to be obtained prior to construction.

This project was developed using the Context Sensitive Solutions (CSS) process which involves the use of a Public Advisory Committee (PAC) to assist in developing the project purpose and need, identifying numerous alternatives and recommending a proposed alternative. The recommendations of the PAC were strongly considered by both the New Hampshire Department of Transportation (NHDOT) and the Federal Highway Administration (FHWA) throughout the development of the project. The PAC for this project consisted of local property and business owners, public officials, local organization constituents, members of the NHDOT and other stakeholders. During the CSS process, input was also received from multiple State and Federal agencies representing the natural, cultural and socioeconomic interests of the area. The PAC developed the following vision statement to meet the purpose and need of the project:

“The Route 12 corridor will be safe, efficient, attractive, and environmentally sensitive, while adequately serving the needs of the motoring public, bicyclists, pedestrians and commercial traffic including rail service. Route 12 will be a wider road with adequate shoulders, appropriate guardrails, and safe passage for bicyclists and pedestrians, while providing better access and parking to enjoy the river. This project will realistically maximize the limited space available for the various modes of transportation, while preserving and enhancing the scenic qualities of the area for travelers and residents.”

In accordance with the National Environmental Policy Act of 1969 (42 USC 4332(2)(c)) as implemented in 23 CFR 771.117(d)(1) and Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303), this Environmental Study and 4(f) evaluation addresses the reconstruction of NH Route 12 and has been prepared using a systematic, interdisciplinary approach to assess the engineering considerations and environmental effects of this Categorical Exclusion project.

Existing Conditions/ Project Purpose and Need

The existing roadway is located in proximity to the Connecticut River to the west, and an active railroad to the east. Immediately to the east of the existing railroad line is a very steep hillside leading up to Fall Mountain. The project area is located just to the north of the North Walpole Village and several miles south of the Charlestown Village. The Villages of North Walpole and Charlestown are typical of many small New Hampshire towns with small, moderately dense residential / business districts surrounded by forestlands, agricultural lands and rural/residential properties. The southern end of the project area abuts the northern outskirts of the North Walpole Village adjacent to several commercial properties. The areas adjacent to the middle and northern segments contain a mix of residential, forested/natural and agricultural properties.

The existing roadway contains two, 12-foot lanes with no shoulders. The lack of roadway shoulders forces bicyclists and pedestrians to travel within the vehicle lanes and do not provide for safe emergency stopping and vehicle recovery. The safety concerns associated with vehicle recovery are further exacerbated by substandard cable guardrail and the proximity of the roadway to the railroad facility to the east and the steep embankments of the Connecticut River to the west of the existing roadway.

Over the past decade there have been multiple accidents along this section of roadway, several of which are of particular importance as they are indicative of the safety concerns associated with a lack of adequate shoulders, updated guardrail and appropriate safety zones between both the Connecticut River and the railroad facility. Two of these accidents, one of which resulted in a fatality, involved vehicles crashing through the guardrail and sliding down the steep embankment into the Connecticut River. Another two accidents involved vehicles crashing through the guardrail and coming to rest on the railroad tracks where they were subsequently hit a train before they could be removed from the tracks. Another accident, which resulted in a fatality, involved a vehicle crossing the centerline and hitting an oncoming vehicle.

In addition to the above noted safety concerns, the roadway is showing signs of substantial deterioration. Several locations along the roadway embankments adjacent to the Connecticut River, mainly near the southern end of the project, are showing signs of instability and in some locations have begun sloughing into the River. Many of the existing drainage structures including culverts, catch basins and headwalls are no longer functioning properly or are also showing signs of substantial deterioration.

The intent of this project is to address the above noted safety concerns and structural deficiencies by widening, reconstructing and updating NH Route 12 within the project area.

Alternatives Overview

During the CSS process the PAC developed the following alternatives (*Exhibit D*) which were subsequently evaluated on their ability to meet the project's purpose and need as well as the projects vision statement (see [Introduction](#) section for additional information). It was determined early on during the process that in order to address the existing safety deficiencies of NH Route 12, the proposed project should include the construction of an updated facility which includes the addition of paved shoulders. The American Association of State Highway and Transportation Officials (AASHTO) recommends that a facility similar to NH Route 12 should be constructed with 12-foot travel lanes and 8-foot shoulders. The Department, at the recommendation of the PAC, and in consultation with the FHWA has determined that despite the AASHTO recommendations, a facility with 12-foot travel lanes and 4-foot shoulders will adequately meet the project's purpose and need while minimizing impacts to the surrounding properties and the natural, cultural and socioeconomic environments as well as reducing the overall project costs. For these reasons, all of the following alternatives include the construction of a facility with 12-foot travel lanes and 4-foot shoulders.

During the development of this project and for documentation purposes, the project area was broken up into three segments. The southern segment begins at the southern terminus of the project at station 3003 and proceeds north approximately 1 mile to station 3051 (*Exhibits C & DD*). The middle segment begins at station 3051 and proceeds north approximately 0.7 miles to station 3090. The northern segment begins at station 3090 and proceeds north approximately 1.1 miles to the northern terminus of the project at station 3148.

Several of the following alternatives were considered to be "hybrid" alternatives which combined aspects of several of the original 5 alternatives. The naming convention for the hybrid alternatives relates to the options used in each segment. The first number is for the southern segment, the second number is for the middle segment and the third number is for the northern segment. For example; Alternative 3-2-3 utilizes an alignment similar to alternative 3 in the southern segment, alternative 2 in the middle segment and alternative 3 in the northern segment.

Project Proposal/Preferred Alternative (Alternative 3-2-3)

Due to the apparent safety and structural deficiencies of NH Route 12, the main intent of this project is to widen, reconstruct and update the existing roadway through the construction of a facility with 12-foot travel lanes and 4-foot shoulders. In order to accommodate for the additional roadway width and address the stability issues associated with the roadway's proximity to the Connecticut River, the roadway will be shifted to the east in the southern and northern segments and to the west in the middle segment. In the southern and northern segments, the proposed shift in the roadway alignment will also require shifting the alignment of the existing railroad facility. The proposed adjustments to both the roadway and railroad for each section are as follows:

- Southern section: The alignments of both the roadway and railroad will be shifted approximately 50 to 60 feet to the east.

- Middle section: The existing eastern edge of the roadway will be maintained and the western edge of the roadway will be shifted approximately 8 to 10 feet to the west. The existing railway will remain in its existing location throughout the majority of the middle section and will only be adjusted slightly at either end to tie the existing tracks into the proposed track alignments of the southern and northern sections.
- Northern section: The existing western edge of pavement will remain in approximately the same location and the eastern edge of the roadway will be shifted approximately 10 feet to the east. The railroad alignment will be shifted approximately 15 to 20 feet to the east of the existing alignment.

In addition to the proposed alignment shifts, the proposed project will also include the following efforts:

- Removal of the abandoned roadbed within the southern section.
- Rehabilitation/reconstruction of the existing roadbed within the middle and northern sections.
- Rehabilitation/replacement of the railroad track and substructure within the middle section, as necessary.
- Installation of updated guardrail throughout the length of the project.
- The existing culverts and cross-pipes will be rehabilitated and/or replaced as necessary.
- The existing roadway drainage systems will be rehabilitated, replaced and/or updated as necessary. Additional drainage may be necessary.
- Adjustments to the turning lane dimensions and pavement markings at the NH Route 12/NH Route 12A intersection.

The proposed alternative was recommended by the PAC as the preferred alternative and ultimately was chosen by the Department in consultation and agreement with the FHWA as it avoids major impacts to the Connecticut River in both the southern and northern segments and avoids costly impacts to an extremely steep slope to the east of the railroad adjacent to the middle section. This alternative was also recommended and chosen as it avoids impacting surrounding properties to the maximum extent practicable. This alternative is estimated to cost approximately \$15 million to \$20 million.

Alternatives Considered

“No-Build” – Alternative 1

The “No-Build” alternative does not address the deficiencies and safety concerns associated with the existing section of roadway. Selection of this alternative would require bicycles and pedestrians to continue to use the travel way and would allow for the continued deterioration of the existing roadway and drainage structures. Roadway conditions would continue to deteriorate and safety concerns would persist to a point where development of a future project would likely be

necessary. This alternative was not chosen as it would result in unacceptable operational and safety problems.

Western Alignment Shift – Alternative 2

This alternative would require the roadway to be widened approximately 8 to 15 feet to the west, toward and into the Connecticut River with the intention of avoiding impacts to the railroad and the Fall Mountain hillside. This alternative would require the complete reconstruction of the existing embankment adjacent to the Connecticut River, removal of bank vegetation and extensive fill within the river itself. A review by the State and Federal resource agencies at the May 20, 2009 Natural Resource Agency Coordination Meeting indicated that additional environmental impacts associated with this alternative were unacceptable and that the selection of this alternative would be met with substantial opposition (*Exhibit X*).

This alternative was estimated to cost approximately \$13 million to \$15 million. Although the estimate for this alternative was slightly less than the preferred alternative, the PAC felt that the environmental impacts associated with this alternative were too great. As a result, this alternative was determined unreasonable and thus was not chosen.

Eastern Alignment Shift – Alternative 3

This alternative would require the roadway to be shifted a maximum of approximately 50 to 60 feet to the east, toward the railroad with the intention of avoiding all impacts to the Connecticut River and any other wetlands or properties to the west of the existing roadway. This alternative would require the complete reconstruction of the New England Central Railroad within the project area and would require substantial cuts into the Fall Mountain hillside to the east of the railroad. This alternative was estimated to cost approximately \$15 million to \$20 million. The PAC felt that this alternative was reasonable however, due to the aesthetic concerns with large hillside cuts and increased impacts to the railroad, this alternative was not chosen.

Eastern Bypass, Adjacent to Railroad – Alternative 4A

This alternative involves relocating the existing roadway to the east of the railroad. The roadway would be constructed at approximately the same grade and as close to the eastern side of the existing railroad as possible. At the northern end of the project, the existing NH Route 12A overpass would be used to move NH Route 12 to the east of the railroad. At the southern end of the project, NH Route 12 would be relocated from Church Street to Main Street in North Walpole Village.

This alternative does not require the relocation of the existing railroad tracks; however, it does encroach into the existing railroad right-of-way. This alternative also requires large cuts into the hillside to the east of the railroad. Residential property acquisition would be necessary in the Old Ferry Road/Old State Road neighborhood adjacent to NH Route 12A in South Charlestown. Commercial property impacts at the LenTex Corporation in North Walpole would be necessary and its

operations might be impeded through the introduction of a major state road between several of its buildings.

Currently, NH Route 12 passes along Church Street in North Walpole Village. This alternative would require NH Route 12 to be relocated to Main Street, a narrow, local road with low traffic volumes. Areas of North Walpole Village are eligible for the National Register of Historic places, including areas adjacent to both Church Street and Main Street. Selection of this alternative would result in increased impacts to one or more of these potentially eligible historic districts. As a result of these additional impacts, the NH Division of Historical Resources also expressed displeasure with this alternative at the March 5, 2009 Cultural Resource Agency Coordination meeting (*Exhibit Y*). This alternative was also presented at a Public Informational Meeting on April 29, 2009, and was met with overwhelming disapproval by the residents of North Walpole Village (*Exhibit Z*).

This alternative was estimated to cost approximately \$15 million to \$20 million. Although the estimate for this alternative was similar to that of the preferred alternative, it was determined that the environmental, cultural and socioeconomic impacts associated with the selection of this alternative were too great. For these reasons the PAC felt this alternative was unreasonable and as a result, it was not chosen.

Eastern Bypass, Hillside Option – Alternative 4B

This alternative is similar to Alternative 4A however it shifts the alignment of the proposed roadway farther to the east, partway up the Fall Mountain Hillside, to avoid encroaching upon the railroad right-of-way. Similar to alternative 4A, alternative 4B would have similar property and socioeconomic impacts to the Old Ferry Road/Old State Road neighborhood, the LenTex Corporation and the North Walpole, Main Street neighborhood. Alternative 4B would require large cuts into the Fall Mountain Hillside, similar to alternative 4A, but it would also have large fill areas creating a balance between the necessary cuts and fills. As this alternative would require similar impacts to the Main Street area in North Walpole as alternative 4A, it was met with similar opposition from both the NH Division of Historical Resources and the general public.

This alternative was estimated to cost approximately \$15 million to \$20 million. Although the estimate for this alternative was similar to that of the preferred alternative, the PAC felt that the environmental, cultural and socioeconomic impacts associated with the selection of this alternative were too great. As a result, this alternative was determined unreasonable and thus was not chosen.

Eastern Bypass, Church Street Connection – Alternative 4C

This alternative is essentially the same as alternative 4B however; it includes the installation of a grade separated railroad crossing in the southern section of the project area. This would involve the construction of a bridge over the railroad in order to return traffic from the new alignment to the east of the railroad, to its existing alignment along Church Street. This alternative would avoid the Main Street impacts associated with Alternatives 4A and 4B. This alternative would still require property

impacts in the Old Ferry Road/Old State Road neighborhood in Charlestown and would still require large cuts into the Fall Mountain hillside. It would also require additional property impacts to the LenTex Corporation (Parcel 4). Although this alternative eliminates many of the North Walpole Village impacts associated with alternatives 4A and 4B, it was estimated to cost an additional \$4 million more than alternative 4B (a total of approximately \$19 million to \$24 million). Given the increased costs, the PAC felt this alternative was unreasonable and as a result, it was not chosen.

On Alignment with Retaining Walls – Alternative 5

This alternative involves widening the roadway along its existing alignment, through the use of retaining walls along both sides of the highway. The use of retaining walls and other geotechnical engineering would minimize impacts to both the railroad and the river. Although this alternative eliminates many, if not all of the environmental impacts associated with any of the other alternatives, it was estimated to cost between \$23 million and \$25 million and would require the complete closure of NH Route 12 during the construction process. As a result of the increased costs and impracticable constructability, the PAC felt this alternative was unreasonable and thus it was not chosen.

Hybrid, Northern Segment Westward Shift – Alternative 3-2-2

This alternative is similar to the proposed alternative, in that it involves a “hybrid” of alternatives 2 and 3. With this alternative, the roadway and subsequently the railroad would be shifted approximately 50 to 60 feet to the east in the southern segment. In the middle and northern segments, the roadway would be shifted 8 to 15 feet to the west, towards and into Meany’s Cove and the Connecticut River. Compared to the preferred alternative, this alternative avoids impacts to the railroad, the Jabes Meadow Brook wetland and several properties to the east of the railroad in the northern segment, but increases impacts to the Connecticut River. The additional Connecticut River impacts would result in further wetland, floodway and floodplain impacts as well as potential fisheries and endangered species impacts beyond those of the preferred alternative. These additional impacts would likely raise serious concern among the local, State and Federal Resource Agencies as well as the general public.

A review by the state and Federal resource agencies at the May 20, 2009 Natural Resource Agency Coordination Meeting (*Exhibit X*) indicated that the Connecticut River is a important environmental resource and that excessive impacts to this resource were unacceptable and would be met with substantial opposition. Based upon this input it was anticipated by the PAC and the project design team that due to the increased environmental impacts and potential public concerns associated with alternative 3-2-2, Wetland Impact Permits from both the US Army Corps of Engineers and the NH Department of Environmental Services would either be extremely difficult or impossible to obtain.

Alternative 3-2-2 was estimated to cost approximately \$15 million to \$20 million. Although the PAC felt this alternative was reasonable, it was not chosen due to the additional impacts to the Connecticut River compared to those of the preferred alternative.

NH Route 12/12A Intersection Reconfiguration – Alternatives 3-2-2A & 3-2-3A

These alternatives involve similar designs to those of alternatives 3-2-2 or 3-2-3 (preferred alternative), however they include the relocation of NH Route 12 to the west of the existing NH Route 12A overpass and the reconfiguration of the NH Route 12/12A intersection at the northern end of the project.

The existing NH Route 12A overpass is approximately 68 feet wide and carries NH Route 12A over both NH Route 12 and the railroad. This width is slightly less than what is necessary to maintain the same roadway geometry that will be constructed throughout the length of the rest of the project. In order to avoid a costly reconstruction of this structure, all of the above alternatives will require a reduction in the proposed clear zone (obstruction free zone to either side of the roadway) beneath the NH Route 12A overpass. Throughout the rest of the project the proposed buffer between the two facilities will be approximately 39 feet. Given the constraints of the overpass, this buffer will be reduced to approximately 35 feet beneath the overpass. A concrete crash barrier will also be added adjacent to the western edge of pavement to protect and prevent collisions with the western pier of the existing NH Route 12 overpass.

The intent of alternatives 3-2-2A and 3-2-3A was to eliminate the space restrictions associated with the existing NH Route 12A overpass, allowing for uniform roadway geometry throughout the length of the project and permitting the railroad to be shifted freely beneath the overpass, as necessary. These alternatives would however, require additional impacts to at least one potentially archaeologically sensitive area, wetlands and floodplains as well as substantial property impacts to several active agricultural fields to the west of both NH Routes 12 and 12A. Both alternatives 3-2-2A and 3-2-3A are expected to cost an additional \$700,000 beyond that of either alternative 3-2-2 or alternative 3-2-3. The PAC felt both alternatives 3-2-2A and 3-2-3A were reasonable however, given their additional environmental, cultural, socioeconomic and monetary costs, they ultimately were not chosen.

Coordination and Public Participation

Letters were sent to various Federal, State and local agencies and groups, as well as the general public, requesting input on this project on the following dates:

<u>Agency / Organization</u>	<u>Contact</u>	<u>Date Sent</u>	<u>Date Received</u>
Town of Walpole			
Selectman	Whitney R. Aldrich	2/15/2007	-
Recreation Committee Chair	Joan DeVault	2/15/2007	-
Police Chief	David Hewes	2/15/2007	-
Fire Chief & Emergency Mgt. Director	Richard Hurlburt	2/15/2007	-
Selectman	Charles D. Miller	2/15/2007	-
Planning Board Chair	Jeffrey Miller	2/15/2007	-
Selectman	Sheldon S. Sawyer	2/15/2007	-
Conservation Commission Chair	Gary Speed	2/15/2007	-
Highway Department Superintendent	Jim Terrell	2/15/2007	-

Moderator	Ernie Vose	2/15/2007	-
Selectman	Jamie Teague	12/1/2009	-
Selectman	Whitney Aldrich	12/1/2009	-
Selectman	Sheldon Sawyer	12/1/2009	-
Recreation Committee	Jay Punt	12/1/2009	-
Police Chief	David Hewes	12/1/2009	-
Fire Chief & Emergency Mgt Director	Richard Hurlburt	12/1/2009	-
Planning Board Chair	Jeffrey Miller	12/1/2009	-
Conservation Commission Chair	Marcia Galloway	12/1/2009	-
Highway Department Superintendent	Jim Terrell	12/1/2009	-
Town of Charlestown			
Planning & Zoning Administrator	David Edkins	2/15/2007	-
Recreation Director	Tracy Fairbank	2/15/2007	-
Planning Board Chair	Robert T. Frizzell	2/15/2007	-
Conservation Commission Chair	Richard Holmes	2/15/2007	-
Board of Selectman	Steven A. Neill	2/15/2007	-
Highway Advisory Board Chair,	Bruce Putnam	2/15/2007	-
Recreation Committee Chair	Cheryl Ravlin	2/15/2007	-
Police Chief	Edward Smith	2/15/2007	-
Fire Chief	Gary Stoddard	2/15/2007	-
Highway Department Superintendent	Keith O. Weed	2/15/2007	-
Planning & Zoning Administrator	David Edkins	12/1/2009	-
Board of Selectman Chair	Jon LeClair	12/1/2009	-
Recreation Director	Scott Hagland	12/1/2009	-
Planning Board Chair	Robert T. Frizzell	12/1/2009	-
Conservation Commission Chair	Richard Holmes	12/1/2009	-
Highway Advisory Board Chair	Bruce Putnam	12/1/2009	-
Recreation Committee Chair	Christine Cheney	12/1/2009	-
Police Chief	Edward Smith	12/1/2009	-
Fire Chief	Gary Wallace	12/1/2009	-
Highway Department Superintendent	Keith O. Weed	12/1/2009	-
Connecticut River Joint Commissions	Sharon Francis	5/17/2007	5/18/2007
Connecticut River Joint Commissions	Sharon Francis	12/1/2009	-
Upper Valley Lake Sunapee RPC	Tara E. Bamford	2/15/2007	-
Upper Valley Lake Sunapee RPC	Christine Walker	12/1/2009	-
Southwest Region Planning Commission	Timothy Murphy	2/15/2007	-
Southwest Region Planning Commission	Timothy Murphy	12/1/2009	-
US Fish and Wildlife Service	Bill Neidermyer	2/15/2007	-
US Fish and Wildlife Service	Maria Tur	12/1/2009	-
NH DRED, LWCF	Shari Colby	2/15/2007	-
NH DRED, LWCF	Jane Carey	12/1/2009	-
NH Office of Energy and Planning	Jennifer Gilbert	2/15/2007	2/26/2010
NH Office of Energy and Planning	Jennifer Gilbert	12/1/2009	-
NH Office of Energy and Planning	Jennifer Gilbert	6/2/2010	-
NH Office of Energy & Planning (CLS)	Steve Walker	2/15/2007	2/20/2007
NH Office of Energy & Planning (CLS)	Steve Walker	12/1/2009	12/1/2009
Land & Community Heritage Investment Program	Rachel Rouillard	2/15/2007	-
Land & Community Heritage Investment Program	Rachel Rouillard	12/1/2009	-
NH DOT – HR (Environmental Justice)	David Chandler	2/15/2007	-
NH Division of Historical Resources	Elizabeth Muzzey	12/1/2009	-
NH Preservation Alliance	Jennifer Goodman	12/1/2009	-
Walpole Historical Society	Virginia Putnam	12/1/2009	-
Charlestown Historical Society	Joyce Higgins	12/1/2009	-
New England Central Railroad	Rick Boucher Sr.	12/1/2009	-

NH DES – Drinking Water Source Protection	Johanna McKenna	5/26/2010	6/4/2010
NOAA – National Marine Fisheries	Michael Johnson	6/2/2010	6/7/2010

Meetings have periodically been held throughout the development of this project, with various Federal, State and local agencies, as well as with the general public. Project review meetings were held on the following dates:

Date	Topic
April 18, 2007	Natural Resource Agency Coordination Meeting
May 10, 2007	Cultural Resource Agency Coordination Meeting
August 1, 2007	Public Officials Informational Meeting
October 10, 2007	Public Advisory Committee Meeting
December 12, 2007	Public Advisory Committee Meeting
March 12, 2008	Public Advisory Committee Meeting
April 9, 2008	Public Advisory Committee Meeting
May 20, 2008	Natural Resource Agency Coordination Meeting
June 11, 2008	Public Advisory Committee Meeting
August 20, 2008	Natural Resource Agency Coordination Meeting
September 10, 2008	Public Advisory Committee Meeting
February 11, 2009	Public Advisory Committee Meeting
March 5, 2009	Cultural Resource Agency Coordination Meeting
April 29, 2009	Public Informational Meeting
July 22, 2009	Public Advisory Committee Meeting
September 30, 2009	Public Advisory Committee Meeting
October 20, 2009	Natural Resource Agency Coordination Meeting
November 12, 2009	Cultural Resource Agency Coordination Meeting
December 3, 2009	Cultural Resource Agency Coordination Meeting
January 13, 2010	Public Informational Meeting
March 11, 2010	Cultural Resource Agency Coordination Meeting
April 8, 2010	Cultural Resource Agency Coordination Meeting
April 21, 2010	Natural Resource Agency Coordination Meeting
June 16, 2010	Natural Resource Agency Coordination Meeting
July 29, 2010	Public Hearing

Minutes for the Monthly Natural Resource Agency Coordination Meetings can be found at the following website:

<http://www.nh.gov/dot/bureaus/environment/NaturalResourceAgencyCoordinationMeeting.htm>

Minutes for the Monthly Cultural Resource Agency Coordination Meetings can be found at the following website: <http://www.nh.gov/dot/bureaus/environment/CulturalResourcesMeeting.htm>

Minutes for the Public Advisory Committee Meetings and Public Informational meetings can be found at the following website: <http://www.nh.gov/dot/projects/walpole14747/index.htm>

A Public Hearing was held on March 7, 2006. During the hearing and within the ten day comment period following, six individuals expressed minor concerns and requests regarding the project. These comments and the Department’s responses can be found in the attached Report of the Commissioner (*Exhibit AA*). The Department intends to accommodate as many of these requests as possible. None of the above noted requests will substantially alter the environmental impacts associated with this project.

Evaluation of Environmental Effects

The effects of the project relative to the following social, economic, natural and cultural resources/issues have been reviewed. Resources/issues, which are not discussed in the body of the report, were investigated, however no impacts were evident. As such, these resources/issues are omitted from this environmental documentation. The resources and issues deemed applicable for this project are indicated in type.

Resources/Issues

<u>Social/ Economic</u>	<u>Natural</u>	<u>Cultural</u>
<u>Safety</u>	<u>Water Quality</u>	<u>Historical</u>
<u>Transportation Patterns</u>	<u>NPDES, Stormwater</u>	<u>Archaeological</u>
<u>Air Quality</u>	<u>Mgt.</u>	Stonewalls
<u>Noise</u>	<u>Wetlands</u>	<u>Aesthetics</u>
Displacements	<u>Surface Water</u>	
<u>Contaminated Properties</u>	<u>Groundwater</u>	
<u>Neighborhoods</u>	<u>Floodplains</u>	
<u>Business Impacts</u>	<u>Wildlife</u>	
<u>Land Acquisition</u>	<u>Fisheries</u>	
<u>Land Use</u>	<u>Endangered Species</u>	
<u>Tax Base</u>	<u>Natural Communities</u>	
<u>Recreation</u>	<u>Conservation Lands</u>	
<u>Public Lands</u>	Wild & Scenic Rivers	
<u>Construction Impacts</u>	Stream Rechannelization	
	<u>NH Designated Rivers</u>	
	Costal Zone	

Discussions of the effects on resources/issues in follow.

Safety/Transportation Patterns/Community Services

The proposed project involves addressing the safety concerns and structural deficiencies associated with the existing roadway, by reconstructing, widening, and updating NH Route 12 within the project area.

NH Route 12 through the project area is the main connection between not only the Towns of Walpole and Charlestown, NH but also the Cities of Keene and Claremont, NH to the south and north, respectively. It also serves as an alternative north-south route to Interstate 91 and US Route 5 in Vermont. The Average Annual Daily Traffic (AADT) on this section of roadway in 2013 is projected to be 6,320 vehicles per day (vpd), with 8% trucks, and is expected to increase to 8,510 vpd by the

year 2030. The speed limit within the project area is 50 mph, with the exception of approximately 1,000 feet at the southern end of the project, where the speed limit drops to 30 mph.

NH Route 12 is an important connection for such community services as school busses, emergency response vehicles and officials in both the towns of Walpole and Charlestown. Upon completion of the project, traffic patterns are expected to be similar to those which exist today. It is anticipated that through traffic will be maintained throughout construction. It is not expected that the local services of either municipality will be negatively impacted during the construction of this project.

Air Quality

Pursuant to the Clean Air Act Amendments (CAAA) of 1990 and the National Ambient Air Quality Standards (NAAQS), the proposed project is located within an area of the State that is in attainment for ozone and all other criteria pollutants (CO, NO_x, VOCs, Pb SO₂, PM₁₀ and PM_{2.5}). The project has been included in the *Statewide Transportation Improvement Program (STIP) 2009-2012 Amendments I-4*, dated April 21, 2010. The proposed work is not considered a “Regionally Significant Project” as defined in the final Transportation Conformity rules (40 CFR 51.392) or in the rules adopted by the New Hampshire Department of Environmental Services in accordance with the interagency consultation provisions required by 40 CFR 51.402.

The proposed project includes the reconstruction and relocation of NH Route 12 and the New England Central Railroad in the towns of Walpole and Charlestown, NH. When completed, the project is not expected to result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative or contribute to violations of the NAAQS. Consequently, this project is exempt from the conformity requirements of the CAAA.

For the above noted reasons, the Federal Highway Administration (FHWA) has determined that this project will generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special mobile source air toxics (MSAT) concerns. Consequently, this effort is exempt from analysis for MSAT. Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends, conducted by the FHWA using EPA's MOBILE6.2 model, forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSAT from 1999 to 2050, while vehicle-miles of travel are projected to increase by 145 percent. This will both reduce the MSAT background level as well as the possibility of even minor MSAT emissions from this project.

Though exempt from the conformity requirements of the CAAA, the National Environmental Policy Act (NEPA) requires consideration of the project's impact on air quality. Of the NAAQS pollutants of concern in New Hampshire, only CO can generally be addressed at the project level. The proposed project does not involve any substantial changes to the existing traffic patterns of NH Route 12 or the New England Central Railroad. As a result, it can be concluded that this project will also not have an adverse impact on air quality. No further air quality review is warranted.

Noise

The NH Department of Transportation's *Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects* (Noise Policy) provides guidelines for assessing noise impacts and determining the need, feasibility, and reasonableness of noise abatement measures for proposed Type I highway construction and improvement projects. Noise impacts associated with the proposed project were examined in accordance with the guidelines set forth in the Department's Noise Policy. Traffic noise levels associated with this project were developed using the Federal Highway Administration's Traffic Noise Model Lookup Tables. The results of this analysis are considered to be a "worst case scenario" as they do not take into account vegetation and topographical information that would likely result in lower noise levels.

The Department uses a Noise Abatement Criteria (NAC) of 67 decibels (dBA) Leq for residential receptors and 72 dBA Leq for commercial receptors. These criteria apply to exterior, ground level areas where frequent human use occurs and where a lowered noise level would be of benefit. Traffic noise impacts occur when the predicted traffic noise levels approach (within 1 dBA), are equal to or exceed the NAC or when future predicted traffic noise levels exceed existing noise levels by 15 dBA or more.

The majority of the properties adjacent to the project area are undeveloped forested, natural and agricultural lands. The remainder of the properties consist of several residential and one commercial property. The existing peak hour traffic noise levels within the project area are approximately 63 to 65 decibels or less for residential properties and approximately 66 decibels or less for the commercial property. Upon completion of the project and as a result of the expected increases in traffic over the next several decades, noise levels throughout the project area are expected to increase by approximately 1 to 2 decibels by the year 2033. As increases of less than 3 decibels are considered undetectable to the human ear, this project will not result in a noticeable change in traffic noise levels at any location. Additionally, noise levels in the year 2033 are not expected to approach or exceed the NAC under the proposed conditions. As noise levels are not expected to increase by more than 2 dBA and will not be in excess of the NAC, traffic noise impacts in association with this project are not expected.

The Department's Noise Policy only allows for abatement in association with a Type I highway project. A Type I project is a proposed highway project that involves the construction of a highway in a new location, increases the number of through traffic lanes, or substantially alters either the horizontal or vertical alignment of an existing highway. Although this project does involve alterations to the horizontal and vertical alignment of the existing roadway, noise levels are not expected to result in a substantial increase in noise levels, nor are they anticipated to exceed the NAC. As a result, noise abatement was not examined.

Construction activities will temporarily increase noise due to the use of heavy equipment, however these noise levels are expected to return to normal after the project has been completed. For the

reasons stated above, this project is not expected to adversely affect noise levels at any of the adjacent receptors.

Contaminated Properties

An in-house database search of the New Hampshire Department of Environmental Services (NHDES) One-Stop Environmental Database indicated the presence of two (2) remediation sites in proximity to the project area (*Exhibit F*). Both of these sites have been listed by NHDES as “Closed.” Although these files indicate the potential presence of hazardous materials, the issues associated with each site have been examined by NHDES and given their “Closed” status are considered to have been adequately addressed.

Multiple field inspections between 2006 and 2010 did not indicate any obvious signs of hazardous material contamination within the project area. Although no contamination was evident during these field reviews, there is a potential for contamination within the railroad corridor. The Department will conduct the necessary subsurface investigations to determine the extent of any hazardous materials within the project area. If hazardous materials are determined to be present a soils management plan will be developed and incorporated into the project design ([Environmental Commitment 1](#)).

Land Acquisition/Easements/Neighborhoods/Tax Base

There are thirty-six (36) properties located within the project area of which twenty-three (23) will be impacted by this project. Construction of the proposed highway improvements will require the permanent acquisition of approximately 1,016,371 ft² (23.33 acres) outside the existing right-of-way. In addition to the proposed acquisitions, the project will also require approximately 588,134 ft² (13.50 acres) of permanent easements and 7,430 ft² (0.17 acres) of temporary easements outside the limits of the existing right-of-way. A table showing the proposed property impacts within the project area can be found in *Exhibit E*.

This project will not require the removal of any residential or commercial structures. The above noted permanent acquisitions are mainly associated with the relocation of the New England Central Railroad to the east of its existing location in the southern and northern segments. The remaining temporary and permanent easements are mainly associated with slope reconfiguration/stabilization, drainage improvements and temporary construction needs and therefore are not expected to adversely affect their associated properties. The Department will obtain the necessary property acquisitions, easements and rights of entry prior to the commencement of construction ([Environmental Commitment 2](#)).

There are two neighborhoods within the project area; the Old Ferry Road/Old State Road neighborhood and the Meany’s Cove neighborhood. The Old Ferry Road/ Old State Road neighborhood (Parcels 19, 21, 22, 24, 25 & 28) is located to the east of the railroad, adjacent to the northern segment of the project. The Meany’s Cove neighborhood (Parcels 14, 15, 16 & 17) is located

to the west of NH Route 12 adjacent to the middle segment of the project. The majority of the property impacts within these neighborhoods are associated with slope reconfiguration/stabilization, drainage improvements and re-establishing the necessary right-of-way as a result of the proposed alignment shifts. Although property impacts are anticipated within both of these neighborhoods, the project will not require the removal of any residences within these areas. As a result, it is not anticipated that the functions and values of these neighborhoods will be negatively impacted by the proposed project.

The total land area in the Town of Walpole is approximately 22,848 acres. Total permanent impacts within Walpole are approximately 12.94 acres, 0.06 % of the total land area in this town. The total land area in the Town of Charlestown is approximately 22,912 acres. Total permanent impacts within Charlestown are approximately 10.39 acres, 0.05 % of the total land area in this town. Given that the total permanent impacts within each town are relatively low in comparison to their total land areas, it is not anticipated that this project will cause a substantial change on the tax base of either municipality.

Land Use/ Public Lands/ Conservation Lands

One conservation property, known as the Fall Mountain State Forest (parcel 12), has been identified within the project area. This undeveloped, 477 acre property is located in the towns of Charlestown and Langdon. The property is owned by the State of New Hampshire, Dept. of Resources and Economic Development (DRED); upon which The Nature Conservancy (TNC) holds a conservation easement, the US Fish & Wildlife Service (USF&WS) holds a grant agreement and the Land and Community Heritage Investment Program (LCHIP) has an executory interest. This parcel was placed in conservation through the efforts of the above noted agencies and organizations after the federally endangered *Scirpus ancistrochaetus* (Northeastern Bulrush) was found in interior portions of the property. The primary function of this property is for the management of State timber resources as well as the conservation of the Northeastern Bulrush.

A small section of the western edge of the Fall Mountain State Forest abuts the eastern edge of the New England Central Railroad's right-of-way adjacent to the Charlestown/Walpole town line. The proposed project will necessitate the easterly relocation of approximately 2.2 miles of the New England Central Railroad. This shift in the railroad alignment will require the acquisition of 4.54 acres of permanent acquisition within the Fall Mountain State Forest.

The Fall Mountain State Forest was established, in part, through the LCHIP and therefore is protected under New Hampshire Revised Statutes Annotated (RSA) 227-M. Despite these protections, RSA 227-M:13 recognizes that in the interest of public safety NHDOT occasionally needs to obtain rights to lands acquired through the LCHIP adjacent to state highways. Pursuant to RSA 227-M:13, the Department held a Joint Public Hearing with the LCHIP which covered not only the overall project impacts but also highlighted the proposed impacts to the Fall Mountain State Forest. Subsequent to the Joint Public Hearing, the LCHIP Board of Directors approved the Department's proposal to acquire the subject portion of the Fall Mountain State Forest (*Exhibit J*) as long as the property rights are obtained in accordance with RSA 227-M:13. The Department will continue to coordinate with

DRED, TNC, the USF&WS and the LCHIP throughout the remainder of this project ([Environmental Commitment 3](#)).

The Conservation Land Stewardship (CLS) Program is responsible for monitoring and protecting the conservation values of conservation easement lands in which the State of New Hampshire has invested. The proposed action has been reviewed by the Office of Energy & Planning, CLS Program Coordinator and it was determined that there are no CLS parcels, local or state-held, in close proximity to the project area (*Exhibit H*).

Section 6(f) is an article of the Federal Land and Water Conservation Fund (LWCF) Act of 1964, which provides financial assistance for the acquisition and development of public lands to create parks and open spaces; protect wilderness, wetlands and refuges; preserve wildlife habitat; and enhance recreational opportunities. Any land acquired or improved with these funds is subject to a body of federal regulations under the purview of the US Department of the Interior (USDOJ). Pursuant to these regulations, any land subject to Section 6(f) cannot be “converted” to another use for purposes inconsistent with the Act without the approval of the USDOJ and without being replaced with other land that is of equal use and value to the land proposed for conversion. Based upon a review of their LWCF files, the NH Department of Resources and Economic Development (DRED) has advised that there are no Section 6(f) parcels in the project area (*Exhibit I*).

Recreation

The subject section of NH Route 12 has been identified by local officials and the Upper Valley Lake Sunapee Regional Planning Commission as an important bicycle route for local residents and visitors. The NH Department of Transportation’s Bicycle and Pedestrian Section has also listed this section of roadway as a Statewide Bicycle Route. The existing roadway is narrow and does not have adequate shoulders for safe bicycle and pedestrian travel. In order to increase bicycle and pedestrian safety, the new roadway will be constructed with 12-foot travel lanes and 4-foot shoulders in each direction. As a result of these improvements this project is expected to have a positive effect on bicycle and pedestrian recreation throughout the region.

The National Scenic Byways Program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized under the Transportation Equity Act in 1998. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. This section of NH Route 12 has been officially recognized by Congress as a part of the Connecticut River National Scenic Byway. The Byway is a 500-mile long scenic route that runs along both sides of the Connecticut River between South Hadley, Massachusetts to the Canadian Border in Pittsburgh, New Hampshire. Matters pertaining to the Connecticut River National Scenic Byway are overseen by the Connecticut River Joint Commissions (CRJC). The CRJC has been involved with the development of the project and the selection of the project proposal. The CRJC has expressed full support of the proposed effort (*Exhibit L*). The CRJC has requested that the Department examine the possibility of increased public recreational and scenic overlook opportunities within the project area incorporate them into the design of the project wherever possible

[\(Environmental Commitment 4\)](#). Subsequent to this request, the Department plans to enhance a small existing parking area in the Meany’s Cove area at Station 3075+00 It. through the addition of gravel and improved roadway access. Subsequent to a request from the NH Fish and Game Department, NHDOT will also investigate the possibility of the creation of a small cartop boat launch/scenic area adjacent to the River at Station 3092+35 It.

Section 4(f) of the US Department of Transportation (US DOT) Act of 1966 (amended by 49 U.S.C. Section 303) provides protection for historic resources, wildlife refuges and publicly owned parks and recreational areas that are open to the public and are considered substantial recreational facilities. Consultation with the NH Division of the Federal Highway Administration has indicated that there are no recreational 4(f) resources within the project area. (See the [Wildlife](#) and [Cultural Resources](#) sections for additional information on other Section 4(f) resources.)

Business Impacts

One business is located within the project area, the LenTex Corporation (Parcel 4). The LenTex Corporation is a wall covering manufacturer which has structures on both sides of the railroad tracks at the southern end of the project. The proposed project will require approximately 5,500 s.f. of permanent property acquisition and 4,000 s.f. of permanent easements to be obtained on the LenTex property. The majority of these impacts will be within an unused area at the northern end of the property in proximity to the existing right-of-ways of both the roadway and railroad. A small portion of the company’s parking lot will need to be obtained for the establishment of the new proposed right-of-way, but is anticipated to be small enough that it will have little to no impact on the function of this parking facility. The Department has been and will continue to coordinate with the LenTex Corporation, as necessary, to ensure that the operations of the facility are impacted to the minimum extent practicable.

The downtown areas of North Walpole and Charlestown, to the south and north of the project contain multiple small businesses. Traffic on NH Route 12 will be maintained throughout construction ([Environmental Commitment 23](#)). During construction local businesses may see a short-term increase in patronage due to the presence of on site construction personnel. Upon completion of the project, traffic patterns will return to their pre-construction condition and therefore it is not anticipated that any of these businesses will be adversely impacted by construction.

Utilities

The proposed project requires the relocation of aerial and underground utility lines and power poles. Disruption to service, if any, will be kept to an absolute minimum. The following utility companies have been identified within the project area:

<u>SERVICE</u>	<u>LOCATION</u>
National Grid (Electric)	Aerial/Underground

FairPoint (Telephone)	Aerial/Underground
Comcast (Cable TV)	Aerial/Underground
US Spring (Fiber Optic Communications Cable)	Underground

Environmental Justice

Executive Order 12898, enacted in 1994, requires that an Environmental Justice evaluation be conducted for all transportation projects that are undertaken, funded or approved by the Federal Highway Administration to avoid, minimize, or mitigate disproportionately high and adverse human health, environmental, social and economic effects on minority populations and low income populations. The environmental justice review for the impacted area indicated a sensory disabled population in Charlestown that is slightly higher than the surrounding area (*Exhibit Q*). The project will be designed in compliance with the Americans with Disabilities Act ([Environmental Commitment 5](#)). The project is not expected to require the complete acquisition of any residential properties. For these reasons, the project is not expected to adversely affect this protected group and therefore complies with Executive Order 12898.

Wetlands

Work associated with this project involves dredge and fill activities within the jurisdiction of the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau and the Army Corps of Engineers (ACOE). Impacts consist of 64,912 ft² (1.49 acres) of permanent impacts to wetlands. The proposed project will incur impacts to the following wetland types as classified by the United States Fish and Wildlife Service:

1. PEM1E: Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated
2. PFO1E: Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated
3. PSS1E: Palustrine, Scrub Shrub, Broad-Leaved Deciduous, Seasonally Flooded/Saturated
4. POWH: Palustrine, Open Water, Permanently Flooded
5. R4SB3: Riverine, Intermittent, Streambed, Sand
6. R2UB3: Riverine, Lower Perennial, Unconsolidated Bottom

The project was reviewed by the ACOE, NHDES, NH Fish and Game (NHF&G), US Environmental Protection Agency (EPA), the Federal Highway Administration (FHWA) and several other agencies/organizations at the April 18, 2007, May 20, 2008, August 20, 2008, October 20, 2009, April 21, 2010 and June 16, 2010 Natural Resource Agency coordination meetings. None of the agencies or organizations represented at these meetings objected to the preferred alternative as long as a mutually agreed mitigation package is provided for the proposed wetland impacts.

Per NHDES rules (Env-Wt 303.02) this project is classified as a “major impact” project. Per Env-Wt 302.03, the proposed wetland impacts will require mitigation. At the April 21, 2010 Natural Resource Agency Coordination Meeting, two potential mitigation possibilities were discussed. The

first possibility is an undeveloped property located entirely within the Fall Mountain State Forest (See the [Conservation Lands](#) section of this document for additional information). The NH Department of Resources and Economic Development has expressed interest in adding this property to the Fall Mountain State Forest. The other mitigation possibility that was discussed was a payment in-lieu of mitigation into the Aquatic Resource Mitigation Fund per Env-Wt 803.02. At this meeting it was indicated that either form of mitigation, or a combination thereof, would be acceptable provided the quantities of mitigation adequately offset the proposed impacts. The Department will continue to coordinate with the Natural Resource Agencies throughout the final design of the project to mutually develop an acceptable mitigation package ([Environmental Commitment 6](#)).

It is anticipated that the project will qualify for a State Programmatic General Permit administered by the ACOE. A Wetlands and Non-Site Specific Permit will be obtained prior to construction within any areas under the jurisdiction of the NHDES Wetlands Bureau and the ACOE ([Environmental Commitment 7](#)).

Surface Waters/ NH Designated Rivers/ Water Quality

The project is located adjacent to the Connecticut River. Although impacts to the Connecticut River will be minimal, the entire length of the project is located within ¼ mile of the river. The Department has been coordinating this effort with NHDES and NHF&G to ensure that the project not only meets transportation needs, but also is sensitive to this aquatic ecosystem.

The Rivers Management & Protection Act (RMPA) (NH RSA 483) provides additional protection for Rivers within the State of NH that have been determined to be outstanding natural and cultural resources by the Legislature and the Governor of the State of New Hampshire. This act also established the creation of the NHDES Rivers Management & Protection Program (RMPP) and allows for the creation of local advisory committees to oversee the protection of the State's protected (designated) rivers. The Connecticut River is a designated river, managed by the Connecticut River Joint Commissions (CRJC). The CRJC is a non-profit organization which is comprised of two commissions and five sub-committees which work together to coordinate river protection efforts between the states of Vermont and New Hampshire. The former Director of the CRJC sat on the Public Advisory Committee for the proposed project and was intricately involved in the proposed design. The CRJC has indicated that it is in full support of the proposed project. The Department has been and will continue to coordinate with the CRJC and the NHDES RMPP throughout the design of the project.

The Clean Water Act (CWA) of 1972 (33 U.S.C. 1251) regulates the discharge of pollutants into the waters of the United States and sets quality standards for surface waters. In accordance with the CWA, the surface waters of New Hampshire have been classified by the state legislature (RSA 485-A:8) as either Class A or Class B. Class A waters are considered to be of the highest quality and considered optimal for use as water supplies after adequate treatment. Class B waters are considered to be of slightly less quality than those designated Class A, however they are still considered adequate for wildlife habitat and recreational activity. The Connecticut River within the project area has been designated a Class B Water. Coordination with the NHDES Watershed Management and Alteration of

Terrain Bureaus has indicated that the project should include stormwater treatment and infiltration, to the maximum extent practicable. The Department will continue to coordinate with NHDES throughout final design, to determine the appropriate water quality treatments within the project area ([Environmental Commitment 8](#)).

In accordance with section 303(d) of the CWA, the State of NH Department of Environmental Services (NHDES) has designated the subject section of the Connecticut River as an impaired water for mercury levels. As roadway runoff does not generally contain mercury levels beyond those contained within normal precipitation in the State, the proposed project is not expected to further impair the subject section of the Connecticut River.

To minimize the potential for erosion and sedimentation increases in the Connecticut River and other downstream wetland systems during construction, the contractor responsible for the work will be required, as a contract provision, to prepare a Stormwater Pollution Prevention Plan detailing the pollution prevention measures which will be employed prior to the commencement of construction activities ([Environmental Commitment 9](#)).

Groundwater

The proposed project lies within the Cheshire County Complex Drinking Water Source Protection Area (ID#5765). The Department has coordinated with the NH DES – Drinking Water Source Protection Program to ensure that the proposed project will not adversely affect the Cheshire County Complex Drinking Water Source Protection Area. The Drinking Water Source Protection Program has requested that the project be designed in such a manner that it maximizes vegetative stormwater treatment and infiltration (*Exhibit P*). The Department will provide stormwater treatment and infiltration to the maximum extent practicable and will continue to coordinate with NH DES throughout the final design of the project ([Environmental Commitment 8](#)).

Farmlands

One active farmland is located within the project area on parcel 31, between stations 3123+00 lt. and 3130+00 lt. to the southwest of the NH Route 12A overpass. Another area which is not actively farmed but contains adequate soils and terrain for potential future farming activities is located on parcel 34, between stations 3132+50 lt. to 3134+00 lt. Neither of these properties contain building structures. In anticipation of the need to incorporate potential future water quality treatment areas into the design of the project, the Department may require drainage easements to be obtained on one or both of these farmland properties. Should it be determined that these easements are necessary, the Department will coordinate with the United States Department of Agriculture, the property owner and the farm operator prior to the acquisition of any easements ([Environmental Commitment 10](#)).

Wildlife/ Endangered Species/ Fisheries/ Natural Communities

The proposed action has been reviewed by the USF&WS and the NH Natural Heritage Bureau (NHNHB) for the presence of federal or state, listed or proposed, threatened or endangered species, or other species of special or exemplary status. In a letter dated March 19, 2007, the USF&WS responded that based on currently available information, no species or habitats under the jurisdiction of the USF&WS were identified within the project area (*Exhibit M*).

A NH Natural Heritage Bureau search (NHB File ID: NHB09-2261, dated 10/26/2009) has indicated the potential presence of Dwarf Wedge Mussels (*alasmidonta heterodon*), American Cancerroot (*conopholis americana*), Fern-leaved False Foxglove (*aureolaria pedicularia var. intercedens*) and Water Stargrass (*heteranthera dubia*). This search also indicated the potential presence of two exemplary natural communities; Circumneutral rocky ridge and Rich Appalachian oak rocky woods (*Exhibit K*). Coordination with the NHNB at the October 29, 2009 Natural Resource Agency Coordination Meeting indicated that since the proposed alternative stays relatively close to the footprint of the existing roadway/railway corridor and avoids extensive impacts to the slopes of Fall Mountain, the proposed project will not impact any of the rare plant species or exemplary natural communities which were identified within the previously mentioned NH Natural Heritage Bureau search (*Exhibit X*). Coordination with the USF&WS and NHF&G indicated that the proposed wetland impact areas within the project area are not indicative of typical Dwarf Wedge Mussel habitat and therefore no impact to this Federally endangered species are anticipated (*Exhibit M*).

The Fall Mountain State Forest (see the [Conservation Lands](#) section for additional information) is known to contain a population of the federally endangered *Scirpus ancistrochaetus* (Northeastern Bulrush). Given the known existence of the Northeastern Bulrush in proximity to the proposed project, the NHNB and the USF&WS requested that the project area be surveyed for its presence prior to the commencement of construction. The Department and the NHNB conducted a review of the project area on September 1, 2010 and did not find any occurrences of the Northeastern Bulrush within those areas which would be impacted by the proposed project. Given the apparent absence of any federally listed species within the project's area of impact, the USF&WS indicated that no further consultation with their agency was necessary (*Exhibit M*).

NHF&G has indicated that there are known populations of the Bald Eagle (*haliaeetus leucocephalus*) in the area surrounding the proposed project. The NHF&G has requested that the Department survey all 8-inch diameter or larger trees that will be removed to the east of the existing roadway. Any such trees will be reviewed with NHF&G prior to removal ([Environmental Commitment 11](#)).

The Magnuson-Stevens Fishery Conservation and Management Act requires the federal government to identify Essential Fish Habitat (EFH) and make conservation recommendations to agencies whose actions could affect it. The project is located along the Connecticut River. The Connecticut River is an EFH for Atlantic Salmon (*Salmo salar*). An Essential Fish Habitat (EFH) Study was prepared by the Department and was reviewed by the National Marine Fisheries Service (NMFS). Based upon the information provided in the Study, the NMFS has indicated that there are no concerns with the project as proposed and no further coordination is necessary (*Exhibit N*).

In accordance with the NH Invasive Species Act (ISA), (HB 1258-FN) The NH Department of Agriculture, Markets and Food (DAMF), Division of Plant Industry is responsible for the evaluation, publication and development of rules on invasive plant species. The purpose of this oversight is to protect the health of native species, the environment, commercial agriculture, forest crop production and human health. DAMF rules, specifically AGR 3800, state that “no person shall knowingly collect, transport, sell distribute, propagate or transplant any living or viable portion of any listed prohibited invasive plant species including all of their cultivars, varieties and specified hybrids.” Pursuant to this rule, the project area was reviewed for invasive species during the initial phases of design. Several occurrences of Japanese Knotweed, Buckthorn and Honeysuckle were found within the project area. If these plants will be impacted during construction they shall be handled and disposed of in accordance with the NHDOT’s Best Management Practices for Roadside Invasive Plants manual ([Environmental Commitment 12](#)). Fill materials brought onsite or transported within the site will be free of invasive species or treated in accordance with the above noted BMP manual to prevent the spread of such species ([Environmental Commitment 13](#)).

Section 4(f) of the US Department of Transportation (US DOT) Act of 1966 (amended by 49 U.S.C. Section 303) provides protection for historic resources, wildlife refuges and publicly owned parks and recreational areas that are open to the public and are considered substantial recreational facilities. Consultation with the NH Division of the Federal Highway Administration has indicated that there are no wildlife refuge 4(f) resources within the project area. (See the [Recreation](#) and [Cultural Resources](#) sections for additional information on other Section 4(f) resources.)

Floodplains/ Floodways

Walpole and Charlestown are communities that participate in the National Flood Insurance Program (both towns are listed as Community Number 330153). The project lies within areas delineated as Floodway Areas, Special Flood Hazard Areas, and Zone X on the Flood Insurance Rate Map (*Exhibit O*). The Floodway Area is defined by the Federal Emergency Management Agency (FEMA) as “the channel of the river plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights.” Special Flood Hazard Areas are subject to inundation by the 100-year flood. Zone X areas are those areas that are subject to the 500-year flood or areas that are subject to the 100-year flood but with average depths of less than one foot. Floodway impacts are expected within the northern section of the project where the floodway is actually located in the same location as the existing roadway and railway, approximately between stations 3101+00 and 3117+00. Floodplain impacts (Special Flood Hazard Areas and Zone X) are expected in various locations within the middle and northern segments of the project.

As the project is a Federal action, expected to include impacts within both the floodplain and the floodway of the Connecticut River, the project is subject to Executive Order 11988. Executive Order 11988 indicates that “each [Federal] agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities.” The

Department's Preliminary Design Engineers have qualitatively examined the extent of the necessary alterations within the floodplain and floodway and has indicated that the project is not expected to increase the potential for additional flooding within or adjacent to the project area. For this reason, the project is assumed to be in compliance with Executive Order 11988.

Although the project is not expected to produce increased flooding potential, it includes impacts within the floodway of the Connecticut River. Since the project is expected to require fill and/or excavation within the existing floodway, the Department will need to conduct a hydraulic analysis of the proposed design to determine if the project will result in a change of the existing base flood elevations. If a change is determined to result from the project, the Department will be required to submit a Letter of Map Revision to the Federal Emergency Management Agency ([Environmental Commitment 14](#)).

Historical/ Archaeological

The Department has conducted architectural history and archaeological surveys and consulted with the NH Division of Historical Resources (NHDHR) and the Federal Highway Administration (FHWA) to locate and identify National Register of Historic Places listed, or eligible, properties or districts within the immediate area of the proposed project. The proposed project has been reviewed by the SHPO and FHWA based on the Section 106 review process set forth by the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800). The proposed design was presented at Monthly Cultural Resource Agency Coordination Meetings held on May 10, 2007, March 5, 2009, November 12, 2009, December 3, 2009, March 11, 2010 and April 8, 2010.

Section 106 regulations offer owners of historic properties directly affected by the project or agencies that possess a direct interest in the historical resources, an opportunity to request Consulting Party status. Consulting Parties become more involved in the project through meetings and commentary and provide advisory input throughout the design process. Although Consulting Party status was solicited by the Department, no such requests were received.

Following completion of a review of the architectural and historical resources present in the area, it was determined that the Sullivan County Railroad corridor, which runs through the towns of Walpole, Charlestown, Claremont and Cornish, is eligible for the State and National Register of Historic Places. Information on this rail is on file at the NH Department of Transportation's Bureau of Environment as well as the New Hampshire Division of Historical Resources in Concord, New Hampshire.

The Sullivan County Railroad, constructed in 1849, consists of twenty-six miles of track that connect the communities of Walpole, Charlestown, Claremont and Cornish. This line is historically important for the connection the rail line created between these communities along the Connecticut River. The Sullivan County Railroad provided a critical and convenient transportation route for local agricultural products, manufactured goods, passengers and mail. The line, now known as the New England Central Railroad, is still in use today by both freight and passenger trains. Given the

importance of the Sullivan County Railroad to the history of the surrounding communities, this corridor has been determined eligible for the National Register of Historic Places (*Exhibit R*).

This project also looked at four individual properties impacted by the relocation of NH Route 12, all of which were determined not eligible for the National Register by the FHWA in consultation with the NHDHR and the NESHPO. Individual Inventory forms were completed for the following properties:

- 2496 Bellows Falls Road (parcel number 15), is a late 18th century to early 19th century vernacular dairy farm, whose exterior has undergone substantial changes, diminishing its historical integrity.
- 2438 Bellows Falls Road (parcel number 17), is a single family residence built in 1942, does not possess enough National Register-level significance to be considered eligible.
- 155 Church Street (parcel number 4), is the former United Murray Wood Heel Company, constructed ca. 1950. Although this building continues to function as a factory, under the present name of Len-Tex Corporation, alterations and additions to this structure have made its original design difficult to discern. Despite the buildings unique arched-roof, it was determined that there were better and less altered examples in the immediate area.
- 59 Old Ferry Road (parcel number 25) has undergone several changes that has hidden its original Greek Revival detailing. This structure was built early-mid 19th century, on what was once a busy road that provided access to the ferry that crossed the Connecticut River at this location. Research suggested that this property may have been used as a tavern when the ferry was running. In more recent years the windows have been replaced, vinyl siding added, and the front door removed. It was determined that this property is not eligible for the National Register.

The proposed project involves shifting NH Route 12 to the east to protect the banks of the Connecticut River, necessitating the easterly relocation of approximately 2.2 miles of the New England Central Railroad (Sullivan County Railroad); the addition of four foot shoulders; and drainage improvements. As the Sullivan County Railroad has been determined eligible for the National Register of Historic Places, the impacts of this project on the historic rail line were reviewed by NHDHR, the SHPO, NHDOT and FHWA in accordance with Section 106. At the March 11, 2010 Cultural Resource Agency Coordination Meeting it was determined that the relocation of the Sullivan Railroad will have an adverse effect on this eligible railroad corridor. An Adverse Effect Memo was signed by representatives from FHWA, NHDHR and NHDOT on May 6, 2010 (*Exhibit R*). The following mitigation measures were outlined:

1. The completion of a New Hampshire Historical Property Documentation Form for the affected portion of the Sullivan County Railroad and its individual resources impacted by the project. The documentation will include large format photographs ([Environmental Commitment 15](#));
2. The placement of a State Historical Marker along NH Route 12 in the project area that highlights the importance of the Sullivan County Railroad ([Environmental Commitment 16](#));
3. The relocation of remaining mile markers from the existing railroad bed to the new railroad bed ([Environmental Commitment 17](#));
4. The reuse of the granite blocks in the existing wall along parcel 25 within the project area ([Environmental Commitment 18](#)); and

5. The completion of all necessary phases of archaeology including the Phase III archaeological investigations or data recovery of National Register eligible archaeological resources ([Environmental Commitment 19](#)).

Pursuant to the provisions of Section 106 of the National Historic Preservation Act (36 CFR 800), a MOA addressing the proposed action and subsequent mitigation was developed (*Exhibit V*).

Section 4(f) of the US Department of Transportation (US DOT) Act of 1966 (amended by 49 U.S.C. Section 303) provides additional protection for historic resources, wildlife refuges and publicly owned parks and recreational areas that are open to the public and are considered substantial recreational facilities. (See the [Wildlife](#) and [Recreation](#) sections for additional information.) The Sullivan County Railroad is considered an historic resource under Section 4(f). A Section 4(f) Evaluation has been prepared to demonstrate that there are no prudent and/or feasible alternatives to the relocation of the Sullivan County Railroad. See the [Section 4\(f\) Evaluation](#) section for additional information.)

In addition to architectural and historical resources, the project area was reviewed for archaeological resources as well. The topography of the area and the proximity of the project to the Connecticut River indicated a high potential for Native American Archaeological deposits within the project area. In order to determine if any archaeological deposits are located within the project area, a Phase 1A Archaeological Sensitivity Assessment and a Phase 1B Intensive Archaeological Investigation were conducted. These investigations included background research and visual inspections of the project area as well as shovel test pits in areas of particular concern. This investigation resulted in the identification of one area of archaeological sensitivity partially located within the project area. The one sensitive site, named Archaeology Area 10 (Smithsonian #: 27SU41), is located on parcel 10 and produced pre-contact Native American artifacts from twelve of the 28 shovel test pits that were excavated within the sensitive area. Artifacts included quartz flakes, a quartzite flake and a hearth feature. A Phase II archaeological investigation was recommended for the site if the area cannot be avoided during construction ([Environmental Commitment 19](#)).

Aesthetics

The project is located in a relatively rural area in proximity to the Connecticut River. Local property owners, officials and organizations have indicated that this resource and the natural feeling of the area are of particular importance. As such, the proposed project has been designed with these features in mind. Although the proposed reconstruction of NH Route 12 and relocation of the New England Central Railroad will visually alter the area, these changes are not expected to negatively affect the aesthetically pleasing nature of the surrounding environment. Furthermore, coordination with the public, local officials and organizations did not indicate the presence of any aesthetic concerns associated with the proposed project. As such, this project is not expected to negatively impact the aesthetic value of the area.

Construction Impacts

Construction of this project is anticipated to cause temporary increases in noise and dust levels within the project area. All standard measures will be employed to ensure such increases are minimized to the extent practicable and limited to the construction period ([Environmental Commitment 20](#)).

The construction of this project will temporarily disrupt traffic patterns. Access to all occupied residences, businesses, recreational facilities and farmlands will be maintained throughout construction. Through traffic will be maintained during construction ([Environmental Commitment 21](#)).

The construction of this project will temporarily disrupt railroad traffic. Railroad operations will be allowed to continue throughout construction and any temporary railroad closures will be kept to a minimum. The Department will coordinate with the railroad operator to ensure that impacts to the operation of this facility have been minimized to the maximum extent practicable ([Environmental Commitment 22](#)).

To minimize the potential for erosion and sedimentation increases in the Connecticut River and other downstream wetland systems during construction, the contractor responsible for the work will be required, as a contract provision, to prepare a Stormwater Pollution Prevention Plan detailing the pollution prevention measures which will be employed prior to the commencement of construction activities ([Environmental Commitment 23](#)).

Summary of Environmental Commitments

The following environmental commitments have been made for this project.

1. The railroad corridor may contain contamination. The Department will conduct the necessary subsurface investigations to determine the extent of any hazardous materials within the project area. If hazardous materials are determined to be present a soils management plan will be developed and incorporated into the project design. **(Highway Design, Construction, Environment)**
2. The Department will obtain the necessary property acquisitions, easements and rights of entry prior to the commencement of construction. **(Right-of-Way, Environment)**
3. The Department has been and will continue to coordinate with DRED, TNC, the USF&WS and the LCHIP throughout the development of this project to determine the appropriate compensation/mitigation for the proposed impacts to the Fall Mountain State Forest (Parcel 12). Property rights to the Fall Mountain State Forest must be obtained in accordance with RSA 227-M:13. **(Highway Design, Right-of-Way, Environment)**
4. The Department will examine the possibility of increased public recreational and scenic overlook opportunities within the project area and incorporate them into the design of the project wherever possible. **(Highway Design, Right-of-Way, Environment)**

5. The environmental justice review for the impacted area indicated a sensory disabled population in Charlestown that is slightly higher than the surrounding area. The project will be designed in compliance with the Americans with Disabilities Act. **(Highway Design)**
6. It is anticipated that this “major impact” project will require wetland mitigation. The Department will continue to coordinate with the Natural Resource Agencies throughout the final design of the project to develop a mutually acceptable mitigation package. **(Highway Design, Right-of-Way, Environment)**
7. It is anticipated that the project will qualify for a State Programmatic General Permit administered by the ACOE. A Wetlands and Non-Site Specific Permit will be obtained prior to construction within any areas under the jurisdiction of the NHDES Wetlands Bureau and the ACOE. **(Highway Design, Construction, Environment)**
8. Coordination with the NHDES Watershed Management and Alteration of Terrain Bureaus has indicated that the project should include stormwater treatment and infiltration, to the maximum extent practicable. The Department will continue to coordinate with NHDES throughout final design, to determine the appropriate water quality treatments within the project area. **(Highway Design, Environment)**
9. To minimize the potential for erosion and sedimentation increases in the Connecticut River and other downstream wetland systems during construction, the contractor responsible for the work will be required, as a contract provision, to prepare a Stormwater Pollution Prevention Plan detailing the pollution prevention measures which will be employed prior to the commencement of construction activities. **(Highway Design, Construction, Environment)**
10. Two farmlands (parcels 31 & 34), have been identified within the project area. Any property acquisitions or easements on either of these farmlands will require further coordination with the United States Department of Agriculture, the property owner and the farm operator. **(Highway Design, Right-of-Way, Environment)**
11. The Department will survey all 8-inch diameter or larger trees that will be removed to the east of the existing roadway. Any such trees will be reviewed with NHF&G prior to removal to determine if the project will result in any negative impacts to the American Bald Eagle. **(Highway Design, Environment)**
12. Several occurrences of Japanese Knotweed, Buckthorn and Honeysuckle were found within the project area. If these plants will be impacted during construction they shall be handled and disposed of in accordance with the NHDOT’s Best Management Practices for Roadside Invasive Plants manual. **(Highway Design, Construction, Environment)**
13. Fill materials brought onsite or transported within the site will be free of invasive species or treated in accordance with the NHDOT’s Best Management Practices for Roadside Invasive Plants manual, to prevent the spread of such species. **(Construction)**
14. It is anticipated that the project will require impacts within the floodway of the Connecticut River. The Department shall conduct a hydraulic analysis of the proposed design to determine if the project will result in a change of the existing base flood elevations. If a change in the base flood elevations is anticipated, the Department will be required to submit a Letter of Map Revision to the Federal Emergency Management Agency. **(Highway Design, Environment)**

15. The Department will complete a New Hampshire Historical Property Documentation Form for the affected portion of the Sullivan County Railroad and its individual resources impacted by the project. The documentation will include large format photographs. **(Environment)**
16. A State Historical Marker that highlights the importance of the Sullivan County Railroad will be placed along NH Route 12 within the project area. **(Highway Design, Environment)**
17. Any remaining railroad mile markers will be relocated from the existing railroad bed to the new railroad bed. **(Highway Design, Environment)**
18. The granite blocks from the existing retaining wall adjacent to parcel 25 will be reused within the project area. **(Highway Design, Environment)**
19. All necessary phases of archaeology and data recovery of National Register eligible archaeological resources will be completed prior to the disturbance of any archaeologically sensitive areas within the project area. **(Environment)**
20. Construction of this project is anticipated to cause temporary increases in noise and dust levels within the project area. All standard measures will be employed to ensure such increases are minimized to the extent practicable and limited to the construction period. **(Construction)**
21. The construction of this project will temporarily disrupt traffic patterns. Access to all occupied residences, businesses, recreational facilities and farmlands will be maintained throughout construction. Through traffic will be maintained during construction. **(Construction)**
22. The construction of this project will temporarily disrupt railroad traffic. Railroad operations will be allowed to continue throughout construction and any temporary railroad closures will be kept to a minimum. The Department will coordinate with the railroad operator to ensure that impacts to the operation of this facility have been minimized to the maximum extent practicable. **(Construction)**
23. The contractor responsible for the work will be required, as a contract provision, to prepare a Stormwater Pollution Prevention Plan detailing the pollution prevention measures which will be employed, prior to the commencement of construction activities. **(Construction, Environment)**

Part II: Section 4(f) Evaluation

Introduction

Section 4(f) of the US Department of Transportation (US DOT) Act of 1966 (amended by 49 U.S.C. Section 303) provides additional protection for historic resources, wildlife refuges and publicly owned parks and recreational areas that are open to the public and are considered substantial recreational facilities. (See the [Wildlife](#), [Recreation](#) and [Historical](#) sections for additional information.) The New England Central Railroad (Sullivan County Railroad), an historic resource, has been identified by the Federal Highway Administration as the only section 4(f) resource which will be adversely affected by the proposed project. This Section 4(f) Evaluation has been prepared to demonstrate that there are no prudent and/or feasible alternatives to the relocation of this historical resource. The evaluation also outlines coordination that has occurred and the measures proposed to minimize harm to that resource.

Pursuant to Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. 303(c), and Section 18(a) of the Federal-Aid Highway Act of 1968, 23 U.S.C. 138 (as amended by the Federal-Aid Highway Act of 1983), the U.S. Secretary of Transportation may approve a program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, State, or local significance (as determined by Federal, State, or local officials having jurisdiction over the park, area, refuge or site) only if:

1. There is no prudent and feasible alternative to using that land, and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife or waterfowl refuge, or historic site resulting from the use.

Coordination was established with local and state officials, and it was determined that there would be no publicly owned public parks, recreation areas, wildlife or waterfowl refuges impacted by the proposed project.

The Department has coordinated with the NH Division of Historical Resources (NHDHR), FHWA, local organizations, local officials and the public to locate and identify National Register of Historic Places listed or eligible properties within the area and has determined how they would be affected by the proposed project. The project was reviewed with NHDHR, FHWA and NHDOT at regularly scheduled Cultural Resource Agency Coordination Meetings on May 10, 2007, March 5, 2009, November 12, 2009, December 3, 2009 and March 11, 2010.

Existing Conditions/ Proposed Action

Due to the apparent safety and structural deficiencies of NH Route 12, the main intent of this project is to widen, reconstruct and update the existing roadway through the construction of a facility with 12-foot travel lanes and 4-foot shoulders. For more information see the [Existing Conditions/Project Purpose and Need](#) and [Project Proposal](#) sections in the [Part I: Environmental Study](#) portion of this document.

Description of 4(f) Resources

The Sullivan County Railroad, constructed in 1849, consists of twenty-six miles of track that connect the communities of Walpole, Charlestown, Claremont and Cornish. This line is historically important for the connection the rail line created to these communities along the Connecticut River, providing a critical and convenient transportation route for local agricultural products and manufactured goods, passengers and mail. The line continues its historical function as an active rail line today. Given the importance of the Sullivan County Railroad to the history of the surrounding communities, this corridor has been determined eligible for the National Register of Historic Places.

Impacts to Section 4(f) Properties

The proposed project involves widening, reconstructing and updating NH Route 12 through the construction of a facility with 12-foot travel lanes and 4-foot shoulders. Given the importance of the natural resources of the Connecticut River and instability of its banks throughout much of the length of the project, the proposed improvements necessitate the relocation of two sections of the Sullivan County Railroad, totaling approximately 2.2 miles. As the Sullivan County Railroad has been determined eligible for the National Register of Historic Places, it is considered a Section 4(f) resource and therefore is subject to the provisions set forth in Section 4(f).

Alternatives

This project was developed using the Context Sensitive Solutions (CSS) process which involves the use of a Public Advisory Committee (PAC) to assist in developing the project purpose and need, identify potential alternatives and recommend a proposed alternative. During the CSS process the PAC developed multiple alternatives and ultimately recommended a preferred alternative based on its ability to reasonably and sensibly meet the project's purpose and need as well as the vision statement. The alternatives that were developed are described in the [Preferred Alternative](#) and [Alternatives Considered](#) sections of this document. Of these alternatives, the following would have avoided or minimized impacts to section 4(f) resources, but for the reasons listed below were not chosen.

Avoidance Alternatives

“No-Build” – Alternative 1

The “No-Build” alternative does not address the deficiencies and safety concerns associated with the existing section of roadway. Selection of this alternative would require bicycles and pedestrians to continue to use the travel way and would allow for the continued deterioration of the existing roadway and drainage structures. Roadway conditions would continue to deteriorate and safety concerns would persist to a point where development of a future project would likely be necessary. The no-build alternative was determined not to be feasible and prudent as it would result in unacceptable operational and safety problems.

Western Alignment Shift – Alternative 2

This alternative would require the complete reconstruction of the existing embankment adjacent to the Connecticut River, removal of bank vegetation and extensive fill within the river itself. A review by the state and Federal resource agencies at the May 20, 2009 Natural Resource Agency Coordination Meeting indicated that additional environmental impacts associated with this alternative were unacceptable and that the selection of this alternative would be met with substantial opposition (*Exhibit X*). It was recognized during the development of this project that the environmental impacts associated with this alternative were substantial. Furthermore, it is anticipated that the environmental impacts associated with this alternative would be so extensive that they would likely require unreasonable and nearly unobtainable quantities of mitigation. As a result this alternative was determined not to be feasible and prudent as it would result in severe impacts to environmental resources even after any reasonable mitigation efforts. For these reasons this alternative was not chosen.

Alternatives Eliminated During Initial Screening

The following alternatives were eliminated during the initial CSS screening process as they were not recommended by the PAC due to the various reasons explained herein. As these alternatives were not recommended by the PAC, the Department, in consultation with the FHWA, chose to eliminate these alternatives from further consideration.

Eastern Alignment Shift – Alternative 3

This alternative would require the complete reconstruction of the New England Central Railroad within the project area and would require extensive cuts into the Fall Mountain hillside to the east of the railroad. It was recognized during the development of this project that this alternative would require more substantial impacts to this historical resource than any of the other alternatives.

This alternative would also result in considerable aesthetic impacts associated with the large cuts into the Fall Mountain hillside. For these reasons this alternative was eliminated from further consideration.

Eastern Bypass, Adjacent to Railroad – Alternative 4A

This alternative does not require the relocation of the existing railroad tracks; however, it does encroach into the existing railroad right-of-way. This alternative also requires large cuts into the hillside to the east of the railroad. Residential property acquisition would be necessary in the Old Ferry Road/Old State Road neighborhood adjacent to NH Route 12A in South Charlestown. Commercial property impacts at the LenTex Corporation in North Walpole would be necessary and its operations might be impeded through the introduction of a major state road between several of its buildings.

Currently, NH Route 12 passes along Church Street in North Walpole Village. This alternative would require NH Route 12 to be relocated to Main Street, a narrow, local road with low traffic volumes. Areas of both Main Street and Church Street are located within the National Register-eligible North Walpole Village Historic District. Selection of this alternative would result in increased impacts to this historic district. As a result of these additional impacts, the NH Division of Historical Resources also expressed displeasure with this alternative at the March 5, 2009 Cultural Resource Agency Coordination meeting (*Exhibit Y*). This alternative was also presented at a public informational meeting on April 29, 2009, and was received with overwhelming disapproval by the residents of North Walpole Village (*Exhibit Z*).

It was determined that the environmental, cultural and socioeconomic impacts associated with the selection of this alternative were too great. For these reasons this alternative was eliminated from further consideration.

Eastern Bypass, Hillside Option – Alternative 4B

This alternative avoids impacts to both the railroad and the railroad right-of-way. However, similar to alternative 4A, alternative 4B would have property and socioeconomic impacts to the Old Ferry Road/Old State Road neighborhood, the LenTex Corporation and the North Walpole, Main Street neighborhood. Alternative 4B would require large cuts into the Fall Mountain Hillside, similar to alternative 4A, but it would also have large fill areas creating a balance between the necessary cuts and fills. As this alternative would require similar impacts to the Main Street area in North Walpole as alternative 4A, it was met with similar opposition from both the NH Division of Historical Resources and the general public. It was determined that the environmental, cultural and socioeconomic impacts associated with the selection of this alternative were too great. For these reasons this alternative was eliminated from further consideration.

Eastern Bypass, Church Street Connection – Alternative 4C

Although this alternative eliminates many of the North Walpole Village impacts associated with alternatives 4A and 4B, it would still require property impacts in the Old Ferry Road/Old State Road neighborhood in Charlestown and would still require large cuts into the Fall Mountain hillside. This alternative would also require additional impacts to the LenTex Corporation (parcel 4). It was also estimated to cost an additional \$4 million more than alternative 4B (for a total of approximately \$19 million to \$24 million). Given the increased costs, this alternative was eliminated from further consideration.

On Alignment with Retaining Walls – Alternative 5

Although this alternative eliminates many, if not all of the railroad impacts associated with many of the other alternatives, it was estimated to cost between \$23 million and \$25 million and would require the complete closure of NH Route 12 during the construction process. As a result of the high costs and impracticable constructability, this alternative was eliminated from further consideration.

Least Harm Analysis

Of the alternatives initially evaluated during the CSS process only Alternatives 3-2-3 (preferred alternative), 3-2-2, 3-2-3A and 3-2-2A were considered reasonable and therefore were advanced for further study along with the no-build alternative.

If there is no feasible and prudent alternative to avoid harm to a Section 4(f) property, then only the alternative that causes the least overall harm in light of the statute's preservation purpose can be chosen. The least overall harm is determined by balancing the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
3. Relative significance of each Section 4(f) property;
4. Views of the officials with jurisdiction over each Section 4(f) property;
5. Degree to which each alternative meets the purpose and need;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among alternatives.

Of the alternatives that were recommended by the PAC (alternatives 3-2-3, 3-2-2, 3-2-3A and 3-2-2A); each alternative was evaluated against the above criteria to determine if the [Preferred Alternative](#) (alternative 3-2-3), is the alternative that causes the least overall harm. The following is a summary of this analysis.

1. Ability to mitigate adverse impacts to each Section 4(f) resource

Through coordination between the FHWA, NHDHR and NHDOT at the Monthly Cultural Resource Agency Coordination Meetings it was determined that the impacts to the Sullivan County Railroad would be mitigated through the implementation of the mitigation measures listed in the [Measures to Minimize Harm/ Mitigation](#) section of this Section 4(f) evaluation. All of these measures would be recommended as potential mitigation for any of the alternatives that were evaluated. Selection of any one of the reasonable alternatives over another would not provide or eliminate any potential forms of mitigation beyond those which have been described in the [Measures to Minimize Harm/ Mitigation](#) section of this Section 4(f) evaluation.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features

Alternatives 3-2-3 and 3-2-3A require the railroad to be shifted approximately 15 to 20 feet to the east of the existing alignment within the northern segment. Conversely, alternatives 3-2-2 and 3-2-2A avoid impacts to the Sullivan County Railroad within the northern segment. As a result, alternatives 3-2-3 and 3-2-3A have a greater impact to the Sullivan County Railroad than alternatives 3-2-2 and 3-2-2A.

Although alternatives 3-2-3 and 3-2-3A will result in additional impacts to the Sullivan County Railroad within the northern segment, impacts to the railroad within the southern segment will still be necessary with all four of these alternatives. Consequently, all four alternatives would result in an adverse effect determination under Section 106 of the National Historic Preservation Act.

3. Relative significance of each Section 4(f) property

Although the New England Central Railroad still operates within the footprint of the original Sullivan County Railroad, many of the original features and attributes of this historical resource have since been replaced to provide for an updated facility and maintain rail traffic. Those features that remain are the railroad profile and alignment, multiple culverts providing drainage beneath the facility, a stone retaining wall adjacent to parcel 25 and several railroad mile markers throughout the length of the project. Impacts to those features that remain will be mitigated through either recordation/documentation or relocation, as indicated in the [Measures to Minimize Harm/ Mitigation](#) section of this Section 4(f) evaluation.

4. Views of the officials with jurisdiction over each Section 4(f) property

FHWA and NHDHR have determined that the [Project Proposal](#) would have an Adverse Effect on the Sullivan County Railroad (*Exhibit R*). The NHDHR has assisted in the development and

execution of a Memorandum of Agreement (*Exhibit V*) with the FHWA and NHDOT to address the Adverse Effects of the proposed project.

5. Degree to which each alternative meets the purpose and need

The basic project purpose and need involves addressing the safety concerns and structural deficiencies associated with the existing roadway, by reconstructing, widening, and updating NH Route 12 within the project area. (See the [Existing Conditions/ Project Purpose and Need](#) section for additional information.) During the CSS process the PAC developed the following vision statement to meet the purpose and need of the project:

“The Route 12 corridor will be safe, efficient, attractive, and environmentally sensitive, while adequately serving the needs of the motoring public, bicyclists, pedestrians and commercial traffic including rail service. Route 12 will be a wider road with adequate shoulders, appropriate guardrails, and safe passage for bicyclists and pedestrians, while providing better access and parking to enjoy the river. This project will realistically maximize the limited space available for the various modes of transportation, while preserving and enhancing the scenic qualities of the area for travelers and residents.”

While each of the alternatives that were considered would address the project’s basic purpose and need, alternatives 3-2-2 and 3-2-2A would require substantial impacts to the Connecticut River while alternatives 3-2-3 and 3-2-3A would require additional impacts to the Sullivan County Railroad. During the selection of the preferred alternative, the PAC concluded that alternatives 3-2-3 and 3-2-3A better matched the project’s vision statement as they felt the overall environmental impacts (natural, cultural and socioeconomic) were less with alternatives 3-2-3 and 3-2-3A than alternatives 3-2-2 and 3-2-2A. Additional evaluation indicated that the selection of alternative 3-2-3 would further reduce both the environmental and fiscal impacts of the project and therefore would best meet the project’s vision statement.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)

Although alternatives 3-2-2 and 3-2-2A would minimize impacts to the Sullivan County Railroad, their selection would substantially increase impacts to the Connecticut River. The additional Connecticut River impacts associated with alternatives 3-2-2 and 3-2-2A would result in further wetland, floodway and floodplain impacts as well as potential fisheries and endangered species impacts beyond those of alternatives 3-2-3 and 3-2-3A. The additional impacts to the natural environment associated with alternatives 3-2-2 and 3-2-2A would likely raise serious concern among the local, State and Federal Resource Agencies as well as the general public.

Alternatives 3-2-2A and 3-2-3A eliminate the space restrictions beneath the NH Route 12A overpass, however, they do not increase or decrease impacts to the railroad any more than their original alternatives (alternatives 3-2-2 and 3-2-3). The intent of alternatives 3-2-2A and 3-2-3A was

to eliminate the space restrictions associated with the existing NH Route 12A overpass, allowing for uniform roadway geometry throughout the length of the project and permitting the railroad to be shifted freely beneath the overpass, as necessary. These alternatives would however, require additional impacts to at least one potentially archaeologically sensitive area, wetlands and floodplains as well as substantial property impacts to several active agricultural fields to the west of both NH Routes 12 and 12A.

A review by the state and Federal resource agencies at the May 20, 2009 Natural Resource Agency Coordination Meeting (*Exhibit X*) indicated that the Connecticut River is a important environmental resource and that excessive impacts to this resource were unacceptable and would be met with substantial opposition. Based upon this input it was anticipated by the PAC and the project design team that due to the increased environmental impacts and potential public concerns associated with alternatives 3-2-2 and 3-2-2A, Wetland Impact Permits from both the US Army Corps of Engineers and the NH Department of Environmental Services would either be extremely difficult or impossible to obtain.

7. Substantial differences in costs among alternatives

Both alternatives 3-2-3 and 3-2-2 were estimated to cost approximately \$15 million to \$20 million. Both alternatives 3-2-3A and 3-2-2A were estimated to cost an additional \$700,000 beyond that of either alternative 3-2-3 or 3-2-2.

Conclusion

Based upon consideration and balancing of the seven factors above, the FHWA and the NHDOT have determined that the Project Proposal/Preferred Alternative (Alternative 3-2-3) would result in the least overall harm in light of the preservation purposes of Section 4(f).

Measures to Minimize Harm/ Mitigation

Through coordination between the FHWA, NHDHR and NHDOT at the Monthly Cultural Resource Agency Coordination Meetings it was determined that the impacts to the Sullivan County Railroad would be mitigated through the implementation of the following mitigation measures:

1. The completion of a New Hampshire Historical Property Documentation Form for the affected portion of the Sullivan County Railroad and its individual resources impacted by the project. The documentation will include large format photographs.
2. The placement of a State Historical Marker along NH Route 12 in the project area that highlights the importance of the Sullivan County Railroad.
3. The relocation of remaining mile markers from the existing railroad bed to the new railroad bed.

4. The reuse of the granite blocks in the existing wall along parcel 25 within the project area.
5. The completion of all necessary phases of archaeology including the Phase III archaeological investigations or data recovery of National Register eligible archaeological resources.

NHDOT shall ensure that all documentation is completed and accepted by NHDHR and FHWA prior to any disturbance of Sullivan County Railroad and that copies of this documentation are made available to NHDHR.

Coordination and Public Participation

Coordination meetings have been held among NHDHR, FHWA, NHDOT, officials from the towns of Walpole and Charlestown as well as concerned citizens to discuss alternatives and measures to minimize harm to the Section 4(f) resources. The measures that were considered feasible and prudent were evaluated and incorporated into the design of the project. An Adverse Effect memo was prepared which addresses unavoidable impacts to the historic properties and appropriate mitigation (*Exhibit R*). Pursuant to the provisions of Section 106 of the National Historic Preservation Act (36 CFR 800), a MOA addressing the proposed action and subsequent mitigation will be developed.

Letters were sent to and meetings were held with various Federal, State and local agencies and groups, as well as the general public, soliciting input on this project. For more information and a list of the letters that were sent and the meetings that were held, see the [Coordination and Public Participation](#) section in the [Part I: Environmental Study](#) portion of this document.

Summary Statement

For the reasons demonstrated in this Section 4(f) Evaluation, there are no prudent and/or feasible alternatives to avoid impacts to the Sullivan County Railroad. This evaluation has demonstrated that “there are unique problems or unusual factors involved in the use of alternatives that avoid these properties or that the cost, social, economic, and environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes” (23 CFR 771.135 (a) (2)). The Proposed Action includes all possible planning to minimize harm to Section 4(f) properties resulting from such use.

All parties involved have agreed with the proposed measures to minimize harm to the cultural resources. A Memorandum of Agreement (MOA) between FHWA, NHDHR and NHDOT addressing the proposed action and subsequent mitigation has been developed and included in this document (*Exhibit V*).

Prepared by: _____
Jonathan A. Evans
Senior Environmental Manager

_____ Date

Walpole-Charlestown, X-A000(487), 14747

Exhibits

Exhibit A

Regional Map of Walpole and Charlestown NH

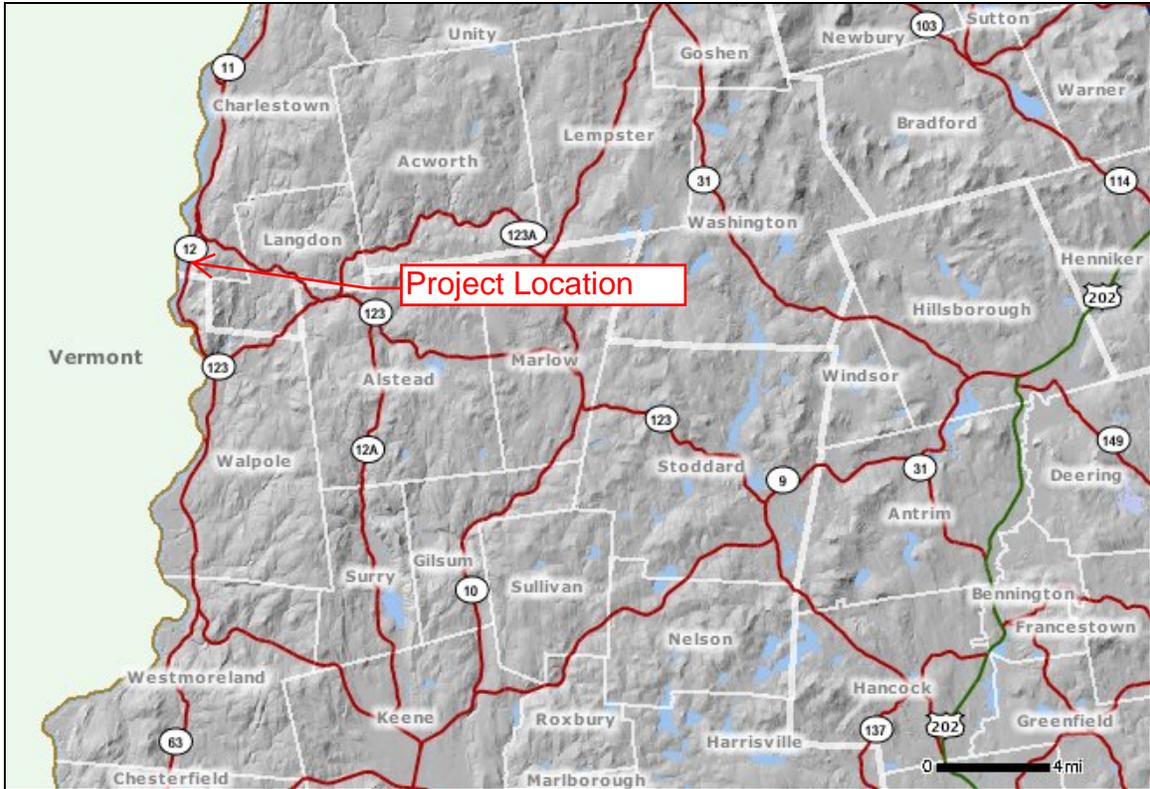
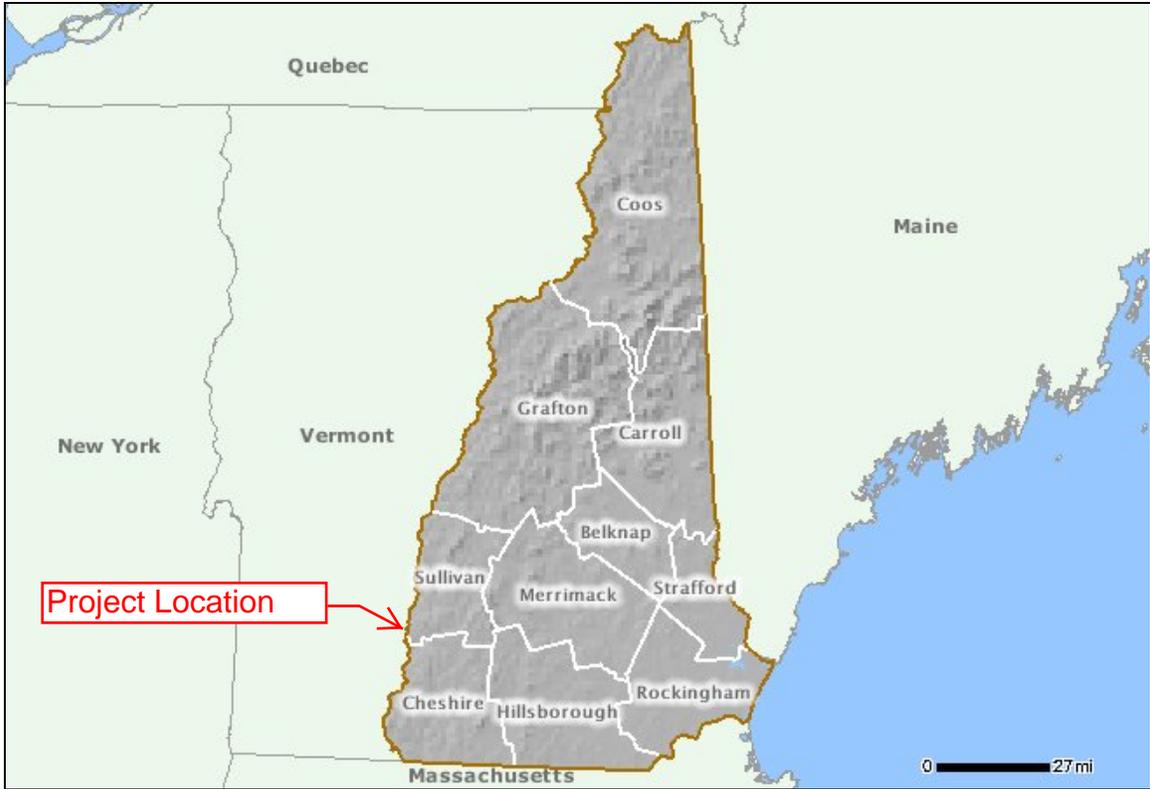


Exhibit B

Project Location Map

72.466666° W

72.450000° W

72.433333° W

43.183333° N

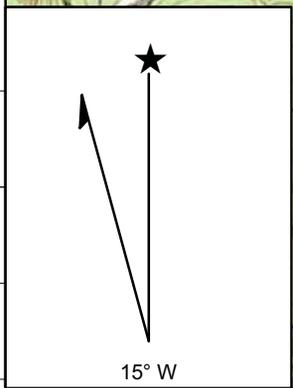
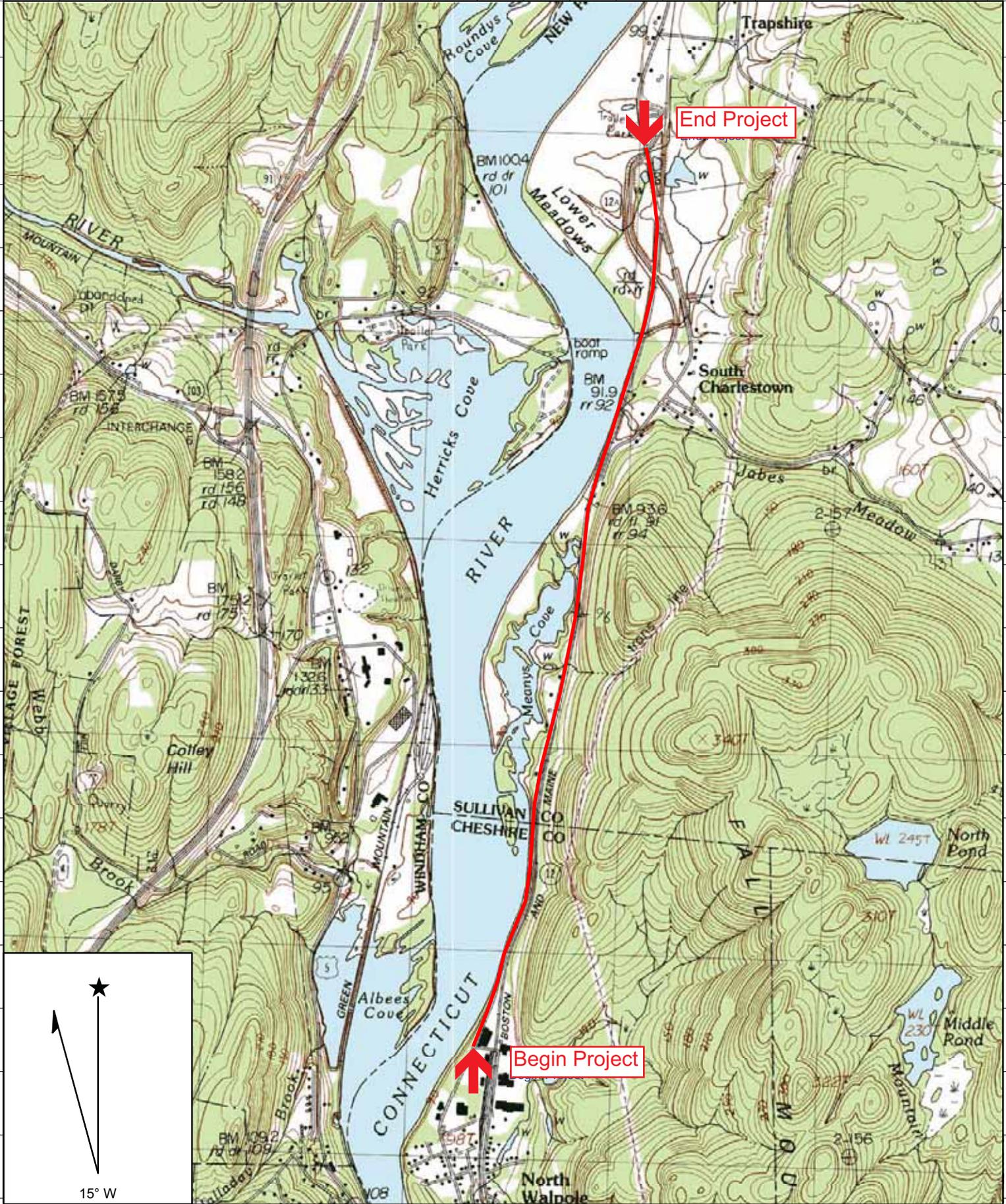
43.183333° N

43.166666° N

43.166666° N

43.150000° N

43.150000° N



Name: BELLOWS FALLS

Date: 2/14/2007

Scale: 1 inch equals 2000 feet



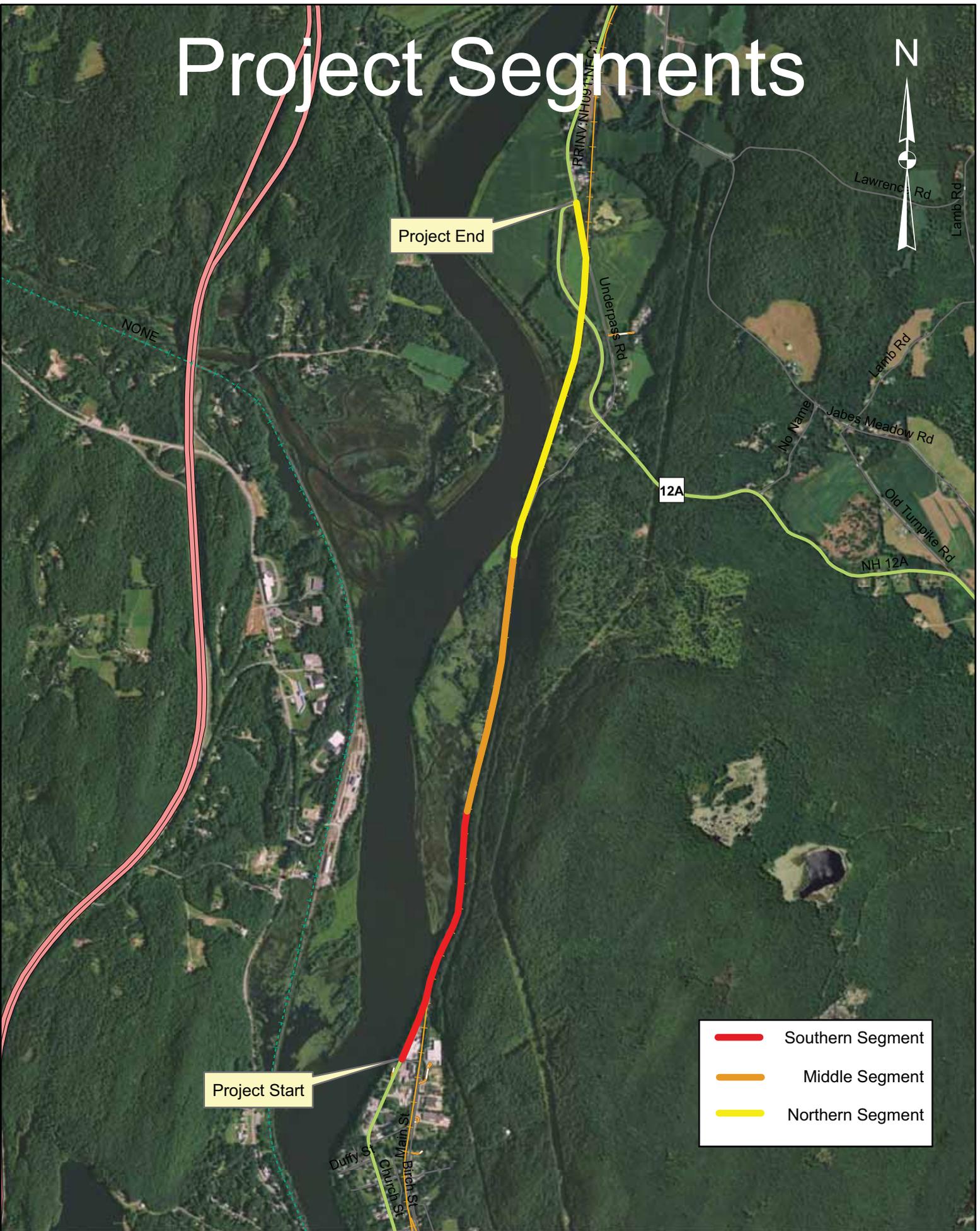
Location: 043.1705589° N 072.4484471° W

Caption: Walpole-Charlestown, 14747, X-A000(487)

Exhibit C

Project Segment Map

Project Segments



-  Southern Segment
-  Middle Segment
-  Northern Segment

1 inch = 2,000 feet

1:24,000



Exhibit D

Project Alternative Maps

Alternative 2



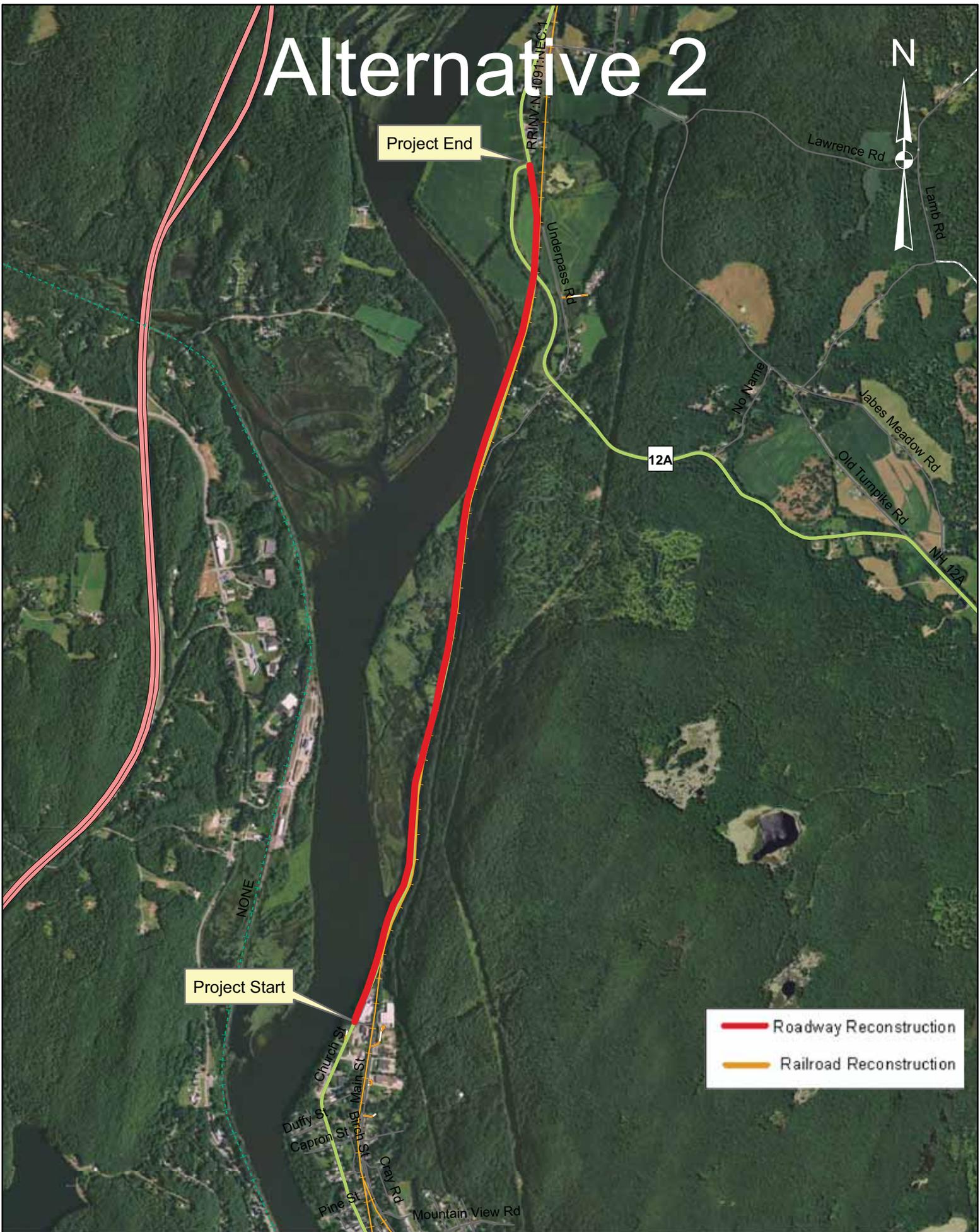
Project End

Project Start

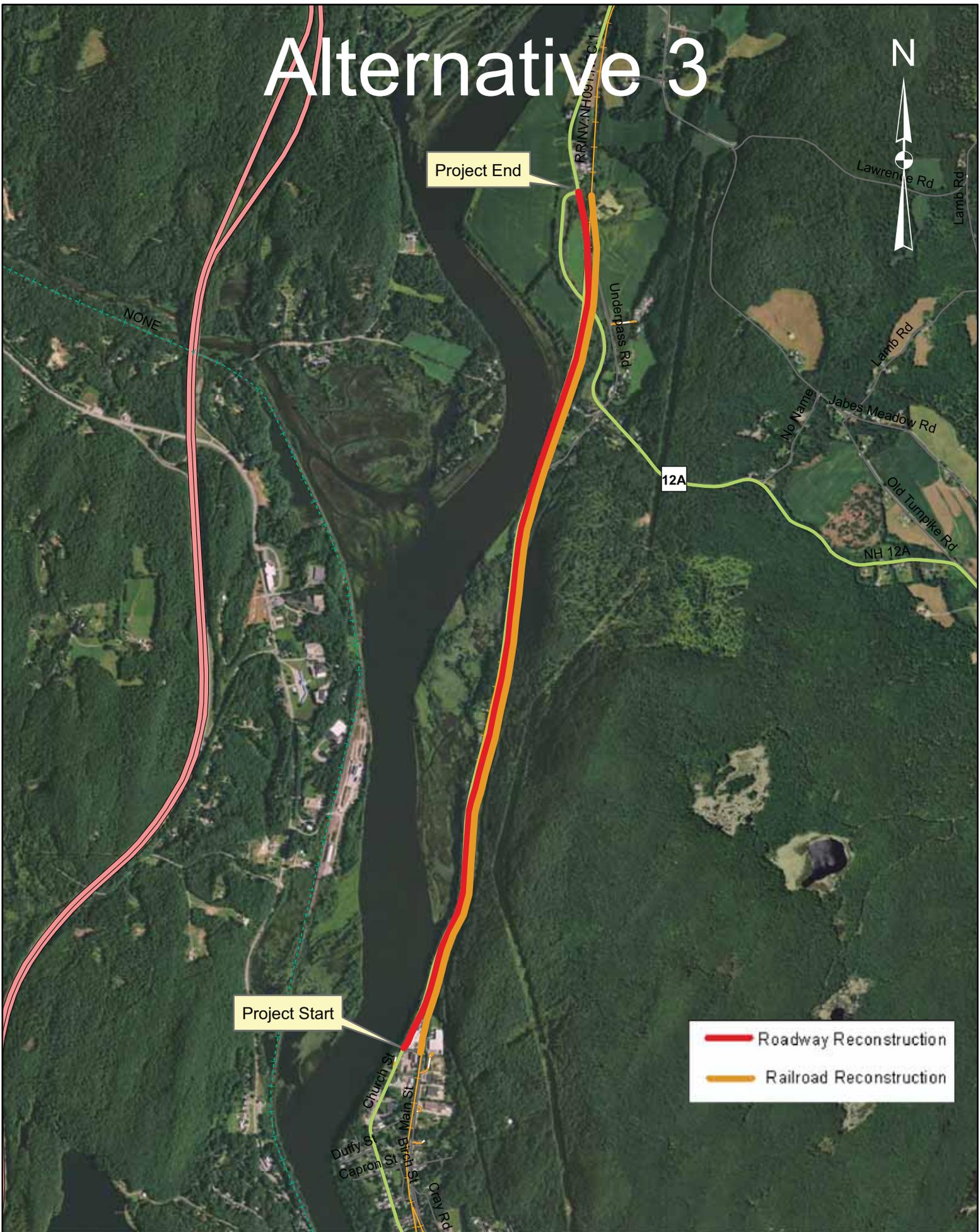
-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 3



Project End

Project Start

	Roadway Reconstruction
	Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 4A

Project End

NONE

Underpass Rd

NH 12A

12A

Lawrence Rd

Old Turnpike Rd

No Name

Lamb Rd

N

Church St

Duffy St

Birch St

Project Start

- Roadway Reconstruction
- Railroad Reconstruction

1 inch = 2,000 feet

1:24,000

0 1,000 2,000 4,000 Feet

Alternative 4B



Project End

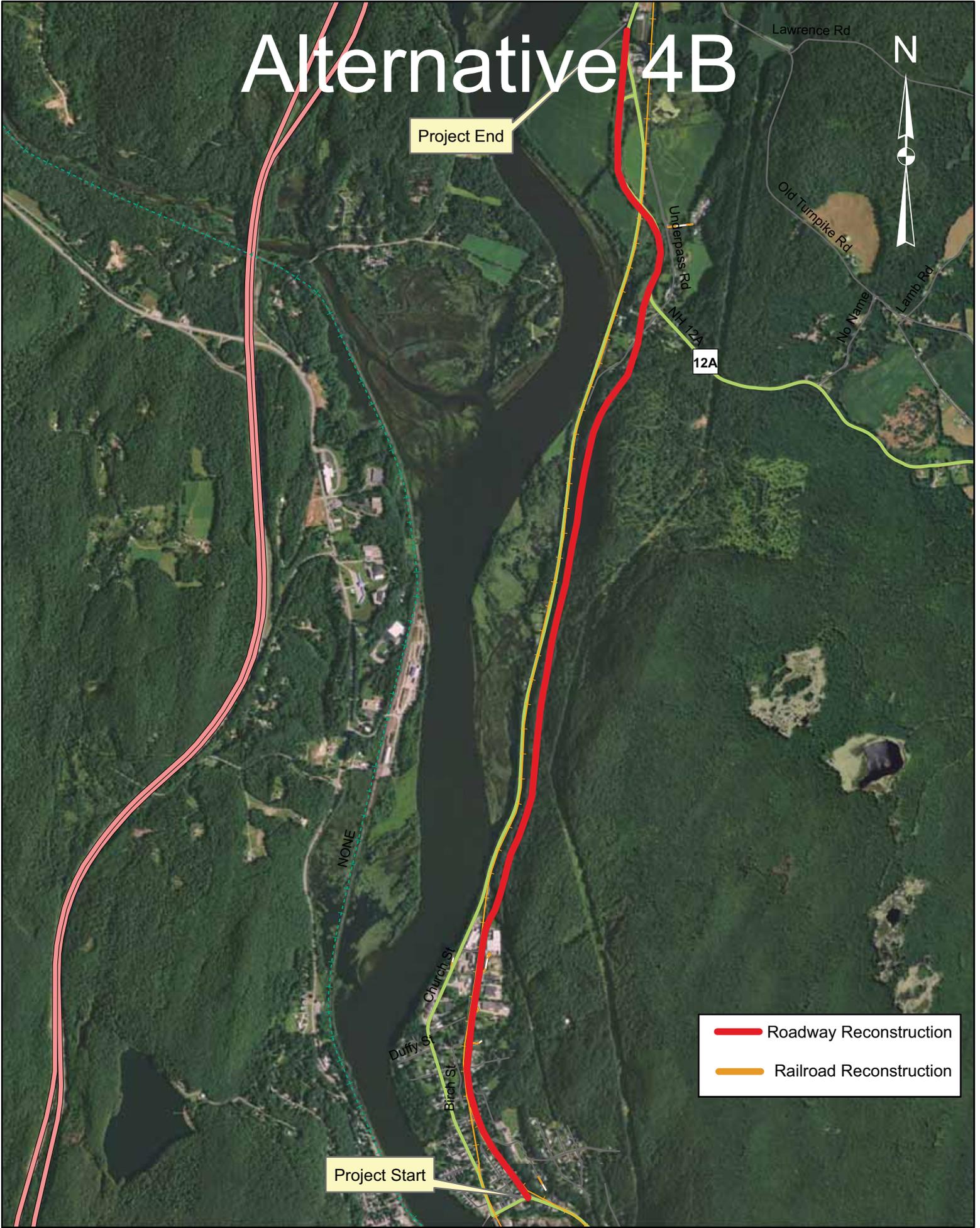
Project Start

12A

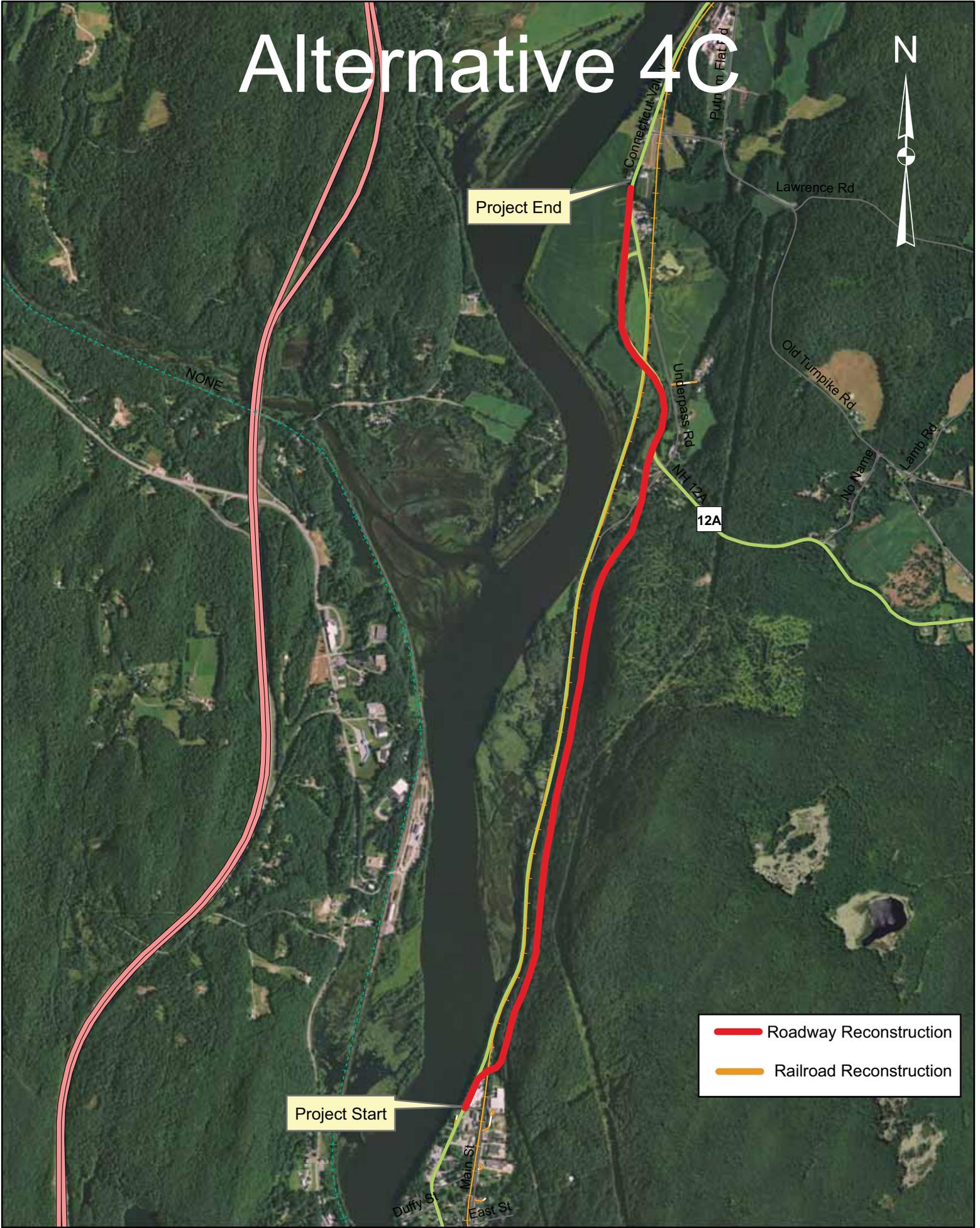
-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 4C



Project End

Project Start

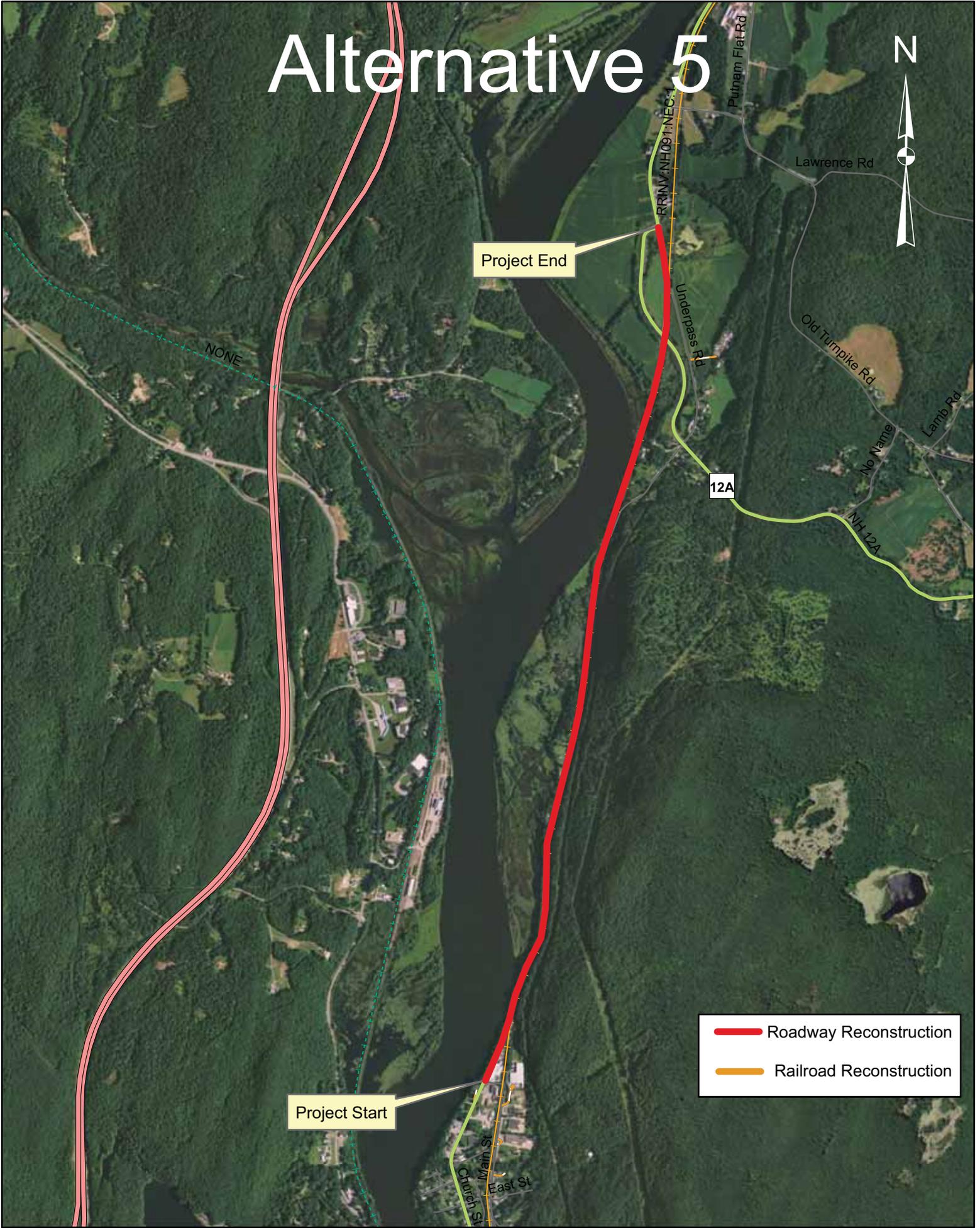
-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 5



Project End

Project Start

-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 322



Project End

Project Start

12A

-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000

0 1,000 2,000 4,000 Feet



Alternative 323



Project End

Project Start

12A

-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000

0 1,000 2,000 4,000 Feet



Alternative 322A



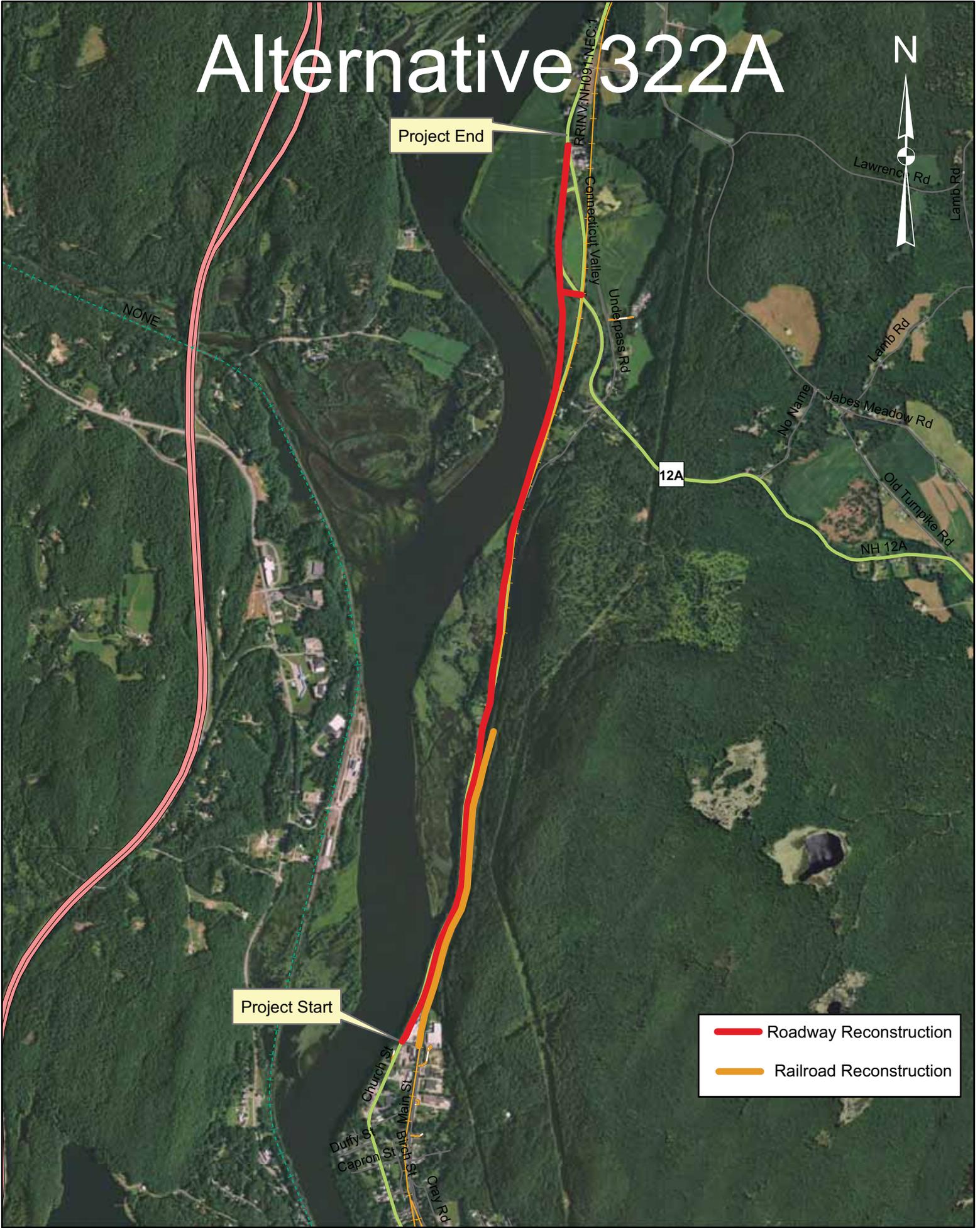
Project End

Project Start

-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000



Alternative 323A



Project End

Project Start

-  Roadway Reconstruction
-  Railroad Reconstruction

1 inch = 2,000 feet

1:24,000

0 1,000 2,000 4,000 Feet

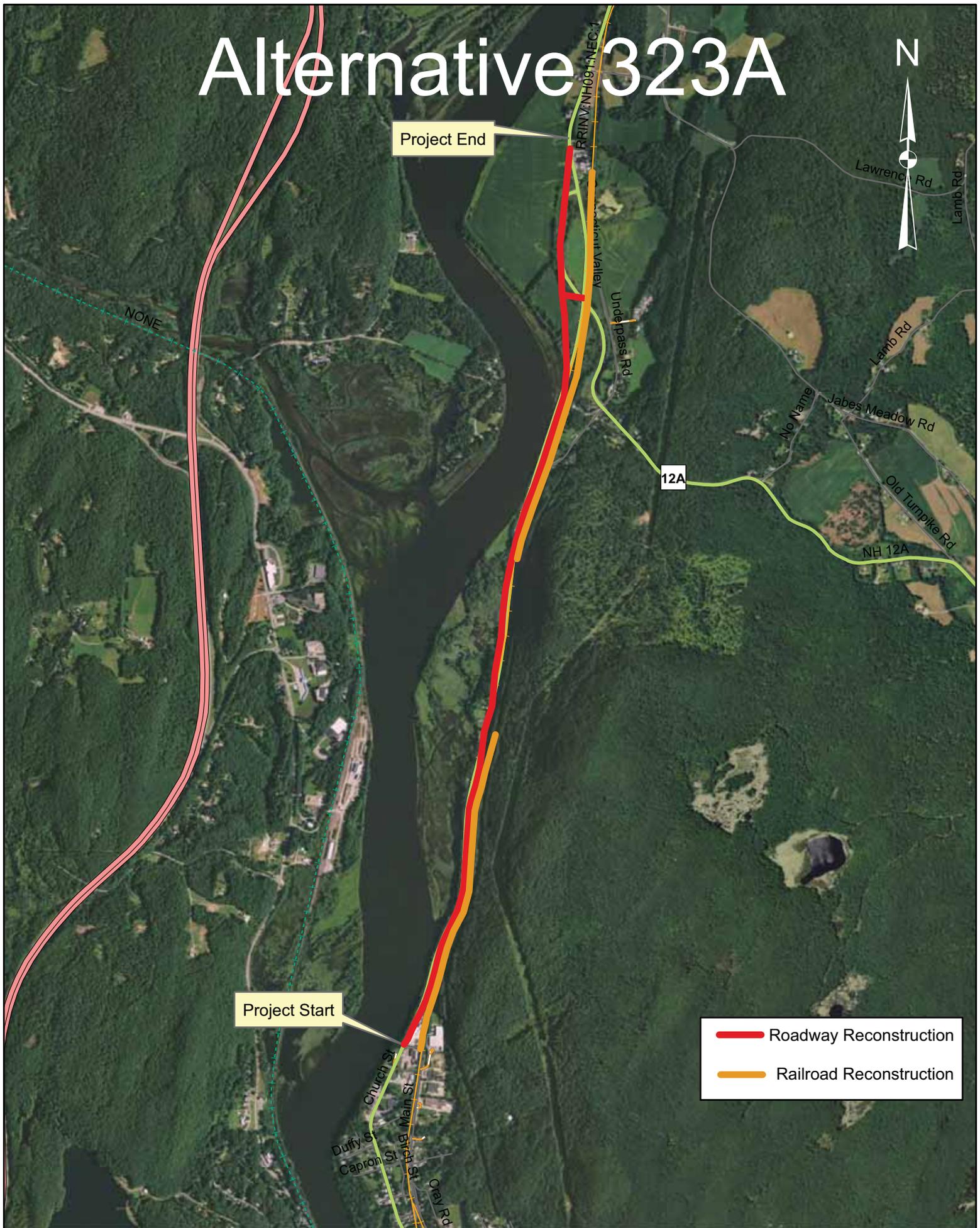


Exhibit E

Property Impacts Table

Parcel #	14747 Walpole Charlestown Property Owner List	Highway Station	Route	Permanent Acquisition (SqFt)	Permanent Easements (SqFt)	Temporary Easements (SqFt)	Total Project Impacts (acres)	Approximate Parcel Size (acres)	Comments	Parcel #
1	POSILLI, NICHOLAS A	3001+00 LT	NH 12	0	0	0	0.00	0.70		1
2	LAVALLEY BUILDING SUPPLY	3001+00 RT	NH 12	0	0	0	0.00	2.50		2
3	TRANSCANADA HYDRO NORTHEAST	3004+00 LT	NH 12	0	16000	0	0.37	0.34	drainage ease (row to verify total parcel size)	3
4	LEN TEX	3005+00 RT	NH 12	5500	4000	300	0.22	2.30	row take, water quality ease, drive ease	4
5	NEW ENGLAND CENTRAL RAILROAD	3014+00 RT	NH 12	161885	12000	0	3.99	7.50	row take, water quality ease	5
6	DCR REAL ESTATE LLC	3011+00 RT	NH 12	26350	0	0	0.60	5.50	row take for rr corridor	6
7	SCOTT	3020+00 RT	NH 12	211355	164714	0	8.63	147.00	row take for rr, utility easement	7
8	H AND H INVESTMENTS, INC	3035+00 RT	NH 12	158767	101,440	0	5.97	123.00	row take for rr, utility easement	8
9	NEW ENGLAND CENTRAL RAILROAD	3040+00 LT	NH 12	0	672	0	0.02	0.09	drainage easement	9
10	TRANSCANADA HYDRO NORTHEAST	3044+00 LT	NH 12	10750	106600	4000	2.79	54.00	row take, drain&slope ease, drive temp	10
11	NEW ENGLAND CENTRAL RAILROAD	3044+00 RT	NH 12	197629	0	0	4.54	5.30	row take	11
12	STATE OF NH - DRED / LCHIP	3044+00 RT	NH 12	187365	0	0	4.30	943.00	row take for rr	12
13	H AND H INVESTMENTS, INC	3048+00 LT	NH 12	37200	12300	0	1.14	327.00	row take for rr, utility easement	13
14	CONRAD-SEAVEY, TAMELA L.	3048+00 LT	NH 12	0	16800	0	0.39	0.98	drainage & water quality easement	14
15	TACY, DRUSENDAHL, SALADYGA	3057+00 LT	NH 12	1500	10000	0	0.26	1.11	row take, slope and drain ease	15
16	TACY, DONALD & JUDY A.	3059+00 LT	NH 12	600			0.01	1.23	row take	16
17	KONESKO, KONESKO-GILBERT	3063+00 LT	NH 12	2100	800	2000	0.11	2.30	row take, slope ease, temp drive	17
18	NEW ENGLAND CENTRAL RAILROAD	3089+00 LT	NH 12	2800	3300		0.14	0.31	row take, slope ease	18
19	POISSON, FREDRICK & VIRGINIA	3095+00 RT	NH 12	0	0	0	0.00	1.20		19
20	NEW ENGLAND CENTRAL RAILROAD	3104+00 LT	NH 12			800	0.02	0.37	temp slope ease	20
21	BONIFACE		OLD STATE RD	0	0	0	0.00			21
22	WILCOX		OLD STATE RD	0	0	0	0.00			22
23	TRANSCANADA HYDRO NORTHEAST	3105+00 RT	NH 12	0	7213	0	0.17	2.80	slope easement	23
24	GOLDEN KNIGHT LTD	3108+50 RT	NH 12	0	25	0	0.00	1.80	ret wall ease	24
25	AUGUSTINOWICZ	3110+00 RT	NH 12	0	4600	0	0.11	1.80	ret wall ease	25
26	STATE OF NH		OLD STATE RD	0	0	0	0.00	0.91		26
27	STATE OF NH		OLD FERRY RD	0	0	0	0.00	0.39		27
28	NOBREGA, JACQUELINE		OLD FERRY RD	0	0	0	0.00			28
29	NEW ENGLAND CENTRAL RAILROAD	3117+00 RT	NH 12	0	70	0	0.00	3.40	ret wall ease	29
30	STATE OF NH	3124+00 RT	NH 12	0	0	0	0.00	2.70		30
31	TRANSCANADA HYDRO NORTHEAST	3128+00 LT	NH 12	0	50000	0	1.15	97.00	drainage & water quality easement	31
32	NEW ENGLAND CENTRAL RAILROAD	3133+00 RT	NH 12	12500	0	330	0.29	0.78	row take, temp slope	32
33	STATE OF NH - DOT	3135+00 RT	NH 12	0	0	0	0.00	2.40		33
34	TRANSCANADA HYDRO NORTHEAST	3139+00 LT	NH 12	0	69000	0	1.58	7.50	slope and water quality easement	34
35	SNOW, CHAMBERLAIN	3147+00 RT	NH 12	0	0	0	0.00	47.00		35
36	WILD GOOSE CHASE PROPERTIES, LLC	3146+00 RT	NH 12	70	8600	0	0.20	7.10	row take, slope easement	36
							0.00			
							0.00			
							0.00			

SQUARE FOOT TOTALS				1016371	588134	7430				
		DATE	07/14/10	Permanent Acquisition	Permanent Easements	Temporary Easements				
ACRE TOTALS				23.33	13.50	0.17				

**Preliminary Impact Totals
Subject to Change**

Exhibit F

Initial Site Assessment (ISA)

Initial Site Assessment (ISA) Checklist

Project Name: Walpole-Charlestown
Federal Number: X-A000(487)
State Number: 14747

Date: 7/28/2010
Reviewer: J. Evans

1. Project Features:

New R/W Yes Excavation Yes Relocate Utilities Yes

2. Review of Existing Information (Check Sources used)

DES Files

Sanborn Insurance Maps

Local Officials

Aerial Photos (List Dates)

Fire Department

Chain of Title (R/W)

Land Owners/Interviews

Other

Does the review of existing information indicate the presence or potential presence of hazardous materials? (If yes, identify, locate and explain.)

Yes. There are two (2) remediation sites in close proximity to the project area. The locations and file information of these sites can be found on the attached map and activity lists. Both of these sites have been listed by NHDES as "Closed." Although these files indicate the potential presence of hazardous materials, the issues associated with each site have been examined by NHDES and given their "Closed" status are considered to have been adequately addressed.

3. Field Review of Project Area (attach photos, if taken).

Setting (Undeveloped/Rural/Urban) Rural.

Land Uses (Industrial, Commercial, Residential, Agricultural, Forested):

Current Predominant Land Uses Forested/residential

Previous Predominant Land Uses Forested/residential

Associated Land Uses Forested/residential

Adjacent Land Uses Forested/residential

Storage Structures (Observed or Suspected)

- | | | | |
|--------------------------|--------------------------|------------------|--------------------------|
| Underground Tanks | <input type="checkbox"/> | Drums | <input type="checkbox"/> |
| Surface Tanks | <input type="checkbox"/> | Basins | <input type="checkbox"/> |
| Transformers | <input type="checkbox"/> | Landfills | <input type="checkbox"/> |
| Sumps | <input type="checkbox"/> | Others | _____ |
| Ponds | <input type="checkbox"/> | | |

Contamination

- | | | | |
|-------------------------|--------------------------|--------------------------|-------------------------------------|
| Surface Staining | <input type="checkbox"/> | Vegetation Damage | <input type="checkbox"/> |
| Oil Sheen | <input type="checkbox"/> | Dead Fauna | <input type="checkbox"/> |
| Odors | <input type="checkbox"/> | Other | <input type="checkbox"/> |
| | | None | <input checked="" type="checkbox"/> |

Potential Asbestos Containing Materials*

- | | | | |
|--------------------------------|--------------------------|---------------------|-------------------------------------|
| Buildings | <input type="checkbox"/> | Serpentine | <input type="checkbox"/> |
| Sprayed-On Fireproofing | <input type="checkbox"/> | Pipe Wrap | <input type="checkbox"/> |
| Acoustical Plaster | <input type="checkbox"/> | Friable Tape | <input type="checkbox"/> |
| Fill Material | <input type="checkbox"/> | None | <input checked="" type="checkbox"/> |

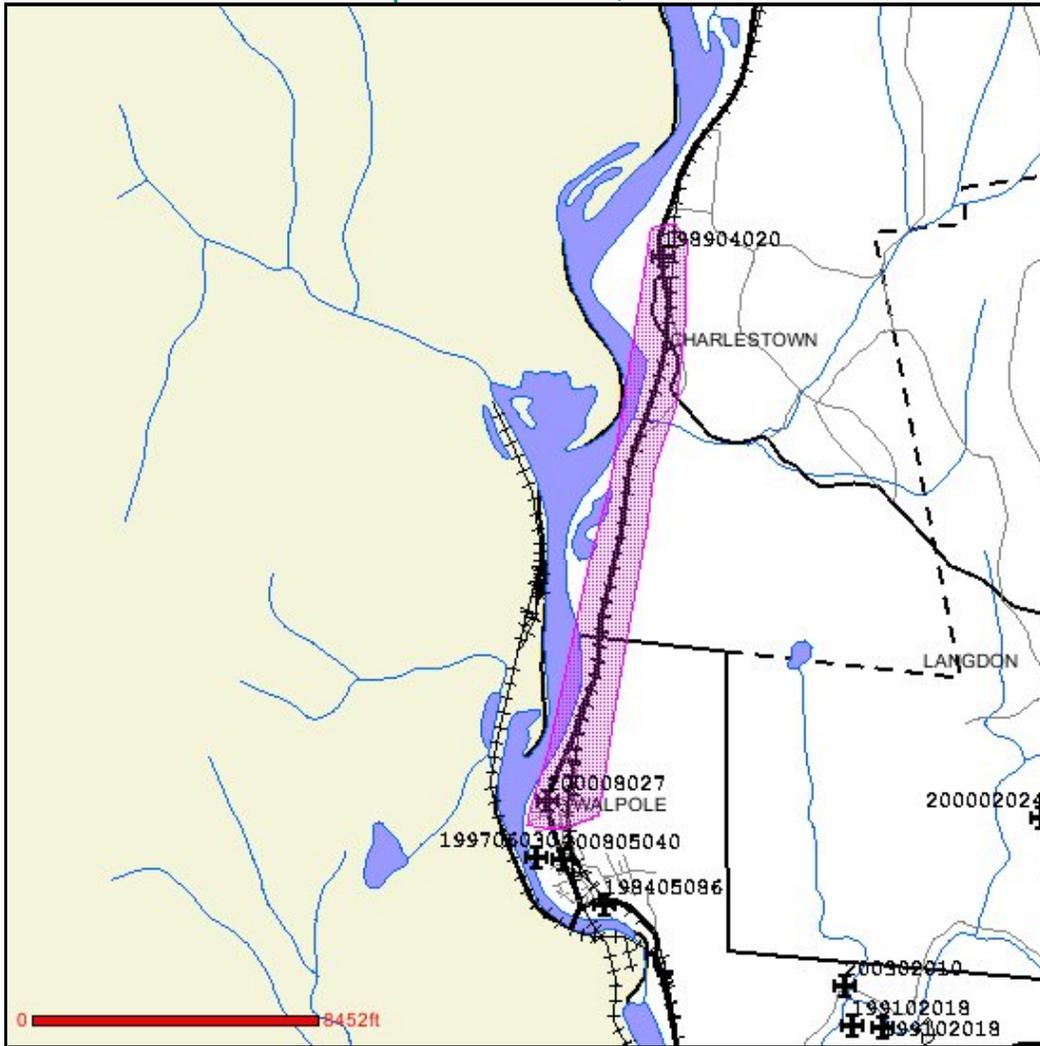
Does the field review indicate the presence or potential presence of hazardous materials? (If yes, identify, locate, and explain.)

Multiple field inspections between 2006 and 2010 did not indicate any obvious signs of hazardous material contamination within the project area. Although no contamination was evident during these field reviews, there is a potential for contamination within the railroad corridor. The Department will conduct the necessary subsurface investigations to determine the extent of any hazardous materials within the project area. If hazardous materials are determined to be present a soils management plan will be developed and incorporated into the project design.

*** The Bureau of Right-of-Way should be notified when buildings possibly containing asbestos are to be taken or moved.**



Walpole-Charlestown, 14747



- Legend**
- ★ Asbestos Disposal Site
 - ⊕ Remediation Site
 - ▨ Remediation Site (polygon)
 - River, stream
 - - - Intermittent stream
 - Open water
 - Wetland
 - - - Railroads
 - == Interstate Highway
 - == Primary Highway
 - == Secondary Highway
 - Other Road/Street
 - - - Town Boundary
 - - - County Boundary
 - == State Boundary

Map Scale = 1 : 80162 (1" = 1.3 miles or 6680 feet)

The information contained in the OneStop Program GIS is the best available according to the procedures and standards of each of the contributing programs and of the GIS. The different programs are regularly maintaining the information in their databases. As a result, the GIS may not always provide access to all existing information, and it may occasionally contain unintentional inaccuracies. The Department can not be responsible for the misuse or misinterpretation of the information presented by this system.

Map prepared 7/6/2010 11:40:27 AM



Developed in cooperation with NH GRANIT

Remediation Sites
Features returned: 2 of 9152.

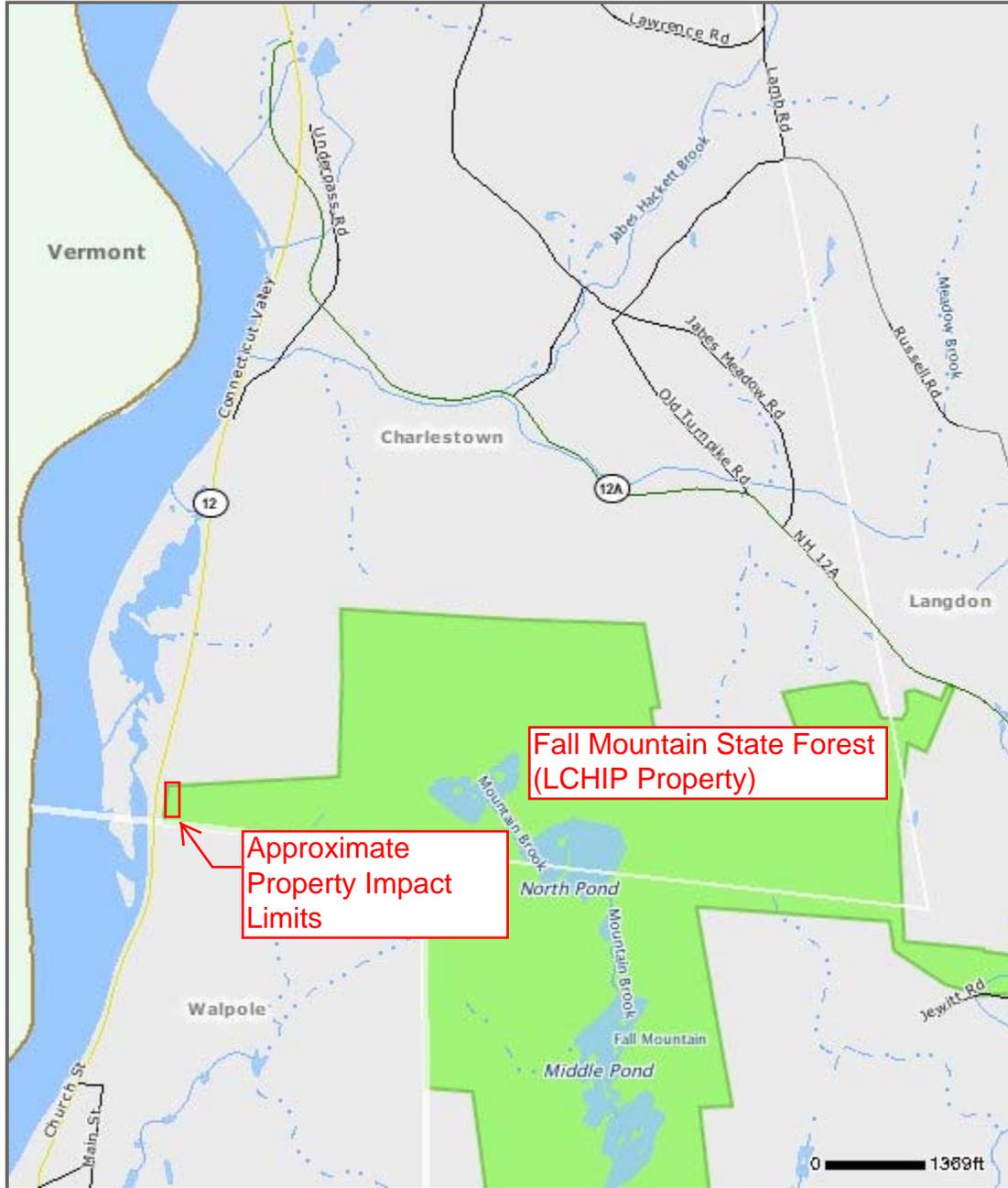
MASTER ID	SITE ID	SITE NAME	ADDRESS	TOWN	PROJECT TYPE	PROJECT MANAGER	WORKLOAD PRIORITY	RISK	PERMIT#	TAX MAP	TAX LOT
<u>583</u>	198904020	CONNECTICUT VALLEY MOBILE HOME PARK	ROUTE 12	CHARLESTOWN	LUST	CLOSED	3	8	NA	39	11
<u>50959</u>	200008027	STOCKER'S SERVICE CENTER	120 CHURCH STREET	WALPOLE	UIC, HAZWASTE	CLOSED, CLOSED	3, 3	8, 8	NA, NA		

Exhibit G

Land Conservation Map

NH GRANIT DATA MAPPER

Land Conservation: Walpole-Charlestown, 14747



Location Map



Map Produced:
June 10, 2010



NH GRANIT DATA MAPPER

Land Conservation: Walpole-Charlestown, 14747



Data Sources

All data are maintained and/or distributed by NH GRANIT. See www.granit.unh.edu for detailed documentation on individual data layers.

Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center, under contract to the NH Office of Energy and Planning, and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

Identify Results

Location

New Hampshire State Plane Coordinates

X (ft)	Y (ft)
782699	241255

Conservation Lands (CL): Single Symbol: Solid

RecordName	Reported Size (ac)	Calculated Size (ac)	Primary Protecting Agency	Agency Type	Protection Level	Protection Type	Date Recorded	Date Added to Database
1 Fall Mountain	943	955.09002686	The Nature Conservancy	Private	Permanent conservation land	Conservation Easement	20040901	20050128

Exhibit H

Conservation Land Stewardship (CLS) Program
Correspondence

Jonathan Evans

From: Walker, Steve [Steve.Walker@nh.gov]
Sent: Tuesday, February 20, 2007 11:57 AM
To: Jonathan Evans
Subject: Walpole Charlestown 14747

There are no LCIP interests in the project area.

Exhibit I

Land and Water Conservation Fund (LWCF) Memo

STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION

To: Jonathan A. Evans
Senior Environmental Manager
Department of Transportation
Bureau of Environment

From: Jane Carey
Dept. of Resources and Economic Development
Division of Parks and Recreation

Date: December 2, 2009

Subject: Walpole – Charlestown, 14747, X-A000 (487)

This communication is in response to your memo dated December 1, 2009 regarding the reconstruction along NH Route 12 in the towns of Walpole and Charlestown, NH. From the Main St. intersection on North Walpole for approximately 2.5 miles along NH Route 12 to its intersection with NH Route 12A in Charlestown.

There presently are 3 Land and Water Conservation Fund 6 (f) projects in the towns of Walpole and Charlestown, New Hampshire. They are Project #'s

33-00441 – Walpole Recreation Park
33-00101 – Charlestown Patch Park
33-00495 – Charlestown Pool

I have checked into our project files, and based on the map and description you have provided, it does not appear that there are any Land and Water Conservation 6 (f) projects in this area.

Feel free to contact me at 271-3556 or at Jane.Carey@dred.state.nh.us should you have any questions.

Exhibit J

Land and Community Heritage Investment Program
(LCHIP) Correspondence

JAE

LCHIP

Investing in New Hampshire's Heritage



LAND & COMMUNITY HERITAGE INVESTMENT PROGRAM

Land and Community Heritage Investment Program
13 West Street, Suite 3
Concord, NH 03301

(603) 224-4113
fax (603) 224-5112
www.lchip.org

October 8, 2010

Jonathan A. Evans
Senior Environmental Manager
Bureau of Environment
NH Department of Transportation
7 Hazen Drive
Concord NH 03302-0483

Dear Jon -

Thank you again for taking time to present information about the proposed road reconstruction project along NH Route 12 in Walpole and Charlestown and its impact on the western edge of the Fall Mountain Conservation area.

The LCHIP Board of Directors passed the following motion during a meeting today:

The LCHIP Board of Directors approves the proposal from the New Hampshire Department of Transportation to acquire the LCHIP interest in 4+/- acres of the Fall Mountain Conservation area along NH Route 12 in Walpole and Charlestown, under the terms specified in RSA 227-M:13 with compensation to be at full fair market value of the property interest at the time of the department's acquisition, or as replacement land with conservation value within the Fall Mountain Conservation area, with a preference for land with conservation value.

Thank you for your good efforts to accommodate the interests of the conservation land and its holders in your highway reconstruction planning process and to provide LCHIP with a 60-day extension of the 15-day application decision period from the date of the Public Hearing on Thursday, July 29, 2010. We appreciate your patience in dealing with the repetition and minor slowdowns related to staff changes in the LCHIP office.

Please let me or Aaron know as the transfer unfolds or if you have further questions about LCHIP's position in this matter.

Sincerely,

Dijit Taylor
Interim Executive Director

Cc via email: Aaron Ferarro, LCHIP
Bill Carpenter, DRED
Krista Helmboldt, TNC
Tim Murphy, SWRPC

P:\Projects\Natural Resource\Charlestown & Langdon, Fall Mountain\Correspondence\DOT\LCHIP Board re DOT Fall Mountain acquisition.doc

Exhibit K

NH Natural Heritage Bureau (NHNHB) Memo

Memo



NH NATURAL HERITAGE BUREAU

To: Jonathan Evans, NH Department of Transportation
7 Hazen Drive
PO Box 483
Concord, NH 03302-0483

From: Melissa Coppola, NH Natural Heritage Bureau

Date: 10/26/2009 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB09-2261

Project type: Bank Stabilization: Repair bank erosion,
etc.

Town: Charlestown, Walpole

Location: NH Route 12 beginning at its junction with Main Street in North Walpole,
continuing approximately 2.7 miles to the NH Route 12A junction in
Charlestown

cc: Kim Tuttle, Susi von Oettingen

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: This site is within an area flagged for possible impacts on the federally-listed *Alasmidonta heterodon* (dwarf wedgemussel) in Connecticut River. NHB has concerns about the impact this project may have on plants and/or natural communities and please send detailed site plans and photos to Melissa Coppola at NHB.

Invertebrate Species

Dwarf Wedge Mussel (*Alasmidonta heterodon*)

State¹

E

Federal

E

Notes

Contact the NH Fish & Game Dept and the US Fish & Wildlife Service (see below).

Natural Community

Circumneutral rocky ridge*

State¹

--

Federal

--

Notes

Threats would primarily be trampling by recreational hikers.

Rich Appalachian oak rocky woods

--

--

The primary threat to this natural community is logging.

Plant species

American Cancerroot (*Conopholis americana*)

State¹

T

Federal

--

Notes

This plant occurs on talus slopes and in mesic forests. It is parasitic on the roots of several trees, including oaks. Threats include tree removal and opening of the canopy.

Fern-leaved False Foxglove (*Aureolaria pedicularia*
var. *intercedens*)

T

--

This species occurs on rocky ridges, cliffs, and talus slopes, and in dry forests and thin woods. Threats would include development of its habitat or recreational use that directly impacted the plants.

Water Stargrass (*Heteranthera dubia*)*

E

--

Threats to aquatic species include changes in water quality, e.g., due to pollution and

Memo



NH NATURAL HERITAGE BUREAU

stormwater runoff, and significant changes in water level.

¹Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

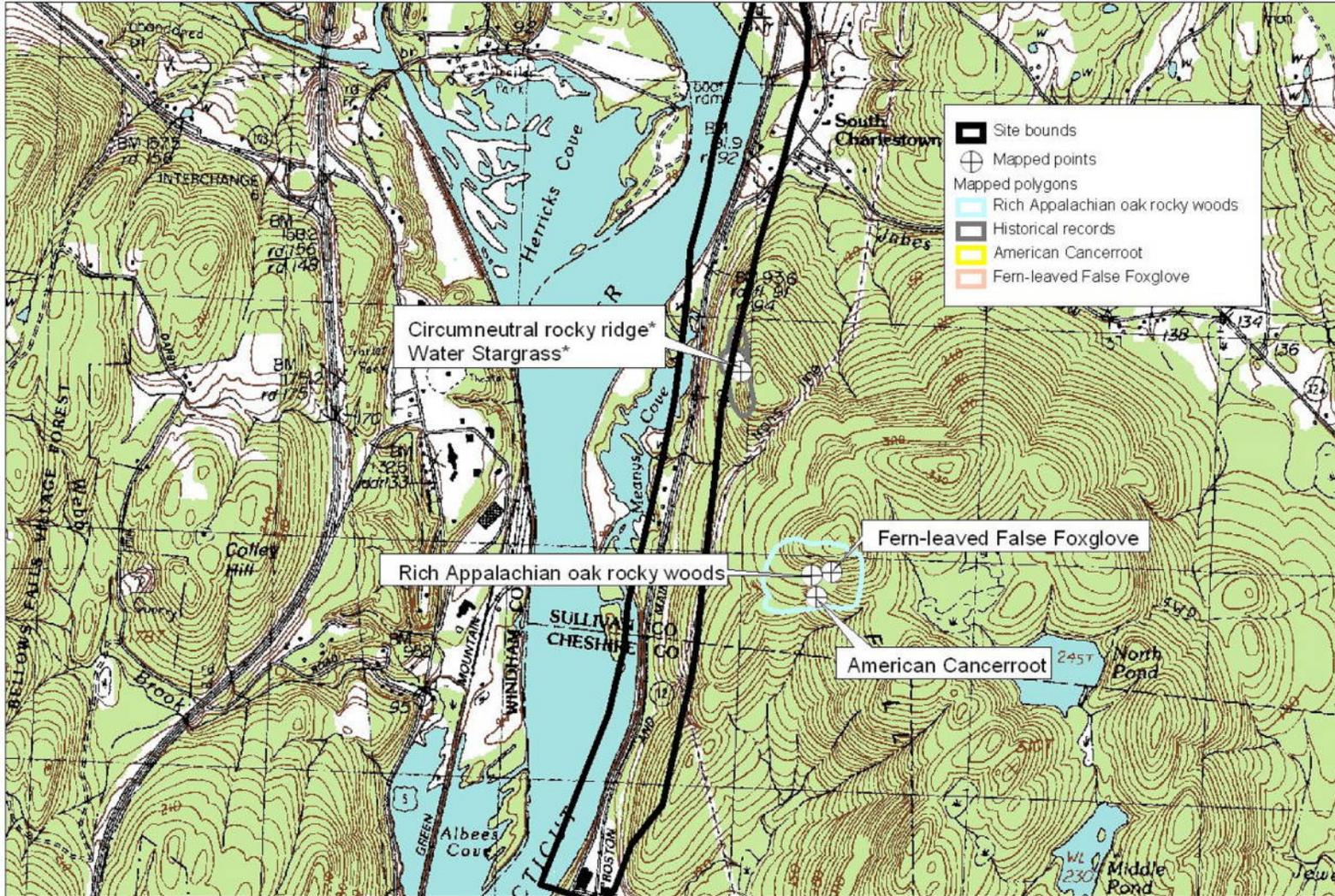
Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544. Contact for federally-listed species: Susi von Oettingen, US FWS, at (603) 223-2541.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.



Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



New Hampshire Natural Heritage Bureau - Community Record

Rich Appalachian oak rocky woods

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Not ranked (need more information)
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Good quality, condition and lanscape context ('B' on a scale of A-D).
Comments on Rank:

Detailed Description: 2006: **Rich Appalachian oak rocky woods** community on steep, south-facing slope with rock outcrops and areas of open ledge. Characteristic tree species are *Quercus rubra* (red oak), *Quercus alba* (white oak), *Carya ovata* (shagbark hickory), and *Ostrya virginiana* (ironwood). The herb layer is dominated by a lawn of *Deschampsia flexuosa* (common hairgrass) and *Carex pensylvanica* (Pennsylvanian sedge), along with *Campanula rotundifolia* (harebell), *Solidago caesia* (blue-stemmed goldenrod), and *Aralia nudicaulis* (wild sarsaparilla). The rare species *Conopholis americana* (American cancerroot) and *Aureolaria pedicularia* var. *intercedens* (fern-leaved false foxglove) were observed in this community.

General Area: 2006: The community occurs on a south-facing slope near the top of the ridge of Fall Mountain. The surrounding forest is primarily **hemlock - beech - oak - pine forest**, although in many places it has a significant *Quercus alba* (white oak) component, giving it a more southern aspect. Directly to the east is a network of large beaver ponds which harbor the rare plant *Scirpus ancistrochaetus* (northeastern bulrush).

General Comments:
Management
Comments:

Location

Survey Site Name: Fall Mountain State Forest
Managed By: Fall Mountain

County: Sullivan	USGS quad(s): Bellows Falls (4307224)
Town(s): Charlestown	Lat, Long: 430948N, 0722614W
Size: 27.1 acres	Elevation: 885.8268 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Park at parking area off Rte. 12A. Take woods road to North Pond. Community is located on steep, south-facing slope approximately 0.5 miles WNW of North Pond.

Dates documented

First reported: 2006-07-14	Last reported: 2006-07-14
----------------------------	---------------------------

Bowman, Pete and Ben Kimball. 2006. Field survey to Fall Mountain on July 14.

New Hampshire Natural Heritage Bureau - Plant Record

American Cancerroot (*Conopholis americana*)**Legal Status**

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Good quality, condition and lanscape context ('B' on a scale of A-D).
 Comments on Rank:

Detailed Description: 2006: 12 clumps scattered over roughly 100 m2 area.

General Area: 2006: Plants are located in a dry rich oak - hickory forest characterized by *Quercus rubra* (red oak) and *Ostrya virginiana* (ironwood). Associated herbs include *Carex pensylvanica* (Pennsylvanian sedge) and *Deschampsia flexuosa* (common hairgrass).

General Comments:

Management

Comments:

Location

Survey Site Name: Fall Mountain State Forest

Managed By: Fall Mountain

County: Sullivan

USGS quad(s): Bellows Falls (4307224)

Town(s): Charlestown

Lat, Long: 430945N, 0722613W

Size: .4 acres

Elevation: 885.8268 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Park at parking area off Rte. 12A. Take woods road to North Pond. Population is on south-facing slope west of North Pond, just south of Fall Mountain State Forest property line (N 43.162799, W 72.437040).

Dates documented

First reported: 2006-07-14

Last reported: 2006-07-14

Bowman, Pete and Ben Kimball. 2006. Field survey to Fall Mountain on July 14.

New Hampshire Natural Heritage Bureau - Plant Record

Fern-leaved False Foxglove (*Aureolaria pedicularia* var. *intercedens*)**Legal Status**

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Apparently secure but with cause for concern
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Fair quality, condition and/or lanscape context ('C' on a scale of A-D).
 Comments on Rank:

Detailed Description: 2006: 8 small clumps, all with upper portions of the plants browsed off, all within 2m2 of each other. Because of browsing, no flowers present.

General Area: 2006: On open ledges on steep slope surrounded by *dry rich oak - hickory forest*. Surrounding forest dominated by *Quercus rubra* (red oak) and *Carya ovata* (shagbark hickory). *Carex pensylvanica* (Pennsylvanian sedge) and *Deschampsia flexuosa* (common hairgrass) frequent in understory.

General Comments:
 Management
 Comments:

Location

Survey Site Name: Fall Mountain State Forest
 Managed By: Fall Mountain

County: Sullivan USGS quad(s): Bellows Falls (4307224)
 Town(s): Charlestown Lat, Long: 430948N, 0722611W
 Size: .4 acres Elevation: 1003.937 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Park at parking area off Rte. 12A. Take woods road to North Pond. Population is on open ledge on steep slope WNW of North Pond, just east of Fall Mountain State Forest property line (N 43.163443, W 72.436252).

Dates documented

First reported: 2006-07-14 Last reported: 2006-07-14

Bowman, Pete and Ben Kimball. 2006. Field survey to Fall Mountain on July 14.

New Hampshire Natural Heritage Bureau - Plant Record

Water Stargrass (*Heteranthera dubia*)**Legal Status**

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Historical records only - current condition unknown.
Comments on Rank:

Detailed Description: 1985: RAWINSKI SPECIMEN TJR85-1207.

General Area:

General Comments:

Management

Comments:

Location

Survey Site Name: Fall Mountain Marshes
Managed By:

County: Sullivan
Town(s): Charlestown
Size: 2.8 acres

USGS quad(s): Bellows Falls (4307224)
Lat, Long: 431017N, 0722629W
Elevation: 500 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: CHARLESTOWN. FALL MOUNTAIN MARSHES.

Dates documented

First reported: 1985
Last reported: 1985-09-25

Exhibit L

Connecticut River Joint Commissions Correspondence



STATEMENT
from
SHARON F. FRANCIS, EXECUTIVE DIRECTOR
NH Route #12 Reconstruction
to
Natural Resource Agency Meeting
Concord, NH
April 21, 2010

The first official meeting I attended on improvements to NH Route #12 between Charlestown and North Walpole was in December, 2006. DOT's Bill Oldenberg explained a new planning concept. It was called Context Sensitive Solutions, and replaced the old system under which highway engineers drew up plans, called a public hearing, and were berated by the public who had reasons to believe that they knew their segment of road better than the engineers might. Under this new CSS system, public preferences and local knowledge were going to drive the process. DOT's resourceful personnel would help. Upper Valley Lake Sunapee Regional Planning Commission would convene meetings and keep us all informed and engaged in working through the many matters that need to be taken into consideration when a public road is "improved."

I heartily commend the CSS process. It truly worked. People with widely different priorities - at the end - agreed on the final layout for Route #12. The fact that all agreed is the best recommendation you could receive.

Participants who took part in the CSS process were a diverse lot, representing local government, businesses, schools, and citizen organizations from both Charlestown and Walpole. A few of us represented wider concerns, New England Central Railroad, TransCanada Corporation, and in my case the New Hampshire and Vermont commissions entrusted by the legislatures and governors to safeguard the Connecticut River.

The Connecticut River Joint Commissions hold responsibility for developing the management plan for the Connecticut River, and for advising the Department of Environmental Services on any permit that affects the River. We have led the effort to address the widespread problems of riverbank erosion, and have raised funds and repaired several riverbanks where important public resources were at stake.

We also sponsor the Connecticut River Byway and have successfully gained national byway status for the roadways that border our lovely river. The motive for the byway is to lure visitors, bring tourism dollars, and preserve the villages and vistas that bring visitors in the first place.

The two-and-a-half mile roadway between Charlestown and Walpole is one of those special scenic places. At the north end of the segment, the river is close by, and drivers can appreciate the broad waters, look across to the wildlife sanctuary at Herrick's Cove, and see glimpses of occasional Bald Eagles fishing for breakfast or supper from a snag tree beside the road. This segment is one of very few along the 500 mile byway where the River appears to be close enough to touch. Thus the scenic values in this area are very high.

By moving the railroad tracks eastward there will be room to refrain from introducing fill into the Connecticut River in the northern section. From our fluvial geomorphic assessments of the Connecticut River, we have learned that stone fill or riprap too often causes more problems than it solves; Thus we strongly urge NHDOT to apply bioengineering techniques when it is necessary to work adjacent to the River.

Mid-section is Meany's Cove, an area of setbacks favored by fishermen who fish from the shore or use bob houses in the winter. The preferred alignment will result in some fill in this section, and CRJC supports this alternative because extensive impacts on the river are eliminated elsewhere. We suggest, additionally, that a pull off, with room for a few cars would be a valued asset in the Meany's Cove area so fishermen can still access the river shore they have long enjoyed, and the occasional driver can pull over and enjoy the view.

In the southern section where the road is elevated above the River, the concern is not the road impacting the River, but the instability of the road because of inevitable erosion below. Everyone who has driven this section of roadway will benefit from DOT's plan to move both railroad and Route #12 eastward and allow for badly-needed stabilization of the roadway's foundation.

It is a pleasure to be able to convey support from the Connecticut River Joint Commissions for the preferred alternative proposed by the CSS planning group. The process was admirable and fair. Now, as the project goes into the design phase, it will be very important to give priority to aesthetic considerations, to remember that the endangered Bald Eagle is frequently seen in this area, that the River is home to Dwarfwedge mussels, and wherever possible apply bioengineering when the roadway comes close to New England's Great River, the Connecticut.

Thank you.

Exhibit M

United States Fish and Wildlife Service Memo and
Correspondence

Jonathan Evans

From: Susi_vonOettingen@fws.gov
Sent: Monday, May 03, 2010 11:20 AM
To: Jonathan Evans
Cc: Rich Roach (E-mail); Melissa L. Coppola (E-mail); SCairns@dred.state.nh.us
Subject: RE: Walpole-Charlestown 14747 LCHIP and NHNHB/USF&WS Field Review

Hi Jon,

Thanks for sending me more information on the potential wetland impacts from the reconstruction of Rt. 12 in Walpole. I don't think dwarf wedgemussels will be an issue, the habitat clearly is not DWM habitat. However, there is a possibility that the Northeastern bulrush could be present in Meany Cove, I base this on the locality, (i.e. very close to known sites) and the habitat as shown in the photos (it looks like there are some other rush species in the photos). I believe that Meany Cove was surveyed in 1993 and no plants were found. However, I don't know how much of the cove was surveyed and if water levels were optimal for finding this species. The report I have doesn't go into great detail about sites that were surveyed and no plants were found. As a first step, a habitat review should be conducted to see if other species that are generally associated with the bulrush are present (is there a "sedge meadow") and an idea of where to focus survey efforts could be developed. If suitable habitat is present, then Meany's Cove should be surveyed in August to determine whether the bulrush is present.

I do not believe that there is suitable habitat at the fill area of Jacob's Meadow, I've never seen the bulrush in riprap. What I don't know is how the rest of the wetland would be affected by the fill. If there is a potential that the hydrology of that wetland would be affected, then it should also be surveyed for the suitable bulrush habitat. If the hydrology is not anticipated to change, then no further surveys are required at this point for the Jacob's Meadow wetland.

NHNHB may have more information in there files regarding the Meany Cove site, I don't think that Jacob's Meadow was previously surveyed, but I'm not sure.

A site visit this early in the season may not be sufficiently informative to tell us whether or not we need to survey later in the season. Melissa and Sara what do you think? If you think it is worthwhile, I will try to make the field trip, but will drive separately and limit my review to those two wetlands.

Susi

~~~~~  
Susi von Oettingen  
Endangered Species Biologist  
US Fish and Wildlife Service  
70 Commercial St., Suite 300  
Concord, NH 03301  
603-223-2541 ext. 22  
603-491-8219 (cell)  
<http://www.fws.gov/newengland>

7/16/2010

## Jonathan Evans

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**From:** Susi\_vonOettingen@fws.gov  
**Sent:** Friday, September 17, 2010 8:44 AM  
**To:** Jonathan Evans  
**Cc:** mcoppola@dred.state.nh.us  
**Subject:** RE: Walpole-Charlestown 14747 - NH Route 12, LCHIP, Fall Mountain State Forest

Hi Jon,

Thank you for providing the information regarding the LCHIP property and the Northeastern bulrush survey. Based on the survey results, no further consultation is necessary since there are no federally listed species that may be affected by the project. If you need a letter stating this, please send me a request. Otherwise, I would consider this email sufficient for the administrative record.

Please call or email if you need further assistance.

Susi von Oettingen

~~~~~  
 Susi von Oettingen
 Endangered Species Biologist
 US Fish and Wildlife Service
 70 Commercial St., Suite 300
 Concord, NH 03301
 603-223-2541 ext. 22
 603-491-8219 (cell)
<http://www.fws.gov/newengland>

"Jonathan Evans" <JEvans@dot.state.nh.us>

09/10/2010 11:57 AM

To "Bob Spoerl" <Robert.Spoerl@dred.state.nh.us>, "Krista Helmboldt (E-mail)" <khelmboldt@TNC.ORG>, "Bill Carpenter" <Bill.Carpenter@dred.state.nh.us>, "Sussana von Oettingen (E-mail)" <susi_vonoettingen@fws.gov>
 cc "Melissa L. Coppola (E-mail)" <mcoppola@dred.state.nh.us>, "Aaron Ferraro (E-mail)" <aferraro@lchip.org>
 Subject RE: Walpole-Charlestown 14747 - NH Route 12, LCHIP, Fall Mountain State Forest

All,

I wanted to provide all of you with an update on the status of the proposed LCHIP property acquisition in Charlestown. As you may remember this property is part of the Fall Mountain State Forest; of which interior portions are known to contain the northeastern bulrush.

Deb Turcott-Young recently left LCHIP and Aaron Ferraro recently joined LCHIP. Aaron is trying to get up to speed on this project and the proposed impacts to the Fall Mountain State Forest. As I indicated previously, the hearing was held on July 29. We are planning on presenting the project at the September 20, 2010 meeting of

9/15/2011

the LCHIP Board of Directors for a decision on the proposed LCHIP impacts. This meeting will be at the NH Office of Energy and Planning sometime between 10AM and noon. If any of you would like to attend this meeting that would be great, but not required. Please let me know if you plan to attend so I can give you a more definitive time once I have it. Once we have the Board's decision we can begin working on the property appraisal and the final compensation package.

Melissa Coppola and I reviewed the entire project area on Wednesday Sept. 1, 2010 for the presence of the northeastern bulrush. During this review Melissa did not find this species to be present within any areas that will be impacted by the project. She indicated that there is a possibility that the bulrush is located in unaffected portions of the wetlands adjacent to the project area, but again, no occurrences of the bulrush were found within the wetland areas that will be impacted by this project.

Should you have any questions, please feel free to let me know.

-Jon

~~~~~

Jonathan Evans  
Senior Environmental Manager  
NH Department of Transportation  
Bureau of Environment  
Email: [jevans@dot.state.nh.us](mailto:jevans@dot.state.nh.us)  
Phone: (603)271-4048  
Fax:(603)271-7199



# Northeastern Bulrush

## *Scirpus ancistrochaetus*

Northeastern bulrush puzzles biologists. A wetland plant first identified as a distinct species in 1962, it is considered a relict species, one that was once more widespread. Occurring in isolated areas scattered across seven states, northeastern bulrush is difficult to find and difficult to recognize.

**Relict - a persistent remnant of an otherwise extinct flora or fauna or kind of organism**

A leafy bulrush in the sedge family of plants, northeastern bulrush is tall, with narrow leaves and a drooping flower head with chocolate-brown florets. While it resembles some other leafy bulrushes, northeastern bulrush's flowers and seeds are structurally different.

Like other sedges, northeastern bulrush grows in wet areas – small wetlands, sinkhole ponds or wet depressions with seasonally fluctuating water levels. It may be found at the water's edge, in deep water or in just a few inches of water, and during dry spells there may be no water visible where the plant is growing. Northeastern bulrush appears to have adapted to regularly changing water levels, which may have given it an advantage over less tolerant plant species. But habitat alterations that make a site consistently drier or wetter could make life impossible for northeastern bulrush. Activities such as filling or ditching in a wetland can destroy or degrade this species' habitat and pose a threat.

Because it is not showy and not easily identified, little is known about the life history of northeastern bulrush. Biologists periodically monitor known

populations to gain information on the species and its habitat requirements, and have conducted field surveys to locate additional populations.

The goal of the northeastern bulrush recovery program is to protect and maintain the species and its habitat so it can eventually be removed from Endangered Species Act protection. That will be accomplished by preventing habitat destruction and deterioration at sites where the plant now grows and any additional locations as they are found. Biologists are also studying northeastern bulrush to determine its habitat requirements, reproductive strategy and genetic variability. This information will assist in designing appropriate conservation measures for it.

Protection for northeastern bulrush will depend on many partnerships among the U.S. Fish and Wildlife Service, state agencies, non-governmental organizations and private landowners. Working together, we can help this survivor remain in the 21st century.



*Northeastern bulrush*

**According to the Endangered Species Act, endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.**

**Northeast Region  
U.S. Fish and Wildlife Service  
300 Westgate Center Drive  
Hadley, MA 01035  
413/253 8200  
<http://northeast.fws.gov>**

**Federal Relay Service  
for the deaf and hard-of-hearing  
1 800/877 8339**

**U.S. Fish & Wildlife Service  
1 800/344 WILD  
<http://www.fws.gov>**

**August 2006**

**Northeastern bulrush is found in Maryland, Massachusetts, New Hampshire, Pennsylvania, Vermont, Virginia and West Virginia.**

# **Exhibit N**

National Marine Fisheries Service Correspondence and  
Essential Fish Habitat Study

**Jonathan Evans**

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**From:** Kevin Nyhan  
**Sent:** Monday, June 07, 2010 2:06 PM  
**To:** Jonathan Evans  
**Subject:** FW: [Fwd: Walpole-Charlestown, X-A000(487), 14747 EFH Assessment]

-----Original Message-----

**From:** Lou Chiarella [mailto:Lou.Chiarella@noaa.gov]  
**Sent:** Monday, June 07, 2010 12:45 PM  
**To:** Kevin Nyhan  
**Subject:** Fwd: [Fwd: Walpole-Charlestown, X-A000(487), 14747 EFH Assessment]

**Kevin,**

***I have reviewed your EFH assessment. It looks good. Nice and thorough. NMFS has no concerns with this project and EFH conservation recommendations are not required.***

**Lou**

----- Original Message -----

**Subject:**[Fwd: Walpole-Charlestown, X-A000(487), 14747 EFH Assessment]  
**Date:**Mon, 07 Jun 2010 10:05:32 -0400  
**From:**Mike R. Johnson <[Mike.R.Johnson@noaa.gov](mailto:Mike.R.Johnson@noaa.gov)>  
**To:**Chiarella, Lou <[Lou.Chiarella@noaa.gov](mailto:Lou.Chiarella@noaa.gov)>

Lou,

Here's the attachment.

----- Original Message -----

**Subject:** Walpole-Charlestown, X-A000(487), 14747 EFH Assessment  
**Date:** Wed, 02 Jun 2010 09:55:13 -0400  
**From:** Kevin Nyhan <[KNyhan@dot.state.nh.us](mailto:KNyhan@dot.state.nh.us)>  
**To:** Mike Johnson (E-mail) <[Mike.R.Johnson@noaa.gov](mailto:Mike.R.Johnson@noaa.gov)>  
**CC:** Jamie Sikora (E-mail) <[jamie.sikora@fhwa.dot.gov](mailto:jamie.sikora@fhwa.dot.gov)>, Jonathan Evans <[JEvans@dot.state.nh.us](mailto:JEvans@dot.state.nh.us)>, Charles Hood <[charles.hood@dot.state.nh.us](mailto:charles.hood@dot.state.nh.us)>

Good morning Mike,

Please find attached an EFH Assessment for the subject project. With his permission, I have completed this assessment on behalf of Jamie Sikora of the NH Division of the Federal Highway Administration. As such, you will see that I have C.C.'d him on this Email.

This project will provide improvements along a section of NH Route 12 in Walpole and Charlestown, NH, which runs along the Connecticut River in NH. This section of river is EFH for Atlantic Salmon. I utilized the web-based GIS tool, which I found extremely useful, but which lists this area as having missing data for Atlantic Salmon and a consultation was

7/28/2010

necessary.

If you have questions, please feel free to contact either myself or Jon Evans of NHDOT, or certainly Jamie Sikora.

Thank you Mike,

Kevin

<<EFH Assessment>>

## EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 08/04)

PROJECT NAME: Walpole-Charlestown DATE: June 2, 2010

PROJECT NO.: X-A000(487), 14747 LOCATION: Walpole and Charlestown, NH

PREPARER: Kevin T. Nyhan

**Step 1. Use the Habitat Conservation Division EFH webpage, Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest (<http://www.nero.noaa.gov/hcd/index2a.htm>). Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. Attach that list to the worksheet because it will be used in later steps. Make a preliminary determination on the need to conduct an EFH Consultation.**

| 1. INITIAL CONSIDERATIONS                                                                                                                                                                                          |     |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| EFH Designations                                                                                                                                                                                                   | Yes | No |
| Is the action located in or adjacent to EFH designated for eggs?                                                                                                                                                   |     | X  |
| Is the action located in or adjacent to EFH designated for larvae?                                                                                                                                                 |     | X  |
| Is the action located in or adjacent to EFH designated for juveniles?                                                                                                                                              | X   |    |
| Is the action located in or adjacent to EFH designated for adults?                                                                                                                                                 | X   |    |
| Is the action located in or adjacent to EFH designated for spawning adults?                                                                                                                                        |     | X  |
| If you answered no to all questions above, then EFH consultation is not required -go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet. |     |    |

**Step 2.** In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Please note that, there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts.

| <b>2. SITE CHARACTERISTICS</b>                                                                                       |                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Characteristics</b>                                                                                          | <b>Description</b>                                                                                                                                                                                                                                                                                                                          |
| Is the site intertidal, sub-tidal, or water column?                                                                  | Water column within backwater of the Connecticut River                                                                                                                                                                                                                                                                                      |
| What are the sediment characteristics?                                                                               | Unconsolidated muck (organic sediments)                                                                                                                                                                                                                                                                                                     |
| Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so what type, size, characteristics? | No.                                                                                                                                                                                                                                                                                                                                         |
| Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the spatial extent.       | Yes. The SAV is throughout Meany's Cove. At the areas of impact, there is approximately 37 acres of SAV.                                                                                                                                                                                                                                    |
| What is typical salinity and temperature regime/range?                                                               | Salinity: N/A fresh water<br>Temperature: 15.5 C – 25.5 C (growing season)                                                                                                                                                                                                                                                                  |
| What is the normal frequency of site disturbance, both natural and man-made?                                         | There is no normal human disturbance along this section of the Connecticut River. The area of disturbance is a backwater area of the Connecticut River. However, this section of river is impounded, approximately 2.6 miles downstream from Meany's Cove.                                                                                  |
| What is the area of proposed impact (work footprint & far afield)?                                                   | Impacts will be incurred within Meany's Cove at three locations totaling 6,400 sf (attached). The filled areas are for shifting of the roadway to minimize impacts to the railroad to the east of the roadway. The roadway was shifted away from the Connecticut River in other locations to minimize work within the channel of the river. |

Step 3. This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

| <b>3. DESCRIPTION OF IMPACTS</b>                                     |          |          |                                                                                                                                                                                                                               |
|----------------------------------------------------------------------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Impacts</b>                                                       | <b>Y</b> | <b>N</b> | <b>Description</b>                                                                                                                                                                                                            |
| <b>Nature and duration of activity(s)</b>                            |          |          | <b>The work will consist of the placement of fill for the roadway within Meany's Cove. The work will be done only one time and will be done during the construction season.</b>                                               |
| <b>Will benthic community be disturbed?</b>                          | X        |          | <b>Yes, to the extent that benthic communities exist at the three locations along NH Route 12 that will be impacted.</b>                                                                                                      |
| <b>Will SAV be impacted?</b>                                         | X        |          | <b>Yes, to the extent that SAV exists at the three locations along NH Route 12 that will be impacted.</b>                                                                                                                     |
| <b>Will sediments be altered and/or sedimentation rates change?</b>  |          | X        | <b>No. It is not expected that sedimentation rates would change or be altered. This area is a backwater area and not subject to the normal flow of the Connecticut River.</b>                                                 |
| <b>Will turbidity increase?</b>                                      |          | X        | <b>No. Work will be completed with the use of construction BMPs to prevent turbidity increases.</b>                                                                                                                           |
| <b>Will water depth change?</b>                                      |          | X        | <b>No. The limited fill should not change water depths any measurable amount.</b>                                                                                                                                             |
| <b>Will contaminants be released into sediments or water column?</b> |          | X        | <b>No. Work will be completed with the use of construction BMPs to prevent contamination.</b>                                                                                                                                 |
| <b>Will tidal flow, currents or wave patterns be altered?</b>        |          | X        | <b>N/A</b>                                                                                                                                                                                                                    |
| <b>Will ambient salinity or temperature regime change?</b>           |          | X        | <b>No. The type and duration of work will not cause temperature or salinity increases. Only a minimal amount of tree clearing, that which is necessary to facilitate construction, will be allowed.</b>                       |
| <b>Will water quality be altered?</b>                                |          | X        | <b>No. Work will be completed with the use of construction BMPs to prevent alterations to water quality. Following construction, it can be expected that water quality would increase since the slope will be stabilized.</b> |

**Step 4.** This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species from the EFH species list (generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage (<http://www.nero.noaa.gov/hcd/list.htm>) should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

| <b>4. EFH ASSESSMENT</b>                                 |          |          |                                                                                                                                                                                                                                                  |
|----------------------------------------------------------|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Functions and Values</b>                              | <b>Y</b> | <b>N</b> | <b>Describe habitat type, species and life stages to be adversely impacted</b>                                                                                                                                                                   |
| <b>Will functions and values of EFH be impacted for:</b> |          |          |                                                                                                                                                                                                                                                  |
| <b>Spawning</b>                                          |          | X        |                                                                                                                                                                                                                                                  |
| <b>Nursery</b>                                           |          | X        |                                                                                                                                                                                                                                                  |
| <b>Forage</b>                                            |          | X        |                                                                                                                                                                                                                                                  |
| <b>Shelter</b>                                           |          | X        |                                                                                                                                                                                                                                                  |
| <b>Will impacts be temporary or permanent?</b>           |          |          | <b>N/A based on impact location within Meany's Cove.</b>                                                                                                                                                                                         |
| <b>Will compensatory mitigation be used?</b>             | X        |          | <b>Mitigation for unavoidable wetland impacts will consist of a payment into the DES Aquatic Resource Mitigation Fund. Funds from this program are competitively awarded to applicants sponsoring restoration and restoration-type projects.</b> |

Step 5. This section provides the Federal agency=s determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

| 5. DETERMINATION OF IMPACT                                                                                                         |   |                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                    | / | Federal Agency=s EFH Determination                                                                                                                                                                                      |
| Overall degree of adverse effects on EFH (not including compensatory mitigation) will be:<br><br>(check the appropriate statement) |   | There is no adverse effect on EFH<br><br>EFH Consultation is not required                                                                                                                                               |
|                                                                                                                                    | X | The adverse effect on EFH is not substantial.<br><br>This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.                        |
|                                                                                                                                    |   | The adverse effect on EFH is substantial.<br><br>This is a request for an expanded EFH consultation. A detailed written EFH assessment will be submitted to NMFS expanding upon the impacts revealed in this worksheet. |

Step 6. Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats. Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

| 6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT             |                                                                                                                                                                                           |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Species known to occur at site (list others that may apply) | Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). |
| alewife                                                     |                                                                                                                                                                                           |
| blueback herring                                            |                                                                                                                                                                                           |
| rainbow smelt                                               |                                                                                                                                                                                           |
| Atlantic sturgeon                                           |                                                                                                                                                                                           |
| Atlantic menhaden                                           |                                                                                                                                                                                           |
| American shad                                               |                                                                                                                                                                                           |
| American eel                                                |                                                                                                                                                                                           |
| American lobster                                            |                                                                                                                                                                                           |
| blue mussels                                                |                                                                                                                                                                                           |
| soft-shell clams                                            |                                                                                                                                                                                           |
| quahog                                                      |                                                                                                                                                                                           |
| Other species:                                              |                                                                                                                                                                                           |
|                                                             |                                                                                                                                                                                           |
|                                                             |                                                                                                                                                                                           |
|                                                             |                                                                                                                                                                                           |

## **Exhibit O**

NH Office of Energy and Planning Memo and Flood  
Insurance Rate Maps (FIRM)



JOHN H. LYNCH  
GOVERNOR

STATE OF NEW HAMPSHIRE

OFFICE OF ENERGY AND PLANNING

57 Regional Drive, Suite 3  
Concord, NH 03301-8519  
Telephone: (603) 271-2155  
Fax: (603) 271-2615

CHH CHH SAE ✓



www.nh.gov/oep

MEMORANDUM

**TO:** Jonathan Evans  
DOT Bureau of Environment

**FROM:** Jennifer Gilbert, Assistant State Coordinator  
National Flood Insurance Program

**DATE:** February 26, 2007

**SUBJECT:** Walpole-Charlestown, 14747, X-A000(487)

I am writing in reference to your letter dated February 15, 2007 regarding the above-referenced project.

I have reviewed and attached the Flood Insurance Rate Maps for the proposed project. It appears that the proposed project runs adjacent to and crosses through Zone AE of the Connecticut River and through a portion of its associated floodway. The Flood Insurance Study for both Cheshire and Sullivan counties can be found at:  
<http://www.granit.sr.unh.edu/dfirms/FIS.html>.

The towns of Walpole and Charlestown are participating communities of the National Flood Insurance Program (NFIP). Therefore, if any development takes place within the special flood hazard area, the towns should be contacted to assure that the proposed project meets the NFIP requirements contained in the towns' floodplain ordinances. Development is defined under NFIP as "any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

Another applicable NFIP regulation contained in a community's floodplain ordinance is language regarding development in a designated regulatory floodway. This language states:

Along watercourses with a designated Regulatory Floodway no encroachments, including fill new construction, substantial improvements, and other development are allowed within the floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed encroachment would not result in any increase in flood levels within the community during the base flood discharge.

OEP is not authorized by the Federal Emergency Management Agency (FEMA) to make final determinations on the impacts of floodplain development. The NH Department of Transportation (DOT) should use its best judgment in determining if further study is necessary. If DOT feels that the proposed construction will have a negligible effect on flooding dynamics then additional coordination with FEMA is likely not necessary.

If you need further assistance, please contact me at 271-2155 or [jennifer.gilbert@nh.gov](mailto:jennifer.gilbert@nh.gov).

Thank you.

# NH GRANIT DATA MAPPER

## Floodplains (DFIRMs): Walpole-Charlestown, 14747 (Map 1)



Location Map



Map Produced:  
June 10, 2010



# NH GRANIT DATA MAPPER

## Floodplains (DFIRMs): Walpole-Charlestown, 14747 (Map 2)



Location Map

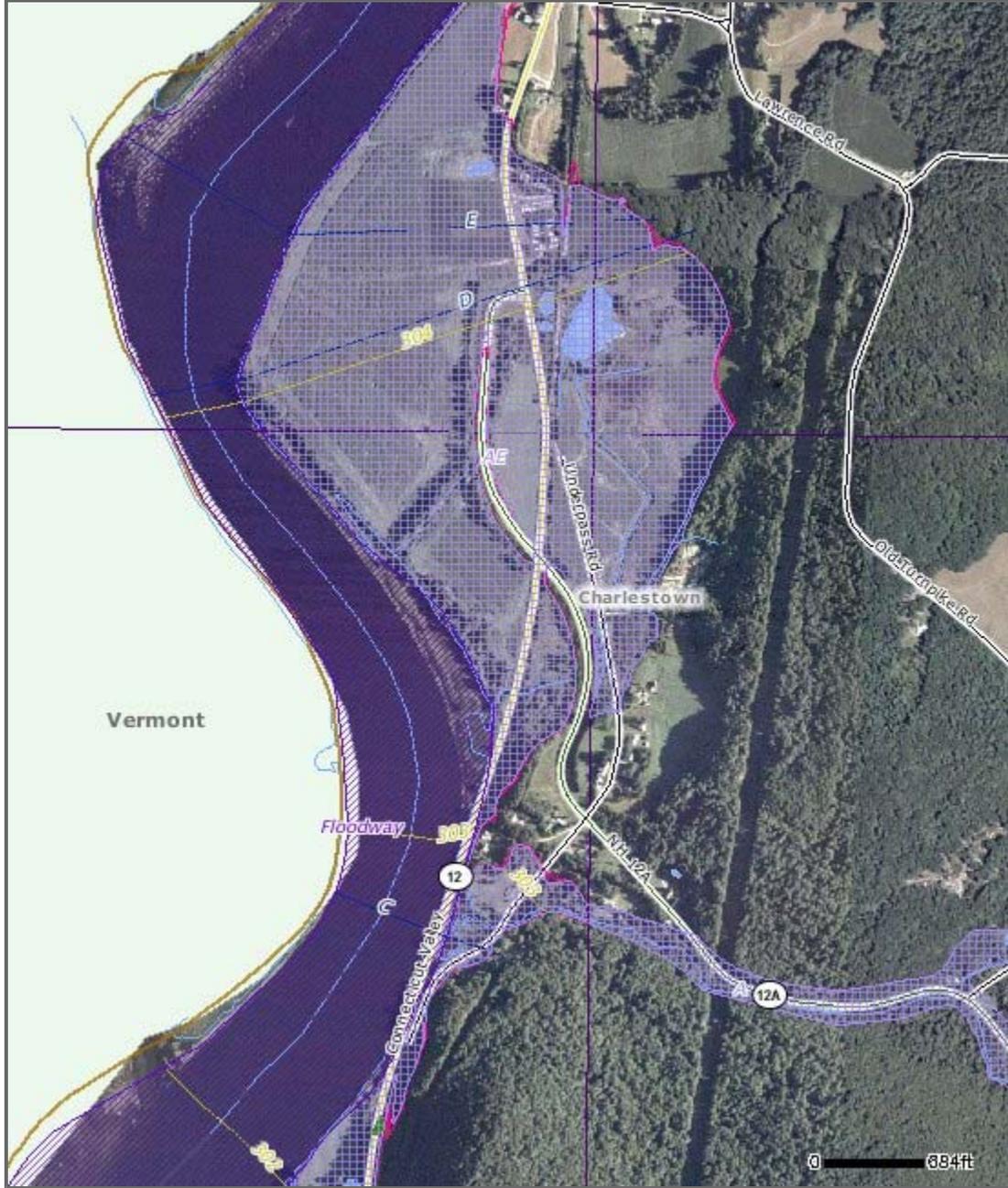


Map Produced:  
June 10, 2010



# NH GRANIT DATA MAPPER

## Floodplains (DFIRMs): Walpole-Charlestown, 14747 (Map 3)



Location Map



Map Produced:  
June 10, 2010



# NH GRANIT DATA MAPPER

## Floodplains (DFIRMs): Walpole-Charlestown, 14747 (Map 3)



### Data Sources

All data are maintained and/or distributed by NH GRANIT. See [www.granit.unh.edu](http://www.granit.unh.edu) for detailed documentation on individual data layers.

Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center, under contract to the NH Office of Energy and Planning, and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

# **Exhibit P**

NHDES Drinking Water Source Protection Program  
Correspondence

## Jonathan Evans

---

**From:** Kevin Nyhan  
**Sent:** Friday, June 04, 2010 12:21 PM  
**To:** Jonathan Evans  
**Subject:** FW: Walpole-Charlestown, X-A000(487), 14747 (NH Route 12 improvements)

-----Original Message-----

**From:** Susca, Paul [mailto:Paul.Susca@des.nh.gov]  
**Sent:** Friday, June 04, 2010 12:07 PM  
**To:** Kevin Nyhan  
**Subject:** FW: Walpole-Charlestown, X-A000(487), 14747 (NH Route 12 improvements)

Kevin, our concerns are that effective erosion and sedimentation measures are in place during and after construction, and that stormwater management be designed to vegetatively treat and then infiltrate the first flush into the ground wherever possible, particularly since you are increasing the amount of impervious area (I assume the shoulder is compacted enough to make it much less pervious than the undisturbed soil. Maximizing the time and distance travelled by the runoff before it reaches surface water would help improve opportunities for vegetative treatment and infiltration. Thanks for the opportunity to comment.

-----Original Message-----

**From:** McKenna, Johnna  
**Sent:** Wednesday, May 26, 2010 11:24 AM  
**To:** Susca, Paul  
**Subject:** FW: Walpole-Charlestown, X-A000(487), 14747 (NH Route 12 improvements)

-----Original Message-----

**From:** Kevin Nyhan [mailto:KNyhan@dot.state.nh.us]  
**Sent:** Wednesday, May 26, 2010 11:19 AM  
**To:** McKenna, Johnna  
**Cc:** Jonathan Evans  
**Subject:** Walpole-Charlestown, X-A000(487), 14747 (NH Route 12 improvements)

Good morning,

The Department of Transportation is planning a project to reconstruct and widen NH 12 beginning in North Walpole at its intersection with Main Street and extending north approximately 2.7 miles to its intersection with NH 12A in Charlestown. The NH 12 reconstruction will widen the roadway by adding four-foot wide shoulders to improve the safety of motor vehicles, bicyclists and pedestrians. The roadway will also be shifted to the east to diminish the hazard that the unstable banks of the Connecticut River pose to NH 12 in the north and south segments of the project area. The road realignment will necessitate the relocation of approximately 2.2 miles of New England Central Railroad track.

The project lies within the Cheshire County Complex Drinking Water Source Protection Area (ID#5765) and over an aquifer with a transmissivity less than 1,000 ft<sup>2</sup>/day.

The Department's Bureau of Environment is in the process of preparing the environmental documentation necessary for this project. Any comments you or your staff can provide relative to potential impacts on or involvement with these water supply areas would be greatly appreciated.

Thank you,

# **Exhibit Q**

Environmental Justice Memo

CHH ✓  
JAE ✓

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
INTER-OFFICE COMMUNICATION

DATE: March 14, 2007  
FROM:  David Chandler, Chief of Labor Compliance  
TO: Jonathan Evans, Environmental Manager  
RE: Environmental Justice Population Analysis, Project: Walpole-Charlestown, 14747, X-A000(487)

The attached analysis and recommendations are provided pursuant to Title VI of the Civil Rights Act of 1964 and Executive Orders 12898 & 13166. The intent of these statutes is to ensure fair and full participation and the equal receipt of benefits under Federally-assisted programs. Your efforts to accommodate and encourage participation by traditionally underserved groups, where significant, will ensure program access and minimize the potential for disproportionate project impacts on protected groups.

The table entitled "EJ Population Analysis" shows the presence of protected groups that might be impacted by the project. Personnel responsible for project planning/design and the coordination of public meetings/hearings should use this analysis to guide their outreach efforts under Title VI and in support of developing a context sensitive solution. Based on the availability of information and where appropriate, we have included specific outreach recommendations to facilitate public comment from underrepresented groups.

If you have questions regarding this analysis, please contact me @ 271-2467.

encls: EJ Population Analysis

cc: Peter Crouch, Bureau of Traffic  
Donald Lyford, Bureau of Highway Design

**EJ Population Analysis for Project: Walpole-Charlestown,  
14747, X-A000(487)**

| STUDY AREA                                                                         | AVG%<br>Elderly<br>Population | AVG %<br>Minority<br>Population | AVG %<br>Low-income<br>Population | AVG%                           |          | AVG%<br>LEP |
|------------------------------------------------------------------------------------|-------------------------------|---------------------------------|-----------------------------------|--------------------------------|----------|-------------|
|                                                                                    |                               |                                 |                                   | Disabled Population<br>Sensory | Physical |             |
| Impacted Area –<br>Sullivan County<br>(US Census Tract<br>#9757, Block<br>Group 3) | 14%                           | 2%                              | 6.1%                              | *9%                            | 7.4%     | 0%          |
| Impacted Area –<br>Cheshire County<br>(US Census Tract<br>#9702, Block<br>Group 1) | 14%                           | 3%                              | *15                               | 3.2%                           | *13.3%   | 0%          |
| Surrounding Area<br>Sullivan County                                                | 14%                           | 2%                              | 6%                                | 4%                             | 8%       | 0%          |
| Surrounding Area<br>Cheshire County                                                | 18%                           | 3%                              | 4.2%                              | 5%                             | 7%       | 0%          |

**REMARKS:**

\* The population percentage identified is meaningfully greater than the surrounding area and constitutes an EJ population. Characteristics of this particular study area indicate that targeted outreach efforts to solicit public participation should be taken.

LEP Definition: Where there is a population of people who speak English as a second language less than well (“not well” or “not at all” as indicated by the U.S. Census data). When a particular LEP language group constitutes 5% of the impacted population, the Department is required to translate public information meeting notices and take appropriate measures to ensure language access. If this requirement exists, the Project Manager should contact the Title VI Coordinator for further assistance.

**Impacted Area:** The impacted area was defined by the population within Sullivan County Census Tract 9757, Block Group 3 and Cheshire County Census Tract 9702, Block Group 1.

**Surrounding Area:** All Block Groups immediately adjacent to the impacted area.

**Special Considerations:** It is apparent that both the **low income and disabled populations** within the impacted area are relatively significant and above statewide averages. It would be appropriate to consider additional outreach efforts to encourage public comment from these groups. In light of a significant disabled population, special consideration should be given to all features that affect pedestrian accessibility. This project constitutes a structural alteration. In accordance with Title II of the Americans with Disabilities Act and the most recent FHWA guidance, the scope of this project might trigger a requirement for other accessibility improvements. If you require further assistance, please contact the Title VI Coordinator or go to: <http://www.access-board.gov/prowac/status.htm>

**Outreach Recommendations:** N/A

# **Exhibit R**

Adverse Effect Memo



**THE STATE OF NEW HAMPSHIRE**  
**DEPARTMENT OF TRANSPORTATION**



**GEORGE N. CAMPBELL, JR.**  
**COMMISSIONER**

**JEFF BRILLHART, P.E.**  
**ASSISTANT COMMISSIONER**

**Walpole-Charlestown**  
**X-A000(487)**  
**14747**  
**Page 1**

**Adverse Effect Memo**

Pursuant to meetings and discussions on May 10, 2007 and March 5, 2009, and for the purpose of compliance with regulations of the National Historic Preservation Act, as amended, and the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the NH Division of Historical Resources (NHDHR) and the NH Division of the Federal Highway Administration (FHWA) have coordinated the identification and evaluation of historic and archaeological properties with plans to reconstruct approximately 2.5 miles of NH Route 12 from Main Street in North Walpole north to NH Route 12A in South Charlestown in the towns of Walpole and Charlestown, New Hampshire. The project has progressed through the Context Sensitive Solutions process to a preferred alternative that includes the following improvements: shifting NH Route 12 to the east to protect the banks of the Connecticut River, necessitating the easterly relocation of approximately 2.2 miles of the New England Central Railroad (Sullivan County Railroad); the addition of four foot shoulders; and drainage improvements.

Based on a review pursuant to 36 CFR 800.4 of the historical and architectural significance of identified resources and the potential significance for archaeological remains in the project area, we agree that the Sullivan County Railroad is eligible for listing in the National Register of Historic Places. We also agree that there are fourteen archaeologically sensitive areas. Sensitive areas impacted by the project will undergo all necessary phases of archaeological investigations.

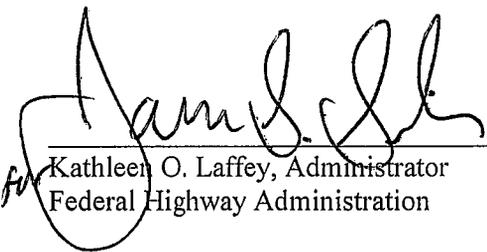
Applying the criteria of effect at 36CFR800.5, we have determined that the project will have an adverse effect on approximately 2.2 miles of the Sullivan County Railroad by its relocation to the east. Mitigation for the impacts will include the following elements:

1. The completion of a New Hampshire Historical Property Documentation Form for the affected portion of the Sullivan County Railroad and its individual resources impacted by the project. The documentation will include large format photographs;
2. The placement of a State Historical Marker along NH Route 12 in the project area that highlights the importance of the Sullivan County Railroad;
3. The relocation of remaining mile markers from the existing railroad bed to the new railroad bed;
4. The reuse of the granite blocks in the existing wall along parcel 25 within the project area; and
5. The completion of all necessary phases of archaeology including the Phase III archaeological investigations or data recovery of National Register eligible archaeological resources.

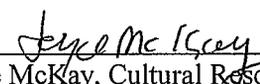
**Walpole-Charlestown**  
**X-A000(487)**  
**14747**  
**Page 2**

In accordance with the Advisory Council's regulations, consultation will continue, as appropriate, as this project proceeds.

Wanda Ray Wilson, DSHPO, for  
Elizabeth Muzzey,  
State Historic Preservation Officer

  
for Kathleen O. Laffey, Administrator  
Federal Highway Administration

Concurred with by the New Hampshire Department of Transportation:

Date: May 6, 2010 By:   
Joyce McKay, Cultural Resources Manager

c.c.: Jamie Sikora, FHWA; Elizabeth Muzzey, NHDHR; and Don Lyford and Jon Evans, NHDOT

# **Exhibit S**

Sullivan County Railroad Historic District Maps

AREA FORM

AREA NAME: SULLIVAN RAILROAD

- 1. Type of Area Form
- Town-wide:
- Historic District:
- Project Area:

Inventory numbers in this area:

NA

Name of area: Sullivan Railroad

3. Location: RR right of way

Setting: river valley, rural, villages

City or town: Walpole, Charlestown, Claremont, Cornish

Acreage: approx. 318 acres

County: Cheshire, Sullivan

Preparer(s): Lisa Mausolf

USGS quadrangle name(s): Bellows Falls, Springfield, Mt. Ascutney

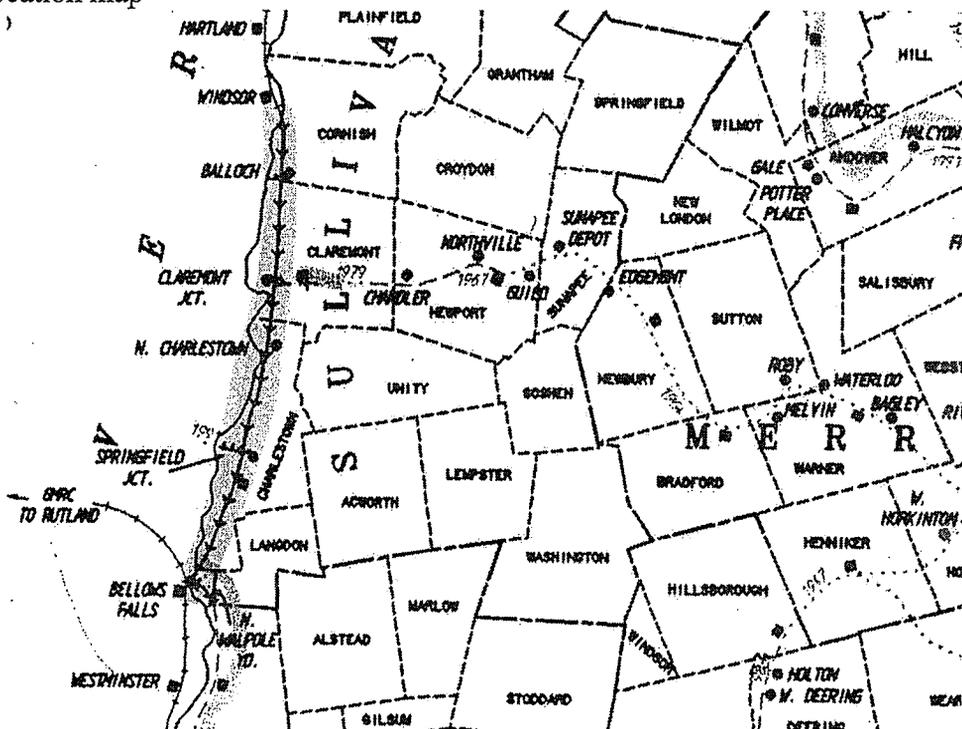
Organization: NHDOT

USGS scale: 1:25000, 1:24000, 1:25000

Date(s) of field survey: Oct. 2007 to March 2008

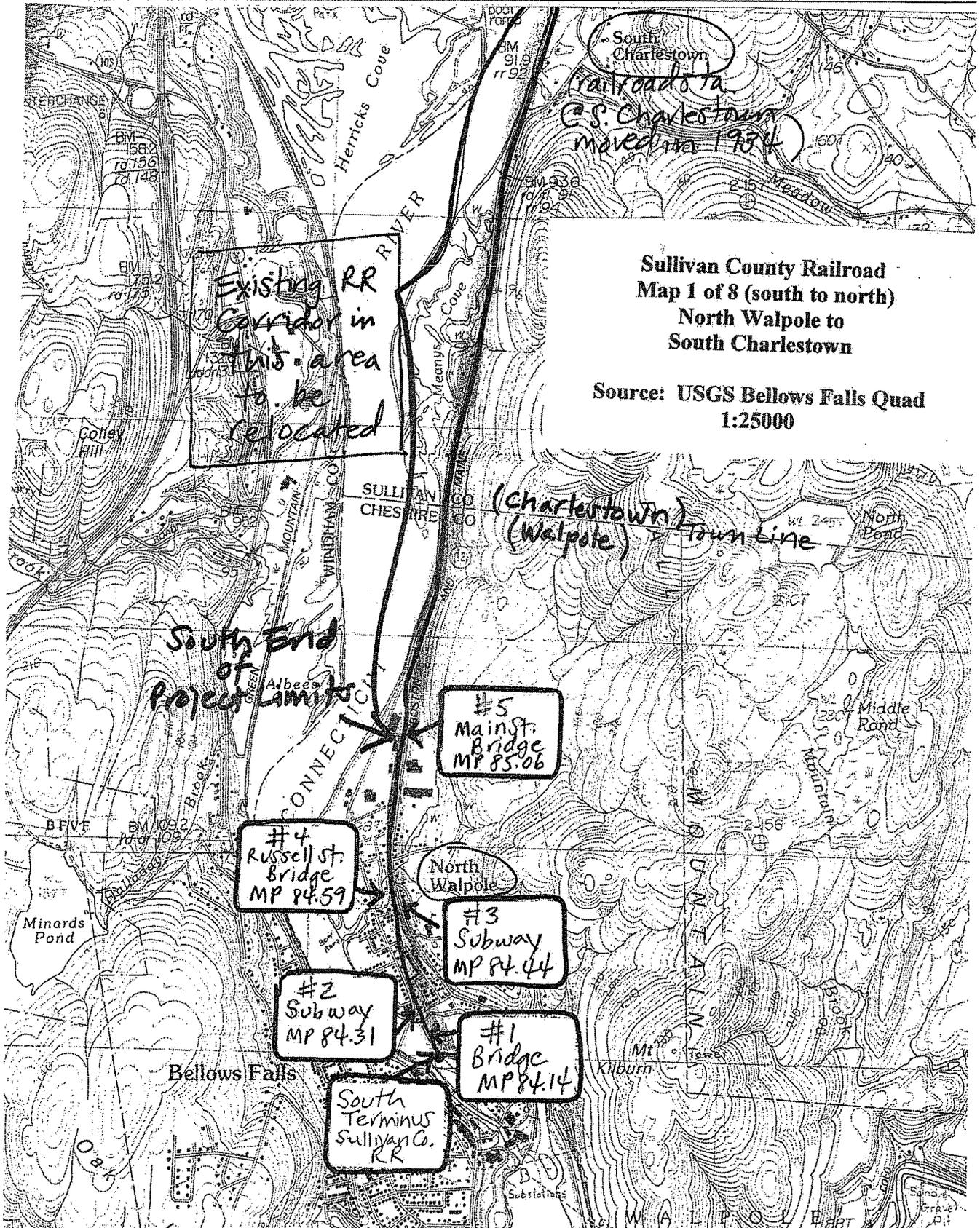
UTM reference: NA

15. Location map



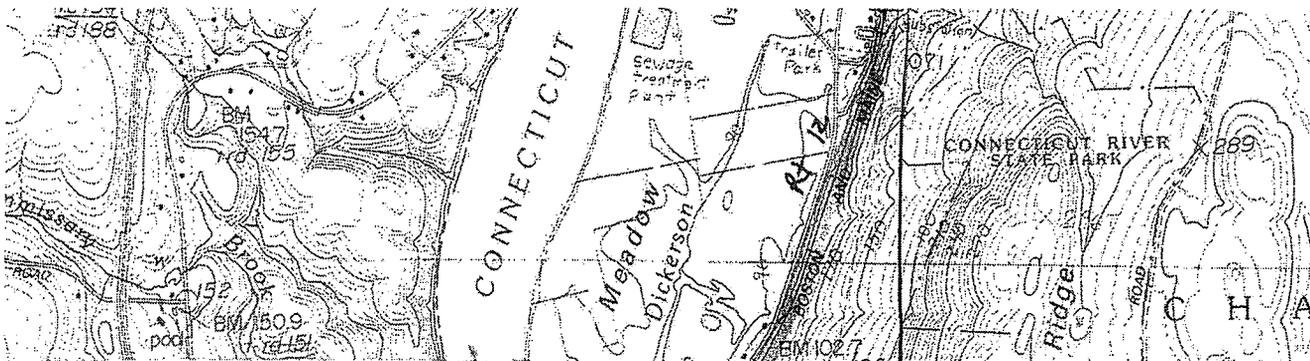
AREA FORM

AREA NAME: SULLIVAN RAILROAD



AREA FORM

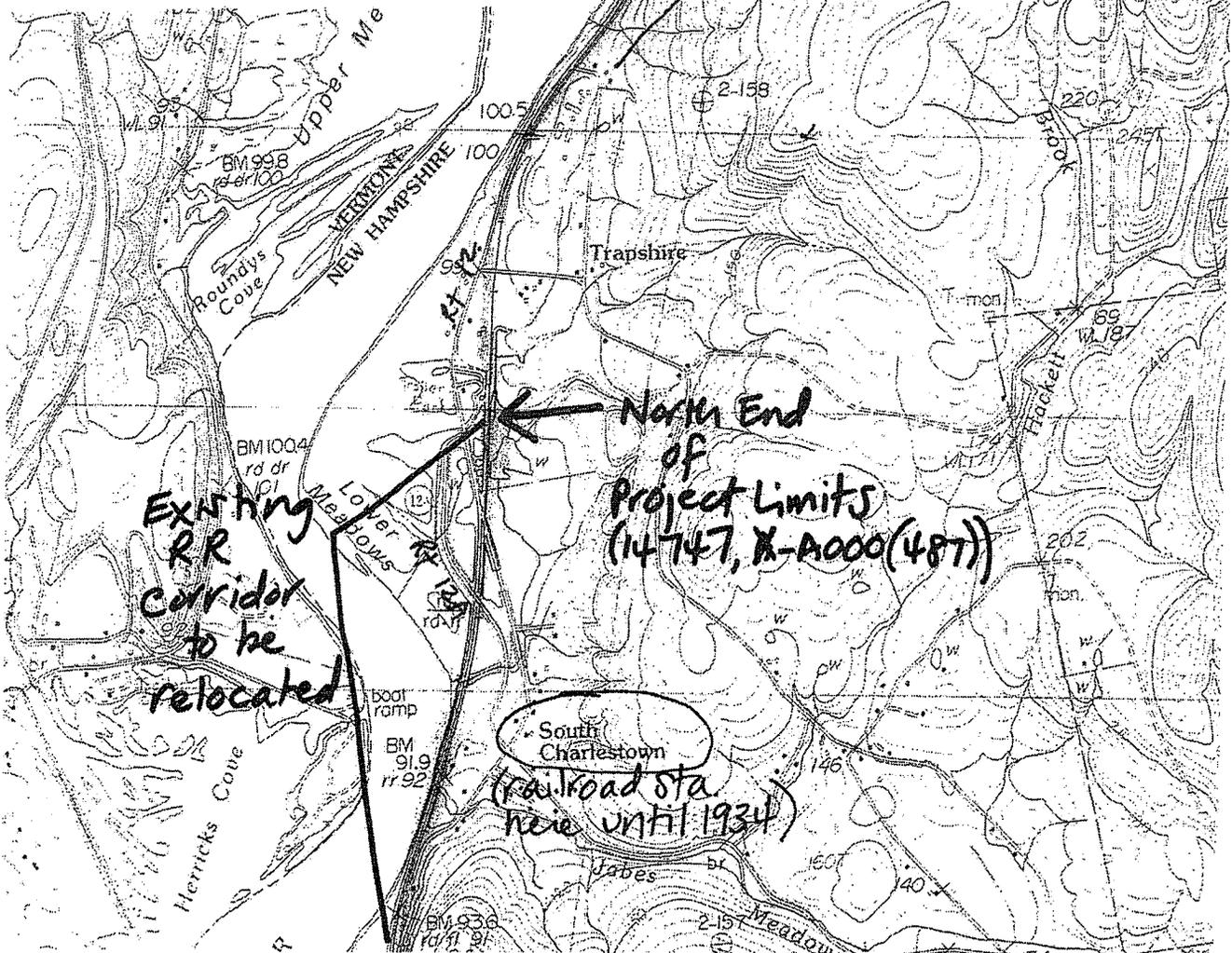
AREA NAME: SULLIVAN RAILROAD



Sullivan County Railroad  
 Map 2 of 8  
 South Charlestown to  
 Charlestown

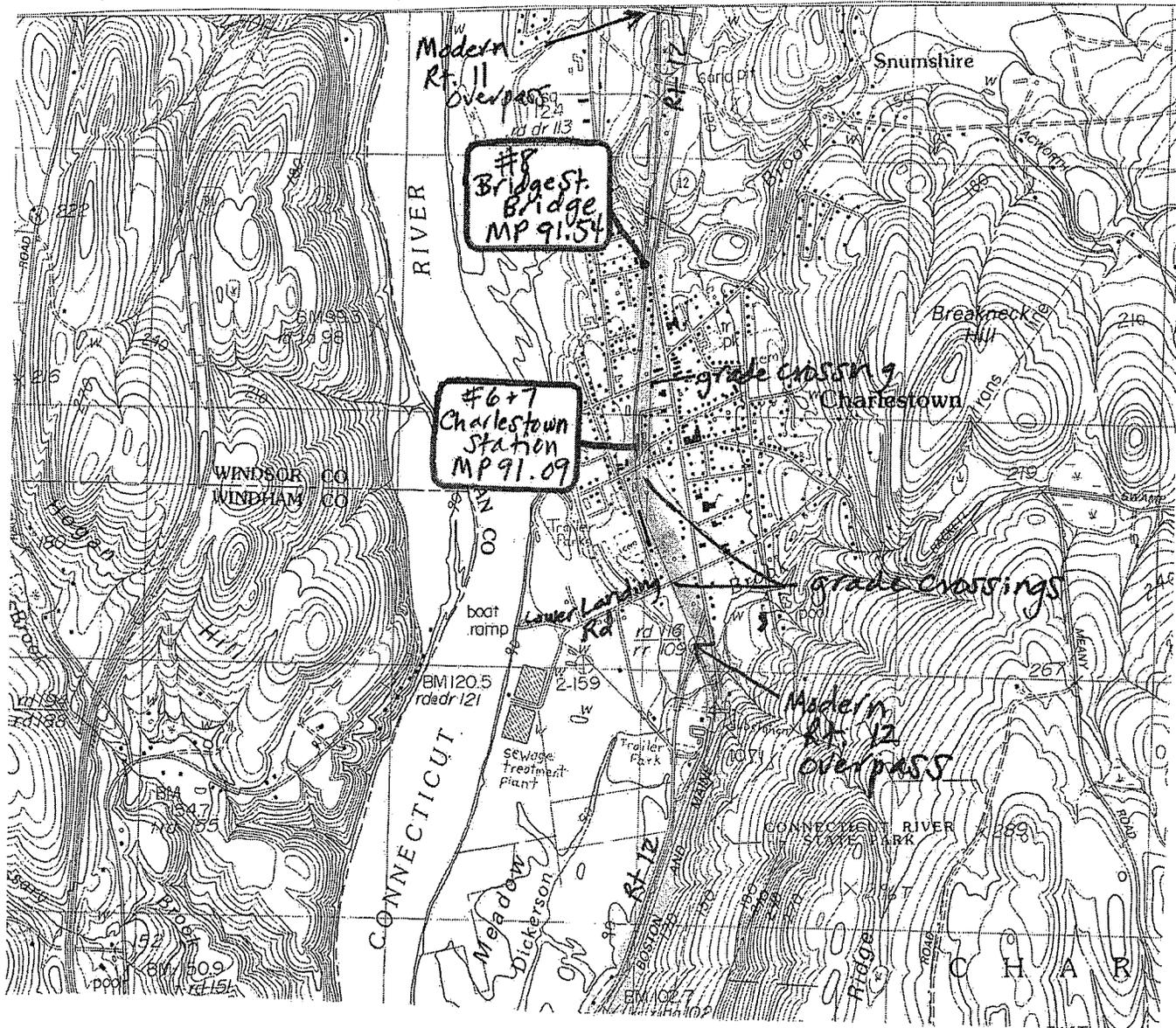
Source: USGS Belows Falls Quad  
 1:25000

multiple  
 examples  
 of  
 stone box  
 culverts



AREA FORM

AREA NAME: SULLIVAN RAILROAD



Sullivan County Railroad  
Map 3 of 8  
Charlestown Village

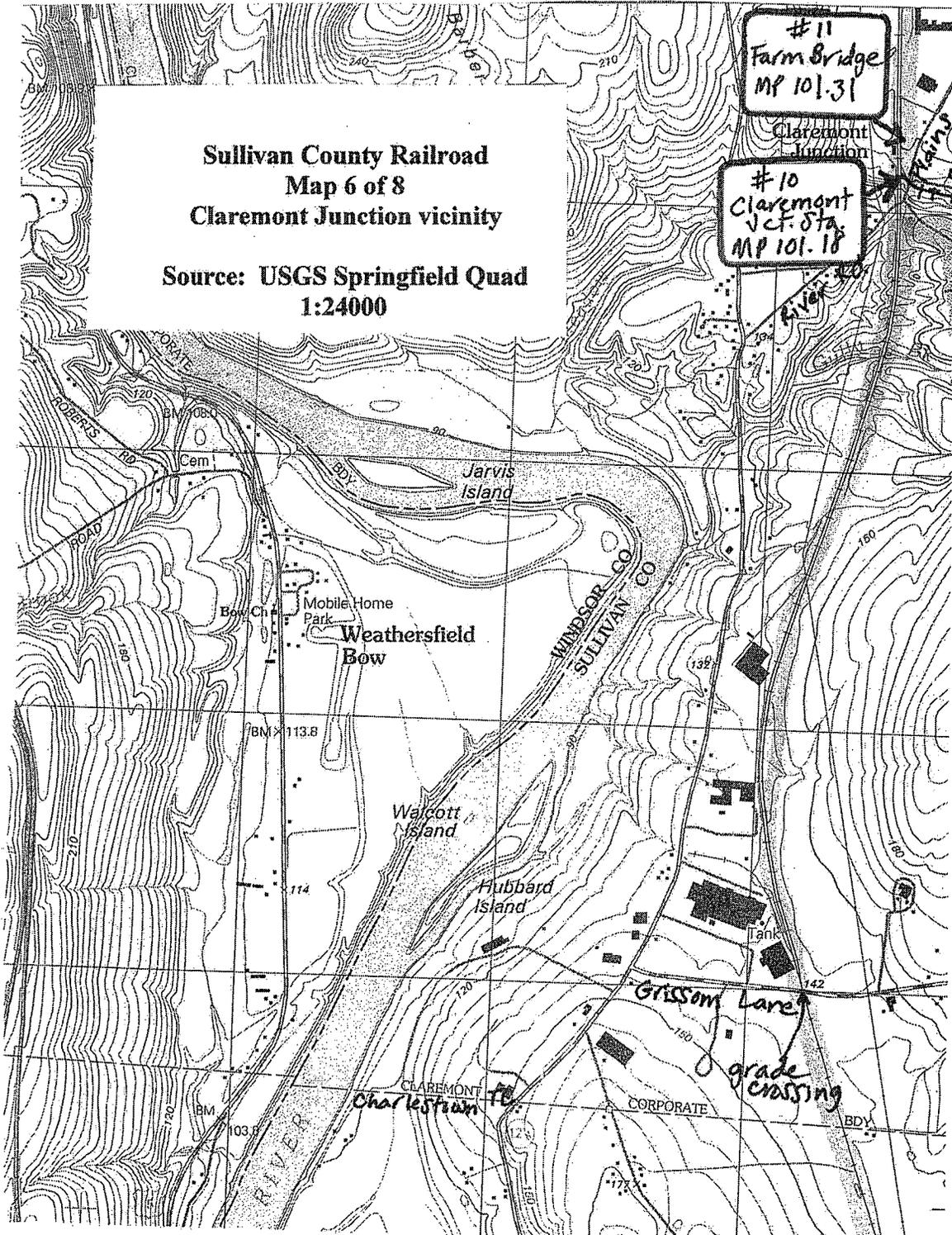
Source: USGS Bellows Falls Quad  
1:25000





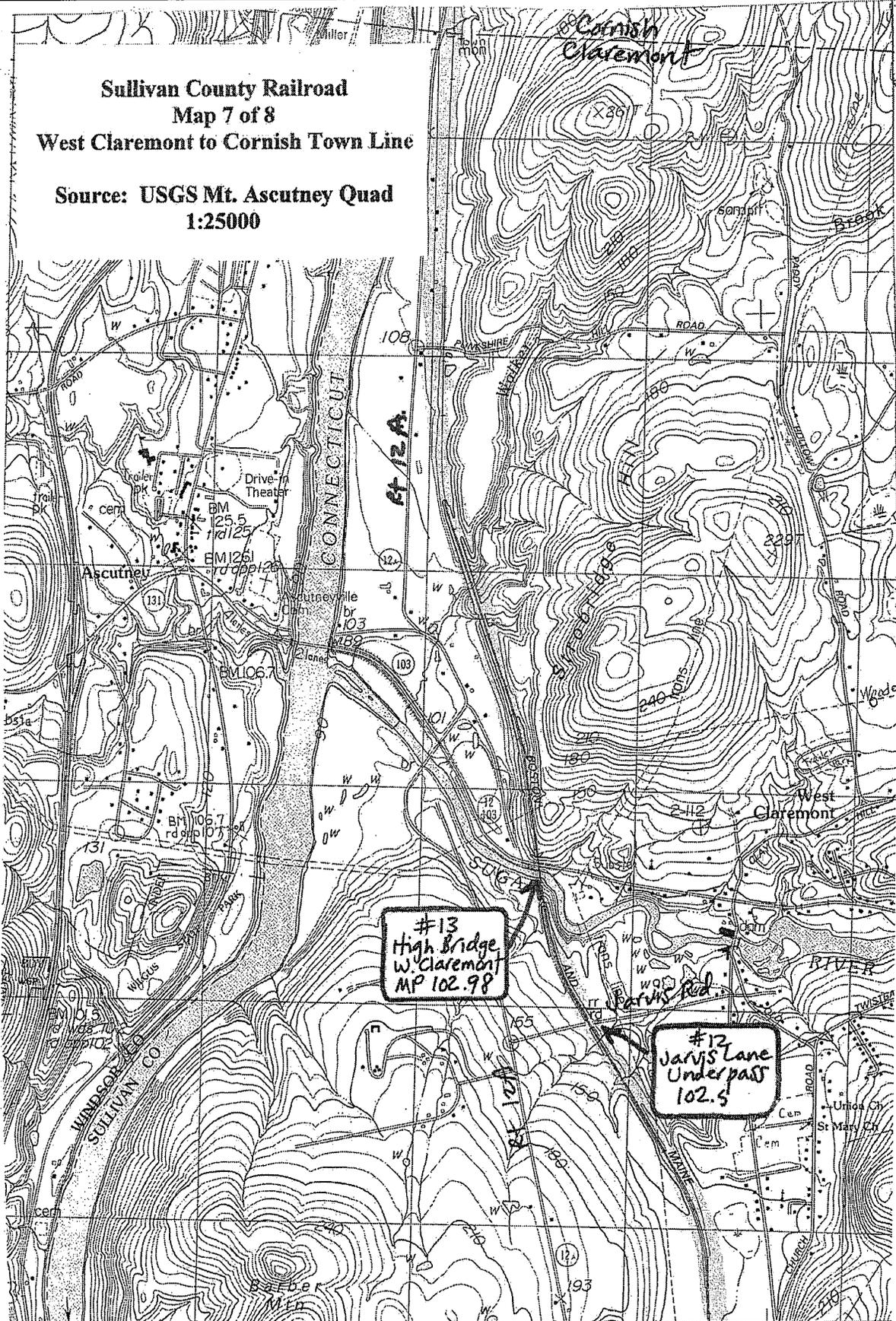
AREA FORM

AREA NAME: SULLIVAN RAILROAD



AREA FORM

AREA NAME: SULLIVAN RAILROAD



AREA FORM

AREA NAME: SULLIVAN RAILROAD



Sullivan County Railroad  
 Map 8 of 8  
 Cornish

Source: USGS Mt. Ascutney Quad  
 1:25000

#14  
 Cornish -  
 Windsor RR  
 Map 8 of 8  
 p. 32

Northern End  
 of Sullivan Creek  
 in N.H.



Former RR  
 Sta. (not extant)

# **Exhibit T**

NH Division of Historical Resources Determination of  
Eligibility (DOE)

JBM



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources 603-271-3483  
19 Pillsbury Street, Concord, NH 03301-3570 603-271-3558  
TDD Access: Relay NH 1-800-735-2964 FAX 603-271-3433  
www.nh.gov/nhdhr preservation@dcr.nh.gov

February 5, 2009

Joyce McKay  
Bureau of Environment  
NH Department of Transportation  
Hazen Drive  
Concord NH 03302-0483

RE: X-A000(487), 14747

Dear Joyce;

Thank you for requesting a determination of National Register eligibility for the area listed below. As requested, the Division of Historical Resources' Determination of Eligibility Committee has reviewed the DHR Area Form prepared by Lisa Mausolf; based on the information available, the DOE Committee's evaluation of National Register eligibility is:

| TOWN/CITY                                 | PROPERTY                                 | DETERMINATION |
|-------------------------------------------|------------------------------------------|---------------|
| Walpole/Charlestown/<br>Claremont/Cornish | Sullivan Rail Road Right of Way, MLT-SRR | Eligible      |

A copy of the DHR evaluation form is attached for your use. The inventory data and the evaluation will also be added to the statewide survey database for historic properties in New Hampshire.

Please call if you have questions.

Sincerely,

Christina St. Louis  
Program Specialist

Enclosure

cc: Elizabeth Muzzey, Director / State Historic Preservation Officer  
Lisa Mausolf  
Jamie Sikora, FHWA

RECEIVED  
BUREAU OF ENVIRONMENT  
FEB 10 2009  
NH DEPARTMENT OF  
TRANSPORTATION



NH Division of Historical Resources  
Determination of Eligibility (DOE)

Date received: December 31, 2008

Inventory #: NA **MLT - SRR**

Date of group review: January 14, 2009

Area: Sullivan Rail Road Right of Way

DHR staff: Peter Michaud

Property Name: Sullivan Railroad

Town/City: Walpole, Charlestown, Claremont, Cornish

Address:

County: Cheshire & Sullivan

Reviewed for: R&C PTI NR SR Survey Other

Agency, if appropriate: DOT

**Individual Properties**

NR SR  
 Eligible  
 Eligible, also in district  
 Eligible, in district  
 Not eligible  
 More information needed  
 Not evaluated for individual eligibility

**Districts**

NR SR  
 Eligible  
 Not eligible  
 More information needed  
 Not evaluated @ district

Integrity: Location Design Setting Materials  
Workmanship Feeling Association

Criteria: A. Event B. Person C. Architecture/Engineering  
D. Archaeology E. Exception

Level: Local State National

**STATEMENT OF SIGNIFICANCE:**

IF THIS PROPERTY IS REVIEWED IN THE FUTURE, ADDITIONAL DOCUMENTATION WILL BE NEEDED.

Agree with Consultant. *that district is eligible for the National and State Registers of Historic Places as a district.*

ENTERED INTO DATABASE

ACREAGE: ~318

PERIOD OF SIGNIFICANCE: 1848-1958

AREA OF SIGNIFICANCE:

BOUNDARY: RR Right of Way

SURVEYOR: Lisa Mausolf

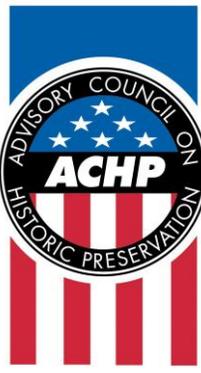
FOLLOW-UP: Notify Consultant

Final DOE approved by:

*Laura Kate Ryan*

# **Exhibit U**

Advisory Council on Historic Preservation Correspondence



*Preserving America's Heritage*

August 2, 2010

Mr. Jamison S. Sikora  
Environmental Programs Manager  
FHWA – New Hampshire Division  
19 Chenell Drive, Suite One  
Concord, NH 03301

Ref: *Proposed New Hampshire Route 12 Improvements Project - X-A000(487), 14747 between Walpole and Charlestown, New Hampshire*

Dear Mr. Sikora:

On July 13, 2010, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the New Hampshire State Historic Preservation Office (SHPO) and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Ms. Najah Duvall-Gabriel at (202) 606-8585, or via e-mail at [ngabriel@achp.gov](mailto:ngabriel@achp.gov).

Sincerely,

LaShavio Johnson  
Historic Preservation Technician  
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004  
Phone: 202-606-8503 • Fax: 202-606-8647 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)

# **Exhibit V**

Memorandum of Agreement Submitted to the ACHP

**Memorandum of Agreement**  
**SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION**  
**PURSUANT TO 36 CFR PART 800.6(a)**

WHEREAS, the NH Division of the Federal Highway Administration (FHWA) has determined that the relocation of NH Route 12 between Main Street in Walpole and NH Route 12A in Charlestown along the Connecticut River in the Towns of Walpole and Charlestown, New Hampshire, which involves the relocation of 2.5 miles of the New England Central Railroad (historically, the Sullivan County Railroad), will have an adverse effect on the Sullivan County Railroad Historic District, which is eligible for the National Register of Historic Places; and,

WHEREAS, the proposed undertaking requires funding from the FHWA; and,

WHEREAS, FHWA has consulted with the New Hampshire State Preservation Officer (NHSPO) pursuant to 36 CFR 800, regulations implementing Section 106 of the National Historical Preservation Act of 1966, as amended [16 U.S.C. 470 (f)]; and,

WHEREAS, the New Hampshire Department of Transportation (NHDOT) has participated in the consultation, has solicited public comment through the public meeting process and consulting party procedures with FHWA as stated in 36 CFR 800(2), and is invited to concur in this Memorandum of Agreement (MOA); and,

WHEREAS, the FHWA has agreed that the NHDOT shall participate in consultation with the NHSPO to find ways to mitigate any potential identified effects on impacted archaeological sites found eligible for the National Register of Historic Places under its standard phased investigations; and

WHEREAS, FHWA through NHDOT has notified the Abenaki Nation as a consulting party about the identified archaeological site in accordance with the protocol established on October 19, 2002, between the Abenaki Nation and the Federal Highway Administration; and

WHEREAS, to the best of our knowledge and belief, no human remains associated or unassociated funerary objects or sacred objects of cultural patrimony as defined in the Native American Graves Protection Act (25 U.S.C. 3001), are expected to be encountered in the archaeological work; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii).

NOW, THEREFORE, FHWA, NHSPO, and the NHDOT agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

**Stipulations**

FHWA will ensure that the following mitigation measures are carried out in consultation with the parties to

the agreement.

#### I. Documentation of the Sullivan County Railroad

Prior to relocation of 2.5 miles of the Sullivan County Railroad, the NHDOT will complete a New Hampshire Historical Property Documentation Form for the affected portion of the railroad. The form will be completed in a district format, which will document each affected resource along the line within the affect area. The documentation narrative will include a general description of the railroad; a description of each affected resource including materials and design and approximate construction date where possible; resource alterations; a contextual history of the development and operation of the railroad, and a summary of its historical significance. The form will include a location map of the line and its individual resources, large format photographs of each resource, a map key, and a photographic description. The specified work is based on HAER standards. This documentation will be completed using the services of a 36 CFR 61-qualified architectural historian as stated under Appendix A. The NHDOT shall ensure all photography and fieldwork are completed and accepted by NHSHPPO prior to any disturbance of the railroad and its setting. The NHSHPPO agrees to review and provide comments on the acceptability of the documentation within forty-five (45) days of receipt of a draft copy of the above-defined documentation. Following NHSHPPO review and approval, copies of the final documentation will be distributed to the NHSHPPO, FHWA, NHDOT, and the Walpole and Charlestown Historical Societies.

#### II. State Historic Marker

The NHDOT will prepare text for and erect a state historic marker that provides background on and highlights the importance of the Sullivan County Railroad to the communities it served. The marker will be located along the relocated NH Route 12 near the railroad line. This text will be completed using the services of a 36 CFR 61-qualified architectural historian as specified in Appendix A. Wording for the marker will be submitted to NHSHPPO for review and comment.

#### III. The Resetting of Mile Marker and Reuse of Stone

The NHDOT will place commitments in the construction document that specifies the careful removal of all affected mile markers, appropriate storage so that their condition is not impaired, and their resetting as close as possible to their original mile point once the Sullivan County Railroad is relocated. The NHDOT will also include in these commitments the careful removal and storage of the granite from the existing wall along parcel 25 within the project area and their reuse at a location to be reviewed with NHSHPPO.

#### IV. Archaeological Investigations

The NHDOT will attempt to design NH Route 12 so that it avoids the Meanys Cove Site (27SU41) in the Town of Charlestown. If the site can be avoided, then it will be protected with construction fencing during the period of construction in that location. The Bureau of Environment will periodically inspect the condition of the site during construction. If the site cannot be avoided, then it will undergo Phase III data recovery, which will be guided by a data recovery plan that is accepted by NHSHPPO and FHWA. The Phase II intensive archaeological investigations identified it as a small, single component site dating to the Late Archaic or Early Woodland period and found it eligible for inclusion in the National Register

of Historic Places under Criterion D for the information it contains.

All field efforts will be completed before construction occurs in that area. All appropriate consultation with Native American groups that are identified by FHWA shall be undertaken.

In accordance with 36 CFR 800, the FHWA acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation's "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," and other mitigation procedures published in the Federal Register on May 18, 1999. Additionally, under the MOA, NHDOT and NHSHPPO agree that recovery of significant information from affected significant archaeological sites will be done in accordance with published guidance.

If human remains and grave-associated artifacts are discovered while carrying out the activities pursuant to this MOA, the FHWA and NHDOT will immediately notify the appropriate authorities, as prescribed by New Hampshire Statutes, and the NHSHPPO, to determine an appropriate course of action in accordance with RSA 227-C: 8a-8j and the Council's revised "Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects," adopted by the Council on February 23, 2007, at its quarterly business meeting in Washington, D.C.

#### V. Previously Unidentified Historic Properties

The NHDOT will ensure that if additional previously unidentified architectural and / or archaeological properties are discovered or known properties are affected in an unanticipated manner, which may be affected by the undertaking, it will notify FHWA and the NHSHPPO. FHWA and the NHSHPPO will apply the criteria of eligibility and consult pursuant to 36 CFR 800.13.

FHWA shall also ensure that the following terms and conditions are implemented:

#### I. Dispute Resolution

Should the NHSHPPO or other party object within forty-five (45) days to any plans or specifications provided for review or action proposed pursuant to this agreement, FHWA shall consult with the objecting party to resolve the objection. If FHWA determines that the objection cannot be resolved, FHWA shall request the views of the Council. Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR Part 800.6(c)(2) with reference only to the subject of the dispute; FHWA's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

#### II. Termination of Agreement

If any signatory determines that the terms of the MOA cannot be executed, the signatories shall consult to seek amendment of the agreement. If the agreement is not amended, any signatory may terminate the agreement. If the terms of this agreement have not been implemented by December 31, 2020, this agreement shall be considered null and void. In such event, the agency shall notify the parties to this agreement, and if it chooses to continue with the undertakings, shall reinstate review of the undertaking in accordance with 36 CFR 800.

III. Amendment

Any party to this agreement may propose to the agency that the agreement be amended, whereupon the agency will consult with the other parties to this agreement to consider the amendment. 36 CFR 800.6 (c)(1) shall govern the execution of this amendment. An amendment shall be executed when it has been signed by all of the signatories to this MOA.

Execution of this MOA by FHWA, NESHPO, and the NHDOT, its subsequent filing with the Council, and implementation of its terms are evidence that FHWA has afforded the Council an opportunity to comment on this project, and that FHWA has taken into account the effects of the undertaking on historic properties.

**FEDERAL HIGHWAY ADMINISTRATION**

By:  Date: 4/14/2011  
 Division Administrator

**NEW HAMPSHIRE STATE HISTORIC PRESERVATION OFFICE**

By:  DSHPO Date: 3/23/2011  
NH State Historic Preservation Officer

**NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (as a concurring party)**

By:  Date: 3/20/11  
Director of Project Development

# **Exhibit W**

United States Department of the Interior Correspondence

JSS

14747 FILE



United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240



9043.1  
PEP/NRM

SEP 22 2010

ER 10/691

Mr. Jamison Sikora  
Environmental Program Manager  
New Hampshire Division  
Federal Highway Administration  
19 Chenell Drive, Suite One  
Concord, New Hampshire 03301

Dear Mr. Sikora:

The Department of the Interior (Department) has reviewed the Draft Environmental Assessment and Section 4(f) Evaluation to reconstruct and widen **NH Route 12 between the Towns of Walpole and Charlestown; Cheshire and Sullivan Counties, New Hampshire**. We offer the following comments on this project for your consideration.

**Section 4(f) Comments**

The Department concurs that there is no prudent and feasible alternative to the proposed use of Section 4(f) resources which consist of the New England Central Railroad (Sullivan County Railroad). The measures to minimize harm to historic resources determined eligible for the National Register of Historic Places must be explicitly consistent with the mitigation measures listed in the Adverse Effect Memo and the Memorandum of Agreement that will be developed in consultation with the New Hampshire State Historic Preservation Officer (NH SHPO) and concurred by the Advisory Council on Historic Preservation. We recommend that signed copies of these documents be included in the final documentation of compliance reflecting procedures taken to protect cultural resources.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor  
Director, Office of Environmental  
Policy and Compliance

# **Exhibit X**

Natural Resource Agency Coordination Meeting Minutes

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## Natural Resources Agency Meeting Minutes for:

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| ProjectName         | FederalNumber | StateNumber |
|---------------------|---------------|-------------|
| Walpole-Charlestown | X-A000(487)   | 14747       |

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**4/18/2007**

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**Attendees** Kevin Nyhan, Jon Evans, Mike Pouliot, Carol Niewola, Bill Hauser, Russ Lemire, Cathy Goodmen, Don Lyford, Bill Oldenburg, John Kallfelz, Andy Hall, Mark Hemmerlein, Jim Colburn, Erik Paddleford, Alex Vogt, Bill O'Donnell, Rich Roach, Lori Sommer, Gino Infascelli, Bill Neidermyer, Nick Alexander, Royce Rankin, Lisa Lesperance, John Silva, Paul Davis, Jamie Paine

### Notes

Bill Oldenburg provided an overview of the project. This project involves the reconstruction and associated improvements to a 2.7 mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown. The roadway is located in proximity to the Connecticut River and an active Amtrak Railroad line. The current roadway is narrow and contains little to no shoulders. Several sections of the roadway embankments are showing signs of deterioration and in some locations have begun sloughing into the Connecticut River. The proposed project is expected to include a shift away from the river as well as the addition of shoulders and widening of the travel way. In order to shift the roadway away from the River and increase the roadway width, right-of-way will need to be acquired and the railroad will need to be shifted to the east of its existing location. Since this railroad is an active rail line, the new rail line will need to be constructed and operational before the existing line can be removed and construction started on the roadway.

NHDOT is working on developing a stakeholders group to provide input during the context sensitive solutions (CSS) process, which will begin this summer. Don Lyford asked if any of the resource agencies would like to be included as stakeholders during the CSS process. The resource agencies present agreed that they did not need to be included in the committee but would like notification of the meetings as well as regular updates at the Natural Resource Agency Coordination meetings throughout the processes. B. Oldenburg added that the hope was that the Connecticut River Joint Commissions would participate as a stakeholder during the CSS process.

Jon Evans indicated that in addition to the river and its associated backwaters, there are several additional areas of wetlands located mainly at the northern end of the project near the NH Route 12A intersection. Once impacts to these and any other wetland areas are known they will be brought back to the resource agencies for review. Additionally, there is some farmland property in this area. Hazardous materials and contamination issues have not yet been evaluated; however there did not appear to be any visual signs of contamination.

B. Oldenburg also noted that there are approximately 6 properties located along the corridor as well as a small car-top boat launch area.

Rich Roach asked if the CSS meetings would be held in the Walpole, Charlestown area. B. Oldenburg responded in the affirmative.

**8/20/2008**

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**Attendees** NHDOT: Alex Vogt, Bob Landry, C.R. Willeke, Carol Niewola, Cathy Goodmen, Dave Smith, Denis Boisvert, Don Lyford, Jim Kirouac, Jon Evans, Joyce McKay, Michelle Marshall, Mike Dugas, Tom Jameson, Trent Zanes. Federal Highway Administration: Leigh Levine. NHDES: Arlene Allen, Gino Infascelli, Lori Sommer, Steve Couture. NH Fish and Game: Kim Tuttle. NH Natural Heritage Bureau: Melissa Coppola. NH Division of Historical Resources: Edna Feighner, Elizabeth Muzzey. US Fish and Wildlife Service: Bill Neidermyer. EPA: Mark

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# Natural Resources Agency Meeting Minutes for:

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| ProjectName                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FederalNumber | StateNumber |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| Walpole-Charlestown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | X-A000(487)   | 14747       |
| Kern. Army Corps of Engineers: Rich Roach. City of Rochester: Melodie Esterberg. Upper Valley Lake Sunapee Regional Planning Comm.: Nate Miller. Strafford Regional Planning Comm.: Julie Labranche, Miranda McGowan. Rockingham Planning Comm.: David Walker, Scott Bogle. CHA<br>Robert Faulkner. CT River Joint Commissions: Sharon Francis. Normandeau Assoc.: Al Larson, Ian Broadwater. Gale Assoc.: Armand Dufresne, Colleen Lynch. BEC Inc.: Dan Nitzsche. Nashua Airport Auth.: Royce Rankin. Friends of the Northern Rail Trail: Alex Bernhard. |               |             |

## Notes

Walpole-Charlestown, XA000(487), 14747

This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to a 3 mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to approximately NH Route 12A South in Charlestown. C.R. Willeke began by reviewing the project and giving an update on the project status. This section of NH Route 12 is located between an active rail line to the east and the Connecticut River to the west. The existing roadway has 12-foot travel lanes with no shoulders and substandard guardrail. Several sections of the roadway are also showing signs of instability and in some locations sloughing into the river.

As this project is a CSS project, the project purpose, need and preliminary design are being guided by a Public Advisory Committee (PAC), consisting of local property owners, public officials, members of NHDOT and other stakeholders. The committee has developed the following vision statement for the project:

“The Route 12 corridor will be safe, efficient, attractive, and environmentally sensitive, while adequately serving the needs of the motoring public, bicyclists, pedestrians and commercial traffic including rail service. Route 12 will be a wider road with adequate shoulders, appropriate guardrails, and safe passage for bicyclists and pedestrians, while providing better access and parking to enjoy the river. This project will realistically maximize the limited space available for the various modes of transportation, while preserving and enhancing the scenic qualities of the area for travelers and residents.”

From this vision statement the PAC recently developed the following four conceptual alternatives:

- 1)  Do Nothing – This alternative would not address the current safety and roadway stability concerns.
- 2)  Railroad as a control (avoids impacts to the railroad) – This alternative requires the roadway to be shifted towards and in some cases into the Connecticut River.
- 3)  River as a control (avoid impacts to the river, but requires impacts to the railroad) – This alternative would require a new rail line to be constructed next to the existing railroad in order to maintain rail traffic on this active Amtrak line. The new rail line would require impacts to the steep slope to the east of the current rail line.
- 4)  Road Relocation (relocate NH 12 to the east side of the railroad utilizing the existing NH 12A bridge over NH 12) – This alternative would require impacts to the steep slopes to the east of the railroad as well as potential impacts to several wetlands and possible archaeological sites. Additionally, this alternative may require Route 12 to be shifted onto the existing Main Street in North Walpole in order to tie back in with the existing roadway. Main Street in this area is wider than existing NH –12(Church Street), but is a potential historic district.
- 5)  Elevated double decker viaduct (squeeze road between the railroad and the river) – This alternative would be prohibitively expensive and since the support columns for the upper deck would have to be constructed to either side of the lower roadway, it would have a similar footprint and similar environmental impacts to option 2.

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## Natural Resources Agency Meeting Minutes for:

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| ProjectName         | FederalNumber | StateNumber |
|---------------------|---------------|-------------|
| Walpole-Charlestown | X-A000(487)   | 14747       |

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Rich Roach and Kim Tuttle indicated that it would be their preference to stay away from the river. K. Tuttle also indicated that this area has a large population of Dwarf Wedgemussels and a high potential for Bald Eagle activity.

C. Willeke noted that if the roadway was shifted to the east of the existing railroad tracks, there are still several properties to the west of existing Route 12, to which access would still need to be maintained. In order to maintain this access, a portion of the existing Route 12 may need to remain open to local traffic.

C. Willeke noted that regardless of the alternatives developed at this point in time, the slope stability of NH 12 in the North Walpole area just north of the Len-Tex corporation may require the NHDOT to impact the Connecticut River either proactively or reactively.

Mark Kern asked if it would be possible to eliminate this section of Route 12 and divert traffic onto Interstate 91 or US Route 5 in Vermont. C. Willeke indicated that there are few locations to cross over the Connecticut River in this area and some of these have low clearances, making it difficult for truck traffic. This would also add substantial travel time between North Walpole and Charlestown.

Sharon Francis from the Connecticut River Joint Commissions (CRJC) noted that this section of NH Route 12 is designated as a National Scenic Byway. The scenic nature of this section of the roadway is extremely important to the community who see this project as an opportunity to improve the Scenic Byway. S. Francis also noted that this section of the river is of value to the Silvio O. Conte National Fish and Wildlife Refuge as it contains a large population of Dwarf Wedgemussels. Given the sensitive nature of the CT River in this area, she requested that natural stream channel designs be used for bank stabilization rather than standard riprap designs.

Melissa Coppola indicated that the NH Natural Heritage Bureau Review conducted for this project did not include impacts to the hillside to the east of the railroad. She indicated that should there be anticipated impacts to this area, further coordination with the Heritage Bureau would be necessary.

Beth Muzzy asked what historical and archaeological investigations had been completed to date. Joyce McKay indicated that Lisa Mausolf had completed a survey of the Sullivan County Railroad Corridor. This survey indicated that the railroad corridor is a potentially eligible historic district, but that there were no individually eligible structures within the project area (either on the railroad or adjacent to the roadway). A copy of the District Area Form for the railroad corridor will be submitted to NHDHR as soon as it is available. J. McKay also indicated that a Phase 1A archaeological study had been completed within the project area. This study indicated that there were approximately 14 archaeologically sensitive areas within the project area (both to the east of the railroad and to the west of the existing roadway). Once a preferred alternative has been chosen, a Phase 1B archaeological investigation would be conducted on the affected sites.

This project was previously reviewed on the following date: 4/18/07.

**5/20/2009**

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**Attendees** NHDOT: Bob Landry, Craig Green, Jim Bowles, Jon Evans, Joyce McKay, Keith Cota, Kevin Nyhan, Marc Laurin, Michelle Marshall, Pete Stamnas, Randy Talon, Ron Grandmairson, Tom Cleary, Trent Zanes, Wendy Johnson, Federal Highway Administration: Jamie Sikora. Army Corps of Engineers: Rich Roach. EPA: Mark Kern. US Fish and Wildlife Service: Maria

Thursday, July 29, 2010

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# Natural Resources Agency Meeting Minutes for:

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| ProjectName         | FederalNumber | StateNumber |
|---------------------|---------------|-------------|
| Walpole-Charlestown | X-A000(487)   | 14747       |

Tur. NHDES: Gino Infascelli, Jocelyn Degler, Lori Sommer. NH Fish and Game: Carol Henderson. NH Natural Heritage Bureau: Melissa Coppola. VTrans: Danny Landry. Central NH RPC: Rodrigo Marion. Upper Valley Lake Sunapee RPC: Nate Miller. Strafford MPO: Dan Camara. CT River Joint Commissions: Sharon Francis. Tidewater Env. Planning: Jameson Paine. SEA Consultants Inc.: Wade Brown. EIV Consultants: Mary O’Leary. Clough Harbour Associates: Rob Pinckney. HEB Engineers: Jason Ross. Public Participants: Daniel Giovagnoli, Elaine Dolbec, Jeanne Duffy, Kevin Duffy, Rick Dolbec, W. Giovagnoli.

## Notes

Walpole-Charlestown, X-A000(487), 14747

C.R. Willeke began by reviewing the project and giving an update on the project status. This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown. This section of NH Route 12 is located between an active rail line to the east and the Connecticut River to the west. The existing roadway has 12-foot travel lanes with no shoulders and substandard guardrail. Several sections of the roadway are also showing signs of instability and in some locations sloughing toward the river.

As this project is a CSS project, the project purpose, need and preliminary design are being guided by a Public Advisory Committee (PAC), consisting of local property owners, public officials, members of NHDOT and other stakeholders. The following list of alternatives has been developed by the PAC and were recently presented at a Public Informational Meeting:

- Alternative #1 – Maintain Existing Condition
- Alternative #2 – Hold Railroad as Control and Widen Westerly Toward River
- Alternative #3 – Hold River as Control and Widen Easterly Toward Railroad
- Alternative #4 – Relocate NH 12 easterly to “The Other Side of the Tracks”
  - #4A – Adjacent to Railroad, Similar Profile as RR
  - #4B – Hillside Alternative, More Balanced Cuts and Fills
  - #4C – Hillside with new Bridge over RR near Len-Tex
- Alternative #5 – Online Alternative with Geotechnical Measures

C. Willeke highlighted the advantages and disadvantages to each alternative. Alternatives 2 and 5 would likely require impacts to the Connecticut River but would minimize historical and archaeological impacts. Alternatives 3, 4A, 4B and 4C are anticipated to have fewer impacts to the River but would require more impacts to the historical and archaeological resources. Alternatives 4A and 4B would require NH Route 12 to be relocated from Church Street to Main Street in North Walpole. Preliminary estimates indicate that Alternative 2 would cost approximately \$14 million. Alternatives 3, 4A, 4B and 4C would cost approximately \$20 million each. Alternative 5 would avoid some of the natural and cultural resources however it would be substantially more expensive at an estimated cost of approximately \$23 - \$25 million.

C. Willeke and Jon Evans indicated that when this project and the subsequent alternatives were brought to the public at a Public Informational Meeting (PIM) in late April, the public expressed serious concerns for the alternatives which required moving traffic onto North Main Street (Alternatives 4A and 4B). The majority of the PIM attendees were in support of Alternative 2, which moves the roadway into the River. J. Evans indicated that it was relayed at the PIM that this alternative would likely raise serious concerns with the natural resource agencies.

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# Natural Resources Agency Meeting Minutes for:

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Mark Kern, Rich Roach and Sharon Francis indicated that they had serious concerns with Alternative 2 and that it was likely they would not approve this alternative should the Department seek permits in its current form.

Maria Tur asked if a combination of several alternatives would be possible. C. Willeke indicated that a combination of several of the alternatives would likely be the next step.

J. Evans asked if the agencies would entertain river impacts if an alternative were developed which minimized impacts to and balanced the natural, cultural and social impacts as much as feasibly possible. It was agreed by those present that minimized river impacts could be preliminarily pursued as long as further consultation was sought. J. Evans indicated that the project is still in the preliminary design phase and that the Department would continue to seek input from the resource agencies.

This project was previously reviewed on the following dates: 4/18/2007 & 8/20/2008.

**10/29/2009**

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**Attendees** NHDOT: Alex Vogt, Bob Landry, C.R. Willeke, Cathy Goodmen, Christine Perron, Craig Green, Dave Smith, Don Lyford, Erin Bourgoine, Jon Evans, Kevin Nyhan, Kirk Mudgett, Marc Laurin, Matt Urban, Michelle Marshall, Mike Dugas, Pete Salo, Pete Stamnas, Ron Grandmaison, Wendy Johnson. Federal Highway Administration: Jamie Sikora. EPA: Mark Kern. NHDES: Andy Chapman, Lori Sommer. NH Fish and Game: Carol Henderson. NH Natural Heritage Bureau: Melissa Coppola. Southern NH Planning Commission: Tim White. City of Claremont: Bruce Temple. CLD: Daniel Hudson. VHB: Frank Koczalka, Pete Walker. CHA: Robert Faulkner. Manchester – Boston Regional Airport: Richard Fixler. Public Participants: Elaine Dolbec, Jeanne Duffy, David Giovagnoli, Kevin Duffy, Gerald Giovagnoli, Jeff Lewis, (Illegible participant).

## Notes

Walpole-Charlestown, X-A000(487), 14747

This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to a 2.7-mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown.

C.R. Willeke and Jon Evans indicated that the Public Advisory Committee (PAC) recently chose a preferred alternative. This alternative is known as alternative 3-2-3. C. Willeke indicated that given the length of the project and the various constraints located along the corridor, the project area was broken into three sections. Option 3-2-3 is a blend of two of the alternatives, which were examined during the CSS process (alternatives 2 and 3). He indicated that this alternative involves moving the railroad and roadway to the east away from the river in the southern and northern sections and slightly shifting the roadway to the west in the middle section.

C. Willeke explained that the greatest constraint in the southern section was the Connecticut River and as a result the railroad would be shifted towards a moderately steep slope to the east, and then the roadway would be shifted accordingly. In the middle section, the hillside to the east becomes much steeper and as a result the roadway would be widened to the west. This would require impacts to several wetlands associated with Meany's Cove, but would avoid substantial cuts into the hillside of Fall Mountain. In the northern section, the railroad will be shifted to the east to allow the roadway to be widened to the east. This would avoid impacts to the Connecticut River but would require impacts to a wetland to the east of the railroad in the Jabes Meadow

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## Natural Resources Agency Meeting Minutes for:

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Brook area. J. Evans noted that while this alternative largely avoids impacts to the Connecticut River itself, it does impact several backwater areas. In addition, stability issues along the existing banks will need to be further evaluated by NHDOT geotechnical engineers to determine the magnitude of any long term stability issues. Exact slope treatments for wetland impact areas and potential slope stability areas are have yet to be determined.

Jamie Sikora asked if the existing pavement would be removed in areas where the roadway was moved substantially enough to allow for such a possibility. C. Willeke indicated that this had yet to be determined as one of the commitments made to the PAC committee was to investigate Connecticut River public access opportunities such as additional parking.

Lori Sommer asked what the existing drainage features are. C. Willeke indicated that the Department has surveyed the existing drainage, however the proposed drainage and any associated wetland impacts have not yet been determined. J. Evans indicated that there are multiple intermittent streams which come off the existing hillside and pass beneath the railroad and roadway towards the River. He also indicated that the wetlands have been delineated however the wetland impacts had not yet been determined and that the Department would return once these totals had been developed.

Mark Kern asked how much the proposed alternative would cost in comparison to the other alternatives. C. Willeke indicated that this alternative is in the \$15-\$20 million range which is similar to most of the other alternatives with the exception of the retaining wall option which would have cost closer to approximately \$25 million.

Melissa Coppola noted that the NH Natural Heritage Bureau search (NHB File ID: NHB09-2261, dated 10/26/2009) indicated the potential presence of Dwarf Wedge Mussels (*alasmidonta heterodon*), American Cancerroot (*conopholis americana*), Fern-leaved False Foxglove (*aureolaria pedicularia* var. *intercedens*), Water Stargrass (*heteranthera dubia*). This search also indicated the potential presence of two exemplary natural communities; Circumneutral rocky ridge and Rich Appalachian oak rocky woods. Carol Henderson indicated that further coordination with NH Fish & Game and the US Fish & Wildlife Service (Sussi von Oettingen) would be necessary to evaluate potential impacts to the Dwarf Wedge Mussels within the Connecticut River and any associated wetlands. J. Evans indicated that once the potential wetland impact areas have been identified the Department would consult with both agencies to identify the potential Dwarf Wedge Mussel impacts and the possible need for a mussel study. M. Coppola indicated that since the proposed alternative stays relatively close to the footprint of the existing roadway/railway corridor and avoids extensive impacts to the slopes of Fall Mountain, it does not appear that the proposed project will impact any of the other rare species or exemplary natural communities which were identified within the previously mentioned NH Natural Heritage Bureau search.

M. Kern indicated that he felt given the constraints of the project location, the proposed alternative appeared to be a reasonable compromise.

J. Evans indicated that once the drainage details, slope impacts, wetland impacts and other preliminary design details have been fine tuned, the Department would return to provide a project update.

(NHB # 09-2261). This project was previously reviewed on the following dates: 4/18/2007, 8/20/2008 & 5/20/2009.

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# Natural Resources Agency Meeting Minutes for:

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| ProjectName         | FederalNumber | StateNumber |
|---------------------|---------------|-------------|
| Walpole-Charlestown | X-A000(487)   | 14747       |

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**4/21/2010**

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**Attendees** NHDOT: C.R. Willeke, Christine Perron, Don Lyford, Jim Bowles, Jon Evans, Kevin Nyhan, Larry Keniston, Michelle Marshall, Randy Talon. Army Corps of Engineers: Rich Roach. EPA: Mark Kern. NHDES: Gino Infascelli, Laura Weit-Marcum, Lori Sommer. NH Fish and Game: Carol Henderson. NH DRED: Bill Gegas. Town of New London: Jessie Levine, Richard Lee. City of Rochester: Rich Healey. CT River Joint Commissions: Sharon Francis. Safford Regional Planning Commission: Dan Camara. CHA: Kevin Thatcher.

## Notes

Walpole-Charlestown, X-A000(487), 14747

C.R. Willeke began by giving a brief review of the project. This project involves the reconstruction of approximately 2.7 miles of NH Route 12 between Main Street in North Walpole and NH Route 12A in Charlestown. The existing roadway is narrow, with 12-foot wide travel lanes and no shoulders. Several locations throughout the length of the project are showing signs of structural instability. The proposed project involves widening and shifting the roadway and railway to accommodate for two 12-foot travel lanes and two 4 foot shoulders. The preferred alternative involves shifting the roadway to the east, away from the Connecticut River, in the northern and southern segments and a slight shift to the west in the middle segment. This project will require the relocation of the existing New England Central Railroad line adjacent to the northern and southern segments.

C. Willeke indicated that the entire project is expected to require approximately one acre (43,607 s.f.) of wetland impacts. Most of these impacts are associated with small intermittent streams which pass beneath the roadway/railway corridor, providing drainage off of Fall Mountain. He indicated that two "backwater" areas of the Connecticut River will be impacted by the proposed roadway/railway widening; the Jabes Meadow Brook wetland and Meany's Cove.

The road and railroad will be shifted slightly to the east in the area of the Jabes Meadow Brook wetland requiring approximately 4,958 s.f. of wetland impacts. This wetland is classified as palustrine, open water and is connected to the Connecticut River by a 66-inch, concrete box culvert beneath the roadway/railway corridor. This wetland is approximately 5-6 feet deep and the shoreline/bank of the impacted area consists mostly of rip-rap with some scattered vegetation.

The road will be shifted slightly to the west in the Meany's Cove area. This area has two wetlands which will be affected by the project. Both of these wetlands are classified as palustrine, open water. The project is expected to require wetland impacts of approximately 3,617 s.f. to the northern wetland and 2,780 s.f. to the southern wetland. Both wetlands are approximately 3-4 feet deep with a mucky substrate. Meany's Cove is hydraulically connected to the Connecticut River at the southern end of the cove.

Jon Evans indicated that the Department would like to know if the project would require an Individual Army Corps wetland permit or if the project would qualify for coverage under the NH Programmatic General Permit. Rich Roach indicated that he felt the project would likely qualify for PGP coverage however he wanted to know if the EPA or the USF&WS had any objections before he made this determination. Mark Kern indicated that he did not have enough information to say whether or not he had any objections to PGP coverage. He requested a field review be conducted first. J. Evans indicated that he would set one up.

J. Evans noted that the project does require the acquisition of approximately 1-acre of a conservation property

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## Natural Resources Agency Meeting Minutes for:

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| ProjectName         | FederalNumber | StateNumber |
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| Walpole-Charlestown | X-A000(487)   | 14747       |

owned by the Department of Resources and Economic Development. This property was established through the NH Land and Community Heritage Investment Program (LCHIP) and the conservation easement is held by The Nature Conservancy (TNC). This conservation property was established for the purposes of protecting the northeastern bulrush (*scirpus ancistrochaetus*), a federally listed endangered species. J. Evans indicated that coordination with the necessary agencies and organizations on the project's impacts to this property was ongoing.

J. Evans indicated that the project would require wetland mitigation. He noted that coordination with DRED and LCHIP had indicated the presence of a property, approximately 1-acre in size, which is fully contained within the existing DRED/LCHIP property. He indicated that the possibility of placing this property into some form of conservation was something that the Department intends to look into further. With the exception of this property no other mitigation opportunities have been identified. He indicated that during the CSS process, the local conservation commissions and the Connecticut River Joint Commissions were involved in the preliminary design of the project, and to date had not indicated any mitigation opportunities. As a result, J. Evans indicated that the Department anticipates offsetting the necessary wetland impacts with a payment into the Aquatic Resource Mitigation Fund.

M. Kern and R. Roach indicated that they would like to see the Department examine the possibility of using bioengineering when designing the necessary slope treatments. C.R. indicated that the Department would look into these but indicated that they may result in increased wetland impacts.

Sharon Francis indicated that the Connecticut River Joint Commissions (CRJC) has been involved with this project from the very beginning and is in full support of the preferred alternative. She indicated that her recent interactions with the local public have indicated substantial public support for the chosen alternative. She also noted that the CRJC would like to see the Department look into the possibility of providing a small pull-off in the Meany's Cove area to allow parking for fishing, nature viewing or car-top boat launching.

(Project website) (NHB File #: NHB09-2261) This project was previously reviewed on the following dates: 4/18/2007, 8/20/2008, 5/20/2009 & 10/29/2009.

# **Exhibit Y**

Cultural Resource Agency Coordination Meeting Minutes

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## NHDOT Monthly SHPO Meeting Minutes

7/6/2010 1:30:41 PM

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**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 5/10/2007

**Note:** 14747. Participant: Jon Evans and Charles Hood.

J. Evans began by giving an overview of the project. This project involves the reconstruction and associated improvements to a 2.7 mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown. The roadway is located in proximity to the Connecticut River and is an active Amtrak Railroad line. The current roadway is narrow and contains little to no shoulders. Several sections of the roadway embankments are showing signs of deterioration and in some locations have begun sloughing into the Connecticut River. The proposed project is expected to include a shift 8-10' away from the river as well as the addition of four-foot shoulders. B. Oldenburg added that in order to shift the roadway away from the River and increase the roadway width, right-of-way will need to be acquired on the eastern side of the railroad then the railroad will need to be shifted to the east of its existing location. Since this railroad is an active rail line, the new rail line will need to be constructed and operational before the existing line can be removed and construction started on the roadway.

NHDOT is working on developing a stakeholders group to provide input during the context sensitive solutions (CSS) process, which will begin this summer. J. Evans asked if NHDHR would like to be included as stakeholders during the CSS process. It was agreed by those present that NHDHR did not need to be included in the committee but would like notification of the meetings as well as regular updates at the monthly Cultural Resources meetings throughout the processes.

E. Feighner indicated that since the project will require impacts to potentially undisturbed terrace areas to the east of the railroad and on the railroad property, there may need to be some archaeological investigations within the impact areas prior to construction. It was agreed that J. McKay would initially review the area for potential locations of archaeological concern and bring her findings back to the monthly Cultural Resources meeting to determine if further investigation would be needed.

J. Garvin and L. Wilson indicated that they were unsure of the history of the railroad in this area. J. Garvin indicated that he will check into the history of the railroad and if there appears to be some historic potential, a survey would need to be conducted and a district area form prepared. They did not indicate that a survey needed to be conducted of the buildings along the project area. J. McKay indicated that she would perform an initial site investigation of the railroad and review the area for potential locations of archaeological concern and bring her findings back to the monthly Cultural Resources meeting to verify that further investigation would be needed.

**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 3/5/2009

**Note:** Walpole-Charlestown, X-A000(487), 14747. Participant: Jon Evans

This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to NH Route 12 beginning at Main Street in North Walpole and continuing north approximately 3 miles to the NH Route 12A intersection in Charlestown. Jon Evans began by reviewing the project and giving an update on the project status. This section of NH Route 12 is located between an active rail line to the east and the Connecticut River to the west. The existing roadway has 12-foot travel lanes with no shoulders and substandard guardrail. Several sections of the roadway are also showing signs of instability and in some locations are sloughing into the river.

As this project is a CSS project, the project purpose, need and preliminary design are being guided by a Public Advisory Committee (PAC), consisting of local property owners, public officials, railroad personnel, members of NHDOT and other stakeholders.

The PAC recently developed the following conceptual alternatives:

- 1)  "Do Nothing" – This alternative would not address the current safety and roadway stability concerns.
- 2)  "Railroad as a control" (avoids impacts to the railroad) – This alternative requires the roadway to be shifted towards and in some cases into the Connecticut River. J. Evans noted that NHDOT has received strong feedback from the Natural Resource agencies against this alternative because of its potential impacts to the Connecticut River.
- 3)  "River as a control" (avoid impacts to the river, but requires impacts to the railroad) – This alternative would require a new rail line to be constructed next to the existing railroad in order to maintain rail traffic on this active Amtrak line. The new rail line would require impacts to the steep slope to the east of the current rail line.
- 4A) "The other side of the tracks" (relocate NH Route 12 to the east side of the railroad utilizing the existing NH Route 12A bridge over NH Route 12) – This alternative would relocate NH Route 12 to the east of the existing railroad. This alternative does not require the relocation of the existing tracks or existing service road. However, as currently laid out, it does encroach into the existing railroad right-of-way. This alternative would also require impacts to the steep slopes to the east of the railroad as well as potential impacts to several wetlands and potential archaeological sites. Additionally, this alternative may require NH Route 12 to be shifted onto Main Street in North Walpole in order to tie back in with the existing roadway. Main Street in this area is wider than existing NH Route 12 (Church Street), and both are also in an existing or potential historic district.
- 4B) "Hillside" (relocate NH Route 12 onto the hillside to the east of the railroad tracks) – This alternative would relocate NH Route 12 to the east of the existing railroad. The road would be cut into the hillside, farther to the east than alternative 4A to avoid railroad impacts as much as possible. Natural and cultural resource impacts similar to those associated with alternative 4A are anticipated with this alternative.
- 5)  "Retaining wall" (Construct retaining walls and engineered slopes to maintain the existing NH Route 12 and railroad alignments). This alternative would keep NH Route 12 and the railroad in approximately the same location by constructing retaining walls, engineered slopes, etc. to address stability and roadway dimensional concerns.

J. Evans noted that preliminary estimates indicate that all the alternatives are expected to cost approximately the same amount. He also noted that alternatives 2, 3 and 5 would allow the project to be constructed in phases. For fiscal reasons, phased

construction is often desirable to the Department and will likely be a consideration when choosing the preferred alternative.

J. Evans and J. McKay indicated that a District Area Form had been prepared for the railroad and it was determined that the railroad as a whole was individually eligible for the Register. They also indicated that there are several potentially historic stone culverts located beneath the railroad throughout the project area. J. McKay noted that a District Area form had already been performed for the Main St./ Church Street area in North Walpole. A preliminary in-house review of this District indicated that the limits outlined in the form should probably be extended to the north to include more of Main Street, south of the Len-Tex buildings. This extension would stretch west to at least Church Street. It was also indicated that should alternatives 4 and 4A continue to be pursued, additional documentation of this area would be performed to determine the exact limits of the expanded District.

J. Evans and J. McKay indicated that a phase 1A archaeological investigation had been performed a distance of approximately 200 feet to either side of the existing roadway centerline. This investigation identified 14 potentially sensitive areas within the project area, 7 of which are located to the east of the existing railroad tracks. As this investigation was performed prior to the development of the conceptual alternatives, the study area did not include areas potentially impacted by alternative 4A, the "Hillside" option. It was indicated that should alternative 4B continue to be pursued, an additional phase 1A investigation would be performed in this area.

J. Evans indicated that the Department plans to go to a Public Informational Meeting in late April. Once this informational meeting has been held and public feedback obtained the PAC will meet again to choose the preferred alternative(s). Once the preferred alternative(s) have been identified, additional historical documentation and archaeological investigations will be performed to further determine the extent of the potential cultural impacts. Both Beth Muzzy and Edna Feighner indicated that the earlier these additional investigations are performed, the better.

E. Feighner and B. Muzzy acknowledged that this is a difficult project particularly since the potential for natural and cultural resource priority conflicts are high. They expressed particular concerns with alternatives 4A and 4B as they would likely result in increased historical resource impacts to the North Walpole Historic District and there is a high potential for archaeological deposits to the east of the railroad.

E. Feighner asked which Federal Agency would be the lead for this project. J. Evans indicated that it would be FHWA. However, given the natural sensitivity of the CT River, the Army Corps, USF&WS and the EPA will likely play an active roll. E. Feighner noted that the Federal agencies would have to weigh the potential cultural resource impacts along with the natural resource impacts during the permitting and project approval process.

**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 11/12/2009

**Note:** This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to a 2.7-mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown.

C.R. Willeke and Jon Evans indicated that the Public Advisory Committee (PAC) recently chose a preferred alternative. This alternative is known as alternative 3-2-3. C. Willeke indicated that given the length of the project and the various constraints located along the corridor, the project area was broken into three sections. Option 3-2-3 is a blend of two of the alternatives, which were examined during the CSS process (alternatives 2 and 3). He indicated that this alternative involves moving the railroad and roadway to the east away from the river in the southern and northern sections and slightly shifting the roadway to the west in the middle section. Preliminary Design plans of the preferred alternative are available online at:  
[http://www.nh.gov/dot/projects/walpole14747/documents/plan\\_323.pdf](http://www.nh.gov/dot/projects/walpole14747/documents/plan_323.pdf).)

C. Willeke explained that the greatest constraint in the southern section was the Connecticut River, and as a result the railroad would be shifted towards a moderately steep slope to the east, and then the roadway would be shifted accordingly. This may require impacts to several potential archaeologically sensitive areas to the east of the railroad. In the middle section, the hillside to the east becomes much steeper and as a result the roadway would be widened to the west. This would require impacts to several wetlands associated with Meany's Cove, but would avoid substantial cuts into the hillside of Fall Mountain. In the northern section, the railroad will be shifted to the east to allow the roadway to be widened to the east. This would avoid impacts to the Connecticut River but would require moving the railroad to the east and impacting an existing stone block retaining wall, adjacent to the Augustinowicz property (parcel 25). The existing banks of the Connecticut River and other slopes within the project area still need to be further evaluated by NHDOT geotechnical engineers to determine the magnitude of any long term stability issues and any necessary slope treatments.

J. Evans and Joyce McKay indicated that a Phase 1A archaeological assessment and a District Area Form of the Sullivan County Railroad had already been prepared. J. McKay indicated that the District Area Form had included documentation of all known railroad features including the existing drainage features (culverts). J. Evans indicated that the proposed project would impact approximately 7 of the 14 archaeologically sensitive areas identified in the Phase 1A assessment. Edna Feighner indicated that a Phase 1B archaeological assessment would be necessary for any of the previously identified archaeologically sensitive areas that would be impacted in association with the proposed alternative and its drainage swales.

Linda Wilson asked if the granite blocks from the retaining wall adjacent to Parcel 25 could be reused in the construction of the proposed retaining wall. J. Evans and C. Willeke indicated that this might be possible and had been discussed, however further engineering is still needed to determine this possibility.

L. Wilson indicated that she felt the extensive public involvement included in the CSS process had produced a reasonable alternative while still meeting the project purpose and need. She did indicate however, that some of the details of the mitigation package still need to be worked out.

**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 12/3/2009

**Note:** Walpole-Charleston, X-A000(487), 14747  
Participants: Jon Evans, Don Lyford, NHDOT

This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to a 2.7-mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to NH Route 12A in Charlestown.

Jon Evans reviewed what had been presented at the November meeting. He indicated that the Public Advisory Committee (PAC) recently chose a preferred alternative. This alternative is known as alternative 3-2-3, which is a blend of two of the alternatives, which were examined during the CSS process (alternatives 2 and 3). He indicated that this alternative involves moving the railroad and roadway to the east away from the river in the southern and northern sections and slightly shifting the roadway to the west in the middle section.

J. Evans indicated that the Department would like to determine the project's effect on the cultural resources present within the project area. J. McKay and J. Evans indicated that based on previous discussions with NHDHR it was their understanding that the only property which was considered potentially eligible for the National Register was the New England Central Railroad. Joyce McKay and J. Evans noted that during the May 2007 Monthly Cultural Resource Agency Coordination Meeting, a District Area Form of the New England Central Railroad (Sullivan County Railroad) was requested. At this time those properties adjacent to the project area were reviewed with NHDHR, and no additional forms or surveys determining potential eligibility were requested.

J. Evans indicated that no structures except for the New England Central Railroad would be directly impacted as a result of this project. He indicated that several properties, particularly in the Meany's Cove area, would probably be impacted as a result of strip acquisitions and easements. Beth Muzzy indicated that the effect could not be determined until forms for all properties containing potentially eligible structures were prepared. At the December 10, 2009 meeting, pictures of the properties containing structures, which would likely be impacted, were reviewed with NHDHR, and it was determined that four individual property forms would need to be prepared.

**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 3/11/2010

**Note:** Walpole-Charlestown, X-A000(487), 14747  
Participants: Jonathan Evans and Don Lyford, NHDOT

This project involves the reconstruction of approximately 2.7 miles of NH Route 12 between Main Street in North Walpole and NH Route 12A in Charlestown. The preferred alternative involves shifting the roadway to the east along the northern and southern segments and a slight shift to the west in the middle segment. This project will require the relocation of the existing New England Central Railroad line adjacent to the northern and southern segments.

Joyce McKay began by giving a brief overview of the project and an update on the cultural resource investigations. She indicated that the architectural surveys for parcels 4 (LenTex), 15 (Tacy, Drusendahl, Saladyga), 17 (Konesko-Gilbert) and 25 (Augustinowicz) would be completed this spring. She also noted that the phase 1B archaeology for the affected portions of archaeological sites 3, 4, 5, 6, 8 and 10 would also be completed this spring. The remaining archaeologically sensitive areas are not expected to be impacted as a result of the project. The results from each of these investigative efforts will be presented to NHDHR as soon as they are available.

Liz Hengen reviewed her preliminary findings for the four determinations of eligibility. Because of extensive changes, she will complete two front forms. She will complete a full form for the 1930s/1940s dwelling and outbuildings. Although they appear to have integrity, she didn't think the property rose to National Register eligibility as individual properties. Because of the innovative construction of the industrial building, Liz Hengen thought that its footprint might be eligible.

J. McKay indicated that it had already been determined that the New England Central Railroad is eligible for listing on the National Register of Historic Places as an historic district. She indicated that this project included extensive public involvement through the Context Sensitive Solutions process and several public informational meetings and coordination with both the towns and local organizations. As a result the Department feels that there has been adequate public involvement to make an effect determination for the impacts to the railroad. She confirmed that the proposed impacts to the New England Central Railroad Historic District would result in an adverse effect to this resource. Linda Wilson agreed that the project would result in an adverse effect to the New England Central Railroad.

J. McKay indicated that although mitigation for the proposed impacts had been discussed briefly at several previous meetings, the Department would like to confirm the proposed mitigation plan for these impacts. She then highlighted the Department's mitigation proposal for the impacts to the New England Central Railroad. A NH Historic Property Documentation Form with large format photographs, more complete culvert descriptions, and the narrative history and significance statement in the existing determination of eligibility would be prepared for the affected portions of the railroad. This form will include large format photos. Upon completion of the project, the Department will provide and appropriately place a NH Historic Marker highlighting the importance of the railroad. Any remaining existing concrete mile-markers will be appropriately relocated to the east of their existing locations.

J. McKay and Jon Evans indicated that the proposed railroad relocation would require the removal of a granite block retaining wall adjacent to Parcel 25 (Augustinowicz). J. Evans noted that a concrete replacement wall has been proposed at this location and

that the Department is looking into the possibility of facing the wall with the existing granite blocks. He noted that even if this were possible, the new wall will be larger than the existing one and therefore there are not enough blocks to face the entire wall. He indicated that the Department is still looking into other potential uses for the blocks within the project area. He indicated that the blocks would be reused for some purpose within the project area.

J. McKay indicated that public involvement in the project had not resulted in any additional potential mitigation opportunities. L. Wilson agreed that the mitigation proposal was appropriate and that no additional mitigation for the railroad impacts would be necessary.

J. Evans indicated that although the architectural forms for the four previously mentioned properties still need to be prepared, he anticipates that they will at the most result in a No Adverse Effect determination as all impacts to these properties are minor strip easements or acquisitions. He asked Jamie Sikora if a No Adverse Effect Determination were made for the impacts to these properties, if a de minimis Section 4(f) determination could be made for the impacts to these properties even though the property would have an Adverse Effect determination for impacts to the New England Central Railroad. J. Sikora indicated that multiple Section 4(f) determinations could be made for different resources within the same project and that doing so would be preferable, as it would likely simplify the Section 4(f) documentation.

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**Name:** Walpole-Charlestown

**State Number:** 14747

**Federal Number:** X-A000(487)

**Date:** 4/8/2010

**Note:** Walpole-Charlestown, X-A000(487), 14747  
Participants: Jon Evans and Don Lyford and Liz Hengen, Preservation Consultant

This project involves the reconstruction of approximately 2.7 miles of NH Route 12 between Main Street in North Walpole and NH Route 12A in Charlestown. The preferred alternative involves shifting the roadway to the east along the northern and southern segments and a slight shift to the west in the middle segment. This project will require the relocation of the existing New England Central Railroad line adjacent to the northern and southern segments.

Liz Hengen reviewed her preliminary eligibility findings for parcels 4 (LenTex), 15 (Tacy, Drusendahl, Saladyga), 17 (Konesko-Gilbert) and 25 (Augustinowicz). She indicated that extensive modification of the original structures on parcels 15 and 25 would indicate that they are not eligible for the National Register. She suggested that since these would not qualify for National Register eligibility, a form front would only be necessary for both properties/structures. Linda Wilson agreed that form fronts would only be necessary for both properties to determine eligibility.

L. Hengen noted that Parcel 17 included a dwelling constructed in 1942, a silo foundation, a rebuilt barn, and several 1940's-1950s outbuildings, and a 1960s ice cream stand. The farm retained integrity and therefore suggested a full individual inventory form be prepared for this structure. L. Wilson agreed.

L. Hengen indicated that the industrial structure on Parcel 4 had been extensively altered on the exterior however the original structure was still relatively intact within the building. She suggested that the property as a whole would not be eligible for the National Register, but that the footprint of the old building could potentially be eligible. She suggested doing a full individual inventory form for this structure. L. Wilson agreed.

It was agreed that it was unlikely that any of the above noted structures/properties would be eligible for listing on the National Register but that an effect memo could not be signed until a formal Determination of Eligibility is made on the forms and form fronts noted above.

# **Exhibit Z**

Public Informational Meeting Minutes

**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAY DESIGN**

**CONFERENCE REPORT**

**PROJECT:** WALPOLE-CHARLESTOWN 14747  
Reconstruct NH-12 from Main Street in North Walpole north approximately 3 miles to NH 12A in Charlestown

**DATE OF PUBLIC MEETING:** April 29, 2009

**LOCATION OF PUBLIC MEETING:** Fall Mountain Regional High School, Langdon, NH

**ATTENDED BY:** NHDOT and UVLSRPC

Nate Miller, Upper Valley Lake Sunapee RPC  
Donald Lyford – NHDOT Project Manager (PAC Member)  
Michael Dugas – NHDOT Chief of Preliminary Design  
Jon Evans – NHDOT Bureau of Environment (PAC member)  
C.R. Willeke – NHDOT Preliminary Design Engineer  
John Kallfelz – NHDOT Assistant District #4 Engineer

See attached attendance sheet for general public and Project Advisory Committee Members

**SUBJECT:** Public Informational Meeting #1

**NOTES ON PUBLIC MEETING:**

On April 29, 2009 approximately 100 people gathered at the Fall Mountain Regional High School cafeteria in Langdon, NH for a meeting facilitated by the New Hampshire Department of Transportation (NHDOT) and the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC). The intent of the meeting was to review and discuss the ongoing Context Sensitive Solutions (CSS) process and a set of five preliminary design alternatives for the reconstruction of NH 12 from Main Street in North Walpole to the intersection of NH12/NH 12A in South Charlestown. In addition, public comments were solicited to get feedback from the general public relative to the various alternatives.

**Introduction**

Donald Lyford, project manager for the NHDOT, welcomed everyone and introduced the project team and John Kallfelz from District #4. Mr. Lyford then turned the meeting over to Nate Miller from the UVLSRPC.

## **Review of Project CSS Process**

Nate Miller presented a slide show describing the on going Context Sensitive Solutions (CSS) process for the project. Nate gave an overview of how the CSS process started, the limits of the project, and the Project Advisory Committee (PAC) team members. Nate went on to describe the CSS philosophy, the CSS process steps, the development of the project's Problem Statement and Vision Statement, and the screening criteria that were developed to evaluate alternatives. A link to the CSS Presentation can be found below:

[http://www.nh.gov/dot/projects/walpole14747/documents/pim\\_04-29-09.pdf](http://www.nh.gov/dot/projects/walpole14747/documents/pim_04-29-09.pdf)

Nate Miller mentioned that the NHDOT has developed 5 alternatives based on the PAC's previous work during the CSS process. He indicated that the PAC and the NHDOT are looking for comments at the end of tonight's meeting to get feedback from the general public relative to the options presented. He then turned the meeting over to C.R. Willeke to describe the existing conditions, project vision, and preliminary design alternatives.

## **Review of Preliminary Engineering**

C.R. Willeke, preliminary design engineer for the NHDOT, presented a slide show describing the existing conditions and problems associated with NH 12, the proposed vision for the corridor, and five preliminary alternatives that attempt to accomplish the future vision.

He summarized the Problem and Vision Statements as developed by the PAC as follows:

### *NH 12 Currently:*

*Has narrow lanes,  
Does not have adequate shoulders,  
Has inadequate guardrails,  
Is squeezed between the river and the railroad,  
Has aging infrastructure and drainage problems,  
Has a history of riverbank instability  
Hinders travel for vehicles, pedestrians, and bicyclists, and  
Detracts from access to and scenic beauty of the river valley.*

### *NH 12 Should:*

*Be safe, efficient, attractive, and environmentally sensitive,  
Serve the needs of all modes of travel including rail service,  
Be wider with adequate shoulders and guardrail,  
Have safe passage for bicyclists and pedestrians,  
Have improved access to and parking for the river, and  
Preserve and enhance the scenic qualities of the area.*

C.R. Willeke presented slides, typical cross sections, and plans to describe the five preliminary design alternatives. A link to the Preliminary Alternatives Presentation can be found below:

[http://www.nh.gov/dot/projects/walpole14747/documents/4\\_29\\_09\\_pimlr.pdf](http://www.nh.gov/dot/projects/walpole14747/documents/4_29_09_pimlr.pdf)

## Review of Preliminary Design Alternatives

C.R. Willeke highlighted the following alternatives:

- Option #1 – Maintain Existing Condition
- Option #2 – Hold Railroad as Control and Widen Westerly Toward River,
- Option #3 – Hold River as Control and Widen Easterly Toward Railroad,
- Option #4 – Relocate NH 12 easterly to “The Other Side of the Tracks”,
  - #4A – Close to Railroad, Similar Profile as RR,
  - #4B – Hillside Alternative, More Balanced Cuts and Fills,
  - #4C – Hillside with new Bridge over RR near Len-Tex
- Option #5 – Online Alternative with Geotechnical Measures

He explained that Option #1 – Maintain Existing Condition is usually carried through the evaluation process to use as a “book end” when comparing various alternatives. He then went on to highlight elements, benefits, and disadvantages of each option:

### Option #2 – Hold Railroad as Control and Widen Westerly Toward River:

C.R. Willeke reviewed the “Railroad as a Control” alternative, noting that this option would see the railroad location held as is, with road construction happening to the west (toward the Connecticut River). In general a 39 ft offset from the center of the westerly railroad track to the center of the proposed NH 12 reconstruction keeps the new layout as close to the railroad as possible while still providing for 12 ft travel lanes, 4 ft shoulders, and a standard ditch line next to the tracks. In several areas where the railroad track elevation rises above the NH 12 elevation, the 39 ft offset requires retaining walls between the railroad and the proposed northbound ditch line rather than a standard grass slope.

#### Option #2 Highlights:

- Northern limit near NH 12A, Southern Limit near Len-Tex,
- Considerable slope fills into Connecticut River,
- Strong resistance from resource agencies due to river impacts,
- Relatively less business and residential impacts,
- Most likely less archeological impacts than other alternatives,
- Affects the railroad right-of-way but not the track operations,
- Preliminary cost estimate is approximately \$14 million

### Option #3 - Hold River as Control and Widen Easterly Toward Railroad

C.R. Willeke reviewed the “River as a Control” alternative, noting that this alternative would see all the road construction happening to the east with minimal impacts to the Connecticut River. This alternative would require nearly the entire railroad track in the project area to be relocated prior to reconstructing the highway. He explained that this alternative would require significant cuts into the hillside to accommodate the easterly shift of the tracks.

#### Option #3 Highlights:

- Northern Limit near NH 12A, Southern Limit near Len-Tex,
- Utilizes stability of railroad location,

Relocates railroad easterly,  
Allows for phased construction,  
Avoids river impacts, likely has archeological impacts,  
Has right-of-way costs for new railroad corridor,  
Has engineering and constructions costs for new rail,  
Has large cuts into hillside for railroad corridor,  
Has ledge blasting near an active railroad line, and  
Preliminary cost estimate range is \$15 to \$20 million.

#### Option #4A – Relocate NH 12 easterly to “The Other Side of the Tracks”

C.R. Willeke reviewed the “Other Side of the Tracks” alternative, noting that this alternative would utilize the existing NH 12A overpass to relocate NH 12 to the east of the existing railroad. This alternative does not require the relocation of the existing tracks or existing railroad service road; however, it does encroach into the existing railroad right-of-way. He highlighted the alignment and property impacts in the residential area adjacent to NH 12A in South Charlestown. He highlighted areas that would require large cuts into the hillside, and explained that the road would be very close to the Len Tex building and the existing Main Street Underpass that goes beneath the railroad in North Walpole.

##### Option #4A Highlights:

Northern limit extended, southern limit extended down thru Main Street,  
Affects access for residents along NH 12 near Meany’s Cove,  
Avoids river impacts,  
Likely has archeological impacts,  
Has a right-of-way cost for new highway corridor,  
Has alignment similar to railroad,  
Is as close to railroad as possible to minimize cuts slopes into the hillside,  
Is within railroad right-of-way but not track or service road,  
Affects railroad drainage system,  
Has ledge blasting near an active railroad,  
Has unbalanced cuts and fills,  
Affects property and access near Old State Road in South Charlestown,  
Affects Len-Tex building located east of the railroad, and  
Preliminary cost estimate range is \$15 to \$20 million.

#### Option #4B – Hillside Alternative

C.R. Willeke noted that similar to #4A, this alternative would see NH 12 use the existing NH 12A overpass in Charlestown to align NH 12 on the east side of the railroad tracks. This alignment however is shifted further to the east to minimize encroachments into the railroad right-of-way. He highlighted the alignment and property impacts in the residential area adjacent to NH 12A in South Charlestown. He explained that this alignment has large cut areas similar to option #4A, but it also has large fill areas and creates more of a balance between cuts and fills. This alignment also has similar constraints near the Len Tex property and the Main Street underpass as option #4A.

Option #4B Highlights:

Northern limit extended, southern limit extended down thru Main Street,  
Affects access for residents along NH 12 near Meany's Cove,  
Avoids river impacts,  
Likely has archeological impacts,  
Has a right-of-way cost for new highway corridor,  
Uses hillside alignment to minimize railroad right-of-way impacts,  
Affects railroad drainage system,  
Has ledge blasting near an active railroad,  
Has more balanced earthwork but still large cuts and fills,  
Affects property and access near Old State Road in South Charlestown,  
Affects Len-Tex building located east of the railroad, and  
Preliminary cost estimate range is \$15 to \$20 million.

Option #4C – Hillside with new Bridge over RR near Len-Tex

C.R. Willeke explained that this alternative is basically the same as Option #4B except that it avoids the Main Street area in North Walpole by shifting the alignment back onto Church Street (existing NH 12) near the Len Tex property.

Option #4C Highlights:

Includes new bridge over railroad,  
Has skewed bridge,  
Has horizontal curve on bridge,  
Impacts Len-Tex property and parking near Church Street,  
Has retaining wall to avoid Len-Tex building,  
Bridge and retaining wall are near slope stability area of concern,  
Avoids sending NH 12 traffic onto Main Street in North Walpole.

Main Street Existing Conditions and Potential Design Issues

C.R. Willeke explained that because Option #4A and #4B utilize Main Street in North Walpole, the Department has looked at potential issues that would result if traffic were to be increased on this road. C.R. noted that the initial assessment of Main Street is only a preliminary look and that a detailed assessment would need to be done if this option moves forward. He noted the following existing conditions for Main Street:

Wider than Church Street (existing NH 12),  
Access to NH 12 at each end,  
Two underpasses (Russell St and North Main Street),  
Fire and police use the Russell Street underpass to cut response time and avoid trains,  
Russell Street underpass results in deficient geometry (Down Up Road),  
Has historic homes close to the road,  
Has an adjacent school and cross walks,  
Has drainage areas and sidewalk areas in marginal condition

He noted that the intersection with NH 12 at the southern end would likely need to be upgraded with a traffic signal or a roundabout to accommodate the increase in traffic. An upgrade to this intersection would likely result in impacts to the adjacent properties.

C.R. Willeke noted that it is unlikely that the Department could leave the existing intersection of Main Street and the Down Up Road in its existing configuration due to the deficient geometry. Several ideas have been discussed during previous PAC meetings including discontinuing the underpass, narrowing the median between Main Street and the Down Up Road, prohibiting left turns from Russell Street onto Main Street, and lowering the profile of Main Street to allow for an at grade connection with Russell Street. The profile adjustment option would result in substantial property impacts and affect the driveways to properties on the east side of Main Street in the vicinity of the intersection.

C.R. Willeke mentioned that as the alignment transitions from the hillside to Main Street, it impacts the Len Tex property and the Len Tex building to the east of railroad tracks. In addition, the existing Main Street area leading up to the Main Street underpass would need to be filled in and would result in loss of access under the railroad at this location.

#### Option #5 – Online Alternative with Geotechnical Measures

C.R. Willeke discussed an alternative developed by the geotechnical section at the NHDOT. This alternative investigates what additional engineering measures would be required to keep the roadway near its current alignment with minimal impacts to the river and railroad. He explained that the road would be constructed as close to the railroad as possible, widened to provide shoulders, and that retaining walls would be used to prevent roadway slopes from filling in the river. Due to slope stability concerns, the railroad would need to be moved in several locations in the southern portion of the project area. In order to build the retaining walls, the aerial utility poles would require relocation prior to construction. In addition, alternating one-way traffic during construction would be necessary due to the limited width available.

##### Option #5 Highlights:

- Online option with retaining walls along riverside,
- Avoids impacts to river,
- Minimizes impacts to railroad,
- Difficult and expensive to construct,
- Involves alternating one way traffic,
- Preliminary cost estimate range is \$23 to \$25 million.

C.R. Willeke ended his presentation and opened up the meeting for questions and comments.

#### Questions and Comments:

- A North Walpole resident commented that there is virtually no closed drainage system on Main Street north of Mountain View Road, only dry wells and that there are no as built plans for the drainage system.
- A North Walpole resident expressed concerns with the grade on Mountain View Road as it approaches Main Street, the potential impacts to the park on Main Street and the increase in traffic on the Down Up Road associated with Options #4A and #4B.
- A North Walpole resident expressed concerns with the speed of traffic and property impacts associated with Option #4A and #4B. He mentioned that improvements to Main Street would increase speeds on Main Street.
- A gentleman suggested a new Option #1A, which would involve just reducing the speed limit and making minor improvements to the existing roadway.
- A North Walpole resident expressed concerns with potential property impacts on Main Street with Options #4A and #4B.
- A lady expressed concerns with the lifespan of the retaining walls mentioned in Option #5. She was concerned that the expensive walls would need to be replaced again over time due to river erosion.
- A Meany's Cove resident supported shifting the railroad to the east (Option #3)
- A gentleman mentioned the 1996 slope failure and predicted that more failures would occur in the future. He recommended fixing the slopes where they are today.
- A lady asked what happens with the bypassed road?

C.R. Willeke indicated that the normal process is for the Department to reclassify the highway as a Class V town road. He indicated that this process requires cooperation with the town. He mentioned that if the remnant highway is not reclassified as a town road and accesses are affected by the roadway relocation, then the Department would need to provide access for the abutters to the new state highway or purchase the properties.

- A gentleman asked if FEMA could assist in the stabilization of the highway slopes along the Connecticut River and also asked why the State would have trouble getting a permit to fill in the Connecticut River if Home Depot could get a permit to impact the Ash Swamp Brook in Keene?

C.R. Willeke indicated that FEMA normally gets involved with roadway failures similar to the recent flooding events and not roadway improvement projects such as this one, which are intended to avert failures. He indicated that just because the DOT is a state agency they are not guaranteed a wetlands permit. He mentioned that it is often times more difficult for state agencies to get permits than private companies and that the Connecticut River is a particularly valuable resource to the permitting agencies, probably more so than Ash Swamp Brook.

- A gentleman asked what agencies are involved in reviewing impacts for state highway projects?

Jon Evans indicated that numerous Federal, State and Local agencies and organizations have been involved with the project. These include the Federal Highway Administration, US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, NH Department of Environmental Services, NH Fish & Game, NH Office of Energy & Planning, NH Division of Historical Resources, the Connecticut River Joint Commissions, etc. The Department will continue to involve these organizations throughout the design process.

- A lady asked about the cost to the town for this project and the potential impacts to Len-Tex business operations?

C.R. Willeke indicated that this project is on the state's Ten Year Plan and that funding for this project is 80% federal and 20% state. There would be no town funds involved unless other items such as town utilities were relocated or upgraded as part of the project. He went on to mention that if Len Tex or other abutters were impacted by the project that the Department would reimburse them through the right-of-way process for the value of the impact. He indicated that the impact could be as small as a grass strip along someone's frontage to as large as complete property acquisition. He mentioned that the timing of the right-of-way process is such that relocations of businesses can happen prior to highway construction to prevent down time or loss of production.

- Charlie Lennon of Len-Tex indicated that he does not support the new alignments (Options #3 or #4). He also indicated that sooner is better for project completion to avoid any potential slope failures. He mentioned that the Department should lower the speed limit to 30 mph and focus on the immediate problems.
- John LeClair, Charlestown Selectman, indicated that whatever is done the project needs to stabilize the bank. He thinks that the road should be kept where it is today and impact the river if necessary.
- A gentleman mentioned that the changing water levels by the dam operations along the Connecticut River are helping to destabilize the bank. Also he asked how the project would deal with storm water?

C.R. Willeke indicated that storm water along the corridor would need to be collected and treated prior to discharging to the Connecticut River.

- A gentleman mentioned that taking traffic off of Church Street and putting it onto Main Street would hurt the existing Church Street businesses with Options #4A and #4B.
- A North Walpole resident expressed concern with the potential impact of ledge blasting on hillside slopes.

Prior to concluding the meeting, Nate Miller asked for the attendees to indicate either thumbs up (support) or thumbs down (opposition) for each option.

Option #1 received only a couple of thumbs up in support,  
Option #2 received many thumbs up in support,  
Option #3 received many thumbs up in support,  
Option #4A received many thumbs down in opposition,  
Option #4B received many thumbs down in opposition,  
Option #4C received many thumbs down in opposition, and  
Option #5 received a marginal amount of thumbs down in opposition.

Submitted by,

C.R. Willeke, P.E.  
Preliminary Design Engineer

Attachment – 4/29/09 Sign In Sheet

cc: D. Lyford  
M. Dugas  
J. Evans  
W. Cass  
D. Graham – District #4  
W. Lambert – Traffic Bureau  
Nate Miller – UVLSRPC  
J.B. Mack – SWRPC  
PAC Members

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**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAY DESIGN**

**CONFERENCE REPORT**

**PROJECT:** WALPOLE-CHARLESTOWN 14747  
Reconstruct NH-12 from Main Street in North Walpole north approximately 3 miles to NH 12A in South Charlestown

**DATE OF PUBLIC MEETING:** January 13, 2010

**LOCATION OF PUBLIC MEETING:** North Walpole School, North Walpole, NH

**ATTENDED BY:** **NHDOT and UVLSRPC**  
Nate Miller, Upper Valley Lake Sunapee RPC  
Donald Lyford – NHDOT Project Manager (PAC Member)  
Michael Dugas – NHDOT Chief of Preliminary Design  
Jon Evans – NHDOT Bureau of Environment (PAC member)  
C.R. Willeke – NHDOT Preliminary Design Engineer  
Douglas Graham – NHDOT District #4 Principal Engineer

See attached sign-in sheets for general public and project advisory committee members

**SUBJECT:** **Public Informational Meeting #2**

**NOTES ON PUBLIC MEETING:**

On January 13, 2010 approximately 60 people gathered at the North Walpole School for a meeting facilitated by the New Hampshire Department of Transportation (NHDOT) and the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC). The intent of the meeting was to review the project's Context Sensitive Solutions (CSS) process that utilizes a Project Advisory Committee (PAC) to evaluate and screen various alternatives in order to select a "preferred alternative" for roadway reconstruction. After a description of the CSS process and roadway reconstruction options, public comments were solicited to get feedback from the general public on the preferred alternative.

The slideshow presentation used for this January 13, 2010 Public Informational Meeting can be seen at the project's web site via the following link:

<http://www.nh.gov/dot/projects/walpole14747/index.htm>

**Introduction**

Donald Lyford, project manager for the NHDOT, welcomed everyone and introduced the project team and Doug Graham from District #4. Mr. Lyford then turned the meeting over to Nate Miller from the UVLSRPC.

**Review of Project Development Process**

Nate Miller began the slide show presentation describing the Context Sensitive Solutions (CSS) process for the project. Nate gave an overview of how the CSS process started, the limits of the project, and the Project Advisory Committee (PAC) team members. Nate went on to describe the CSS philosophy, the CSS process steps, the development of the project's Problem Statement and Vision Statement, and the screening criteria that were developed to evaluate project alternatives.

Nate Miller briefly described the following 9 alternatives that the PAC asked the NHDOT to review as possible alternatives for roadway reconstruction:

- Option #1 – Maintain Existing Condition
- Option #2 – Hold Railroad as Control and Widen Westerly Toward River,
- Option #3 – Hold River as Control and Widen Easterly Toward Railroad,
- Option #4 – New Highway East of Railroad,
  - #4A – The Other Side of the Tracks,
  - #4B – Hillside Alternative,
  - #4C – Hillside Alternative with new Bridge back to Church Street
- Option #5 – Online Alternative with Geotechnical Measures
- Option #322 – Hybrid with Railroad Relocation in the South
  - Component #322A – NH 12 / NH 12A Intersection Reconfiguration
- Option #323 – Hybrid with RR Relocation in the South and North
  - Component #323A – NH 12 / NH 12A Intersection Reconfiguration

Nate indicated that the NHDOT is looking for comments at the end of tonight's meeting to get feedback from the general public relative to the options presented. He then turned the meeting over to C.R. Willeke to describe the existing conditions, preliminary design concepts, and the PAC committee's preferred alternative.

### **Review of Existing Conditions and Preliminary Engineering**

C.R. Willeke continued the slide show describing the existing conditions and problems associated with NH 12. He highlighted the proximity of the scenic Connecticut River and active New England Central Railroad, the outdated cable guardrail, the narrow pavement and lack of paved shoulders, the slope stability areas of concern, the numerous ledge outcrops adjacent to the highway, and the lack of bicycle and pedestrian accommodations. C.R. mentioned that the NHDOT has developed engineered concepts for the alternatives requested by the PAC. Using slides and typical cross sections, C.R. explained the preliminary designs, estimated costs, and the major pros and cons for each of the 9 alternatives.

C.R. noted that after the last public informational meeting in April of 2009 several hybrid alternatives were developed. C.R. described the hybrid alternatives in relation to the 3 major sections of the project:

- The southern segment,
- The middle segment, and
- The northern segment

The naming convention for the hybrid alternatives relates to the options used in each segment. The first number "3" is for the southern segment which utilizes an alignment similar to previous option #3 that proposes to relocate the railroad tracks easterly to make room for the roadway improvements. The second number "2" is for the middle segment and utilizes an alignment similar to previous option #2 that impacts the Meany's Cove area including Parcel #'s 15, 16, and 17 to make room for the roadway improvements. The third number is for the northern segment and can be either a "2" (from option #2, impact the river) or a "3" (from option #3, move the tracks) depending on the option being proposed. Both proposed hybrid alternatives (#322 and #323) are the same in the southern and middle segments. C.R. then turned the meeting over to Jon Evans to describe the roles of the NHDOT's Bureau of Environment.

Jon Evans gave a brief overview of the roles and responsibilities of the Bureau of Environment, which include evaluating the project's impact on the environment, coordinating with other agencies and organizations, preparing environmental

documentation, and obtaining environmental permits. Jon also mentioned Section 106 of the National Historic Preservation Act and the ability for interested people to request to become a 'consulting party' to the project. Jon then turned the meeting over to Nate Miller to summarize the PAC committee's screening results.

Nate Miller highlighted the major items in the screening criteria:

- Access
- Aesthetics
- Economic Vitality
- Environmental Issues
- Implementation
- Mobility
- Quality of Life, and
- Safety

Nate explained that the PAC answered a series of questions for each of the screening criteria for all of the nine alternatives. The PAC reached consensus when answering all of the screening criteria questions. At the end of each screening exercise, an alternative was determined to be "reasonable" or "unreasonable" by the PAC. The No Build Alternative (Option #1) and the On Existing Alignment Alternative (Option #5) were evaluated by the PAC; however, they were determined "unreasonable" as they were considered to be either infeasible or did not meet the project purpose and need.

The following is a list of "Reasonable" alternatives as determined by the PAC:

- Option #3 – River as Control – Impact Railroad
- Option #322 – Hybrid with Railroad Relocation in the Southern Segment
- Component #322A – NH 12 / NH 12A Intersection Reconfiguration
- Option #323 – Hybrid with Railroad Relocation in the Southern and Northern Segment
- Component #323A – NH 12 / NH 12A Intersection Reconfiguration

After all of the alternatives were screened, the PAC came to a consensus that Alternative #323 was their "preferred alternative".

Nate Miller ended the formal presentation with a slide indicating the next steps and funding for the project:

- Review design with railroad company and develop environmental documentation
- Conduct formal public hearing (2010)
- Final Design and Permitting (2010 / 2011)
- Initial Construction begins (2012)
- Current construction funds are approximately \$13 million

### **Public Questions and Comments:**

- A North Walpole resident asked if the project limits could be extend southerly to include widening and improving the Church Street area?

C.R. Willeke indicated that District #4 crews and Walpole town crews reclaimed and paved the roadway, as well as rebuilt the sidewalk and curbing along Church Street in 2005. He also indicated that the original project limits for the current project were only in Charlestown. However, after looking at the issues associated with the proximity of the Connecticut River in Walpole near the Charlestown town line, the project was extended southerly down to the Main

Street intersection. Due to the relatively recent improvements to Church Street and the lack of its proximity to the Connecticut River, the project would not likely get extended south of Main Street to include the Church Street area.

- A North Walpole resident expressed concern for the continued instability of the slopes along the Connecticut River in North Walpole near the area of the prior slope failure that occurred in 1996. They suggested that the NHDOT extend slope stabilization measures such as riprap with vegetation further south of the current project limits.

C.R. Willeke indicated that one of the PAC members, Ken Alton, represents Trans Canada, the operator of the dams along the Connecticut River. Ken had previously indicated that Trans Canada had installed slope stabilization measures in the area of the 1996 slope failure that were designed to collect sediment and help stabilize the slope. Ken had also indicated that the mats seemed to be working. C.R. indicated that the NHDOT would not likely get involved in additional slope stabilization measures in the area of the 1996 slope failure or areas further south because this work would be outside of the highway right-of-way.

- A North Walpole resident expressed concern with the slopes near NH 12 north of the Len Tex buildings within the project limits. He asked if moving the roadway easterly in this area would be enough if the river washes out the slope in this area?

C.R. Willeke indicated that the easterly shift in the highway proposed for preferred alternative #323 accounts for a potential slope failure, and was based on input from NHDOT geotechnical engineers. A more detailed slope assessment will be performed as the project moves forward to make sure an appropriate buffer exists between the new highway and the Connecticut River.

- Don Provencher asked why the proposed shoulders are only 4 ft wide? He indicated that bicyclists would not feel as comfortable or safe using a 4 ft shoulder compared to a wider shoulder.

Don Lyford indicated that the NHDOT tries to achieve a balance between highway widths and property impacts. A wider shoulder, perhaps 8 or 10 feet wide, would be more comfortable for bicyclists but would have additional impacts to abutters and significantly increase project costs due to the difficult project constraints. However, as we proceed with the design of this project we will see if there are areas where wider shoulders could be included.

- Ed Hasselman, North Walpole Fire Chief, commented that wider shoulders would be beneficial for emergency response.
- Aare Ilves, Charlestown resident and PAC member commented that the project should provide sections of wider shoulder where possible for breakdowns, as well as for scenic pull offs.
- Mr. Seavey, Parcel #14 located at the south end of Meany's Cove on the west side of NH 12, indicated that his septic system is located between his home and NH 12. He expressed concern about the road possibly moving closer to his property.

C.R. Willeke indicated that the highway is transitioning from its easterly shift back to near the existing alignment near parcel 14, and that the proposed

roadway is actually slightly further east than the existing road near his house and driveway.

- J.B. Mack, South West Regional Planning Commission, asked about the cost of the project and budget available. He also asked if any railroad funding was available.

C.R. Willeke indicated that cost estimate for preferred alternative #323 is in the range of \$15 million to \$20 million dollars. There is currently \$13 million dollars available for construction. Don Lyford mentioned that the project could be built in phases with railroad relocation likely to be the first phase. The NHDOT is not aware of any separate railroad funding but will keep an eye out for any potential railroad stimulus funding.

- Jan Lambert asked about the environmental documentation for the project and the public hearing process and timeline.

Don Lyford indicated that Jon Evans is currently working on the environmental documentation and that the Department of Environmental Services may require a formal public hearing in addition to or in combination with the NHDOT's public hearing. Don Lyford indicated that NHDOT public hearings are recorded, and written testimony would also be accepted during the comment period, which is usually ten days in length following the public hearing.

Submitted by,

C.R. Willeke, P.E.  
Preliminary Design Engineer

Attachment – 1/13/10 Sign In Sheet

cc: D. Lyford  
M. Dugas  
J. Evans  
W. Cass  
D. Graham – District #4  
W. Lambert – Traffic Bureau  
Nate Miller – UVLSRPC  
J.B. Mack – SWRPC  
PAC Members

# **Exhibit AA**

Report of the Commissioner

REPORT OF THE COMMISSION

FOR

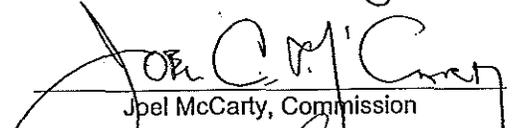
WALPOLE-CHARLESTOWN, X-A000(487), 14747

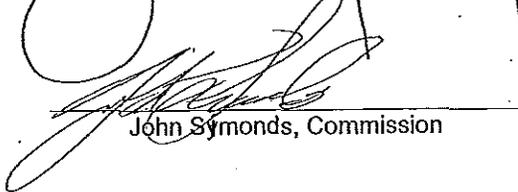
This project will reconstruct and widen NH 12 beginning in North Walpole at its intersection with Main Street and extending north approximately 2.7 miles to its intersection with NH 12A in South Charlestown. The NH 12 reconstruction will widen the roadway by adding four-foot wide shoulders to improve the safety of motor vehicles, bicyclists and pedestrians. The roadway will also be shifted to the east to diminish the hazard that the unstable banks of the Connecticut River pose to NH 12 in the north and south segments of the project area. The road realignment will necessitate the relocation of approximately 2.2 miles of New England Central Railroad track.

We, the Commission appointed by Governor and Executive Council on January 27, 2010, to hold a hearing to determine the occasion for the reconstruction and widening to NH Route 12 in Walpole and Charlestown, held our hearing on July 19, 2011, and find in the affirmative.

Given under our hands this 19th day of July 2011

  
Gerald Coogan, Chairman

  
Joel McCarty, Commission

  
John Symonds, Commission

## REPORT OF THE COMMISSIONER

WALPOLE-CHARLESTOWN, X-A000(487), 14747  
NH ROUTE 12

Commission

PUBLIC HEARING

July 29, 2010 -- North Walpole Elementary School -- 7:00 PM

The following decisions are the Department's resolution of issues as a result of the testimony presented at the July 29, 2010 Public Hearing and written testimony subsequently submitted for the Walpole-Charlestown, X-A000(487), 14747, project described as:

Reconstruct and widen NH Route 12 (Church Street) beginning at a point in the existing traveled way in North Walpole at the intersection with Main Street and extending north to a point approximately two and seven tenths (2.7) miles to its intersection with NH Route 12A in South Charlestown. The NH 12 reconstruction will widen the roadway by adding four-foot wide shoulders to improve the safety of motor vehicles, bicyclists and pedestrians. The roadway will also be shifted to the east to diminish the hazard that the unstable banks of the Connecticut River pose to NH 12 in the north and south segments of the project area. The road realignment will necessitate the relocation of approximately two and two tenths (2.2) miles of New England Central Railroad track.

1. Former State Representative James McClammer, expressed support for the proposed alternative and had the following concerns/questions:
  - a. Will the project increase the amount of traffic that will be within the area communities?
  - b. Will the Department look at low salt usage or alternatives to salt because of the proximity of the road to the Connecticut River?
  - c. Are there any sensitive species on the portion of the Nature Conservancy/ Land and Community Heritage Investment Program (LCHIP) property that is being purchased by the project?
  - d. Will the Department compensate LCHIP for the loss of this portion of the property?
  - e. Will the Department compensate for whatever flood storage is lost because of the project?

*Response:* The Department appreciates the support for the project. Resolution of concerns/questions are:

- a. The type of improvements proposed for NH 12 do not provide additional traffic capacity, so the project is not expected to encourage or stimulate more traffic growth than would otherwise occur in the region.
- b. The Department currently monitors the amount of salt used on State roadways to be as efficient as possible, yet still provide a safe, reasonable level of service. The proximity of this road to the river creates a challenge to balance environmental impact and safety. The Department will continue to monitor the use of road salt, utilize deicing materials as efficiently as possible in accordance with best management practices and the Department's winter maintenance policy, and seek economic alternatives to salt as practical.
- c. The Department is coordinating with LCHIP and the NH Natural Heritage Bureau to ensure sensitive species are identified. At this time none have been identified within the portion of the parcel impacted by the project.
- d. The Department continues to discuss an agreeable compensation package for this impact with the entities that have interest in this property.
- e. Preliminary flood storage discussions have been held with FEMA. The impacts to flood storage will be further investigated. Any flood storage loss will be coordinated with the appropriate resource agencies to determine the proper course of action. The need for a FEMA Flood Insurance Rate Map revision is also being investigated.

2. Mr. Peter Powers, Duffy Street, North Walpole, had the following observations and questions regarding the riverbank in North Walpole:
- At the previous Public Informational meeting it was noted that the potential for slope failure in North Walpole would be further assessed, has that assessment occurred?
  - Back in 1996 and 1997 it was stated that the erosion control mats placed in the river by others were a temporary solution, is that still true? At that time it was also noted that a permanent solution would be to establish an armored toe at the base of the riverbank, is that option still being considered?
  - At previous meetings it has been stated that the erosion mats that were placed some 40 feet offshore in 25 to 35 feet of water are working. How do these mats protect the riverbank and adjacent NH 12?
  - Regarding environmental concerns, destabilized soil can clog fish gills, bury fish and aquatic insect habitat, decrease water clarity, increase water temperature (decreasing oxygen and providing a more hospitable habitat for invasive plants) and change the course of the channel. Doing nothing is a choice, but can have consequences.

*Response:* Resolution of observations/questions are:

- Since the previous Public Informational meeting the Department investigated the riverbank conditions in North Walpole and assessed the potential for slope failure. The relationship of the river to the roadway in the vicinity of the former slope failure is such that the roadway is not in danger of failure. Monitoring of the slope does not show any movement at this time.
  - The erosion mats previously placed by others in the river have allowed the river bottom to stabilize and there is no plan to remove them or perform additional measures, so they have become a long-term solution. While the placement of stone to armor the toe of the slope at the base of the riverbank is an alternative, at this time it does not appear necessary to pursue this type of treatment for this area.
  - The erosion control mats that were placed in the river have allowed the river bottom to stabilize and raise the elevation of the river bottom adjacent to the toe of the riverbank. The slope of the riverbank below the water line is much flatter and more stable now than it was prior to the erosion mats being placed. This condition provides more support for the toe of the riverbank thus leading to a more stable overall condition and less threat to NH 12.
  - River habitats change constantly due to the dynamics of the overall system. Trying to control erosion of one relatively small area, such as the former slope failure, does not alter the long-term effects of those habitat changes. The proper erosion and sediment control measures will be employed during construction for the section of roadway that is being rebuilt to ensure the surrounding natural environment is not negatively impacted by the project.
3. Ms. Judith E. Konesko, NH 12, Charlestown (parcel 17), expressed concern with potential impacts to her deeded water supply which currently originates from a spring on the east side on NH 12, is piped under the railroad and the roadway to another storage/source on the west side of NH 12, and then to her house.

*Response:* The Department will work with Ms. Konesko to maintain a water supply to her property. As the project design continues, a solution to identify how the water will be supplied will be developed and reviewed with Ms. Konesko, the property owner.

4. Vincent, Eugene & Mary Augustinowicz, NH 12, Charlestown (parcel 25), expressed concern with the proposed twenty-foot (20') easement associated with the construction of the retaining wall along their property.

*Response:* In order to allow for the construction and future maintenance of the proposed retaining wall, an easement is required from the Augustinowicz that extends onto their property twenty feet (20') from the face of the proposed wall. The Department will do what it can to keep the impacts to the property to a minimum, but ultimately it will need to purchase an easement for this structure. The Department will work with the property owner to identify ways to mitigate these impacts.

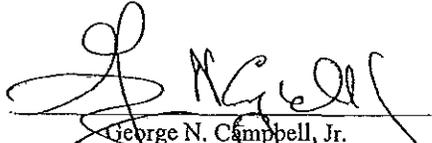
5. Mr. Charlie Lennon, Len-Tex Corporation, Walpole (parcels 4 & 6), suggested the proposed right-of-way width for the railroad corridor be the same width as the railroad currently has, not the wider layout shown on the Public Hearing Plan. He also suggested the drainage culvert under the railroad in the vicinity of the Len-Tex property be retained, rebuilt or improved to provide needed drainage for the area.

*Response:* The Department will review the proposed right-of-way width through Final Design and adjust as necessary. The intent is to replace the railroad right-of-way with the same or nearly the same width that the railroad currently has. An overall drainage review for impacted segments of the railroad and roadway will be included in the final design of the project with the intent to improve or at least maintain drainage that exists. At that time it will be determined if this existing drainage structure is adequately sized and in the proper location to handle the anticipated volume of water.

6. Mr. Fred Poisson, 191 Old State Road, Charlestown (parcel 19), suggested he should be compensated for reduced property value that will result from the railroad being moved closer to his property.

*Response:* The Department will review property impacts as the project continues. In compliance with State and Federal procedures, compensation is usually applicable to direct physical property impacts. Since there is not a direct impact to this property it is not anticipated that compensation will be forthcoming.

June 8, 2011  
Date

  
George N. Campbell, Jr.  
Commissioner  
N.H. Department of Transportation

# **Exhibit BB**

Photographs



NH Route 12 looking north at the southern end of the project.



NH Route 12 looking south at the southern end of the project



NH Route 12 looking north at the southern end of the project.



NH Route 12 looking north at the southern end of the project.



NH Route 12 looking south near the Walpole/Charlestown line.



NH Route 12 looking north near the Walpole/Charlestown line.



NH Route 12 looking north in the middle section of the project.



NH Route 12 looking south in the middle section of the project.



NH Route 12 looking north near Meany's Cove.



NH Route 12 looking north near Meany's Cove.



Meany's Cove southern wetland looking north.



Meany's Cove southern wetland looking south.



Meany's Cove northern wetland, southern impact area.



Meany's Cove northern wetland, southern impact area.



Meany's Cove northern wetland, northern impact area.



Meany's Cove northern wetland, northern impact area.



NH Route 12 looking south, north of Meany's Cove, northern segment of the project.



NH Route 12 looking north, north of Meany's Cove, northern segment of the project.



NH Route 12 looking north, northern segment of the project.



NH Route 12 looking north, northern segment of the project.



Jabes Meadow Brook wetland, east side of road, northern segment of the project.



Jabes Meadow Brook wetland, east side of road, northern segment of the project.



Northern segment of the project.



Northern segment of the project.



Northern segment of the project.



Northern segment of the project looking south from the Route 12A overpass.



Northern segment of the project looking south from the Route 12A overpass.



Northern segment of the project looking south towards the Route 12A overpass.



Northern segment of the project looking north from the Route 12A overpass.



Northern segment of the project looking south from the Route 12A intersection.



Wetland east of NH Route 12 adjacent to the Route 12A intersection.



Intersection of NH Routes 12 and 12A



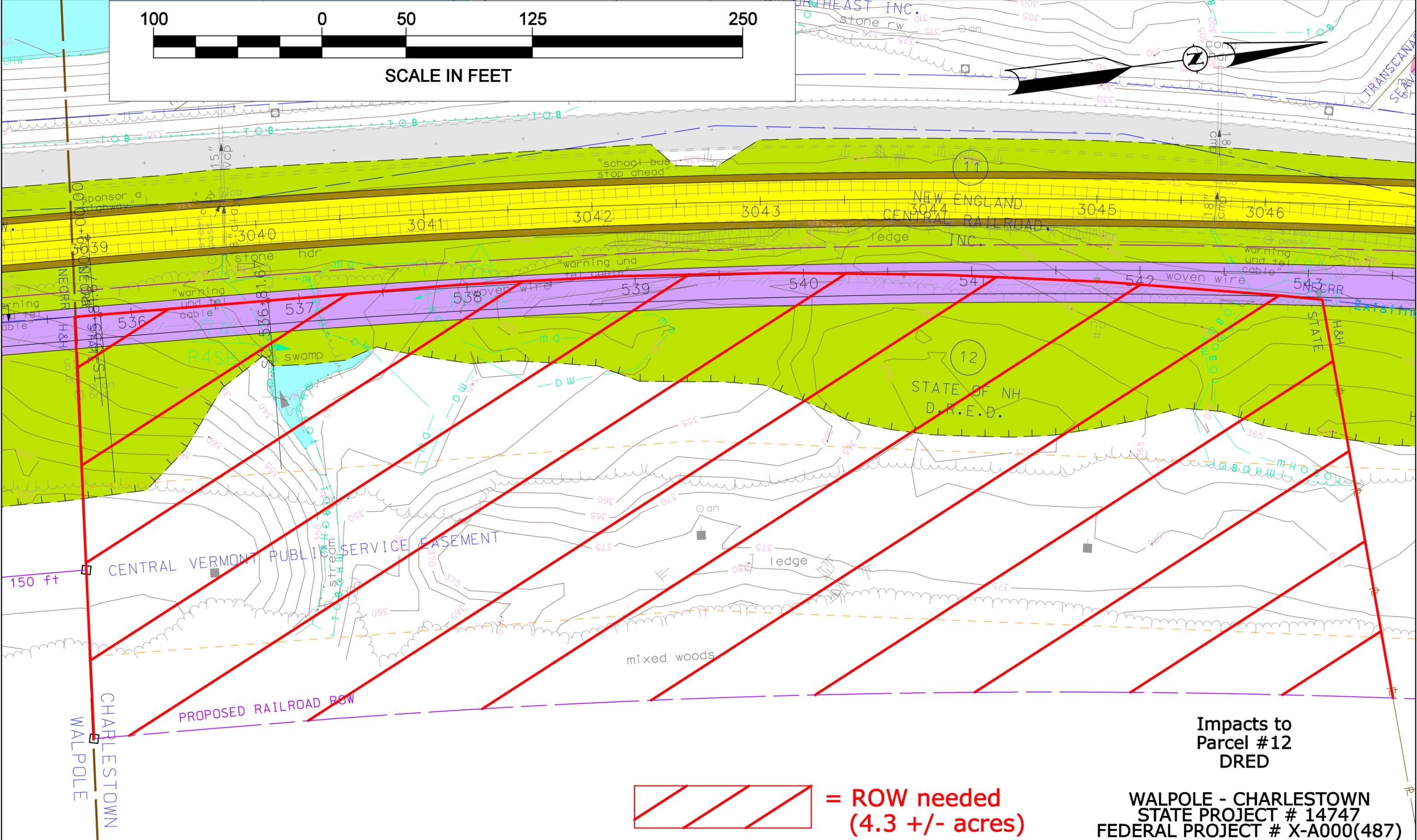
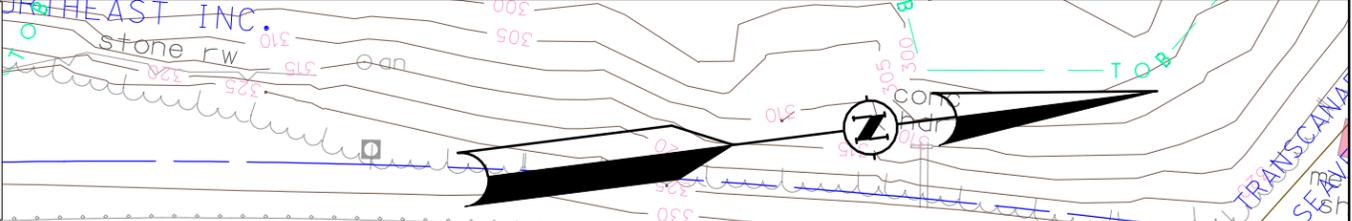
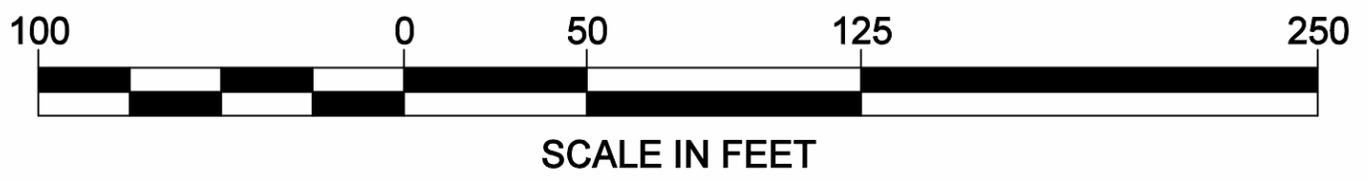
NH Route 12 looking south from the northern end of the project.

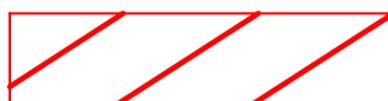


NH Route 12 looking north from the northern end of the project.

# **Exhibit CC**

LCHIP Property Impact Plans



 = ROW needed (4.3 +/- acres)

Impacts to Parcel #12 DRED  
 WALPOLE - CHARLESTOWN STATE PROJECT # 14747  
 FEDERAL PROJECT # X-A000(487)

Once DRED Parcel is acquired by NHDOT - a future utility easement will be granted for relocation of aerial transmission lines

# **Exhibit DD**

Preliminary Design Plans

# LEGEND

-  Travel Way of Proposed Roadway
-  Shoulder of Proposed Roadway
-  Access Points to Proposed Roadway (Drives, etc.)
-  Approximate Limit of Slope Work and Landscaping
-  Proposed Railroad Corridor
-  Existing Pavement (Roadways, Drives, Sidewalks, etc.)
-  Existing Gravel Surface (Drives, Paths, etc.)
-  Water (Rivers, Streams, Lakes, Ponds, Swamps, etc.)
-  Wetlands (Top of Bank, Ordinary High Water, Deliniated Areas)
-  Flood Way Boundary
-  100 Year Flood Plain Boundary
-  Buildings
-  Property Lines
-  State, County, City and Town Lines
-  Existing R.O.W. (Right -of-Way)
-  Existing Railroad R.O.W.
-  Existing C.A.R.O.W. (Controlled Access)
-  Existing Easement Lines
-  Proposed R.O.W. (Right-of-Way)
-  Proposed Easement Lines

Prepared By  
New Hampshire Department of Transportation  
Highway Design Bureau



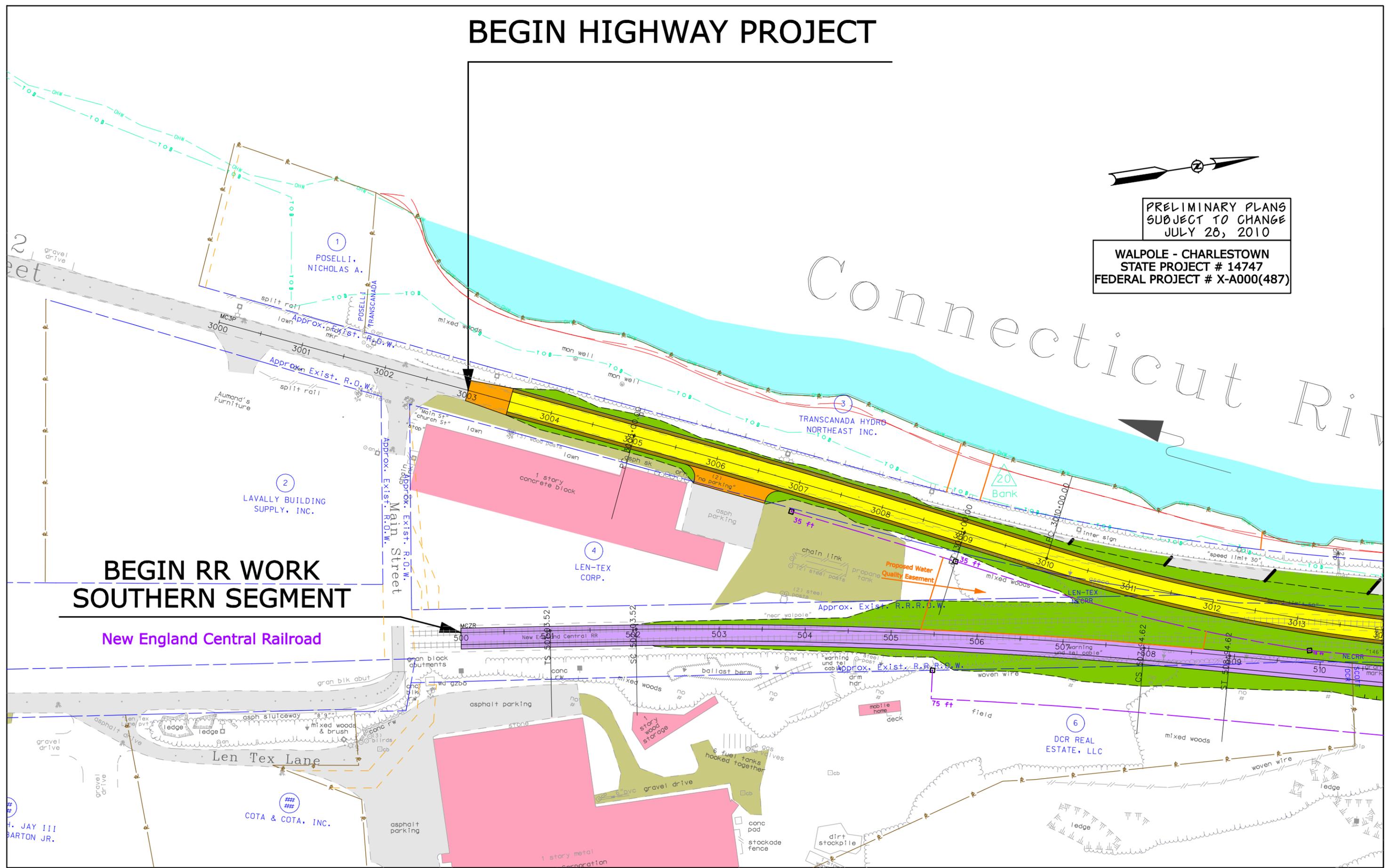
SCALE IN FEET

**WALPOLE - CHARLESTOWN**  
**STATE PROJECT # 14747**  
**FEDERAL PROJECT # X-A000(487)**

# BEGIN HIGHWAY PROJECT

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)



**BEGIN RR WORK  
SOUTHERN SEGMENT**

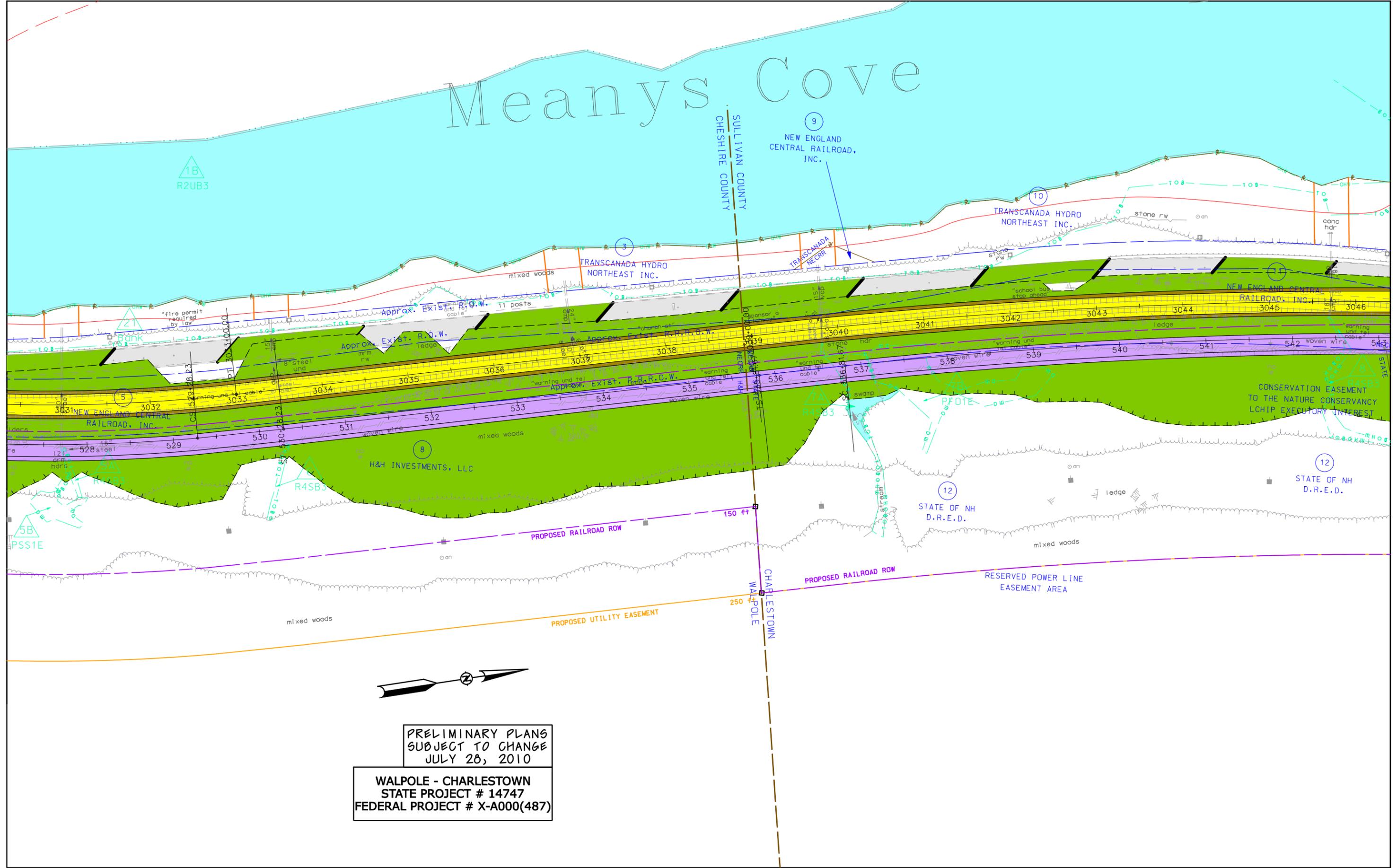
New England Central Railroad

Len Tex Lane

CONNECTICUT RIVER

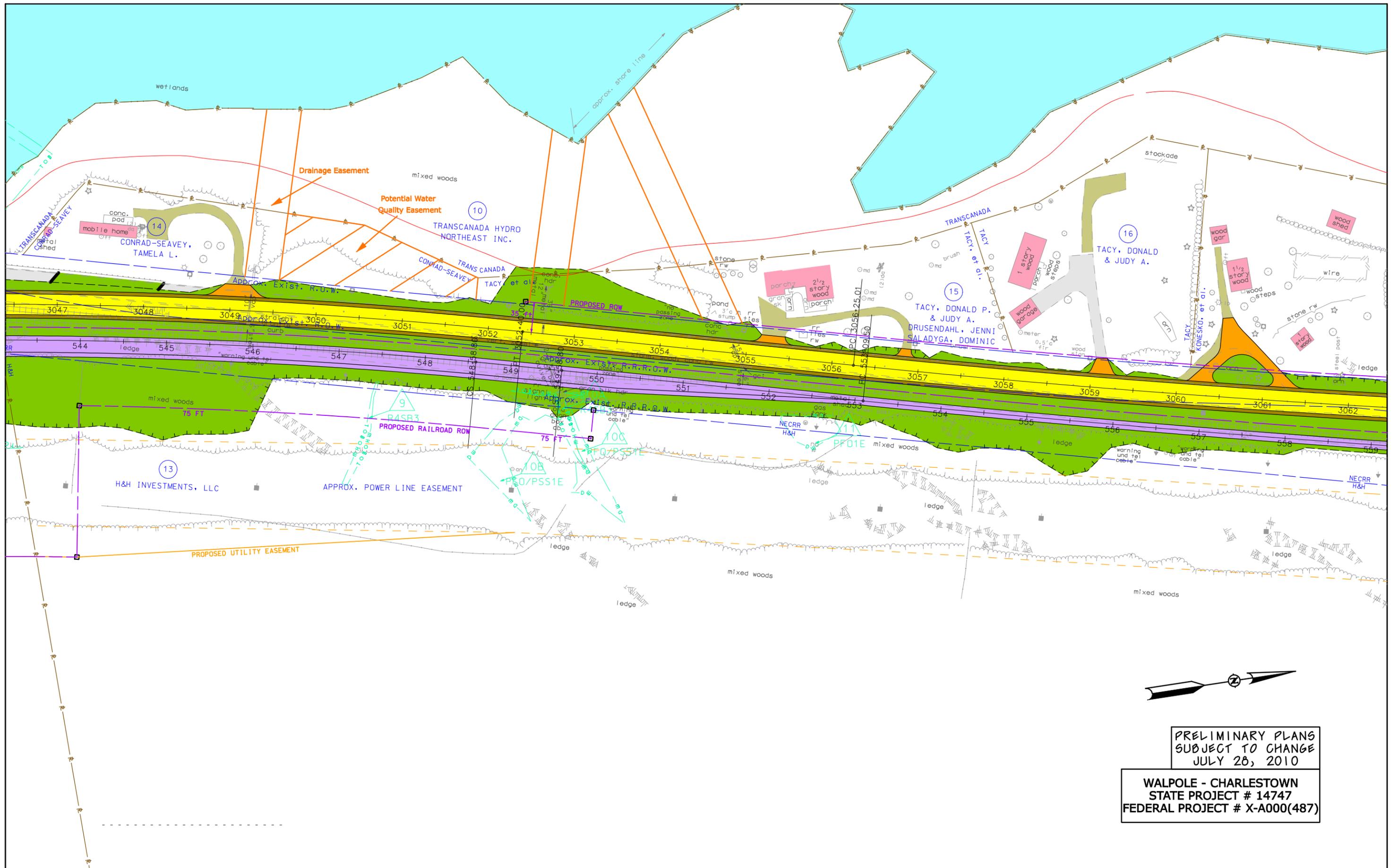


# Meanys Cove



PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

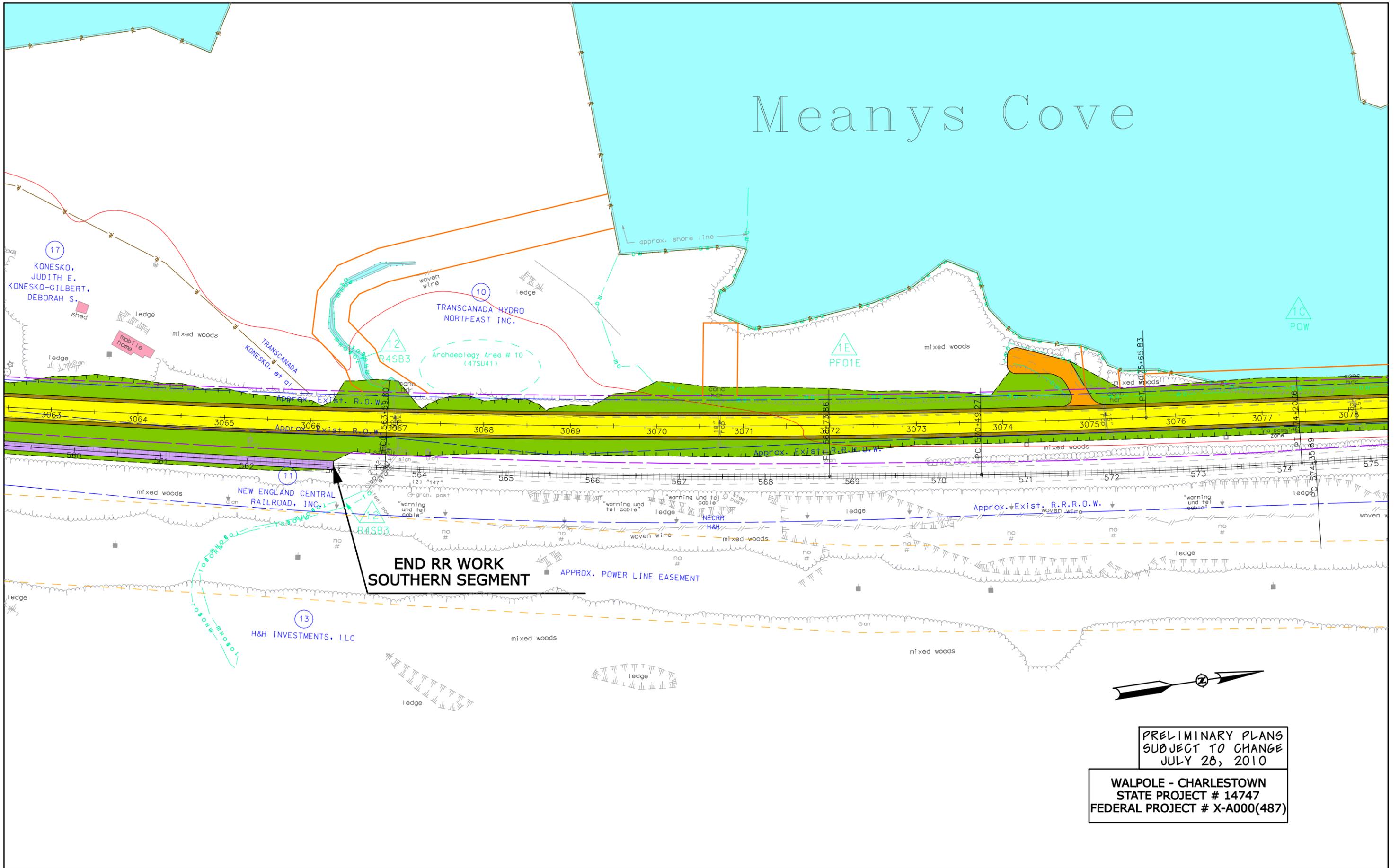
WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)



PRELIMINARY PLANS  
 SUBJECT TO CHANGE  
 JULY 28, 2010

WALPOLE - CHARLESTOWN  
 STATE PROJECT # 14747  
 FEDERAL PROJECT # X-A000(487)

# Meanys Cove



PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

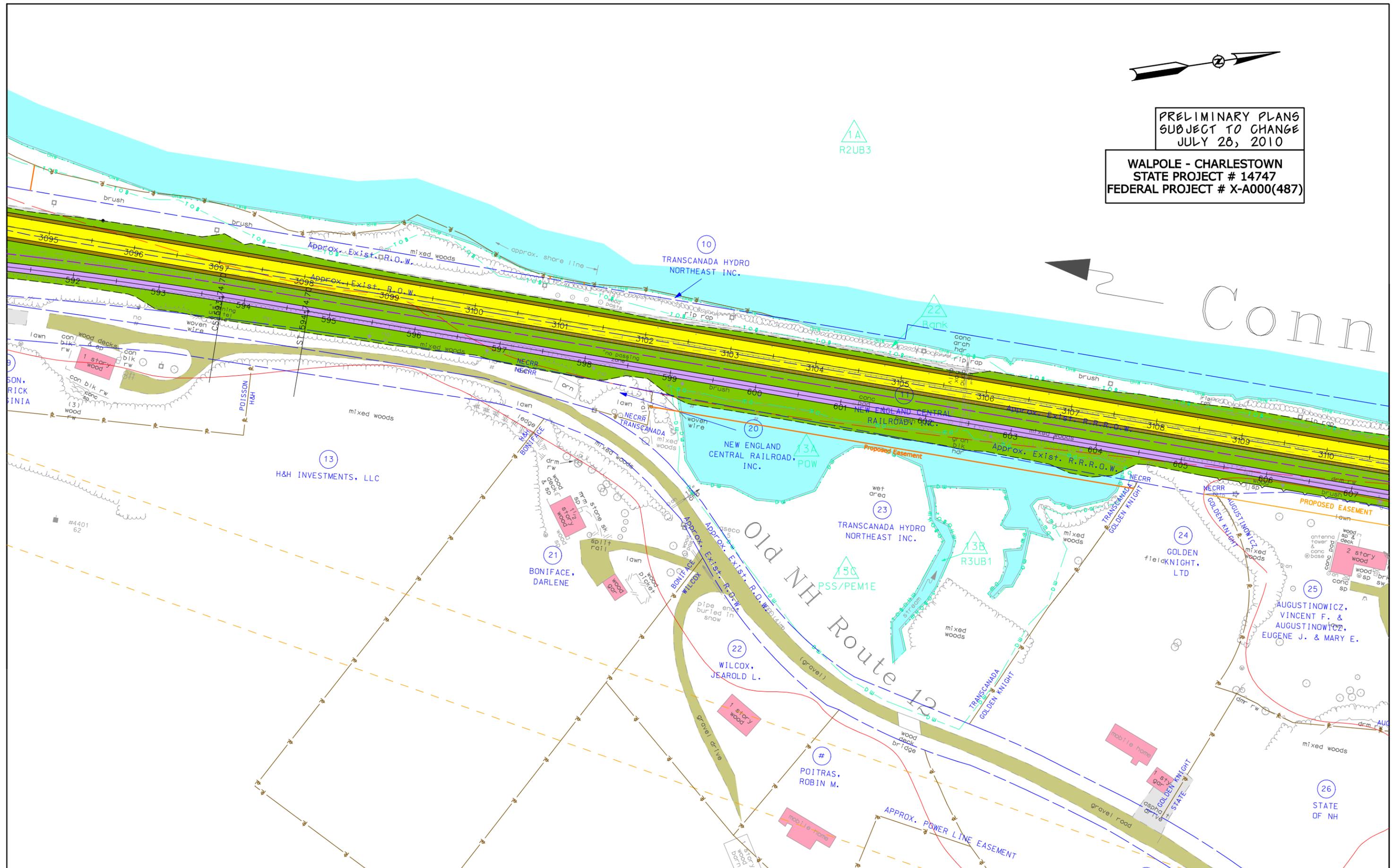
WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)





PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
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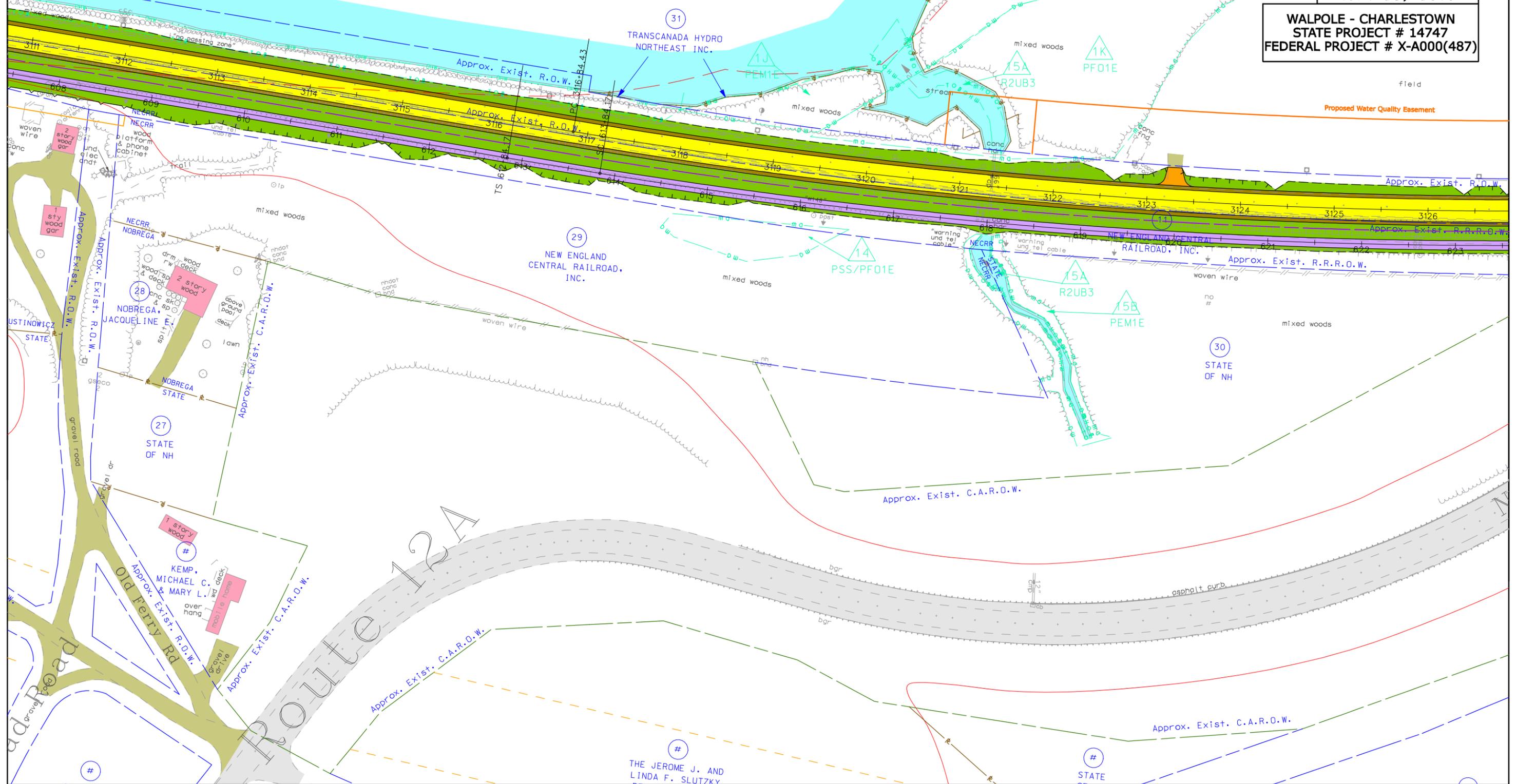


# Wcticicut River



PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

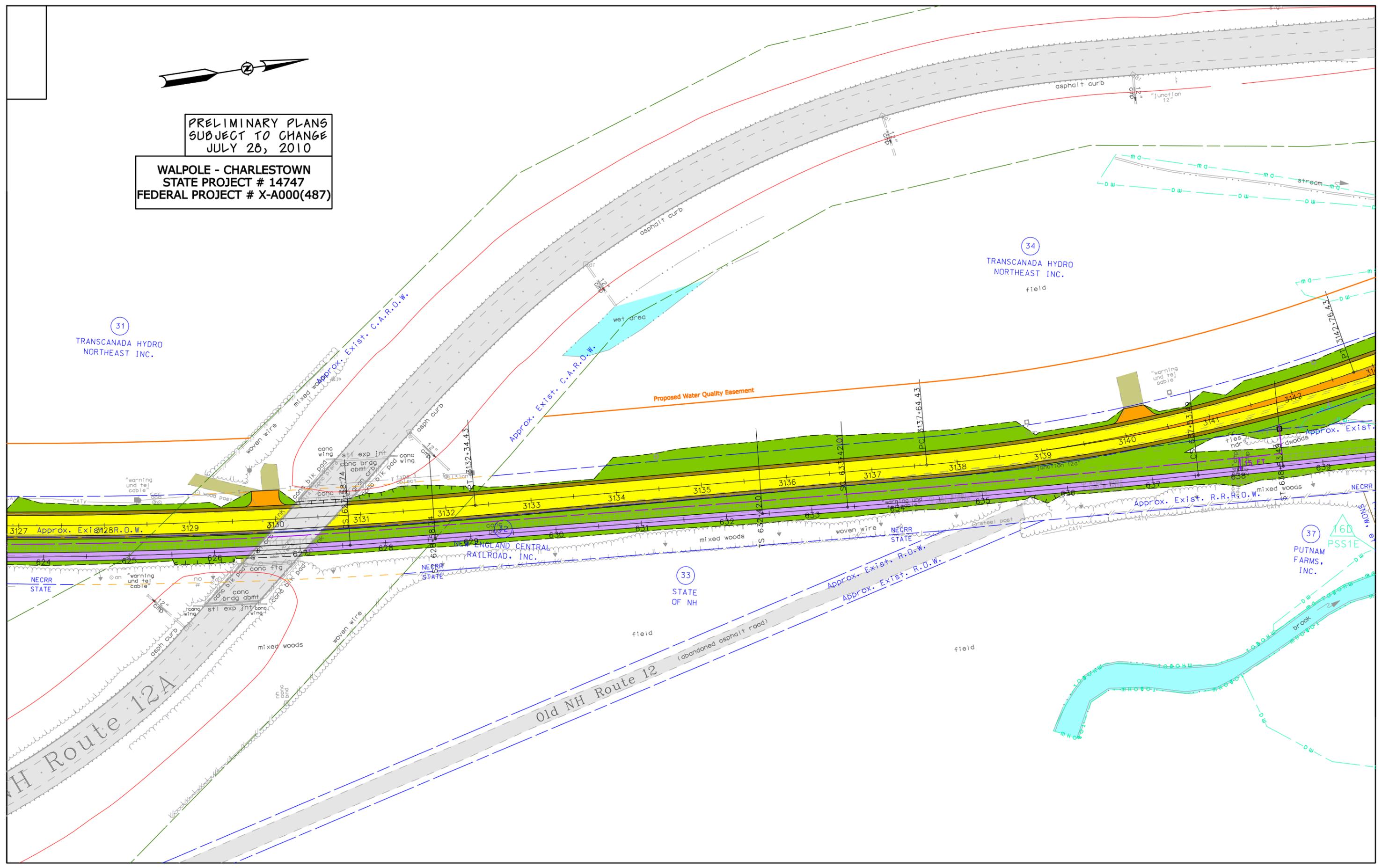
WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)





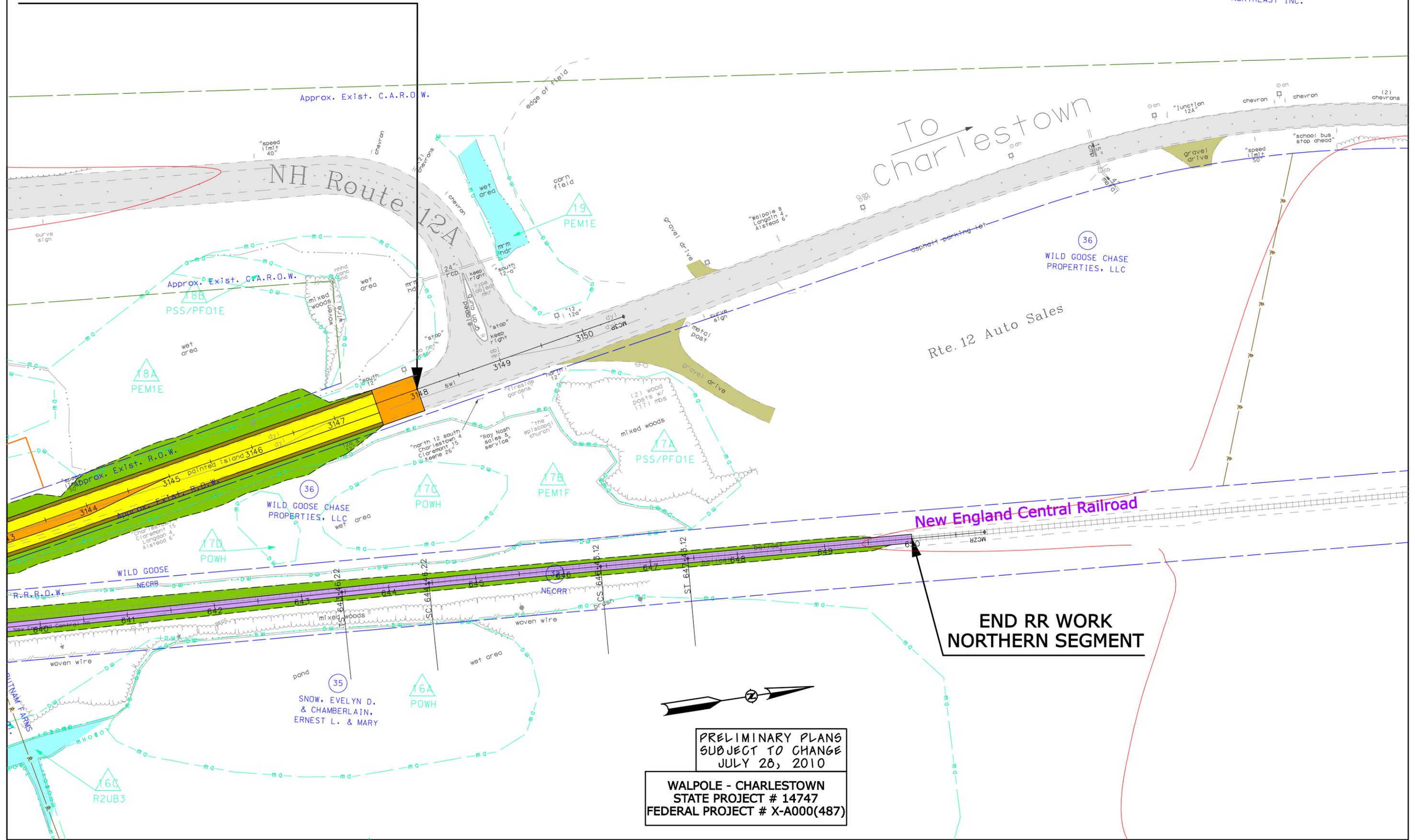
PRELIMINARY PLANS  
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JULY 28, 2010

WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)



# END HIGHWAY PROJECT

31  
TRANSCANADA HYDRO  
NORTHEAST INC.



Rte. 12 Auto Sales

New England Central Railroad

**END RR WORK  
NORTHERN SEGMENT**

PRELIMINARY PLANS  
SUBJECT TO CHANGE  
JULY 28, 2010

**WALPOLE - CHARLESTOWN  
STATE PROJECT # 14747  
FEDERAL PROJECT # X-A000(487)**

