Appendix 4.8-A

Agency Correspondence and Final APE Statement



Introduction

The South Coast Rail project requires review by the Army Corps of Engineers (Corps), as the lead federal agency, pursuant to Section 106 of the National Historic Preservation Act (NHPA) and the regulations of the Advisory Council on Historic Preservation (Council) at 36 CFR Part 800, *Protection of Historic Properties*, as well as under the Corps regulations at 33 CFR 325, Appendix C. The project must be reviewed at the state level by the Massachusetts Historic Commission (MHC) pursuant to MGL Chapter 9 section 26-27C, and the MHC regulations at 950 CMR 70-71, which parallel the requirements of Section 106.

The Area of Potential Effect (APE), as outlined below, defines the areas in which the proposed undertaking may have an effect on a historic property, and the type of effect that may occur.

Area of Potential Effect Definition and Criteria

As defined in the Council's regulations, the APE for a project is the geographic area or areas within which an undertaking may directly, indirectly or cumulatively cause changes in the character of historic properties that make them eligible for listing in the National Register of Historic Places (National Register), if any such properties exist [*36 CFR 800.2(c)*]. A direct impact APE is established to include the geographic area in which historic properties would be altered or otherwise used by construction activities or impacts related to project operations. An indirect impact APE usually consists of a larger area where visual, auditory, pollution, vibration, recreational visitor usage, and/or other types of environmental impacts resulting from an undertaking might affect the qualities for which a historic property is eligible or listed in the National Register.

The South Coast Rail project includes 12 categories of potential work and operations types which may result in direct or indirect effects. The work types and operations expected for the project are:

- 1. Increased train traffic on existing active track segments
- 2. Minor repairs or rehabilitation of existing track in active use
- 3. Constructing an additional track on an existing active track segment
- 4. Restoring track and train traffic on out-of-service or abandoned rights-of-way
- 5. Constructing commuter rail or bus stations
- 6. Constructing overhead catenary to allow electrified train service

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- 7. Adding new lanes in existing highway right-of-way
- 8. Adding new lanes/interchange in existing highway outside of right-of-way
- 9. Layover and maintenance facilities
- 10. Construction staging and laydown areas
- 11. Operations noise and vibration (including horn blowing)
- 12. Increased traffic queuing, intersection changes

These work types and operations may or may not be restricted to individual alternatives. Some of the proposed routes for the alternatives overlap and thus, it is effective to look at track or corridor segments when defining the APE. As defined, the project includes the corridor segments and related alternatives, with associated stations as outlined in Table 1.

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Table 1 South Coast Rail Corridor Segments – Work Type – Alternatives – Stations				
Corridor Segment	Work Type *	Alternative**	Stations	Current Status
Fall River Line (Battleship Cove to Myricks Junction)	Electrified commuter rail	1, 2, 3, 4	Battleship Cove Fall River Depot Freetown	Active freight
New Bedford Line (State Pier to Cotley Junction)	Electrified commuter rail	1, 2, 3, 4	State Pier Whale's Tooth King's Highway	Active freight
Middleborough Secondary (Cotley Junction to Middleborough Line)	Diesel commuter rail – rehab existing track, new wye track at Cotley	2, 3	None	Active freight
Middleborough Line (junction of Middleborough Secondary to Old Colony Main Line)	No construction	2, 3	Middleborough Station	Active commuter/ freight
Old Colony Main Line (north of Plymouth line junction)	Diesel commuter rail – add 2 nd track, tunnel thru Quincy with temporary shoo-fly tracks	2A	Modifications to Quincy Center Station, JFK/UMass	Active commuter
Attleboro Secondary (Cotley Junction to Attleboro Bypass) (note that the portion between Cotley and Weir Junction is sometimes referred to as part of the New Bedford Line)	Electrified commuter rail	1, 3	East Taunton (south) East Taunton (north) Taunton Depot Barrowsville	Active freight
Attleboro Bypass	Electrified commuter rail	1, 3	None	No current or previous rail infrastructure
Northeast Corridor (Attleboro Bypass to Readville)	Add 3 rd track to existing electrified rail	1, 3	No new stations – modifications needed to Mansfield, Sharon, and Canton Junction stations	Active electric commuter/intercity/ freight
Stoughton Line (Weir Junction to Stoughton Station)	Electrified commuter rail	4	Dean Street, Raynham Park, Easton Village, North Easton	Out of service, former commuter/ freight
Whittenton Branch (Attleboro Secondary to Route 138)	Electrified commuter rail	4C	Whittenton	Out of service, former commuter/ freight

. . .



Corridor Segment	Work Type *	Alternative**	Stations	Current Status
Stoughton Line (Stoughton Station to Canton Junction)	Add second track, evaluate electrification	4	No new stations – modifications needed to Stoughton and Canton Center Stations	Active commuter/ freight
Route 24 (Route 140 to I-93/Route 128)	Add 3 rd lane each direction (Route 140 to I-495) Construct bus lane in median (Route 495 to I-93)	5	Fall River Depot Freetown Park State Pier King's Highway Taunton Depot Galleria Mall (no construction)	Highway
I-93/Route 128	Construct bus lane(s) in median, interchange modifications Route 3	5	None	Highway

1. 1

Note: Electrified Commuter Rail is the worst-case - on each segment we are also looking at diesel, but diesel has a narrower APE.

** Alternative 1 = Through Attleboro

Alternative 2 = Through Middleborough

Alternative 3 = Through Attleboro and Middleborough

Alternative 4 = Through Stoughton

Alternative 5 = Rapid Bus

Factors of the South Coast Rail project that have the potential to affect historic properties include:

- > Increases in noise and vibration,
- Introduction of new visual and setting elements, ≻
- ≻ Changes in traffic and access patterns,
- ≻ Changes in air quality,
- Construction activities including laydown areas, ≻
- Indirect effects, and >
- Cumulative impacts. >

The APE for an undertaking may differ for above ground resources (historic structures and landscapes), below ground resources (archaeological sites), and locations that are of traditional cultural significance to a particular individual or group including Native Americans. Additional varying components of the project may result in more than one APE for the undertaking. The APEs defined for the project are presented below following a discussion of the original project APE as described in the 2002 Final Environmental Impact Report (EIR).



For the purpose of data collection on existing conditions for the current South Coast Rail project, the APE for historic and archaeological resources relates to the alternatives under consideration which are advancing to a full environmental review. These alternatives are summarized above and are described in the *Analysis of South Coast Rail Alternatives: Phase 1 Report*¹, Section 8.4, *Alternatives Short List*, as well as proposed optional and possible stations as shown on the draft drawing set dated May 2008.

Original Areas of Potential Effect 1995-2000

The original APE for above ground historic resources survey was established in 1995 by Massachusetts Bay Transportation Authority (MBTA) and Massachusetts Historical Commission (MHC) for the New Bedford/Fall River Commuter Rail Extension project as extending 250 feet on either side of the rail centerline.² The APE for archaeological resources was defined as areas where construction ground disturbances would occur, including within the existing railroad right-of-way and proposed station/layover facility work areas.³ During the period 1995-2000, there was no federal agency involvement in the project.

Areas of Potential Effect 2008

In 2008, the U.S. Army Corps of Engineers (the Corps) was determined to be the lead federal agency with Section 106 responsibilities for the project. In order to address existing conditions, evaluate the affected environment, and determine the possible consequences to the resources of the proposed actions, APEs have been defined by work type and operation rather than track segment. This has been done because there are a restricted number of work types and operations and many of these are applicable to more than one track segment. The APE for below ground, above ground, and TCP resources are defined by work types and operations on Table 2.

¹ Executive Office of Transportation and Public Works. Analysis of South Coast Rail Alternatives: Phase 1 Report, April 30, 2008. Section 8.4, Alternatives Short List.

² Harrington et al., Cultural Resources Survey, Above-Ground Historic Resources Overview Report, New Bedford/Fall River Commuter Rail Extension Project, PAL Report No. 935, May 2000, Chapter 2, pages 4-6.

³ Cherau et al. 2001, Archaeological Reconnaissance Survey, New Bedford/Fall River Commuter Rail Extension Project, PAL Report No. 935-1.

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Work Types and Operations	pes and Operations Below Ground Above Ground		ТСР	
Rail corridors, baseline	Area of direct impact for proposed construction activities	800 ft (400 ft to either side of centerline) for electrification, 800 feet (400 feet either side of centerline) for diesel routes	To be determined in consultation with the Corps	
Stations (including stations, parking lots, access roads, and associated features)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps	
Layover and maintenance facilities (lot only)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps	
Construction laydown and staging areas (lot only)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps	
Road, new lane within existing right-of-way	None	None	None	
Road, new lane outside existing right-of-way	Area of direct impact for proposed construction activities	400 ft from proposed road centerline	To be determined in consultation with the Corps	
Road, temporary and permanent access to proposed facility	Area of direct impact for proposed construction activities	400 ft from proposed road centerline	To be determined in consultation with the Corps	
Road, intersections	Area of direct impact for proposed construction activities	400 ft on either side of the intersection centerline	To be determined in consultation with the Corps	

Table 2 APE Definitions by Work Types and Operations and Resource Class

Above Ground Historic Resources APE Definition

The definition of the APE for historic resources is informed by prior similar rail projects such as the MBTA New Bedford/Fall River Commuter Rail Extension project and MBTA Greenbush Line Restoration project; from visual impact analyses; from technical analyses and standards; and roadway projects. For comparison, the Greenbush Line baseline APE was set in 2000 at 400 feet, extending 500 to 800 feet at intersections where extended views might occur. Greenbush is a "quiet zone" with no horn blowing.



The Federal Transit Authority's (FTA) screening standard for noise and vibration is 375 feet from rail centerline and the Corps accepts this distance as appropriate for the project. Noise and vibration impact APEs may be revised however as noise modeling is completed and the extent of noise and vibration impacts are more clearly understood.

The worst case visual and setting impacts are generally anticipated to occur up to 250 feet from rail centerline for most corridor impacts and 250 feet around the perimeter of stations, construction staging and laydown areas, and layover-maintenance facilities, and along at-grade intersections with extended views (Emidy et al. 2002). These distances were used during the New Bedford/Fall River Commuter Rail Extension Project. Visual and setting impacts will extend out up to 800 feet to either side of the centerline in areas of electrification where 22-foot tall catenary will be installed. Visual impact APEs may be reduced as field survey is conducted and additional information is available. Therefore, based on precedent projects and currently known information about South Coast Rail project effects referenced above, the project Baseline APE for above ground historic resources is as follows (also see Table 2):

- The baseline rail corridor APE for above ground historic resources as regards visual and setting impacts is defined as 250 feet from either side of the rail rightof-way centerline on all segments. The APE is defined as 400 feet from either side of the rail right-of-way centerline for the Middleborough Secondary, Old Colony, and Whittenton Branch segments (areas where overhead catenary is not among the alternatives).
- The APE will extend out to 800 feet from either side of the rail right-of-way centerline on segments where overhead catenary is among the alternatives (Fall River Secondary, New Bedford Main Line, Attleboro Secondary, Attleboro Bypass, Northeast Corridor, and the Stoughton Line).
- The APE is defined as 250 feet from the perimeter of station locations with associated parking lots and features, layover/maintenance facilities, and laydown/construction staging for all track segment alternatives.
- The APE is defined as 400 feet on other side of the highway road centerline for Route 1-93/Route 128 interchanges modifications, and around road intersection improvements if any are required along all track segment alternatives. If a previously recorded or potential historic district or cultural landscape is identified, the APE will broaden as necessary to encompass the entire resource.
- For highway and rapid bus alternatives where work is in the median only, the APE is defined as the existing road right-of-way.
- When adding new lanes (from I-495 to Route 140), the APE is assumed to be the width of the new lane, the associated work space, plus 100 feet for a total not greater than 400 feet.



The APEs for any extended visual effects generated by catenary that is higher than 22 feet, for noise and vibration effects other than those assumed, and for any other effects with parameters that are not yet determined will be defined and addressed when the necessary information is available.



Below Ground Archaeological Resources APE

The APE for archaeological resources is the direct APE where ground disturbances are planned for the construction of project elements. These elements include: the active and inactive railroad right-of-way and active road right-of-way segments; new station locations; new layover/maintenance facility(s); and any other ancillary work areas and landtakings identified as part of the alternatives (see Table 1).

Traditional Cultural Properties APE

The Wampanoag Tribe of Gay Head/Aquinnah has indicated that the Hockomock Swamp and the Pine Swamp are regarded as traditionally culturally sensitive lands.⁴ These two swamps are located in the towns of Easton, Raynham, and Taunton, and may be affected by the Stoughton Route or the Rapid Bus Alternative. The Mashpee Wampanoag Tribe and the Assonet Wopanaak Nation may also express interest in these and other traditionally culturally sensitive lands.

Should a location(s) of traditional cultural significance be identified within the project study area by individual(s) and/or groups including the above Native Americans, through the Corps' consultation with these groups, then the APE for such a location and its eligibility as a Traditional Cultural Property will be determined through consultation between the Corps and the individual(s) and/or groups.

⁴ Personal communication, M. Harding 2002 in Cherau 2002

CERTIFIED MAIL – RETURN RECEIPT REQUESTED



DEPARTMENT OF THE ARMY NEW ENGLAND DISTRICT, CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MASSACHUSETTS 01742-2751

June 5, 2009

Regulatory Division (CENAE-R) File No. NAE-2007-00698

Ms. Brona Simon State Historic Preservation Officer Massachusetts Historical Commission 220 Morrissey Boulevard Boston, Massachusetts 02125

Dear Ms. Simon:

This is further to our Public Notice of November 10, 2008 (previously provided to you via e-mail) concerning our Notice of Intent to prepare an Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), for the proposed South Coast Rail, a major new commuter railroad line intended to link Boston with New Bedford and Fall River, Massachusetts. We have received a permit application from the Massachusetts Executive Office of Transportation and Public Works (EOT) to discharge fill material into waters of the United States, including adjacent wetlands, in order to construct stable grades to facilitate installation of new railroad tracks (or pavement), upgrades of existing railroad tracks (or highways) and establishment of new commuter railroad (or bus) stations and ancillary facilities. We are also coordinating with the Massachusetts Environmental Policy Act (MEPA) office to prepare a combined EIS/Environmental Impact Report (EIR) that meets both federal (NEPA) and state (MEPA) requirements. The purpose of this correspondence is to initiate consultation with your office under Section 106 of the National Historic Preservation Act, the regulations of the Advisory Council on Historic Preservation (36 CFR 800) and our implementing regulations at 33 CFR 325, Appendix C.

Section 404 of the Clean Water Act requires a Department of the Army (DA) permit for the discharge of dredged or fill material into waters of the United States, including adjacent wetlands. Unlike many passenger rail transportation projects, this proposal is not being funded, in whole or part, by the Federal Transit Administration (FTA). Therefore, the undertaking in this instance is limited to the activity "requiring a Federal permit, license or approval" (36 CFR 800.16(y)). Accordingly, the U.S. Army Corps of Engineers is the Lead Federal Agency in the review of this undertaking, and is solely responsible for compliance with Section 106. FTA is nevertheless a Cooperating Agency in the review and preparation of this document.

To date, we have identified the Area of Potential Effects pursuant to federal regulations at 36 CFR 800.16(d). Currently, the suite of alternatives under consideration by the Corps includes three rail alignments (the "Attleboro Alternatives," the "Stoughton Alternatives," and the

"Middleborough Alternatives"), a highway alternative, (the "Rapid Bus Alternative"), and the no-build alternative. The rail alternatives are further refined by modes of rail service; namely, diesel vs. electric. The latter would include the installation of 22-foot tall catenary structures, thereby increasing the distance at which visual/aesthetic impacts of the corridor would be evident.

For purposes of this EIS/EIR, we are relying, in part, on existing FTA protocols and standards, as published in an FTA Guidance Manual (Hanson, et al. 2006. *Transit Noise and Vibration Impact Assessment*, USDOT Tech. Rpt. FTA-VA-90-1003-06, Washington, D.C.), in defining the area of potential effects of the various rail corridors. In addition, the attached report, "South Coast Rail Area of Potential Effect for Cultural Resources," prepared by VHB, Inc., provides rationale for our determination of the APE (including visual, noise and vibration effects) for the various alternative alignments and modes. These data are summarized in Table 2, on page 6 of the report.

The Draft EIS/EIR under preparation by the Corps will thus include an assessment of the affected environment, including properties within the defined APE known to be eligible, potentially eligible, or listed on the National Register of Historic Places. The Draft EIS/EIR will also consider the environmental consequences of the proposed action, including an assessment of effects (whether or not adverse) on said properties. We anticipate that the draft EIS/EIR will be published in early autumn, 2009.

As this project progresses beyond the draft EIS/EIR stage, we will be required by U.S. Environmental Protection Agency (EPA) regulations at 40 CFR 230 et seq., to determine the "least environmentally damaging practicable alternative" (LEDPA) from among the many that have been identified prior to and during scoping. Once this determination is made, we must identify the "permit area" as defined by our own Section 106 regulations (33 CFR 325, Appendix C.1(g)): For purposes of this proposal, the permit area is limited to the waters of the U.S. that would be directly affected by the discharge of dredged or fill material, plus the upland areas along the selected corridor that (1) would not be affected but for our issuance of a DA permit; (2) are integrally related to any Corps-authorized activities in waters of the United States; and (3) wherein such activities in uplands are directly associated with the work to be authorized. Given the multiple crossings of aquatic resources that are probable along any of the given corridors, the permit area for the LEDPA will include the entire length and width of the selected corridor over which earthwork is necessary to complete the installation of new rail or highway infrastructure to successfully meet the overall project purpose, regardless of whether or not that work is in waters of the United States. Our office is therefore responsible for ensuring that necessary archaeological surveys are conducted to identify historic properties within the defined permit area.

We understand that Public Archaeology Laboratory (PAL) has requested a permit from your office to conduct archaeological reconnaissance surveys within existing corridors under consideration in the EIS/EIR. Although it is premature for us to define the permit area for this

project, we understand that PAL, on behalf of EOT, intends to complete said reconnaissance within the Attleboro, Stoughton and Highway corridors at this time, so as to provide a basis for comparison of the potential effects of this project on sensitive historic/archaeological resources within the possible permit areas of those alignments. The findings of that study will factor into our determination of the LEDPA as the EIS/EIR process moves forward, and we will ensure that you receive a copy of that and any related studies, and consult further with your office, at that time.

At this time, we are seeking your concurrence with our overall approach to identifying and documenting effects upon historic properties under Section 106 as defined above, as well as our determination of the APE as described in the VHB report. As this process moves forward, we will seek to facilitate open lines of communication to provide your office with adequate opportunity to review and comment upon the findings of additional studies and reports as they become available.

If you have any questions, please contact Alan R. Anacheka-Nasemann of my staff, at (978) 318-8214.

Sincerely,

Chief. Regulatory Division

Enclosures

Copies furnished:

Alecia McDevitt, MEPA Office, Executive Office of Energy and Environmental Affairs, 100
 Cambridge Street, Suite 900, Boston, Massachusetts 02114-2524 (Attn: Aisling Eglington)
 Kristina Egan, Executive Office of Transportation, Ten Park Plaza, Room 4133, Boston,

Massachusetts 02116-3973

Lisa A. Standley, Ph.D., VHB, Inc., P.O. Box 9151, Watertown MA 02471



Introduction

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- 6. Constructing overhead catenary to allow electrified train service

Area of Potential Effect for Cultural Resources



- 7. Adding new lanes in existing highway right-of-way
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I-93/Route 128	Construct bus lane(s) in median, interchange modifications Route 3	5	None	Highway

Table 1 South Coast Rail Corridor Segments – Work Type – Alternatives – Stations (Cont'd)

* Note: Electrified Commuter Rail is the worst-case - on each segment we are also looking at diesel, but diesel has a narrower APE.

** Alternative 1 = Through Attleboro

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Alternative 5 = Rapid Bus

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- > Introduction of new visual and setting elements,
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- > Construction activities including laydown areas,
- > Indirect effects, and
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Areas of Potential Effect 2008

In 2008, the U.S. Army Corps of Engineers (the Corps) was determined to be the lead federal agency with Section 106 responsibilities for the project. In order to address existing conditions, evaluate the affected environment, and determine the possible consequences to the resources of the proposed actions, APEs have been defined by work type and operation rather than track segment. This has been done because there are a restricted number of work types and operations and many of these are applicable to more than one track segment. The APE for below ground, above ground, and TCP resources are defined by work types and operations on Table 2.

Area of Potential Effect for Cultural Resources

¹ Executive Office of Transportation and Public Works. *Analysis of South Coast Rail Alternatives: Phase 1 Report*, April 30, 2008. Section 8 4, Alternatives Short List

² Harrington et al., Cultural Resources Survey, Above-Ground Historic Resources Overview Report, New Bedford/Fall River Commuter Rail Extension Project, PAL Report No. 935, May 2000, Chapter 2, pages 4-6.

³ Cherau et al. 2001, Archaeological Reconnaissance Survey, New Bedford/Fall River Commuter Rail Extension Project, PAL Report No. 935-1.



Work Types and Operations	Below Ground	Above Ground TCP	
Rail corridors, baseline	Area of direct impact for proposed construction activities	800 ft (400 ft to either side of centerline) for electrification, 800 feet (400 feet either side of centerline) for diesel routes	To be determined in consultation with the Corps
Stations (including stations, parking lots, access roads, and associated features)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps
Layover and maintenance facilities (lot only)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps
Construction laydown and staging areas (lot only)	Area of direct impact for proposed construction activities	250 ft from perimeter of proposed facility boundary	To be determined in consultation with the Corps
Road, new lane within existing right-of-way	None	None	None
Road, new lane outside existing right-of-way	Area of direct impact for proposed construction activities	400 ft from proposed road centerline	To be determined in consultation with the Corps
Road, temporary and permanent access to proposed facility	Area of direct impact for proposed construction activities	400 ft from proposed road centerline	To be determined in consultation with the Corps
Road, intersections	Area of direct impact for proposed construction activities	400 ft on either side of the intersection centerline	To be determined in consultation with the Corps

Table 2 APE Definitions by Work Types and Operations and Resource Class

Above Ground Historic Resources APE Definition

The definition of the APE for historic resources is informed by prior similar rail projects such as the MBTA New Bedford/Fall River Commuter Rail Extension project and MBTA Greenbush Line Restoration project; from visual impact analyses; from technical analyses and standards; and roadway projects. For comparison, the Greenbush Line baseline APE was set in 2000 at 400 feet, extending 500 to 800 feet at intersections where extended views might occur. Greenbush is a "quiet zone" with no horn blowing.



The Federal Transit Authority's (FTA) screening standard for noise and vibration is 375 feet from rail centerline and the Corps accepts this distance as appropriate for the project. Noise and vibration impact APEs may be revised however as noise modeling is completed and the extent of noise and vibration impacts are more clearly understood.

The worst case visual and setting impacts are generally anticipated to occur up to 250 feet from rail centerline for most corridor impacts and 250 feet around the perimeter of stations, construction staging and laydown areas, and layover-maintenance facilities, and along at-grade intersections with extended views (Emidy et al. 2002). These distances were used during the New Bedford/Fall River Commuter Rail Extension Project. Visual and setting impacts will extend out up to 800 feet to either side of the centerline in areas of electrification where 22-foot tall catenary will be installed. Visual impact APEs may be reduced as field survey is conducted and additional information is available. Therefore, based on precedent projects and currently known information about South Coast Rail project effects referenced above, the project Baseline APE for above ground historic resources is as follows (also see Table 2):

- The baseline rail corridor APE for above ground historic resources as regards visual and setting impacts is defined as 250 feet from either side of the rail right-of-way centerline on all segments. The APE is defined as 400 feet from either side of the rail right-of-way centerline for the Middleborough Secondary, Old Colony, and Whittenton Branch segments (areas where overhead catenary is not among the alternatives).
- The APE will extend out to 800 feet from either side of the rail right-of-way centerline on segments where overhead catenary is among the alternatives (Fall River Secondary, New Bedford Main Line, Attleboro Secondary, Attleboro Bypass, Northeast Corridor, and the Stoughton Line).
- The APE is defined as 250 feet from the perimeter of station locations with associated parking lots and features, layover/maintenance facilities, and laydown/construction staging for all track segment alternatives.
- The APE is defined as 400 feet on other side of the highway road centerline for Route 1-93/Route 128 interchanges modifications, and around road intersection improvements if any are required along all track segment alternatives. If a previously recorded or potential historic district or cultural landscape is identified, the APE will broaden as necessary to encompass the entire resource.
- For highway and rapid bus alternatives where work is in the median only, the APE is defined as the existing road right-of-way.
- When adding new lanes (from I-495 to Route 140), the APE is assumed to be the width of the new lane, the associated work space, plus 100 feet for a total not greater than 400 feet.

Area of Potential Effect for Cultural Resources



The APEs for any extended visual effects generated by catenary that is higher than 22 feet, for noise and vibration effects other than those assumed, and for any other effects with parameters that are not yet determined will be defined and addressed when the necessary information is available.



Below Ground Archaeological Resources APE

The APE for archaeological resources is the direct APE where ground disturbances are planned for the construction of project elements. These elements include: the active and inactive railroad right-of-way and active road right-of-way segments; new station locations; new layover/maintenance facility(s); and any other ancillary work areas and landtakings identified as part of the alternatives (see Table 1).

Traditional Cultural Properties APE

The Wampanoag Tribe of Gay Head/Aquinnah has indicated that the Hockomock Swamp and the Pine Swamp are regarded as traditionally culturally sensitive lands.⁴ These two swamps are located in the towns of Easton, Raynham, and Taunton, and may be affected by the Stoughton Route or the Rapid Bus Alternative. The Mashpee Wampanoag Tribe and the Assonet Wopanaak Nation may also express interest in these and other traditionally culturally sensitive lands.

Should a location(s) of traditional cultural significance be identified within the project study area by individual(s) and/or groups including the above Native Americans, through the Corps' consultation with these groups, then the APE for such a location and its eligibility as a Traditional Cultural Property will be determined through consultation between the Corps and the individual(s) and/or groups.

Area of Potential Effect for Cultural Resources

⁴ Personal communication, M. Harding 2002 in Cherau 2002



The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth Massachusetts Historical Commission

July 2, 2009

Jennifer McCarthy Chief, Regulatory Division Department of the Army New England District Corps of Engineers 696 Virginia Road Concord, MA 01742-2751

Attn: Alan Anacheka-Nasemann

RE: South Coast Rail Project, Southeastern Massachusetts. MHC #RC.15924. EEA#14346. CE-NAE-2007-00698.

Dear Ms. McCarthy:

The Massachusetts Historical Commission, office of the State Historic Preservation Officer, have received the US Army Corps of Engineers' (Corps) initial notification to commence consultation for the project referenced above in compliance with Section 106 of the National Historic Preservation Act of 106, as amended (36 CFR 800), received June 5, 2009.

Your letter indicates that the Corps is preparing environmental review documents to assist in NEPA and state MEPA requirements. Please be sure that no sensitive archaeological site data are included in any document prepared for public review in order to protect the sites.

The undertaking includes new above-ground construction, and other actions that have the potential to cause adverse effects to historic properties located in proximity, such as but not limited to visual, vibration, and atmospheric effects. The "South Coast Rail Area of Potential Effect for Cultural Resources" prepared by VHB, Inc. attached to your letter outlines a suitable approach to defining an appropriate area of potential effect and takes into account proposed direct and indirect effects to historic properties. MHC concurs with the Corps' overall approach for the identification and documentation of effects to historic properties, and determination of the area of potential effect, as proposed in VHB, Inc.'s suggested approach.

MHC has received on June 29, 2009, from VHB, Inc., the PAL's draft technical report, *Cultural Resources Reconnaissance Survey South Coast Rail Project Southeast Massachusetts*. The report should also be provided to the Corps for review and comment. MHC will review and comment, and looks forward to the Corps' comments and recommendations on the draft report.

220 Morrissey Boulevard, Boston, Massachusetts 02125 (617) 727-8470 • Fax: (617) 727-5128 www.sec.state.ma.us/mhc MHC looks forward to continued consultation. These comments are provided to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). If you have any questions please contact Jonathan K. Patton, Archaeologist/ Preservation Planner, at this office.

Sincerely,

xc:

Brona Surven

Brona Simon State Historic Preservation Officer Executive Director State Archaeologist Massachusetts Historical Commission

Charlene Dwin Vaughn, ACHP Kate Atwood, COE-NED Bettina Washington, THPO, Wampanoag Tribe of Gay Head (Aquinnah) George Green Jr., THPO, Mashpee Wampanoag Tribe James A. Peters, Jr. Massachusetts Commission on Indian Affairs A. Kenneth Alves, Assonet Band, Wampanoag Nation Kristina Egan, EOT Andrew Brennan, MBTA Holly Palmgren, MBTA Secretary Ian A. Bowles, EEA, Attn: Aisling Eglington, MEPA Unit Stephen C. Smith, SRPEDD **Boston Landmarks Commission** Historical Commissions, Towns of: Quincy, Milton, Canton, Randolph, Braintree, Holbrook, Avon, Stoughton, Norwood, Canton, Sharon, Easton, Foxborough, Mansfield, Bridgewater, Brockton, West Bridgewater, Taunton, Berkley, Lakeville, Middleborough, Norton, Attleborough, Fall River, Freetown, New Bedford Deborah C. Cox, PAL Lisa A. Standley, VHB, Inc.