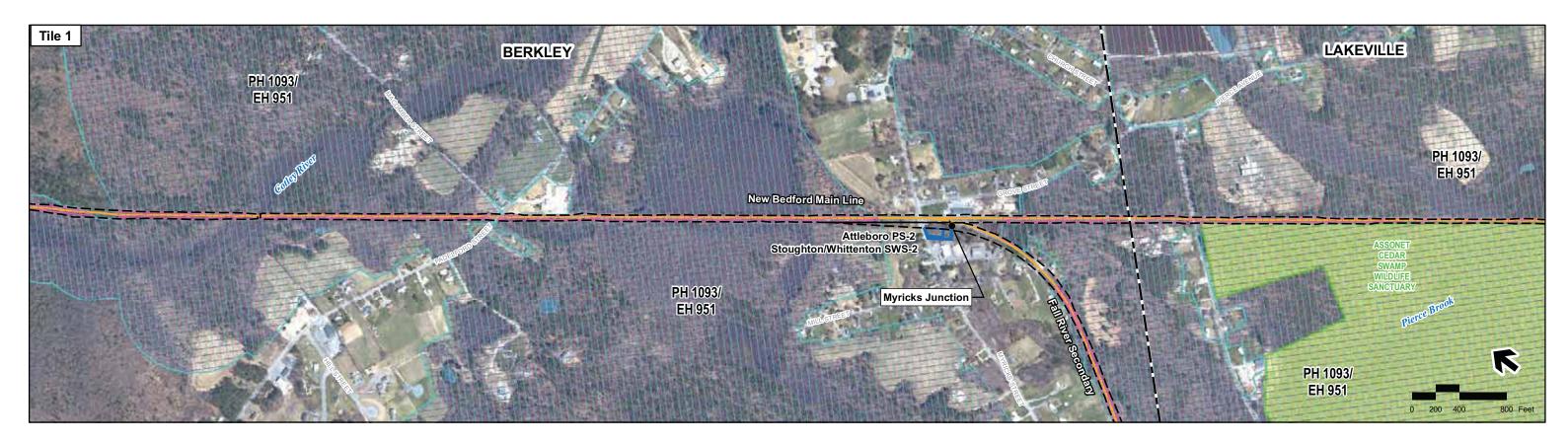


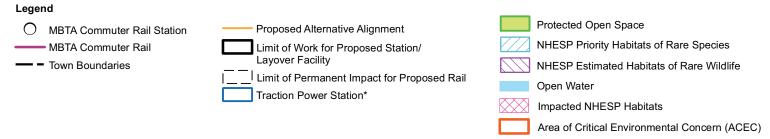
Figure 4.15-1a

All Rail Alternatives - New Bedford Mainline (Sheet 1 of 5)

^{*} Traction power stations are only required for electric rail alternative







INCLESORO AVESDRO TOUTON BERGER FALL RIVER MESTPORT MESTPORT

Figure 4.15-1b

All Rail Alternatives - New Bedford Mainline (Sheet 2 of 5)

^{*} Traction power stations are only required for electric rail alternative





MBTA Commuter Rail Station —— MBTA Commuter Rail

Town Boundaries

Proposed Alternative Alignment Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-1c

All Rail Alternatives - New Bedford Mainline (Sheet 3 of 5)

^{*} Traction power stations are only required for electric rail alternative





MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

ORDO AUGUSTE CARVER CARVER DIGHTON BERKLEY LAKEVELE SWANSEA FREETOWN ROCHESTER

Index Map

Figure 4.15-1d

All Rail Alternatives - New Bedford Mainline (Sheet 4 of 5)

^{*} Traction power stations are only required for electric rail alternative





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/
Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

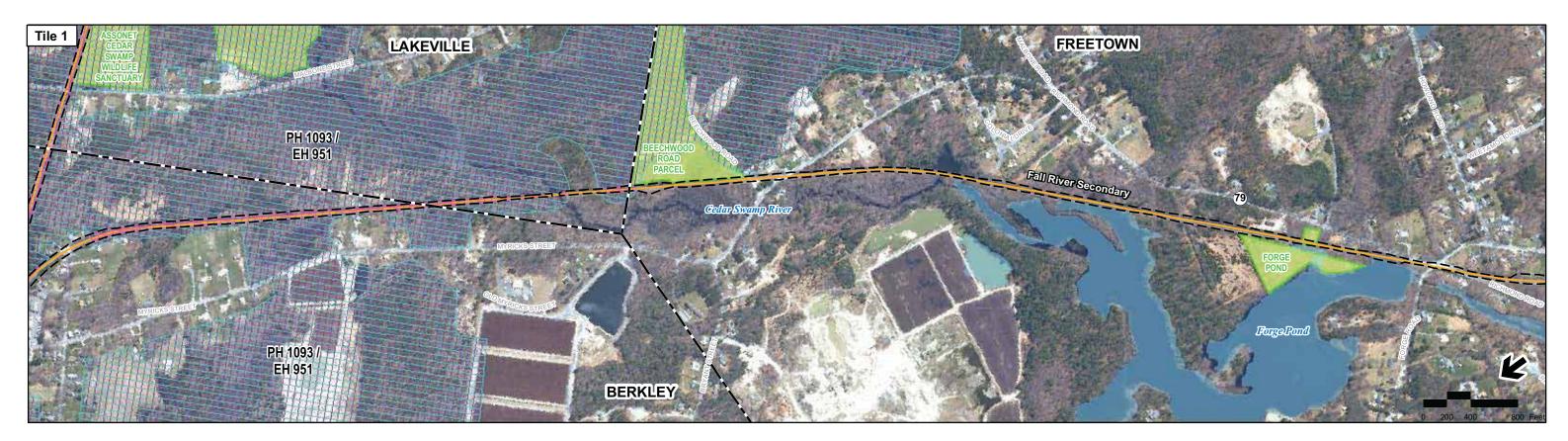
Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-1e

All Rail Alternatives - New Bedford Mainline (Sheet 5 of 5)





Protected Open Space

Impacted NHESP Habitats

Open Water

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

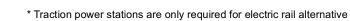
Area of Critical Environmental Concern (ACEC)

Index Map

Figure 4.15-2a

All Rail Alternatives - Fall River Secondary (Sheet 1 of 3)

Threatened & Endangered Species



Proposed Alternative Alignment
Limit of Work for Proposed Station/
Layover Facility

Traction Power Station*

Limit of Permanent Impact for Proposed Rail

Legend

MBTA Commuter Rail Station

----- MBTA Commuter Rail

- Town Boundaries





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/
Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-2b

All Rail Alternatives - Fall River Secondary (Sheet 2 of 3)

^{*} Traction power stations are only required for electric rail alternative

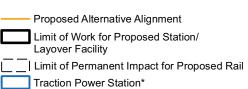




MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries



Protected Open Space NHESP Priority Habitats of Rare Species NHESP Estimated Habitats of Rare Wildlife Open Water Impacted NHESP Habitats Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-2c

All Rail Alternatives - Fall River Secondary (Sheet 3 of 3)





Town Boundaries

---- MBTA Commuter Rail

MBTA Commuter Rail Station

Legend

Proposed Alternative Alignment

Limit of Work for Proposed Station/
Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

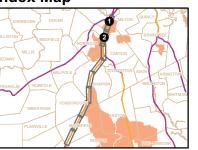


Figure 4.15-3a

Attleboro Alternatives - Northeast Corridor (Sheet 1 of 5)





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

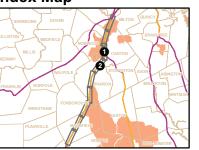


Figure 4.15-3b

Attleboro Alternatives - Northeast Corridor (Sheet 2 of 5)





NHESP Priority Habitats of Rare Species

Open Water

Impacted NHESP Habitats

NHESP Estimated Habitats of Rare Wildlife

Area of Critical Environmental Concern (ACEC)

Figure 4.15-3c

Attleboro Alternatives - Northeast Corridor

Threatened & Endangered Species

(Sheet 3 of 5)

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Traction Power Station*

Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail

MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries





Figure 4.15-3d

Attleboro Alternatives - Northeast Corridor

Threatened & Endangered Species

(Sheet 4 of 5)

Protected Open Space

Impacted NHESP Habitats

Open Water

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Area of Critical Environmental Concern (ACEC)

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Layover Facility

Traction Power Station*

Limit of Work for Proposed Station/

Limit of Permanent Impact for Proposed Rail

O MBTA Commuter Rail Station

----- MBTA Commuter Rail

- Town Boundaries





MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

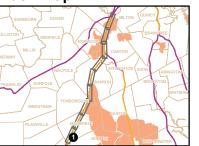


Figure 4.15-3e

Attleboro Alternatives - Northeast Corridor (Sheet 5 of 5)





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/
Layover Facility

Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

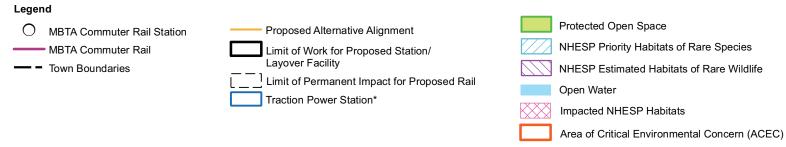


Figure 4.15-4a

Attleboro Alternatives - Attleboro Bypass and Attleboro Secondary (Sheet 1 of 3)







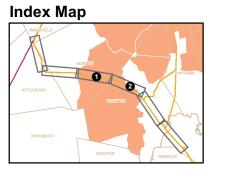
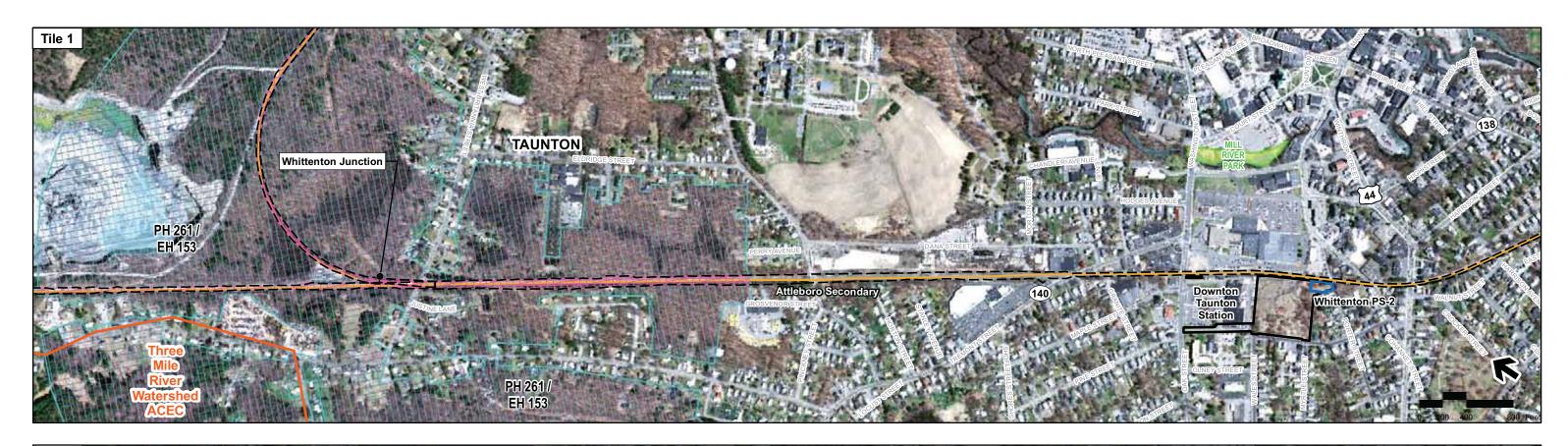


Figure 4.15-4b

Attleboro Alternatives - Attleboro Bypass and Attleboro Secondary (Sheet 2 of 3)





Legend MBTA Commuter Rail Station MBTA Commuter Rail Limit of Work for Proposed Station/ Layover Facility Limit of Permanent Impact for Proposed Rail Traction Power Station* Impacted NHESP Habitats Area of Critical Environmental Concern (ACEC)

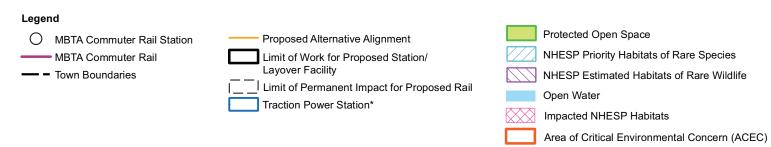
Index Map

Figure 4.15-4c

Attleboro Alternatives - Attleboro Bypass and Attleboro Secondary (Sheet 3 of 3)







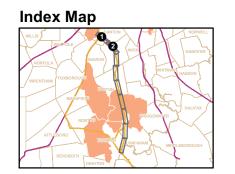
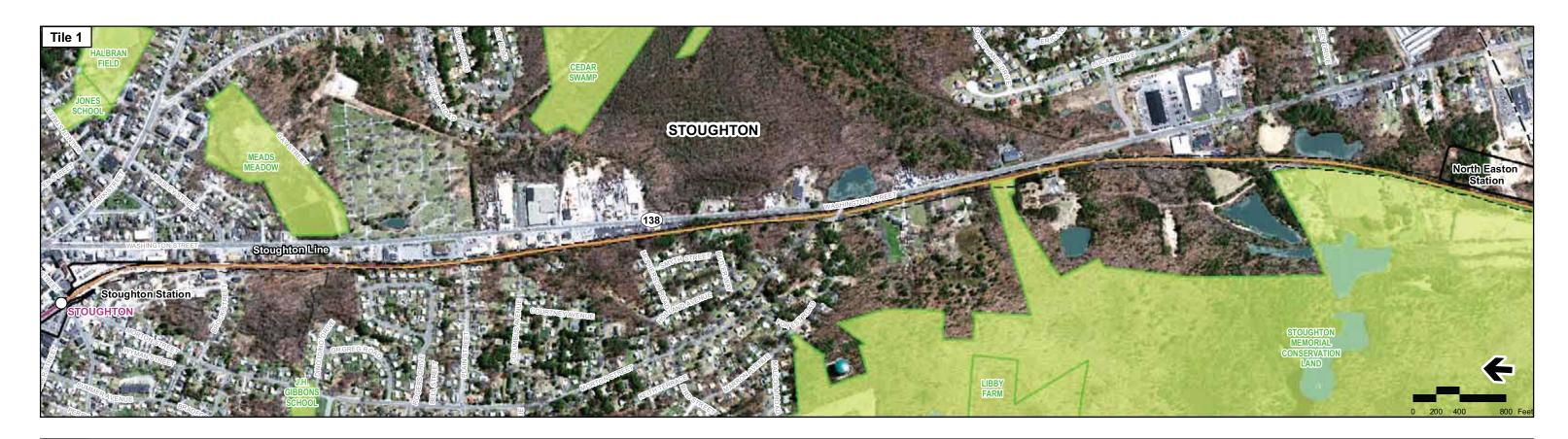
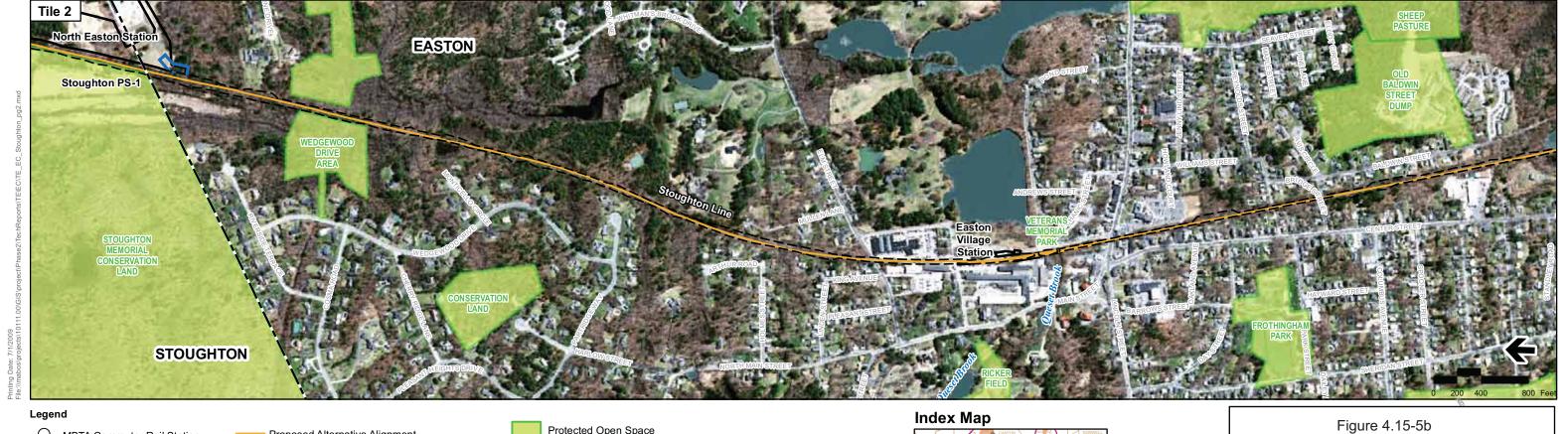


Figure 4.15-5a

Stoughton Alternatives - Stoughton Line (Sheet 1 of 5)





Stoughton Alternatives - Stoughton Line (Sheet 2 of 5)

Threatened & Endangered Species

Protected Open Space

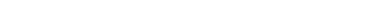
Impacted NHESP Habitats

Open Water

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Area of Critical Environmental Concern (ACEC)



* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment Limit of Work for Proposed Station/ Layover Facility

Traction Power Station*

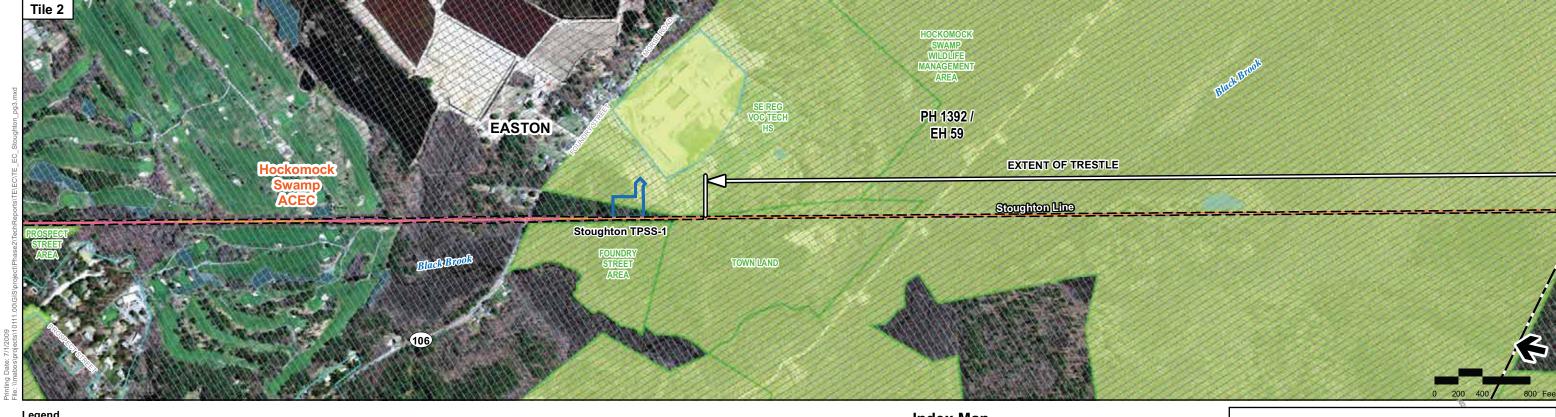
Limit of Permanent Impact for Proposed Rail

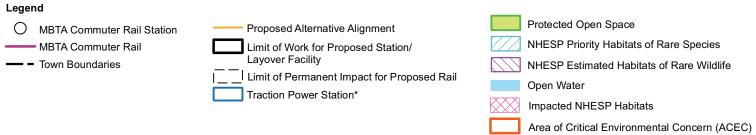
MBTA Commuter Rail Station

----- MBTA Commuter Rail

— - Town Boundaries







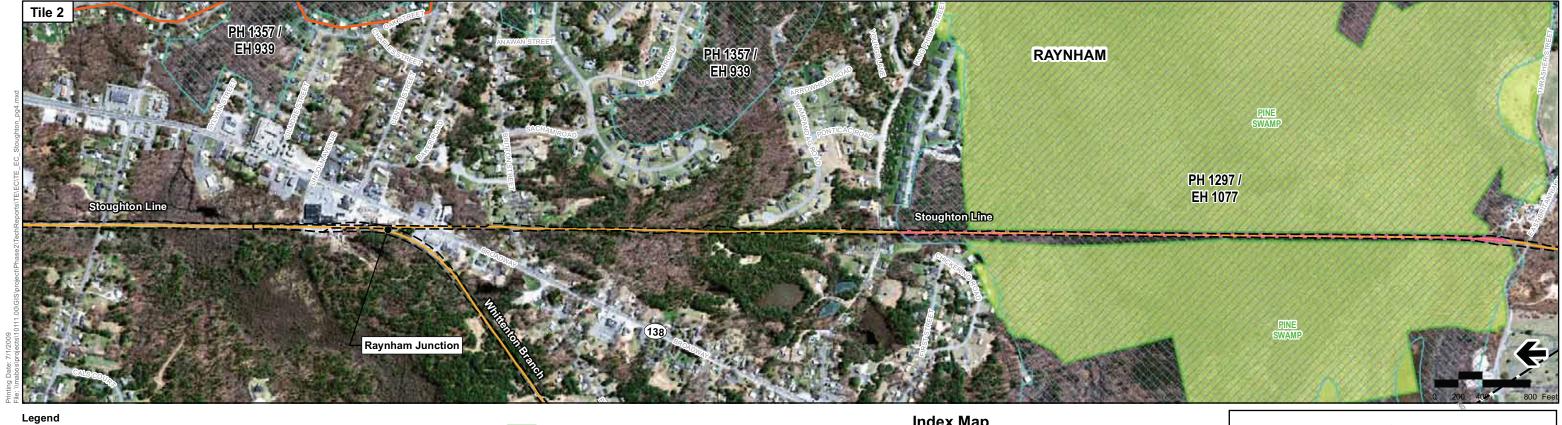
INCHES MADON MILLIS MANOYER MANOYER

Figure 4.15-5c

Stoughton Alternatives - Stoughton Line (Sheet 3 of 5)

^{*} Traction power stations are only required for electric rail alternative





- Town Boundaries

----- MBTA Commuter Rail

MBTA Commuter Rail Station

Proposed Alternative Alignment

Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

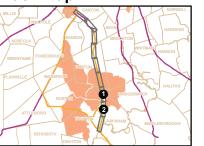


Figure 4.15-5d

Stoughton Alternatives - Stoughton Line (Sheet 4 of 5)

^{*} Traction power stations are only required for electric rail alternative





MBTA Commuter Rail Station ----- MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment Limit of Work for Proposed Station/ Layover Facility

Limit of Permanent Impact for Proposed Rail Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

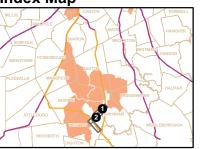


Figure 4.15-6a

Whittenton Alternatives - Whittenton Branch (Sheet 1 of 2)



MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station/
Layover Facility

Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map

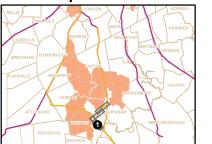
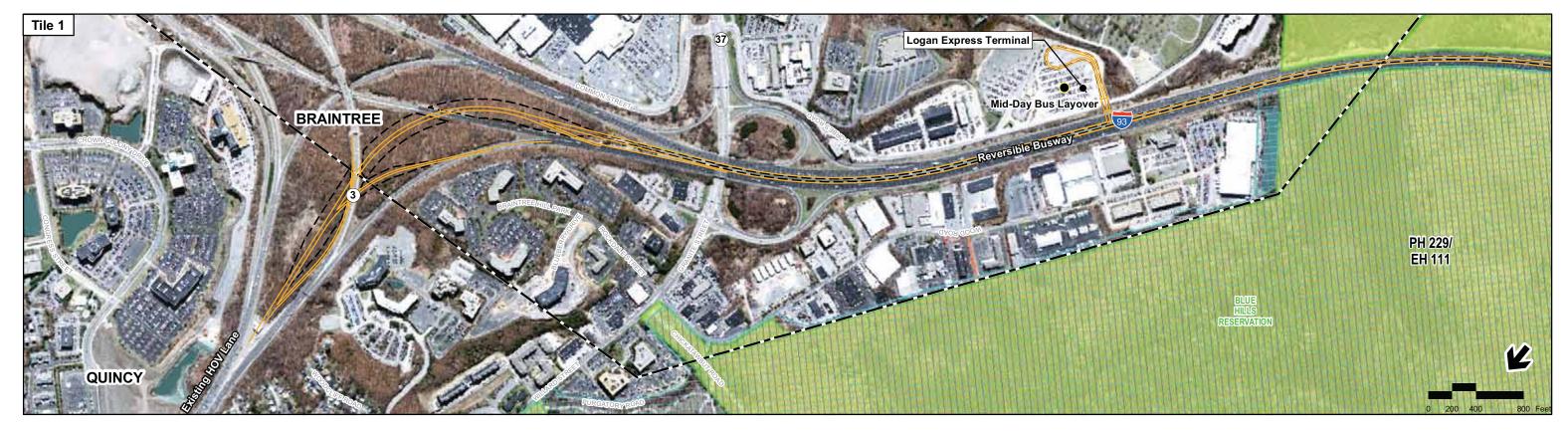


Figure 4.15-6b

Whittenton Alternatives - Whittenton Branch (Sheet 2 of 2)





MBTA Commuter Rail Station ----- MBTA Commuter Rail

- Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Proposed Stations

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-7a

Rapid Bus Alternative (Sheet 1 of 7)





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

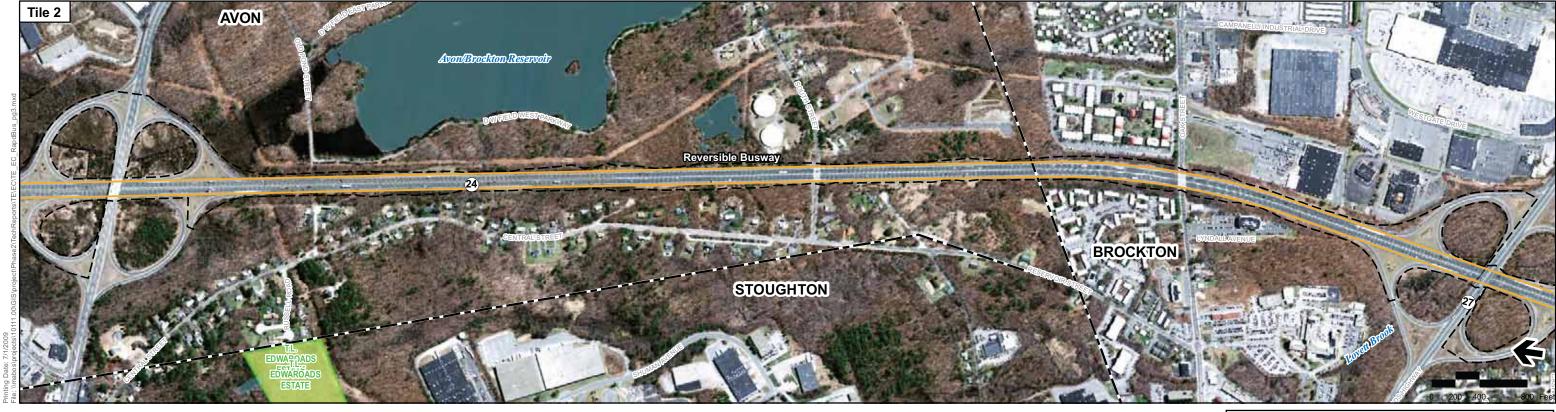
Index Map



Figure 4.15-7b

Rapid Bus Alternative (Sheet 2 of 7)





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-7c

Rapid Bus Alternative (Sheet 3 of 7)





MBTA Commuter Rail Station ----- MBTA Commuter Rail

- Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-7d

Rapid Bus Alternative (Sheet 4 of 7)





MBTA Commuter Rail Station ----- MBTA Commuter Rail

— - Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-7e

Rapid Bus Alternative (Sheet 5 of 7)





MBTA Commuter Rail Station

MBTA Commuter Rail

— - Town Boundaries

Limit of Permanent Impact for Proposed Rapid Bus

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Index Map



Figure 4.15-7f

Rapid Bus Alternative (Sheet 6 of 7)



----- Proposed Alternative Alignment

Limit of Work for Proposed Station

Limit of Permanent Impact for Proposed Rail

Platform

- Town Boundaries

Protected Open Space

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

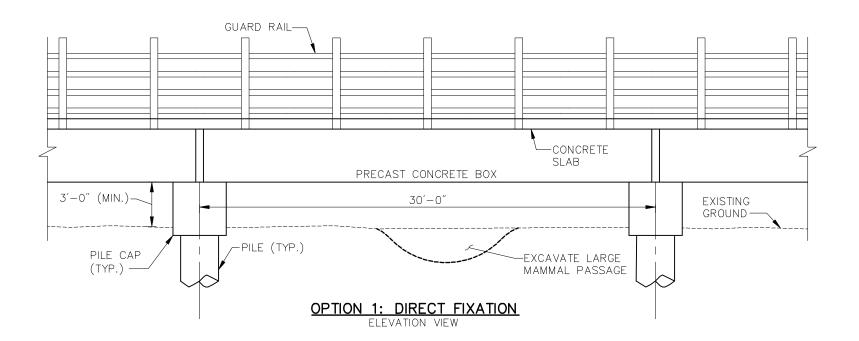
Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Figure 4.15-8

Raynham Place Station Site

Threatened & Endangered Species Polygons



NOTE: EVERY SEVENTH PILE CAP WILL BE LENGTHENED TO SUPPORT THE CATENARY SUPPORT POLES (SPACED AT 210' O.C.).

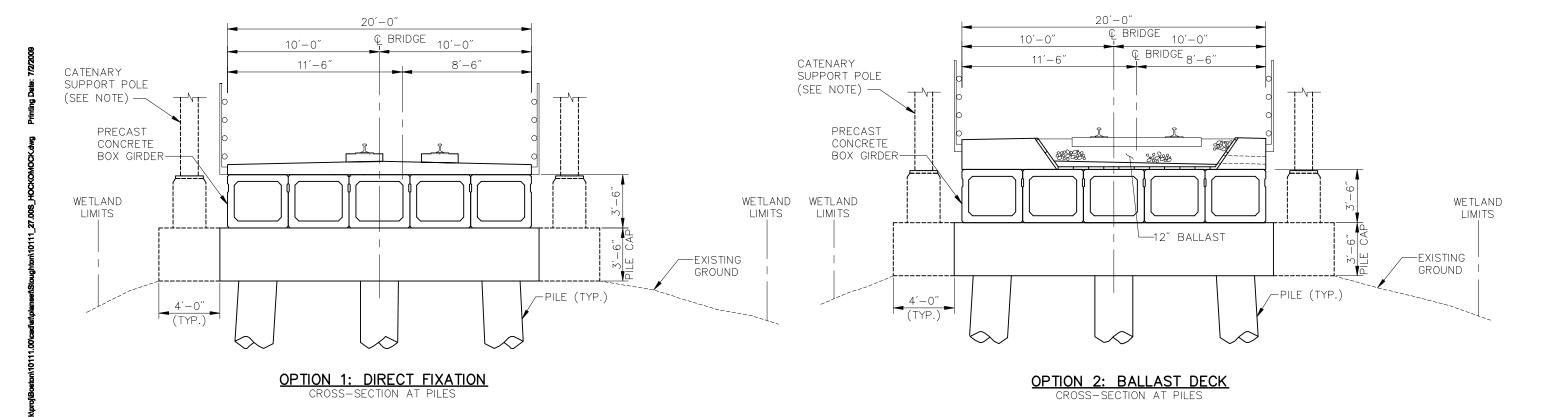
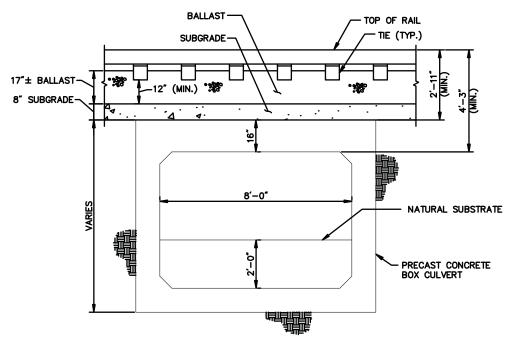




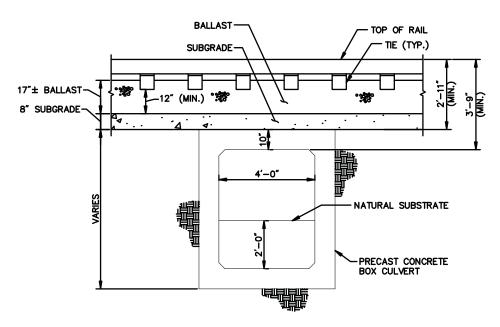
Figure 4.15-9

Trestle Through Hancock Swamp



8'-0" WIDE PRECAST CONCRETE BOX CULVERT

SCALE: 1/4" = 1'-0"

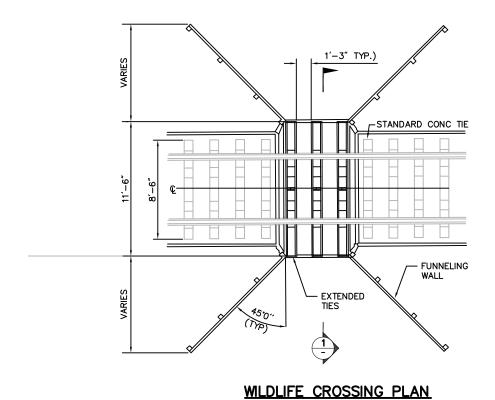


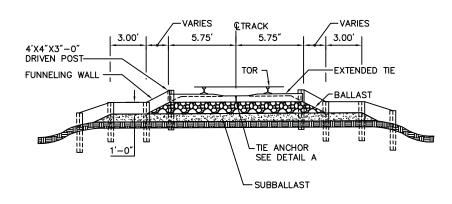
4'-0" WIDE PRECAST CONCRETE BOX CULVERT

SCALE: 1/4"= 1'-0"

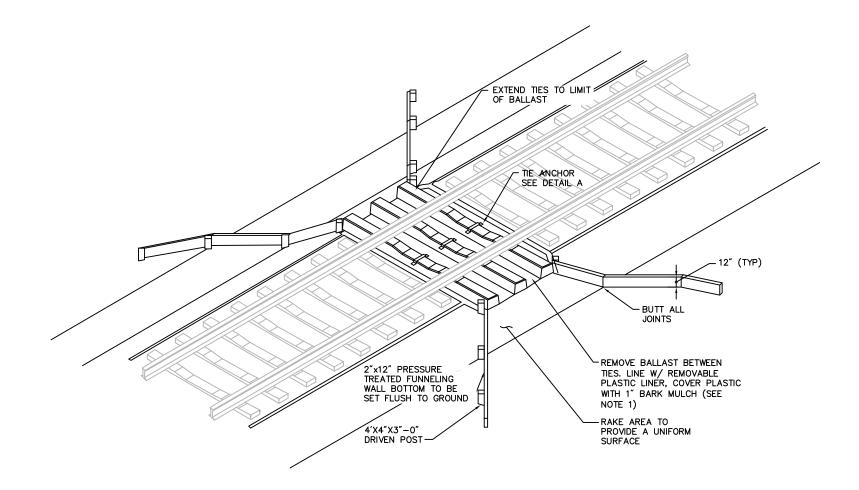
Figure 4.15-10

Typical Cross Sections - Concrete Block Culvert

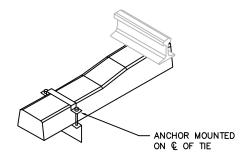








WILDLIFE CROSSING NTS





NOTES:

1. CONTRACTOR TO REMOVE BALLAST BETWEEN
TIES AND LINE AREA WITH 40 MIL HDPE FORMED
TIGHTLY BETWEEN TIES. CONNECT TO CONC TIES
WITH CONC ANCHORS

Figure 4.15-11

Wildlife Crossing - Under-Rail Trough





Legend

MBTA Commuter Rail Station

MBTA Commuter Rail

Limit of Work for Proposed Station/
Layover Facility

Traction Power Station*

Protected Open Space

NHESP Priority Habitats of Rare Species

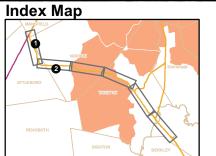
NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats

Area of Critical Environmental Concern (ACEC)

Mitigation Measures

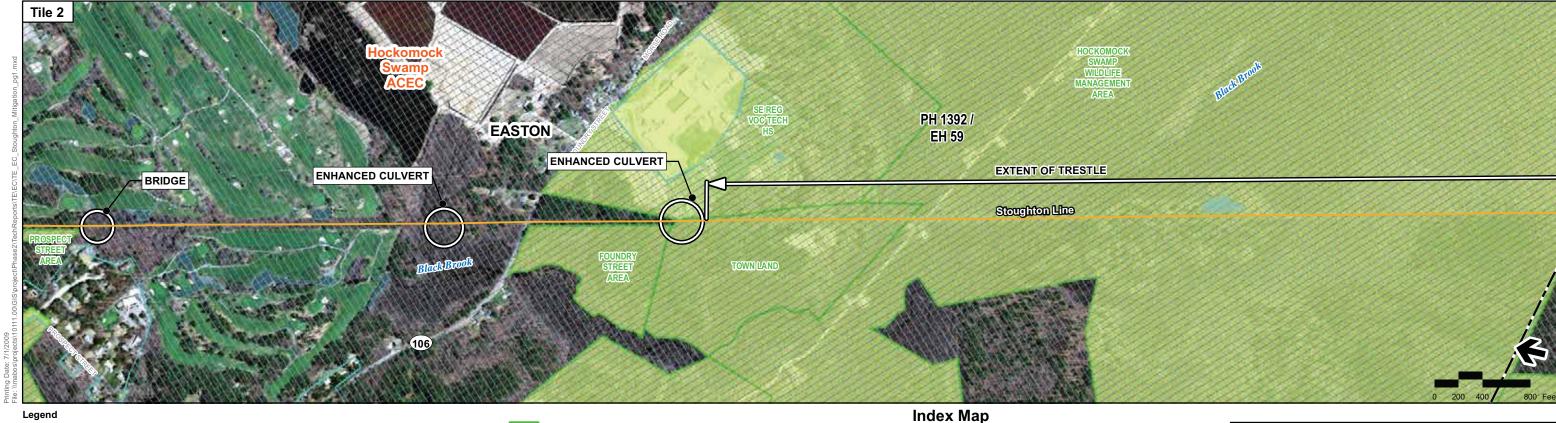


Attleboro Alternatives - Attleboro Bypass and Attleboro Secondary Mitigation Measures

Threatened & Endangered Species

Figure 4.15-12





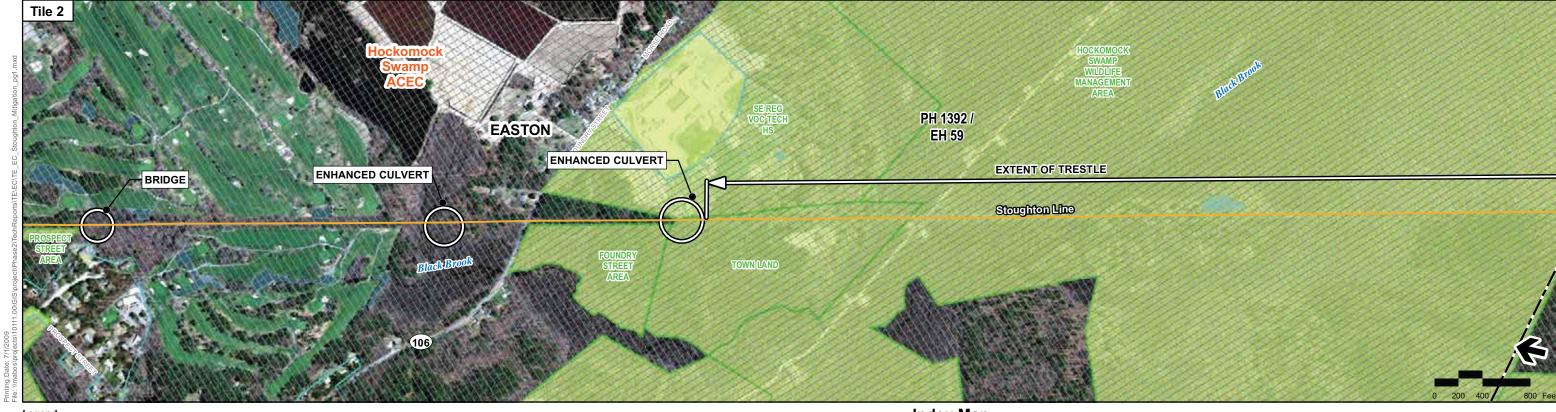
Legend MBTA Commuter Rail Station MBTA Commuter Rail Limit of Work for Proposed Station/ Layover Facility Traction Power Station* Proposed Alternative Alignment NHESP Priority Habitats of Rare Species NHESP Estimated Habitats of Rare Wildlife Open Water Impacted NHESP Habitats Area of Critical Environmental Concern (ACEC) Mitigation Measures



Stoughton Alternatives - Stoughton Line
(Sheet 1 of 2)
Mitigation Measures
Threatened & Endangered Species

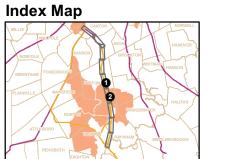
Figure 4.15-13





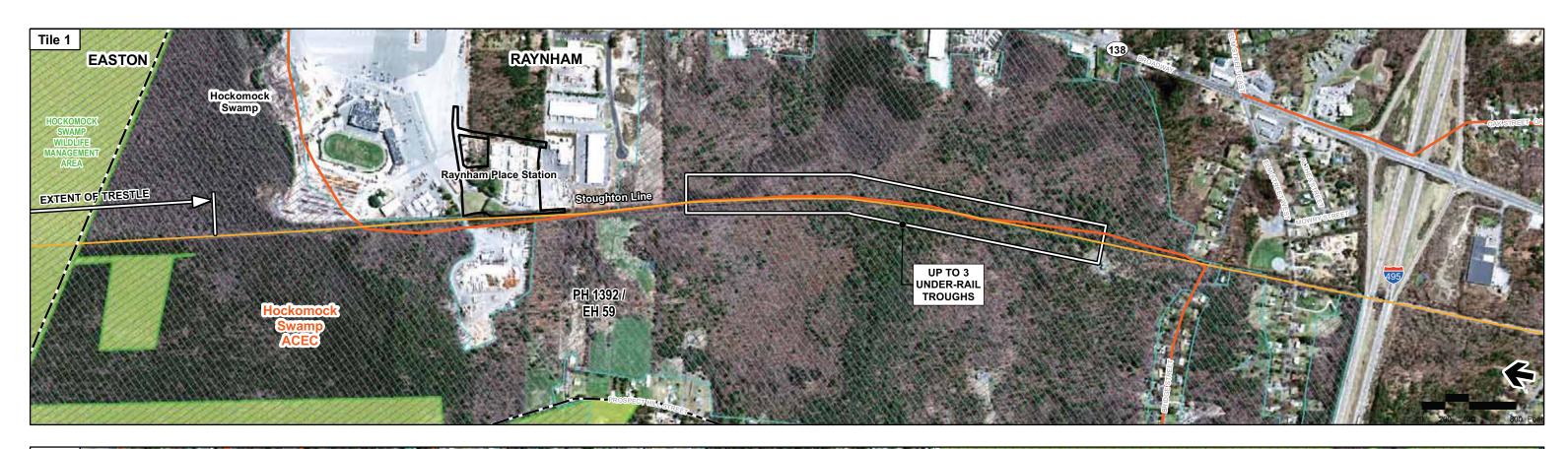
Legend MBTA Commuter Rail Station MBTA Commuter Rail Limit of Work for Proposed Station/ Layover Facility Town Boundaries Protected Open Space NHESP Priority Habitats of Rare Species NHESP Estimated Habitats of Rare Wildlife Open Water Impacted NHESP Habitats Area of Critical Environmental Concern (ACEC)

Mitigation Measures



Stoughton Alternatives - Stoughton Line
(Sheet 1 of 2)
Mitigation Measures
Threatened & Endangered Species

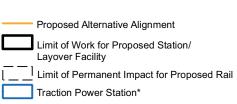
Figure 4.15-13a

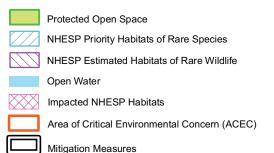


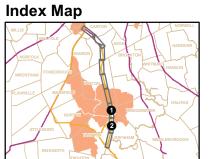


MBTA Commuter Rail Station MBTA Commuter Rail

Town Boundaries







Stoughton Alternatives - Stoughton Line
(Sheet 2 of 2)
Mitigation Measures
Threatened & Endangered Species

Figure 4.15-13b







O MBTA Commuter Rail Station Proposed Alternative Alignment MBTA Commuter Rail Limit of Work for Proposed Station/ Layover Facility Limit of Permanent Impact for Proposed Rail Traction Power Station*

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Open Water

Impacted NHESP Habitats



Area of Critical Environmental Concern (ACEC)



Mitigation Measures



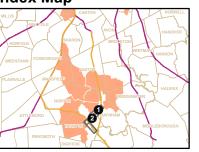


Figure 4.15-14

Whittenton Alternatives - Whittenton Branch

Mitigation Measures Threatened & Endangered Species

Protected Open Space

^{*} Traction power stations are only required for electric rail alternative