

West Roxbury to Needham Reliability Project

Commonwealth of Massachusetts
Energy Facilities Siting Board
Public Comment Hearing

EFSB 16-02
DPU 16-77

September 27, 2016

Greater Boston Solution to Address System Reliability Needs

- A strong electrical transmission grid is vital to the safety, security, and economic prosperity of the region. The transmission system serves a critical role to ensure that electricity flows with a high degree of reliability to where power is needed.
- In a recent study, ISO-New England, the independent system operator for New England, concluded that there are inadequate transmission resources to serve the electricity needs in the Greater Boston /Metro West and surrounding area.
- To proactively address these deficiencies and the growing customer demands on the electric system, Eversource is implementing a series of transmission projects called the “Greater Boston and Southern New Hampshire Solution.”
- One of the selected projects to solve the identified system reliability problems is the DCT (Double Circuit Tower) separation of two 115-kV circuits between West Roxbury and Needham, called the West Roxbury to Needham Reliability Project.

West Roxbury to Needham Reliability Project

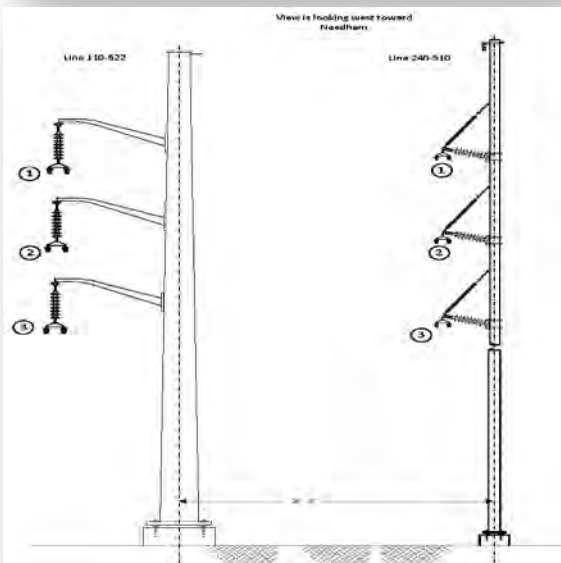
Project Need & Benefits

- Separating the existing 115-kV double circuit tower (“DCT”) overhead transmission lines between the Baker Street Substation in West Roxbury and the Needham Substation will mitigate potential area overloads and will help maintain reliable 115-kV electric service to area substations serving 65,000 customers the western Boston Suburbs.
- The Project will also create economic benefit in the area during construction: direct (construction jobs) and indirect (hotels, restaurants, etc.), and produce significant new property tax revenue for the municipalities in which the new facilities are located.

West Roxbury to Needham Reliability Project Overview



- The proposed project involves a combination of overhead (OH) and underground (UG) transmission line construction.
- The DCT separation work will involve relocating 1.6 miles of existing overhead transmission line onto new sets of structures (steel monopoles) offset ~28-feet north or south of the existing structures on existing Eversource ROW in Boston, Dedham and Needham (up to Valley Road area in Needham).



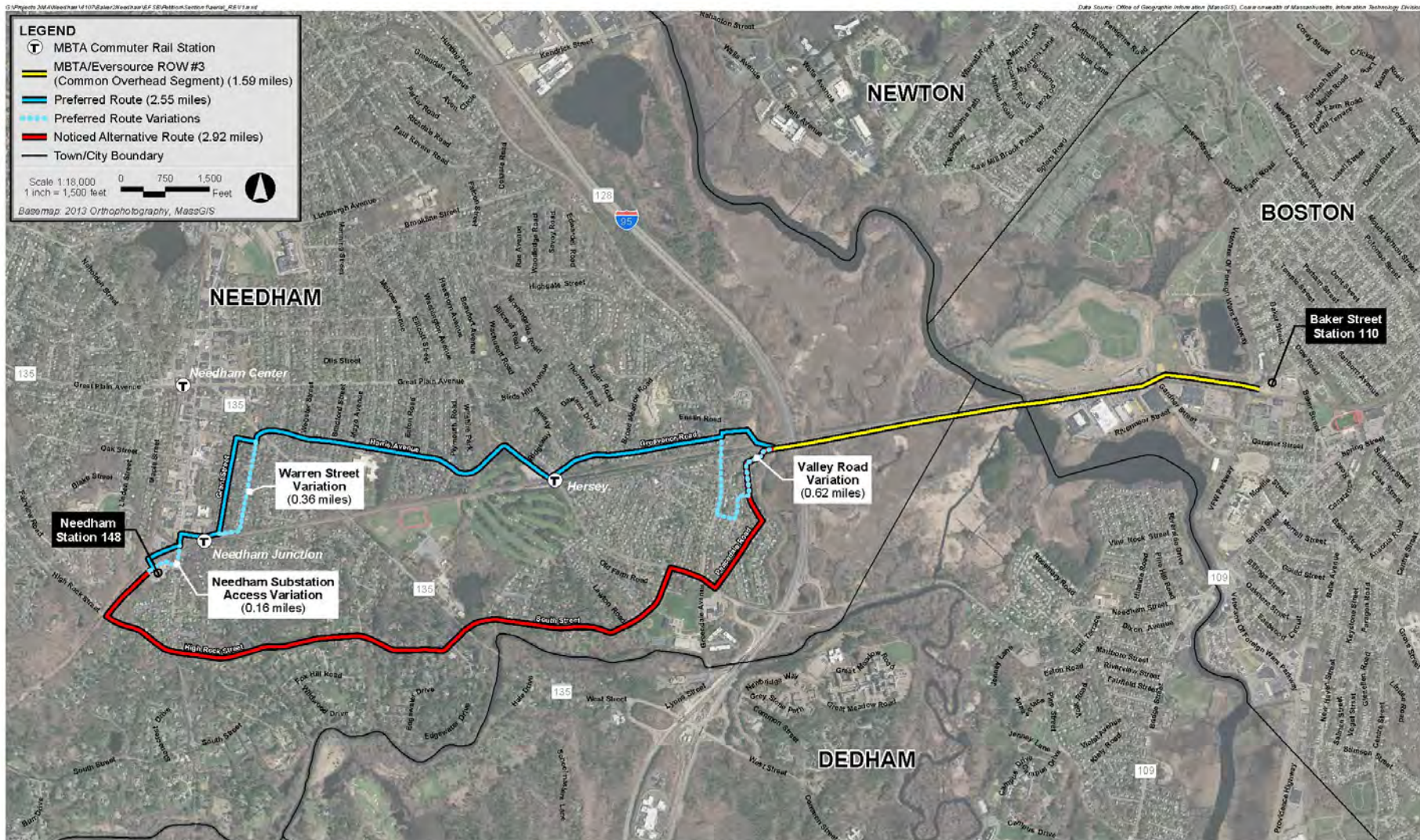
West Roxbury to Needham Reliability Project

Overview (continued)



- The balance of the DCT separation work will involve 2.6 miles of new UG line construction located primarily in public streets in Needham (generally between Valley Road area and Chestnut Street).
- No significant substation work required for the Project (no fence line expansion or removal of existing equipment is required).

West Roxbury to Needham Reliability Project Preferred and Noticed Alternative Route



Preferred UG Route (2.6 miles)

- Greendale Avenue (via municipal “Gravel Pit” parcel)
- Grosvenor Road
- Broad Meadow Road
- Great Plain Avenue
- Harris Avenue
- School Street
- Grant Street
- Junction Street
- Chestnut Street

Potential Variations to Preferred Route

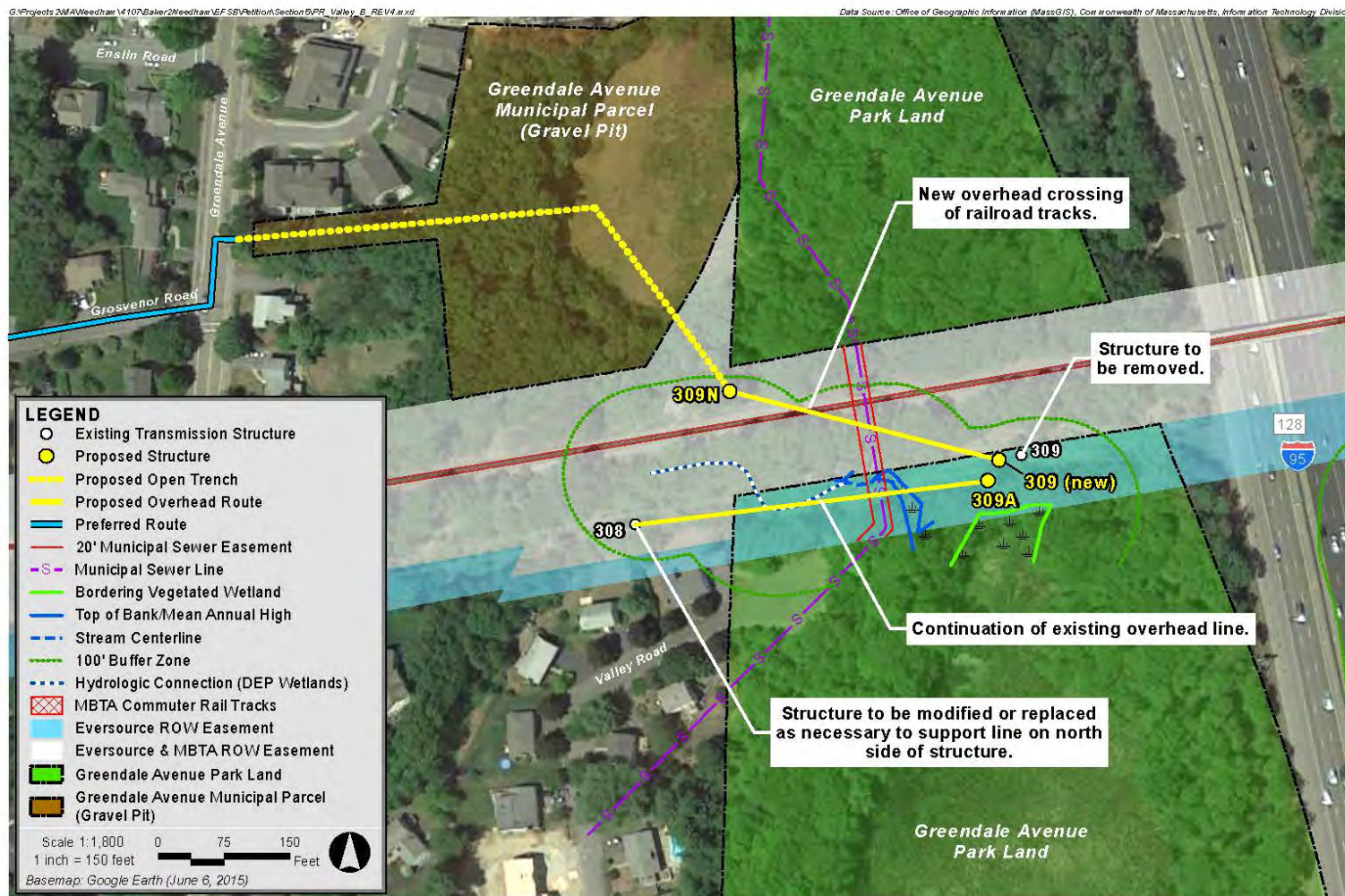
- Valley Road (via Greendale Avenue Park Land)
- Intervale Road
- Warren Street (in lieu of Grant Street)

Noticed Alternative UG Route (3.0 miles)

- Valley Road (via Greendale Avenue Park Land)
- Peacedale Road
- Great Plain Avenue
- South Street
- High Rock Street
- West end of ROW to Needham Substation (via High Rock Street)

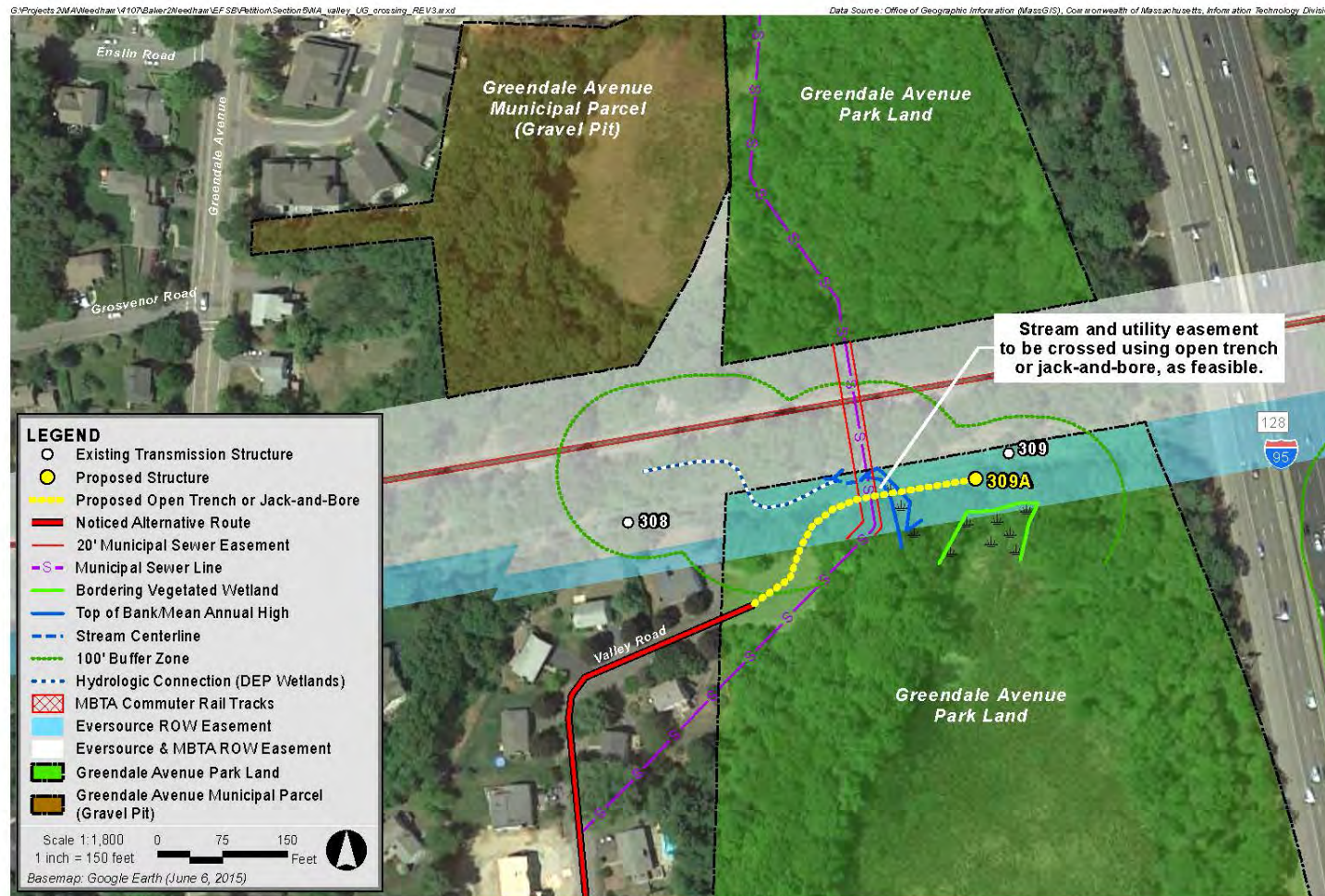
NOTE: No roadway construction is proposed in Boston or Dedham; OH transmission line work will occur within existing ROW along MBTA tracks.

Overhead to Underground Transition Point at Valley Road (Preferred Design – OH SPAN of MBTA TRACKS)



West Roxbury to Needham Reliability Project

Overhead to Underground Transition Point at Valley Road (ROUTE VARIATION ONTO VALLEY ROAD)



West Roxbury to Needham Reliability Project

West Roxbury to Needham Reliability Project

Typical In-Street Construction Process in Needham



- Splice Vault/Manhole installation
- Trench excavation, conduit installation, backfill and temporary paving.
- Install cables between each manhole.
- Cable splicing and testing in manholes.
- Final pavement and other Project restorations completed per municipal town agreements.
- Minor construction at substations will be concurrent with cable construction.

Managing Impacts During Construction

- Traffic Management
 - ✓ Traffic Management Plan to be developed jointly with municipalities.
 - ✓ Police details paid by Project
 - ✓ Maintaining access
 - ✓ Hours of Construction
 - ✓ Maintain pedestrian safety
- Eversource will communicate and work closely with neighbors in the communities throughout the process by providing:
 - ✓ Door-to-door outreach
 - ✓ Informational mailings via town certified abutting property owner list
 - ✓ Project website with progress updates
 - ✓ Project hotline and e-mail



MUTCD TEMPORARY TRAFFIC CONTROL ROAD SIGNS

REVISIONS DURING CONSTRUCTION			
1	08-28-11	DESIGNED FOR REVIEW	DATE
2	08-28-11	DESIGNED FOR REVIEW	DATE
3	08-28-11	DESIGNED FOR REVIEW	DATE
4	08-28-11	DESIGNED FOR REVIEW	DATE

Northeast Utilities Service Co.
CONNECTICUT LIGHT & POWER COMPANY

LINE 1151 SOUTH END - GLENBROOK
115-HV UNDERGROUND TRANSMISSION LINE
TRAFFIC CONTROL GENERAL NOTES
STAMFORD, CONNECTICUT

DATE: 08-21-2013
BY: [Signature]
CHECKED: [Signature]
SCALE: 1" = 100'
SHEET NO: 23370P1
TOTAL SHEETS: 01515-70001PG01

West Roxbury to Needham Reliability Project

Typical Overhead Line Construction



West Roxbury to Needham Reliability Project

Environmental Permitting

- Local Conservation Commissions & Other Town/City Approvals (street opening permits, grants of location, etc).
- State Review and Permitting:
 - EFSB/DPU (underway)
 - MEPA (ENF filed in June; DEIR to be submitted 4th quarter 2016)
 - MassHistorical Commission (underway)
 - MassDFW Natural Heritage Endangered Species Program (underway)
 - MassDEP 401 Water Quality Certificate
- Federal Review and Permitting:
 - Army Corps of Engineers Section 404
 - US Fish and Wildlife Service
 - US EPA NPDES SW Construction General Permit

- Assuming receipt of all necessary permits and approvals, construction of the transmission line is anticipated to commence in 2nd half of 2017.
- Construction is anticipated to occur over an approximately 12 to 18-month period, and in-service by the end of 2018.

Proactive Municipal and Community Outreach Throughout Project Duration

Stakeholders

- Municipal officials
- State and federal elected officials and agencies
- Property owners & tenants
- Businesses
- Community Groups

Project Communication for Municipalities

- Briefings & Presentations

Project Communication for the Public

- News Releases/Media Advisories
- Door to door outreach, including door hangers
- Transmission 1-800-Hotline
- Project e-mail
- Customer letters



Questions?