

Draft Environmental Impact Report/
Environmental Assessment and
Section 4(f) Statement

Green Line Extension Project

EEA #13886



Volume 2 | Figures

October 2009

Executive Office of
Transportation and
Public Works

U.S. Department of Transportation
Federal Transit Administration

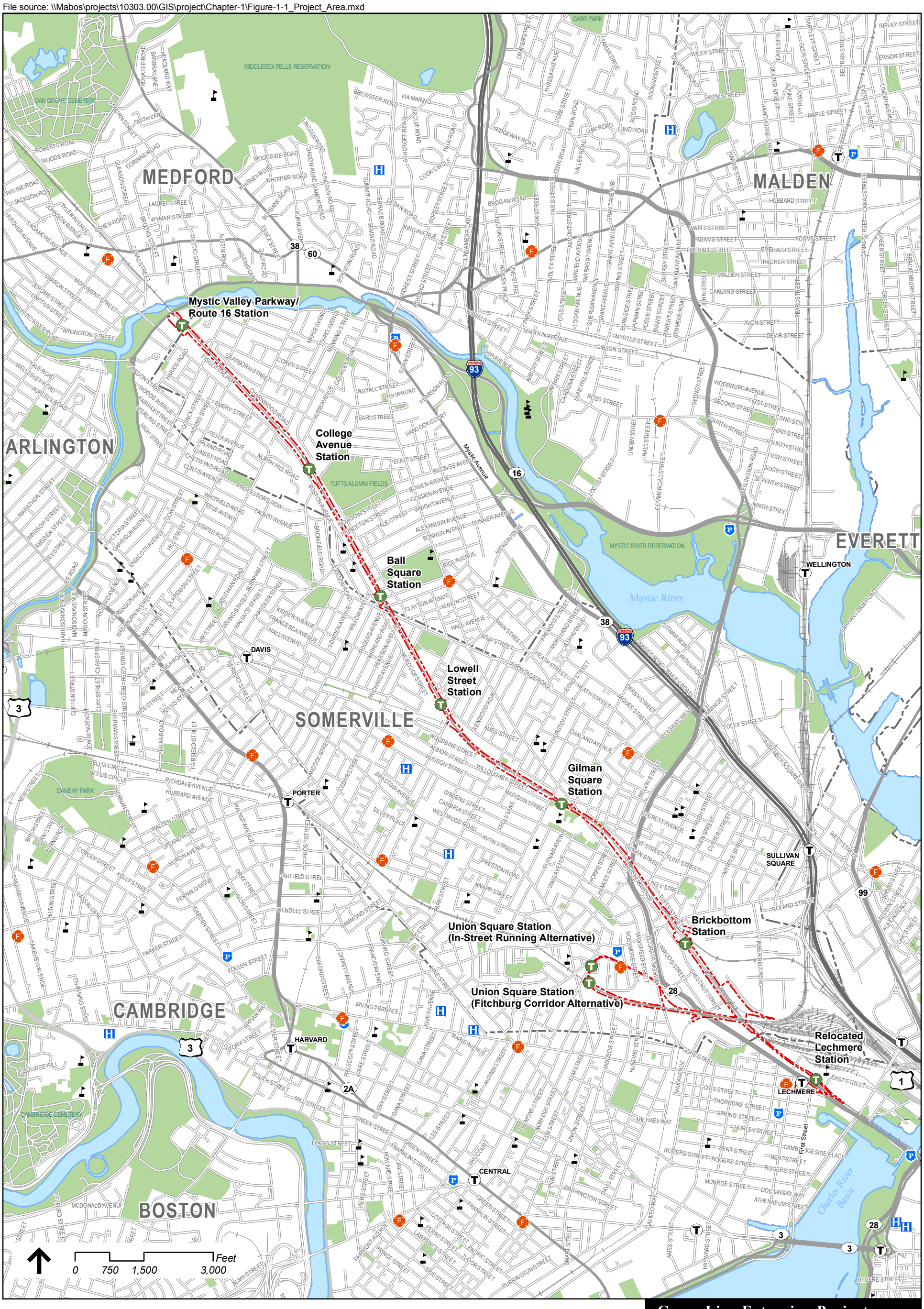
List of Figures

All figures are provided in Volume 2 except as indicated otherwise below.

Figure	Description	Page
1-1	Study Area	
3.3-1	Station Locus Map (Sheet 1 of 2)	
3.3-2	Station Locus Map (Sheet 2 of 2)	
3.3-3	Maintenance Facility Initial Site Alternatives	
3.3-4	Preferred Maintenance Facility Site	
3.5-1	Baseline Alternative	
3.6-1	Alternative 1	
3.6-2	Alternative 2	
3.6-3	Alternative 3	
3.6-4	Alternative 4	
3.6-5	Alternative 5	
3.6-6	Alternative 6	
3.7-1	Proposed Project	
3.7-2	Relocated Lechmere Station – Station Layout	
3.7-3	Relocated Lechmere Station – Station Plan	
3.7-4	Relocated Lechmere Station – Circulation	
3.7-5	Relocated Lechmere Station – Elevation	
3.7-6	Brickbottom Station – Station Layout	
3.7-7	Brickbottom Station – Station Plan	
3.7-8	Brickbottom Station – Circulation	
3.7-9	Brickbottom Station – Elevation	
3.7-10	Gilman Square Station – Station Layout	
3.7-11	Gilman Square Station – Station Plan	
3.7-12	Gilman Square Station – Circulation	
3.7-13	Gilman Square Station – Elevation	
3.7-14	Lowell Street Station – Station Layout	
3.7-15	Lowell Street Station – Station Plan	
3.7-16	Lowell Street Station – Circulation	
3.7-17	Lowell Street Station – Elevation	
3.7-18	Ball Square Station – Station Layout	
3.7-19	Ball Square Station – Station Plan	
3.7-20	Ball Square Station – Circulation	
3.7-21	Ball Square Station – Elevation	
3.7-22	College Avenue Station Medford Hillside Terminus (Alt 1, 3) – Station Layout	
3.7-23	College Avenue Station (Alt 2, 4, 5) Station Layout	
3.7-24	College Avenue Station – Station Plan	
3.7-25	College Avenue Station – Circulation	
3.7-26	College Avenue Station – Elevation	
3.7-27	Mystic Valley Parkway/Route 16 Station – Station Layout	
3.7-28	Mystic Valley Parkway/Route 16 Station – Station Plan	
3.7-29	Mystic Valley Parkway/Route 16 Station – Circulation	
3.7-30	Mystic Valley Parkway/Route 16 Station – Elevation	
3.7-31	Union Square Station – Station Layout	
3.7-32	Union Square Station – Station Plan	
3.7-33	Union Square Station – Circulation	
3.7-34	Union Square Station – Elevation	
3.7-35	Existing Section Looking North *(in Volume 1)*	3-53
3.7-36	Proposed Section Looking North *(in Volume 1)*	3-53
3.7-37	Typical Construction Staging (Sheet 1 of 2)	
3.7-38	Typical Construction Staging (Sheet 2 of 2)	
3.8-1	Typical Section of Somerville Community Path *(in Volume 1)*	3-58
4.1-1	Existing Conditions (Sheet 1 of 10)	
4.1-2	Existing Conditions (Sheet 2 of 10)	
4.1-3	Existing Conditions (Sheet 3 of 10)	
4.1-4	Existing Conditions (Sheet 4 of 10)	
4.1-5	Existing Conditions (Sheet 5 of 10)	
4.1-6	Existing Conditions (Sheet 6 of 10)	
4.1-7	Existing Conditions (Sheet 7 of 10)	
4.1-8	Existing Conditions (Sheet 8 of 10)	
4.1-9	Existing Conditions (Sheet 9 of 10)	
4.1-10	Existing Conditions (Sheet 10 of 10)	
4.2-1	Existing Land Use Index	
4.2-2	Existing Land Use – Existing Lechmere Station	
4.2-3	Existing Land Use – Brickbottom Station	
4.2-4	Existing Land Use – Gilman Square Station	
4.2-5	Existing Land Use – Lowell Street Station	
4.2-6	Existing Land Use – Ball Square Station	
4.2-7	Existing Land Use – College Avenue Station	
4.2-8	Existing Land Use – Mystic Valley Parkway/Route 16 Station	
4.2-9	Existing Land Use – Union Square Station	
4.2-10	Primary Use Zoning – Cities of Somerville, Medford, and Cambridge	
4.4-1	State-Defined Environmental Justice Populations	
4.5-1	Existing and Proposed MBTA Bus and Transit System	
4.5-2	Existing MBTA Commuter Rail Routes	
4.5-3	Existing Freight Rail Routes	
4.6-1	Traffic Study Intersections	

Figure	Description	Page
4.7-1	Microscale Air Quality Study Intersections	
4.8-1	Typical A-Weighted Sound Levels *(in Volume 1)*	4-64
4.8-2	Examples of Typical Outdoor Noise Exposure *(in Volume 1)*	4-65
4.8-3	Noise and Vibration Measurement Sites	
4.9-1	Typical Ground-Borne Vibration Levels and Criteria *(in Volume 1)*	4-71
4.9-2	Existing Vibration Measurement Results *(in Volume 1)*	4-73
4.15-1	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 1 of 10)	
4.15-2	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 2 of 10)	
4.15-3	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 3 of 10)	
4.15-4	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 4 of 10)	
4.15-5	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 5 of 10)	
4.15-6	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 6 of 10)	
4.15-7	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 7 of 10)	
4.15-8	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 8 of 10)	
4.15-9	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 9 of 10)	
4.15-10	Location of Historic Resources Identified within the Green Line Extension Project APE (Sheet 10 of 10)	
5.2-1	Proposed Property Acquisitions – Lechmere Station	
5.2-2	Proposed Property Acquisitions – Brickbottom Station	
5.2-3	Proposed Property Acquisitions – Gilman Square Station	
5.2-4	Proposed Property Acquisitions – Lowell Street Station	
5.2-5	Proposed Property Acquisitions – Ball Square Station	
5.2-6	Proposed Property Acquisitions – College Avenue Station	
5.2-7	Proposed Property Acquisitions – Mystic Valley Parkway/Route 16 Station	
5.2-8	Proposed Property Acquisitions – Union Square Station (Fitchburg Corridor Alternative)	
5.2-9	Proposed Property Acquisitions – Union Square Station (In-Street Running Alternative)	
5.6-1	Mesoscale 2030 Mobile Source Analysis Results (kilograms per day) *(in Volume 1)*	5-92
5.6-2	Mobile Source Air Toxics Emissions *(in Volume 1)*	5-95
5.7-1	Increase in Cumulative Noise Allowed by FTA Criteria *(in Volume 1)*	5-106
5.7-2	Noise Impacts and Mitigation Measures (Sheet 1 of 5)	
5.7-3	Noise Impacts and Mitigation Measures (Sheet 2 of 5)	
5.7-4	Noise Impacts and Mitigation Measures (Sheet 3 of 5)	
5.7-5	Noise Impacts and Mitigation Measures (Sheet 4 of 5)	
5.7-6	Noise Impacts and Mitigation Measures (Sheet 5 of 5)	
5.7-7	Examples of Noise Barrier Materials *(in Volume 1)*	5-116
5.8-1	Criteria for Detailed Vibration Analysis *(in Volume 1)*	5-125
5.8-2	Vibration Impacts and Mitigation Measures (Sheet 1 of 5)	
5.8-3	Vibration Impacts and Mitigation Measures (Sheet 2 of 5)	
5.8-4	Vibration Impacts and Mitigation Measures (Sheet 3 of 5)	
5.8-5	Vibration Impacts and Mitigation Measures (Sheet 4 of 5)	
5.8-6	Vibration Impacts and Mitigation Measures (Sheet 5 of 5)	
5.9-1	Proposed Stormwater Drainage	
5.15-1	Proposed and Reasonably Foreseeable Projects	

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-1\Figure-1-1_Project_Area.mxd



Legend

- Proposed Stations
- Existing MBTA Station
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space

Green Line Extension Project

Figure 1-1

Study Area

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs



Green Line Extension Project

0 500 1000 Feet

MBTA Green Line
MBTA Commuter Rail Line
Other Rail ROW
Proposed Green Line

Figure 3.3-1
Station Locus Map
Sheet 1 of 2

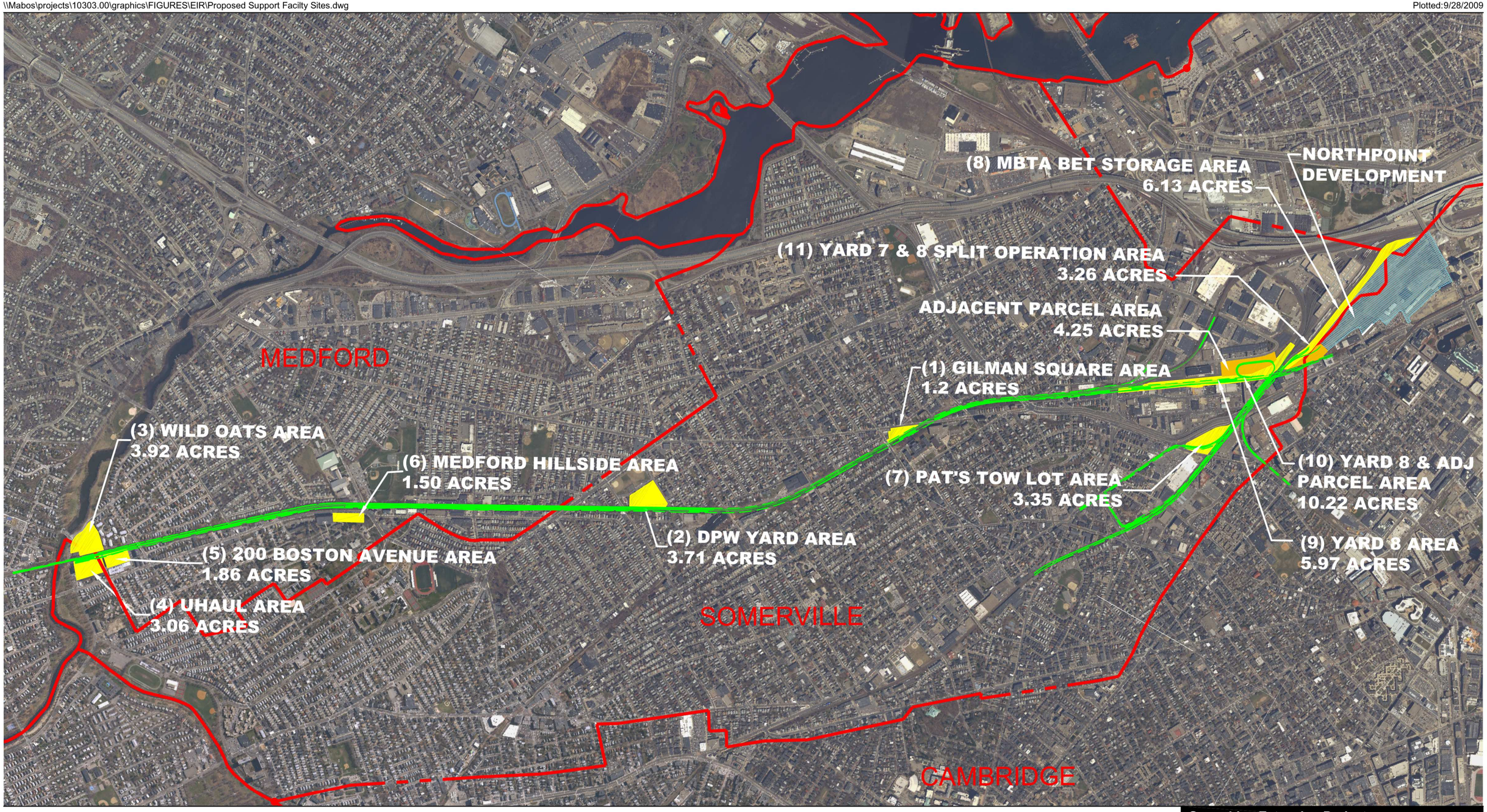


Green Line Extension Project

0 500 1000 Feet

- *MBTA Green Line*
- *MBTA Commuter Rail Line*
- *Other Rail ROW*
- *Proposed Green Line*

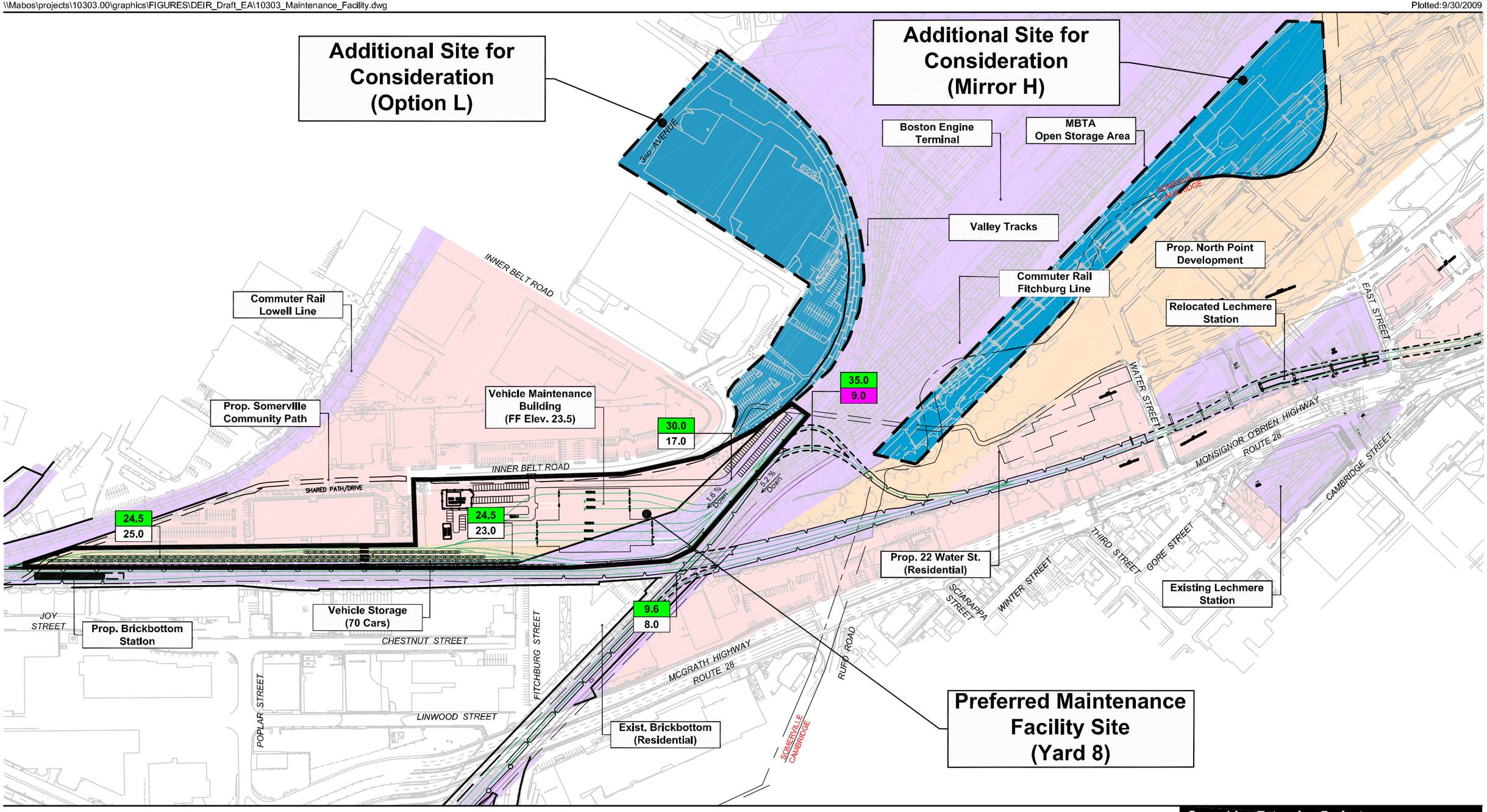
Figure 3.3-2
Station Locus Map
Sheet 2 of 2



Green Line Extension Project

0 750 1500 Feet

Figure No. 3.3-3
Maintenance Facility Initial Site Alternatives



LEGEND

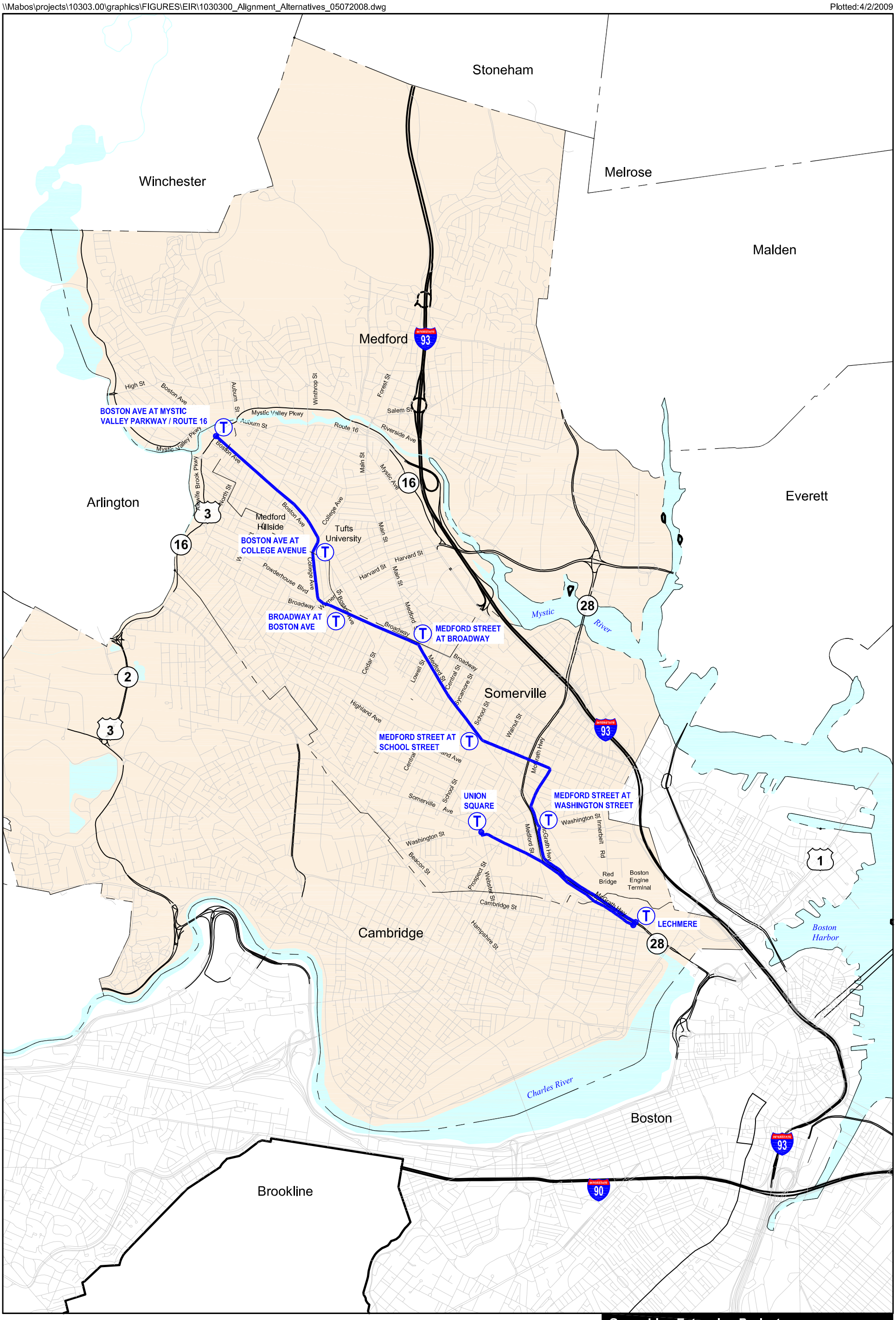
- M.B.T.A. Property
- B & M Property
- Private Property
- Additional Sites for Consideration
- 20.0 Proposed Elevation
- 19.0 Existing Elevation
- 8.0 MBCR Elevation
- Preferred Maintenance Facility Site (Yard 8)
- 10.0 Prop. Road Elevation
- 1.5 % Down → Proposed Slope

0 150 300 Feet

Note: For Main Line Grades see Main Line Profile

Green Line Extension Project

Figure 3.3-4
Preferred Maintenance Facility Site



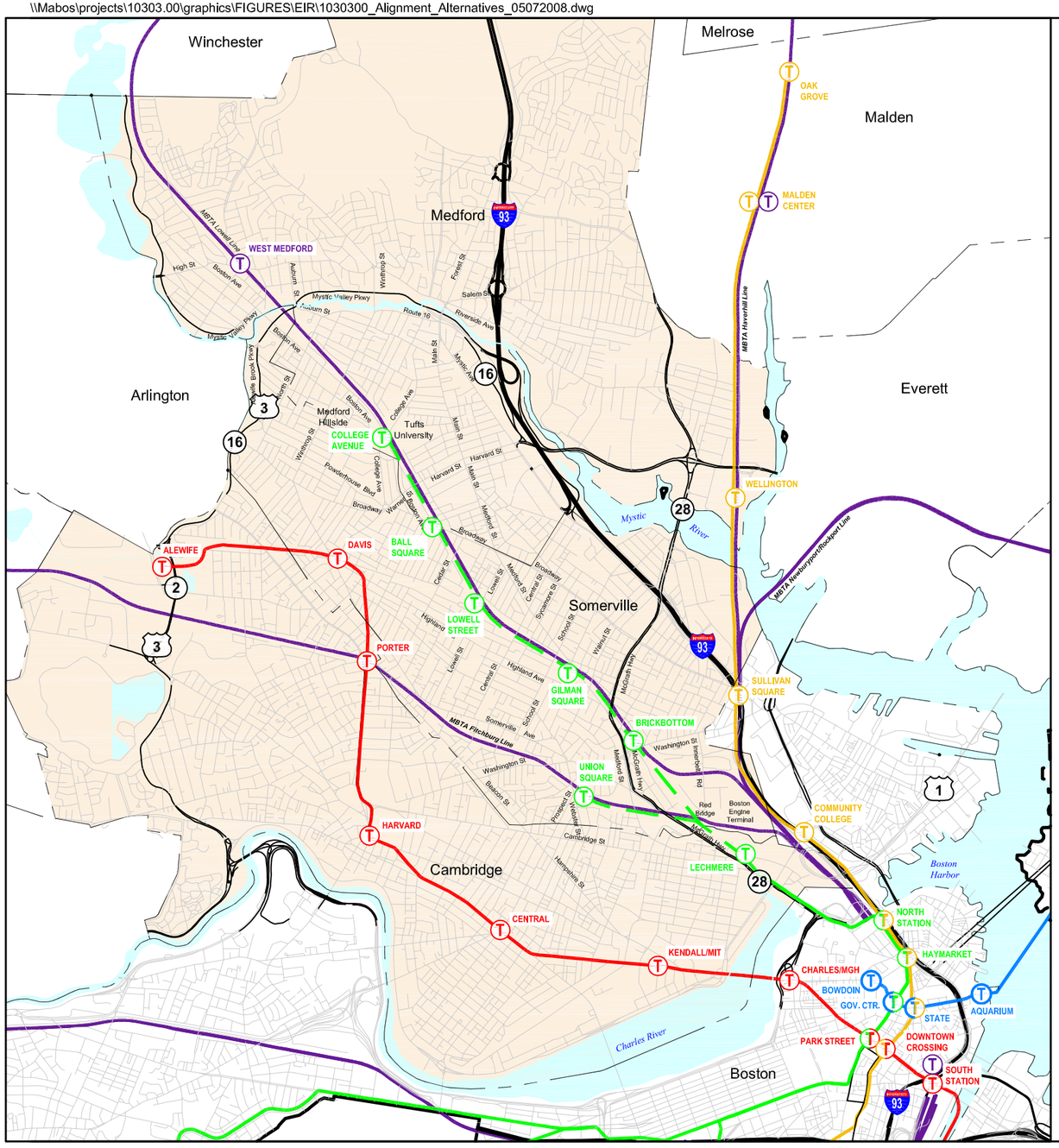
Legend

Baseline Bus Route

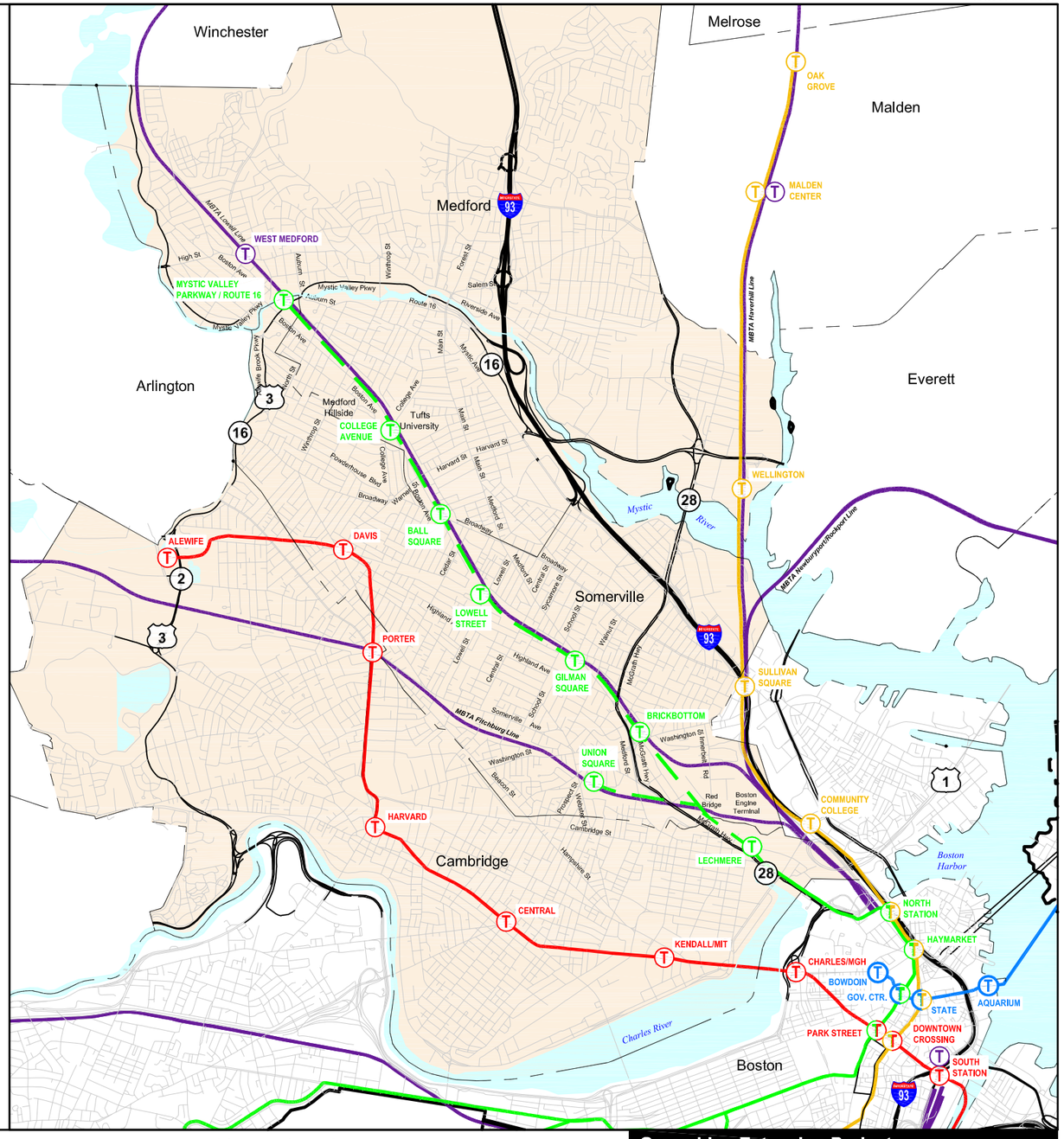
0 1500 3000 Feet

Green Line Extension Project

Figure 3.5-1
Baseline Alternative



Alternative 1
Figure 3.6-1



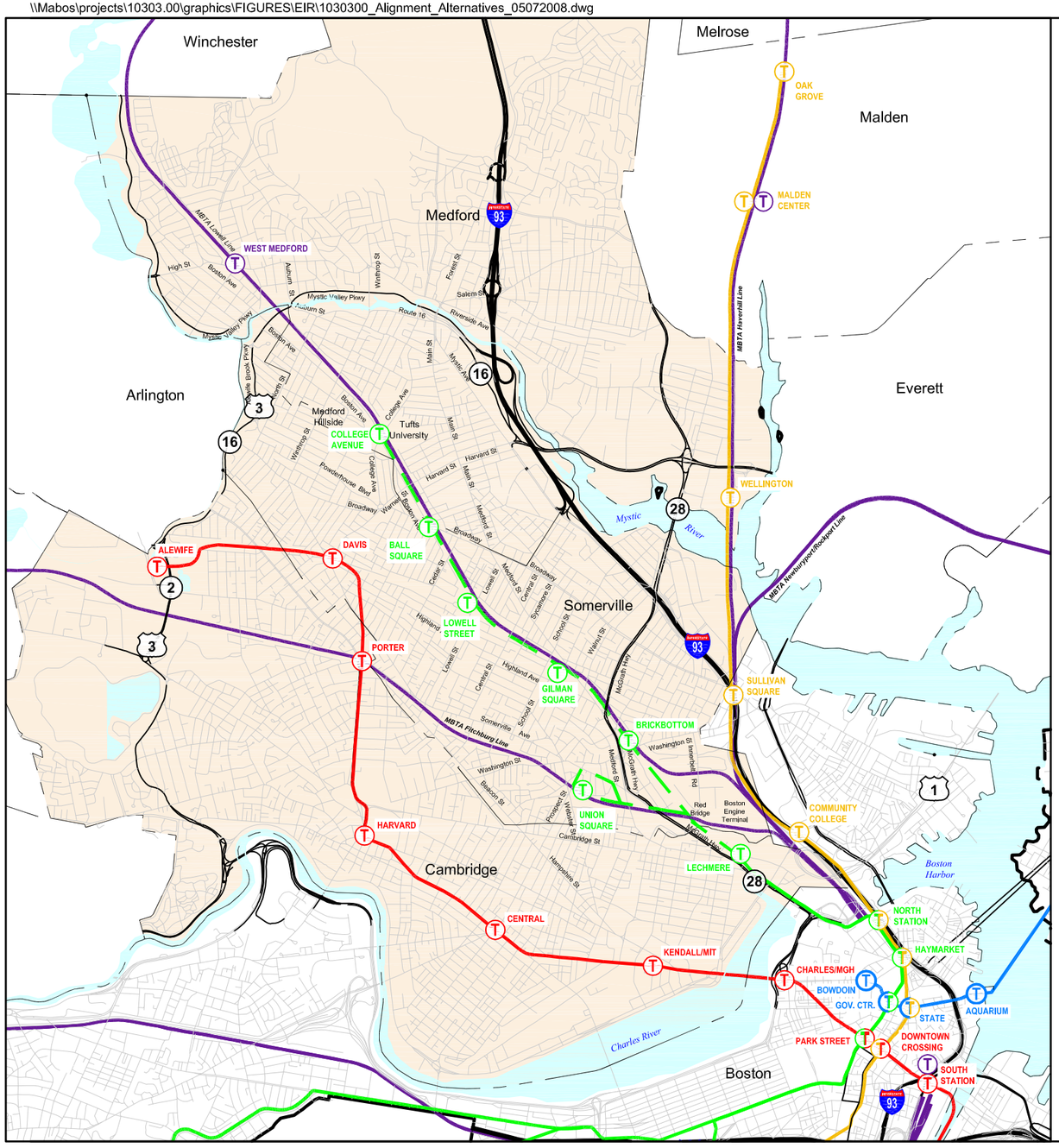
Alternative 2
Figure 3.6-2

MBTA Blue Line
MBTA Green Line
MBTA Orange Line
MBTA Red Line
MBTA Silver Line
MBTA Commuter Rail Line
Proposed Green Line
Proposed Station

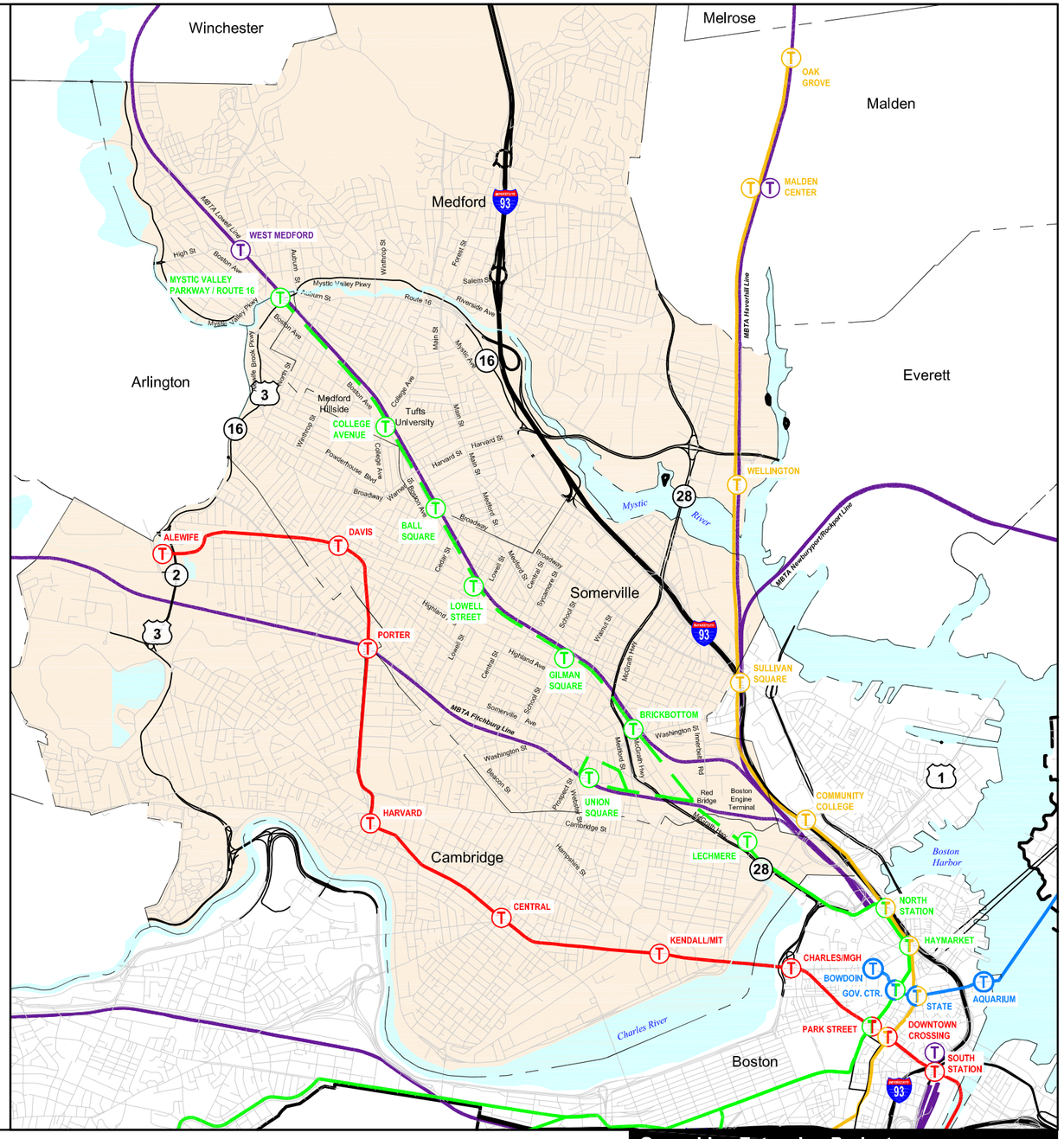
0 2000 4000 Feet

Green Line Extension Project

Figures 3.6-1 and 3.6-2
Alternatives 1 and 2



Alternative 3
Figure 3.6-3



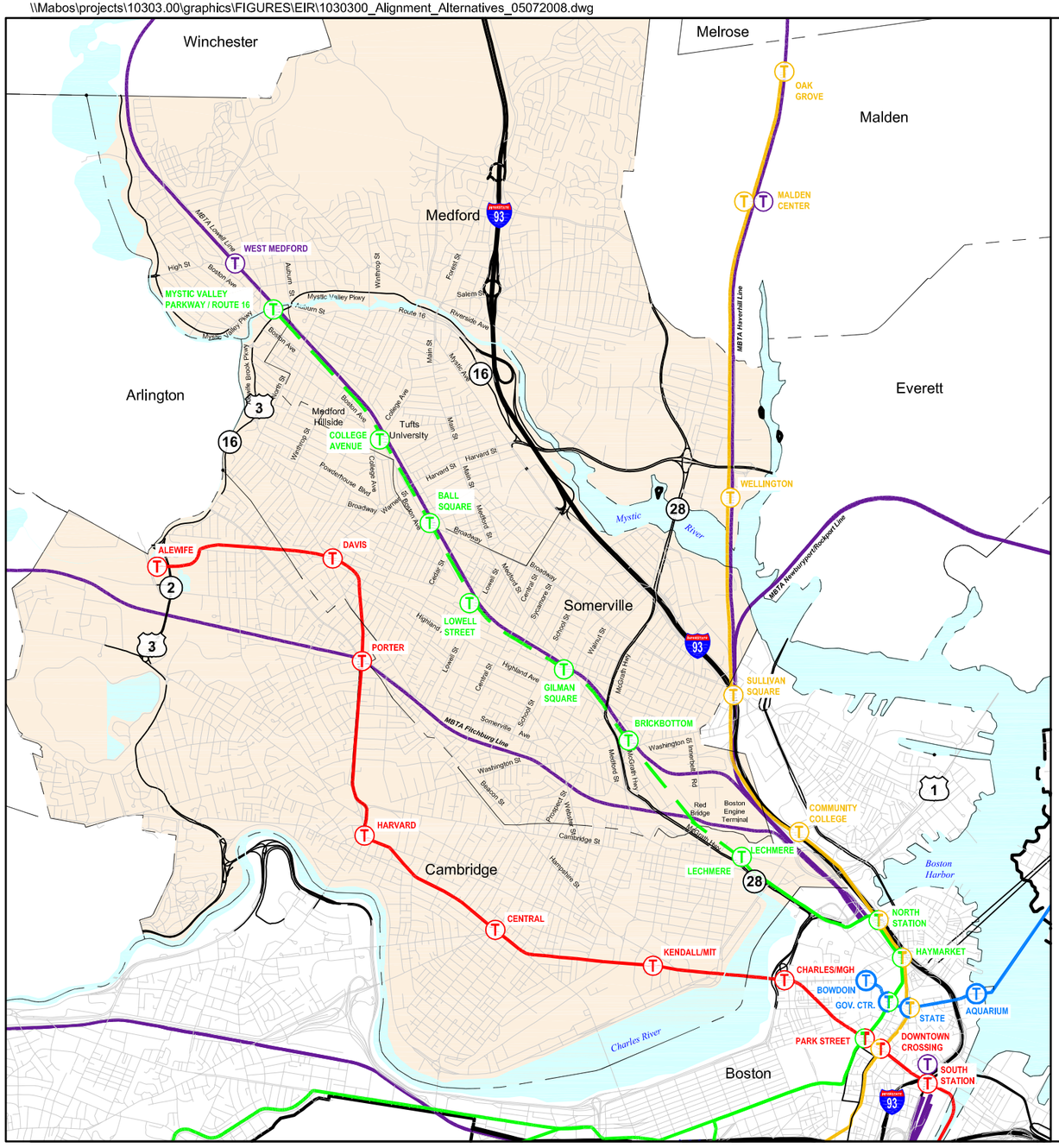
Alternative 4
Figure 3.6-4

MBTA Blue Line
MBTA Green Line
MBTA Orange Line
MBTA Red Line
MBTA Silver Line
MBTA Commuter Rail Line
Proposed Green Line
Proposed Station

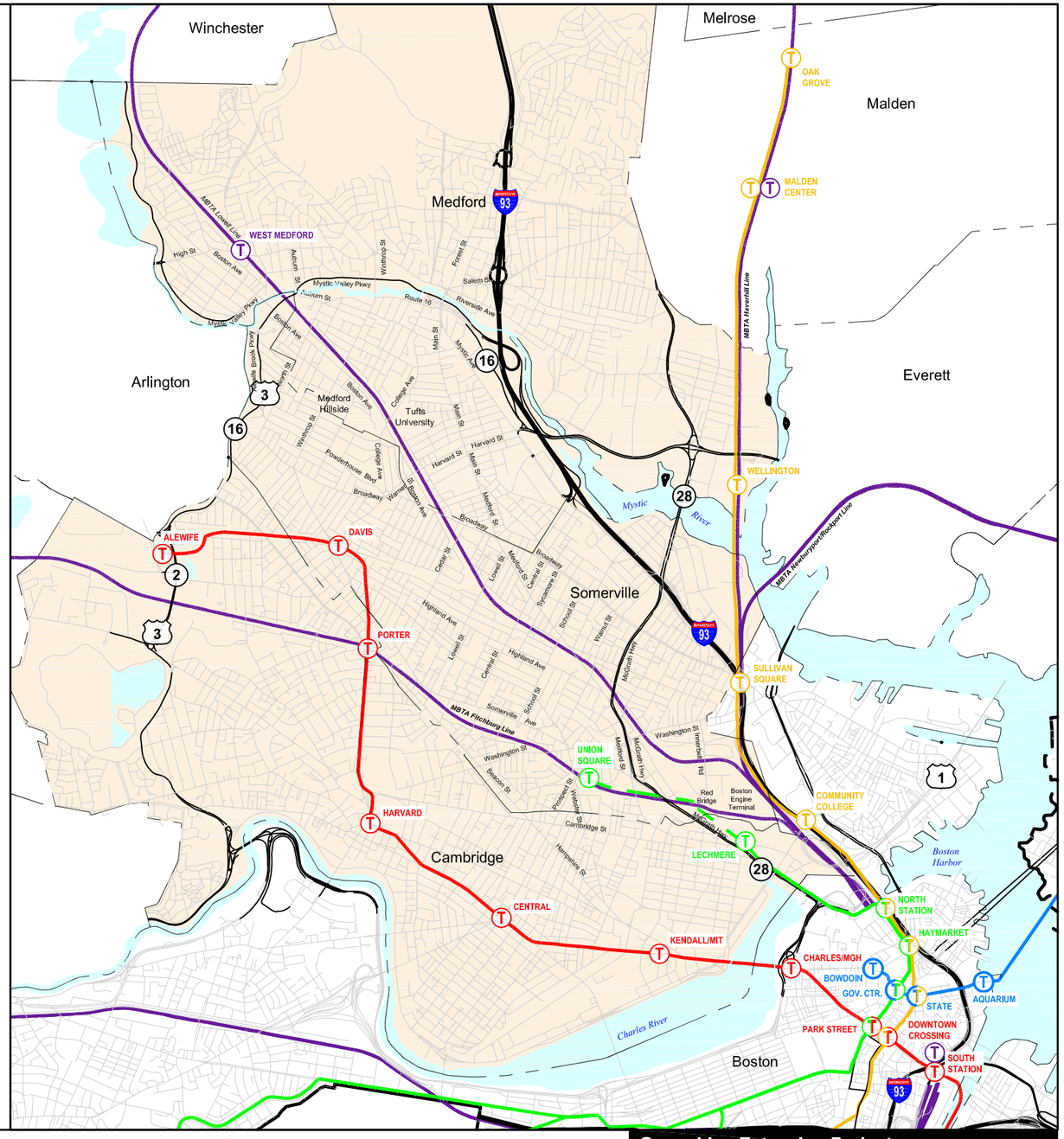
0 2000 4000 Feet

Green Line Extension Project

Figures 3.6-3 and 3.6-4
Alternatives 3 and 4



Alternative 5
Figure 3.6-5



Alternative 6
Figure 3.6-6

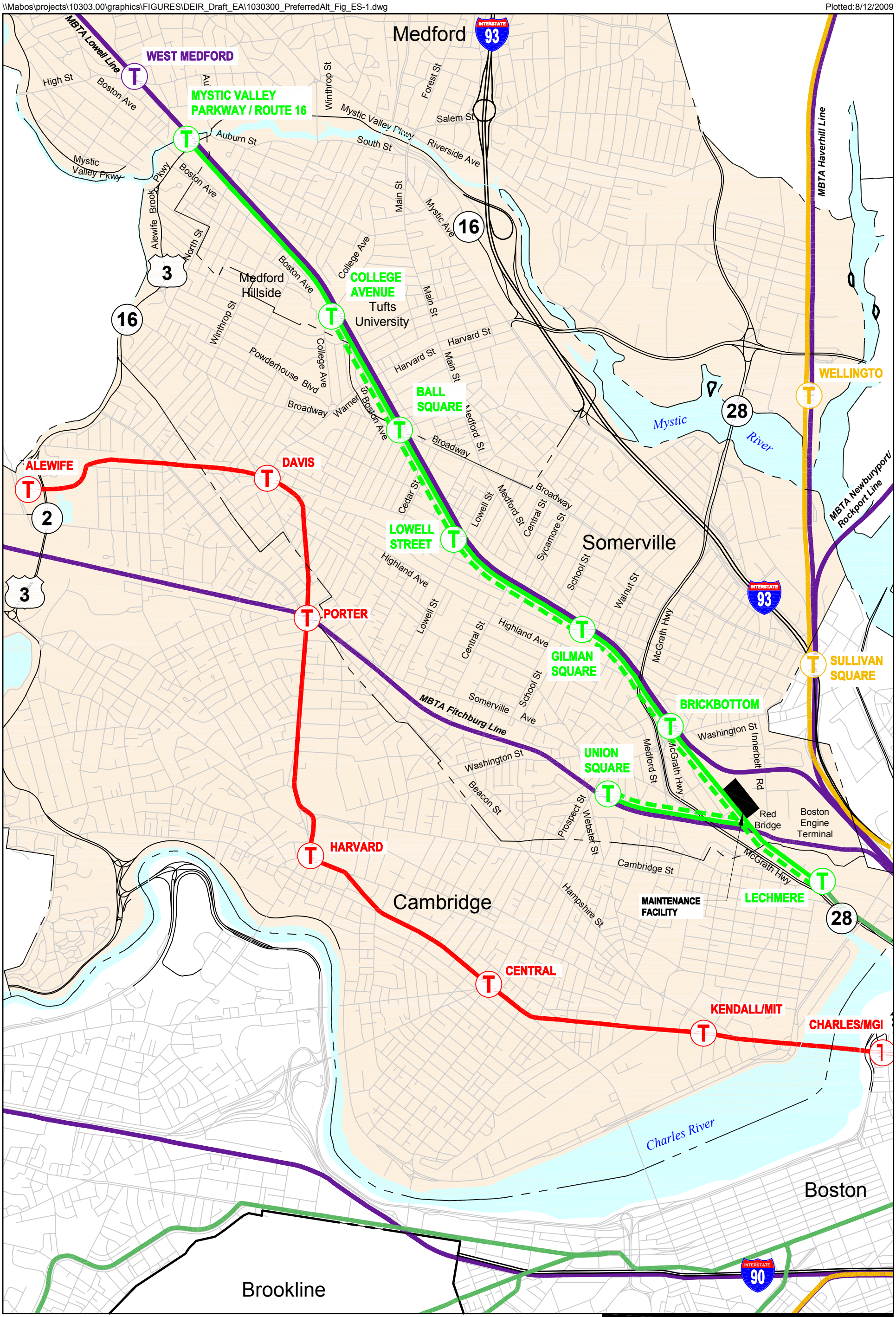
Green Line Extension Project

MBTA Blue Line
MBTA Green Line
MBTA Orange Line
MBTA Red Line
MBTA Silver Line
MBTA Commuter Rail Line
Proposed Green Line
Proposed Station

0 2000 4000 Feet

EOT

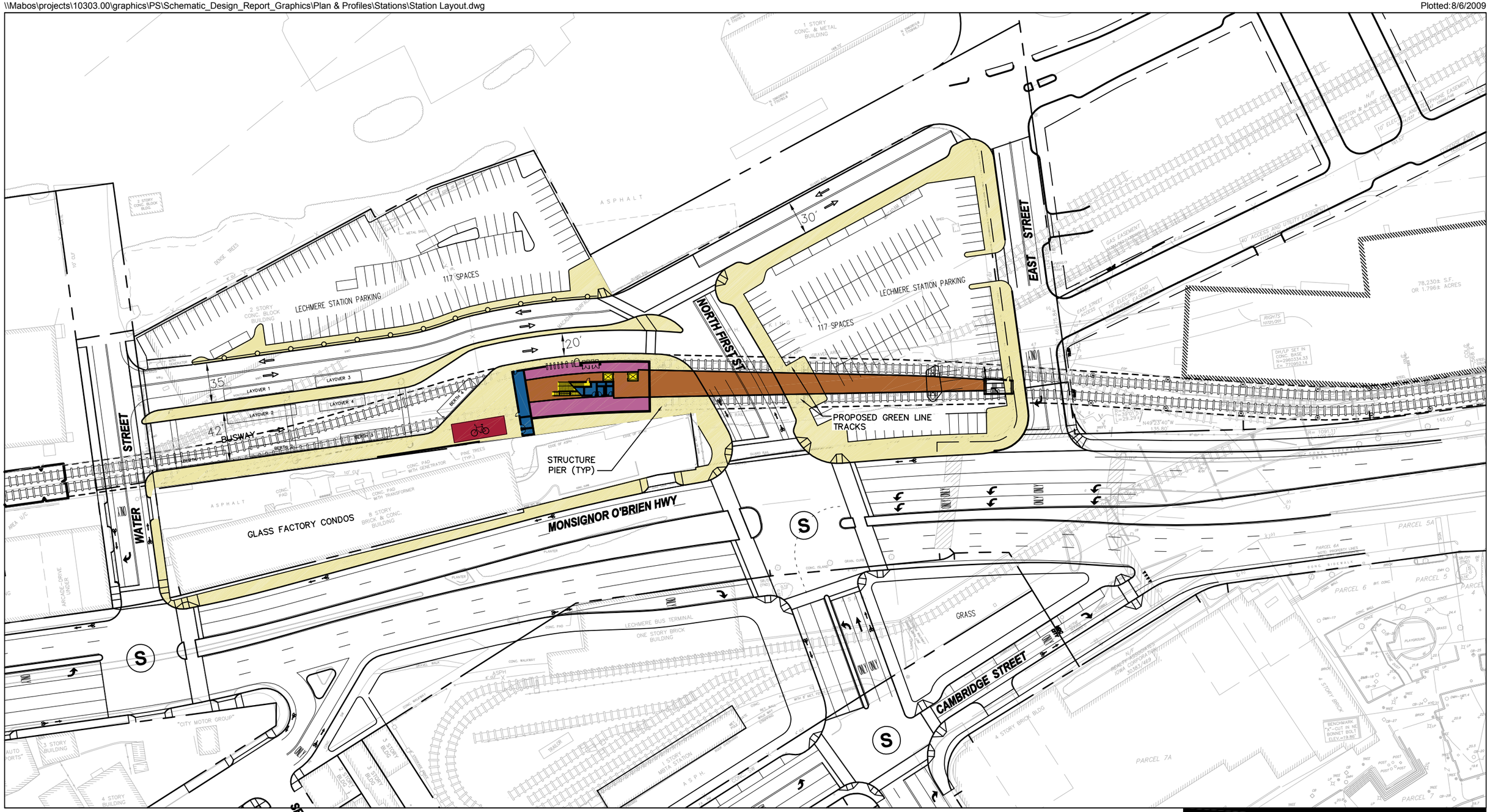
Figures 3.6-5 and 3.6-6
Alternatives 5 and 6



MBTA Blue Line
MBTA Green Line
MBTA Orange Line
MBTA Red Line
MBTA Silver Line
MBTA Commuter Rail Line
Green Line Proposed Project
Green Line Proposed Future Full-Build Alternative
Proposed Station

0 1200 2400 Feet

Figure 3.7-1
Proposed Project



Green Line Extension Project

Legend

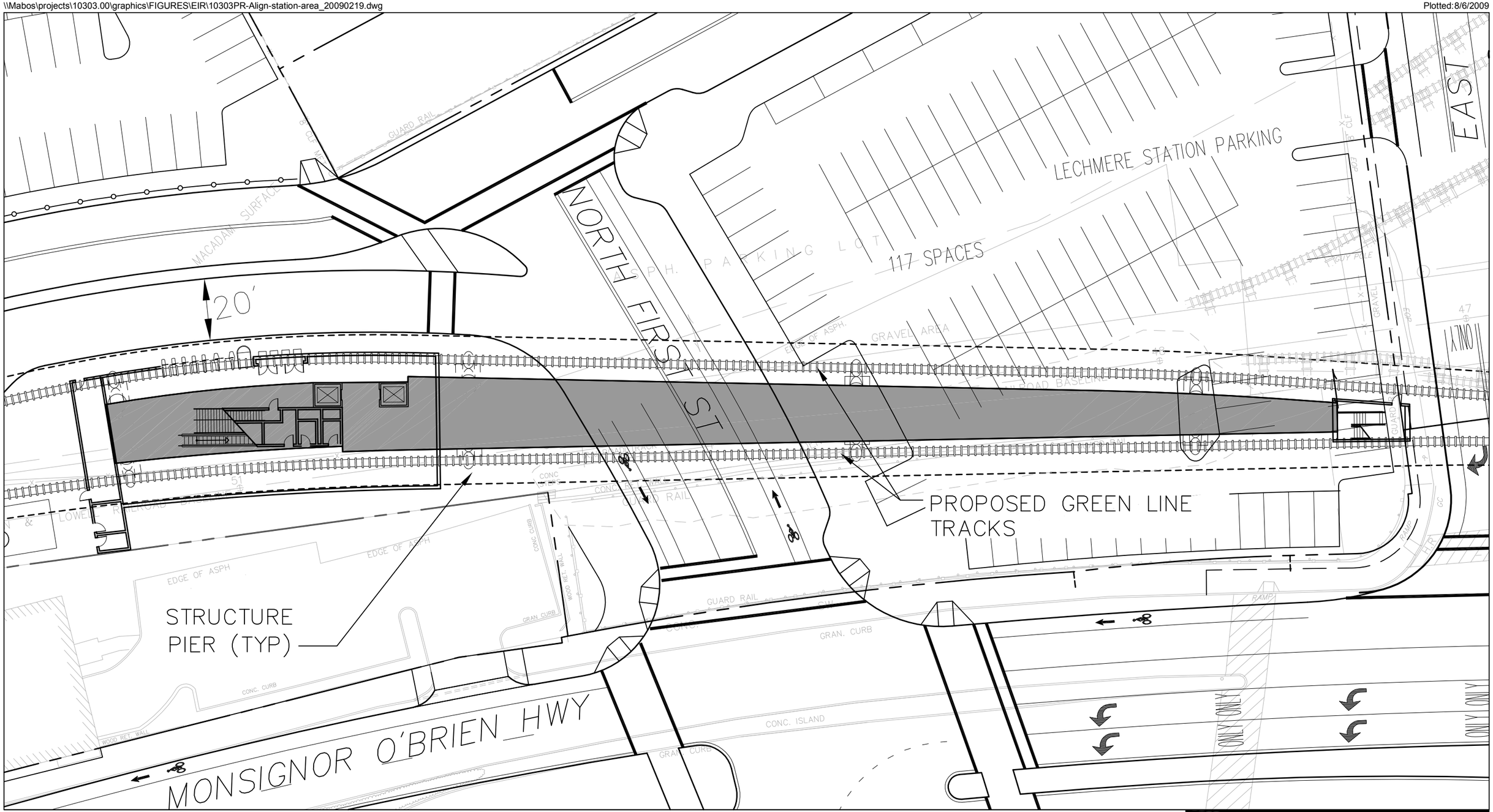
- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

EOT

Figure 3.7-2

Relocated Lechmere Station
Station Layout



Green Line Extension Project

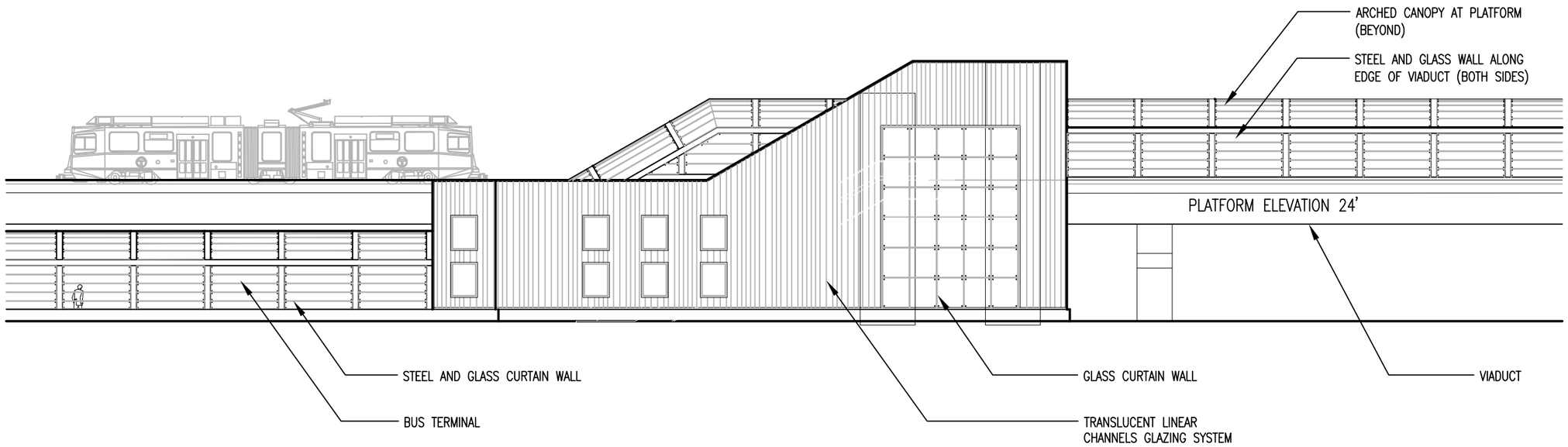
Figure 3.7-3

Relocated Lechmere Station
Station Plan

Green Line Extension Project

Figure 3.7-4

Relocated Lechmere Station Circulation

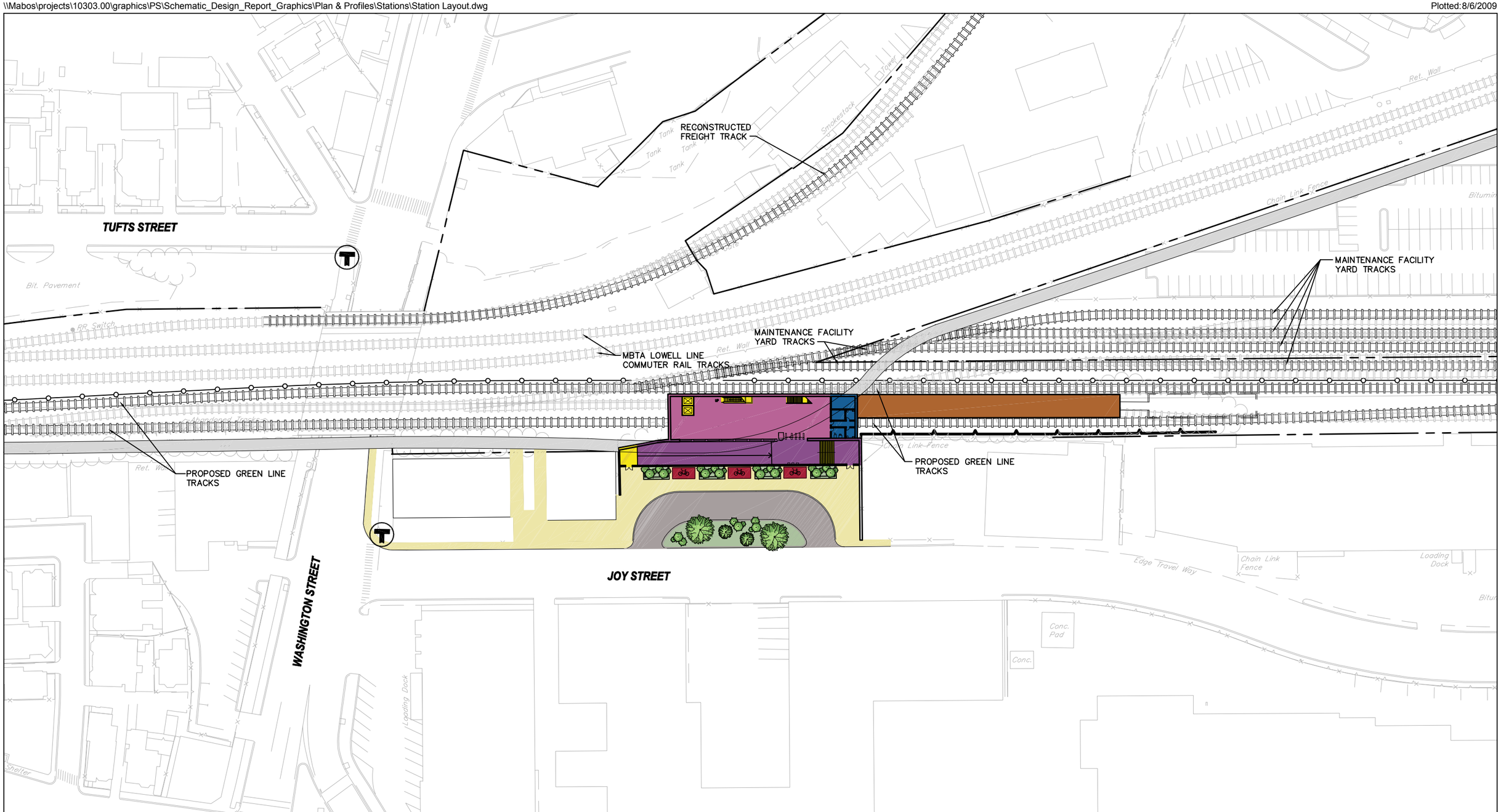


0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-5

Relocated Lechmere Station Elevation



Legend

- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

Green Line Extension Project

Figure 3.7-6

Brickbottom Station
Station Layout

MAINTENANCE FACILITY
YARD TRACKS

MBTA LOWELL LINE
COMMUTER RAIL TRACKS

PROPOSED GREEN LINE
TRACKS

JOY STREET

Ret. Wall

Chain Link Fence

UP

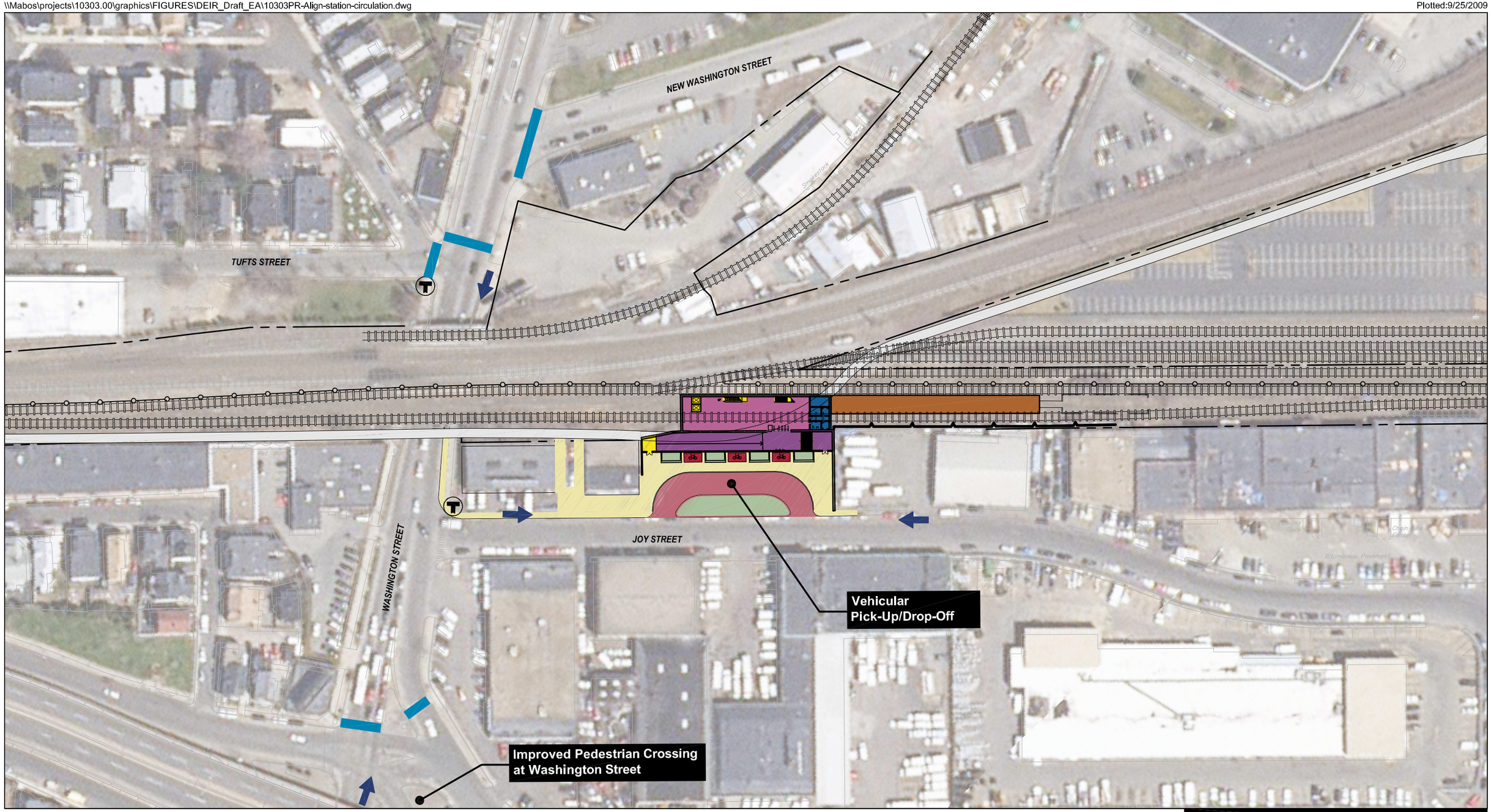
0 15 30 Feet

Legend

- *Platform*
- *Property Line*
- *Retaining Wall*
- *Fence*
- *Proposed Track*
- *Existing Track*
- *Proposed Community Path*
- *Limit of Structure*
- *MBTA Bus Stop*
- *Proposed Traffic Signal*
- *Bicycle Storage*
- *Area of Refuge*
- *Doors*
- *Turnstiles*
- *Elevators*
- *Escalators*
- *Stairs*

Green Line Extension Project

Figure 3.7-7
Brickbottom Station
Station Plan



Green Line Extension Project

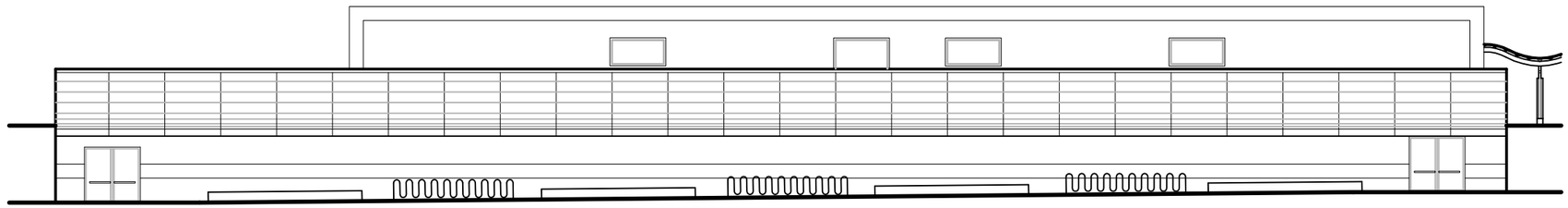
Legend

- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

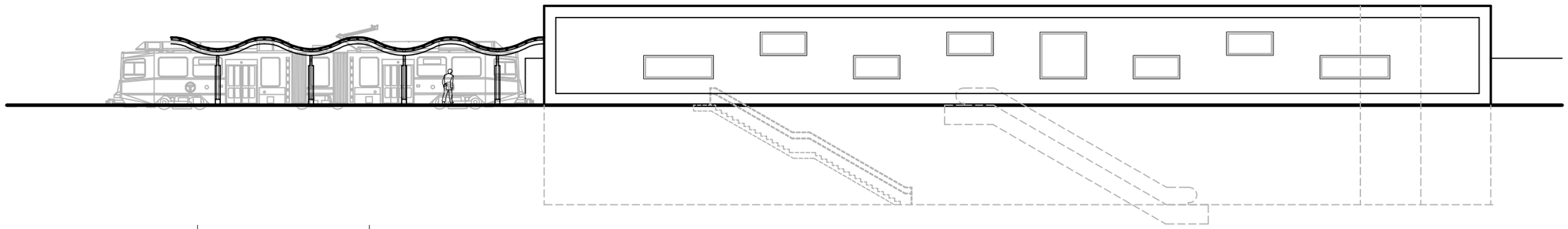
0 50 100 Feet

EOT

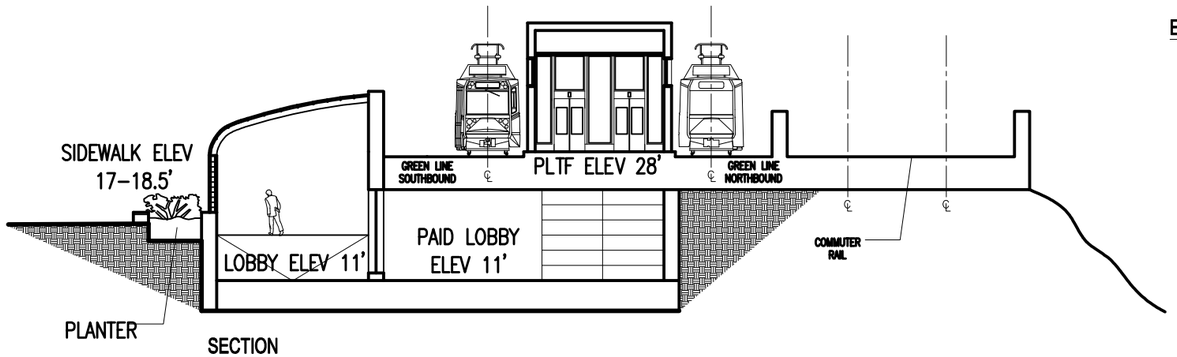
Figure 3.7-8
Brickbottom Station Circulation



WEST ELEVATION - FRONT VIEW



EAST ELEVATION - REAR VIEW



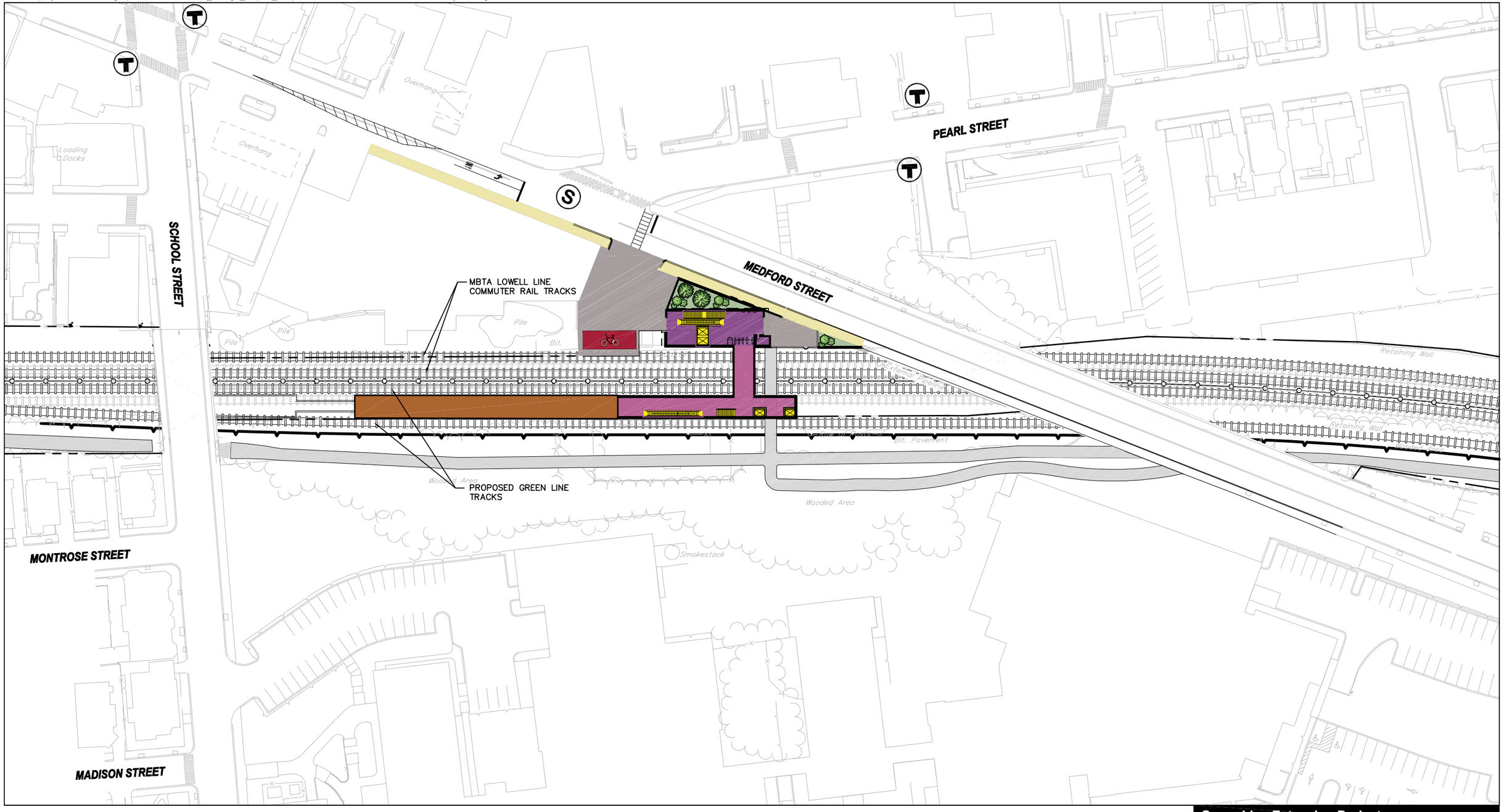
SECTION

0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-9

Brickbottom Station
Elevation



Legend

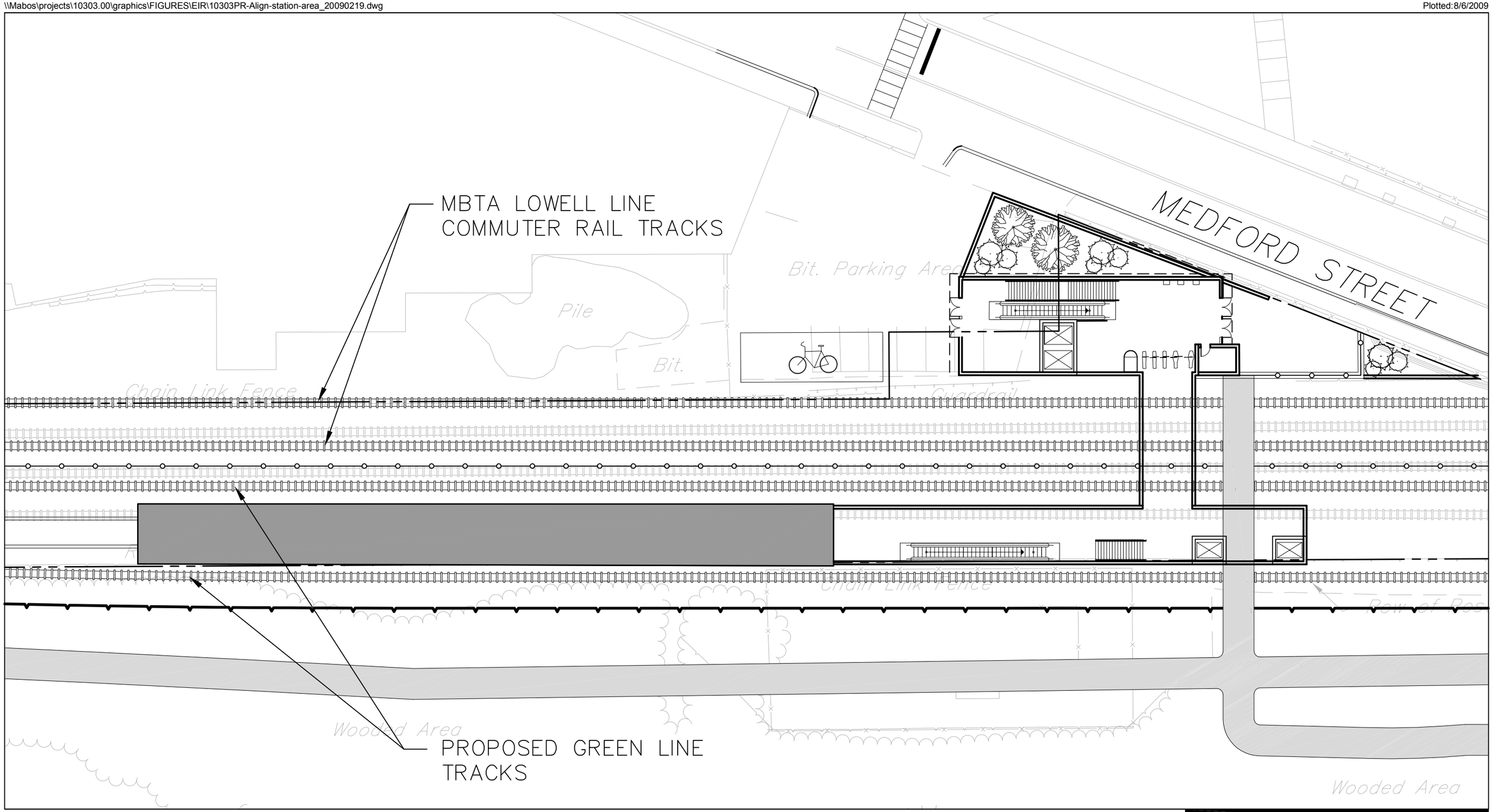
- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

Green Line Extension Project

Figure 3.7-10

Gilman Square Station
Station Layout



Green Line Extension Project

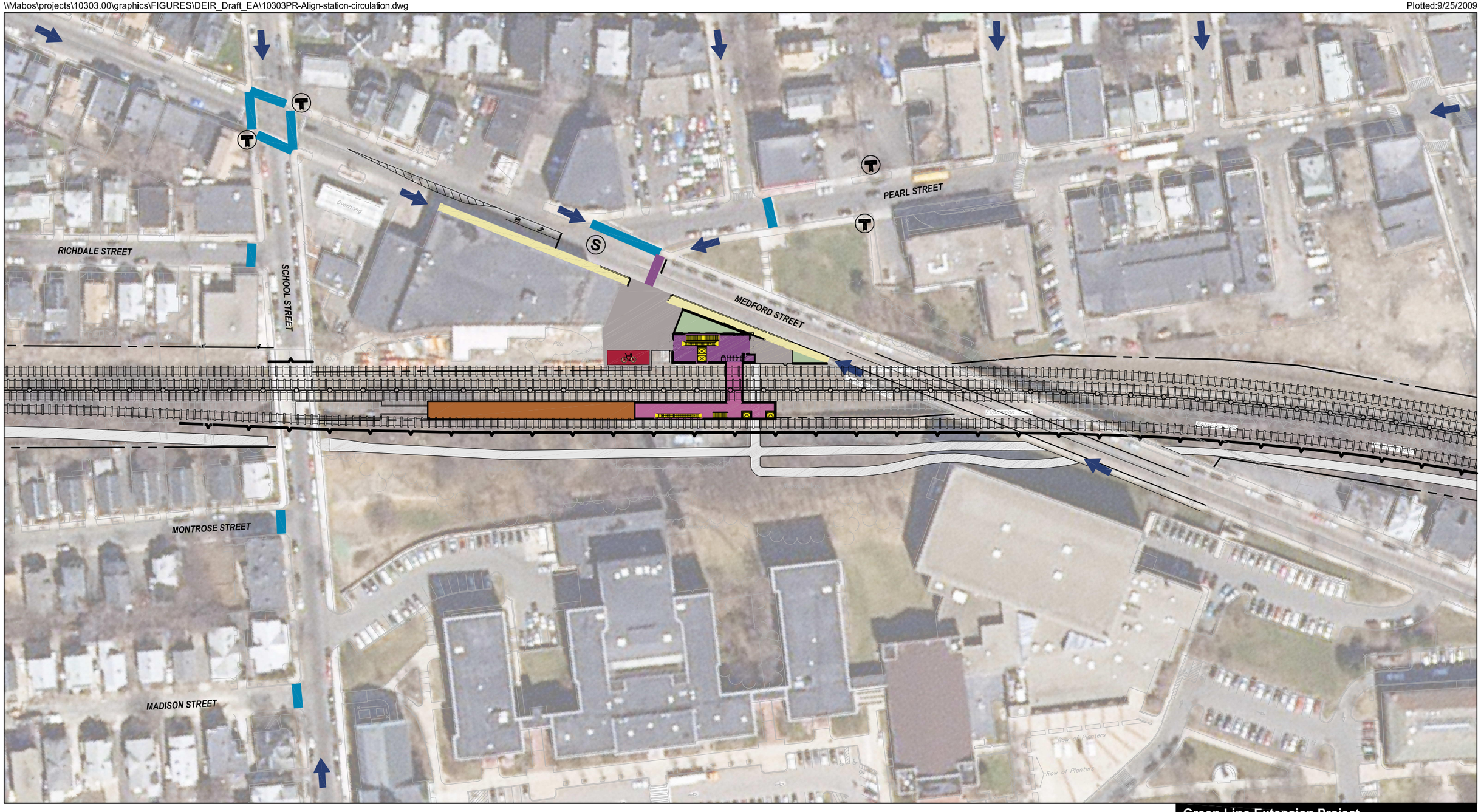
0 15 30 Feet

Legend

- *Platform*
- *Property Line*
- *Retaining Wall*
- *Fence*
- *Proposed Track*
- *Existing Track*
- *Proposed Community Path*
- *Limit of Structure*
- ***MBTA Bus Stop***
- ***Proposed Traffic Signal***
- ***Bicycle Storage***
- ***Area of Refuge***
- ***Doors***
- ***Turnstiles***
- ***Elevators***
- ***Escalators***
- ***Stairs***

Figure 3.7-11

Gilman Square Station
Station Plan



Green Line Extension Project

Legend

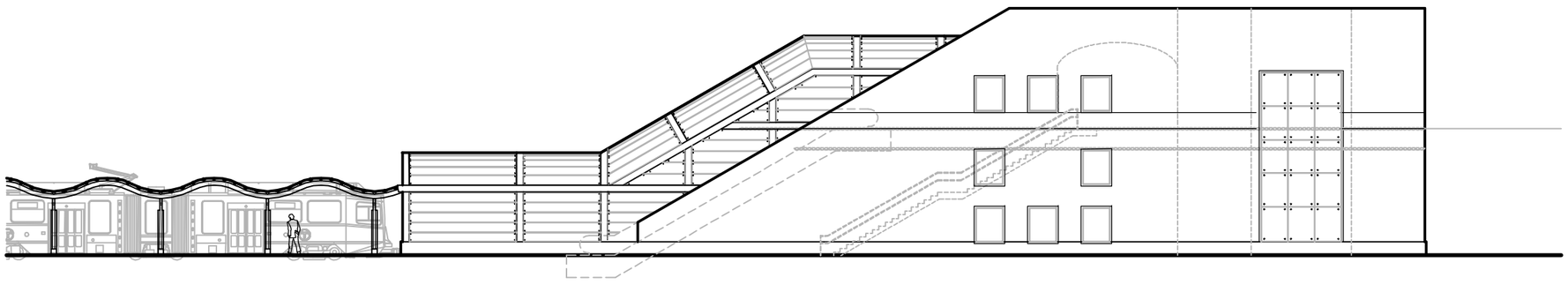
- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access

Note: No vehicular access at this station

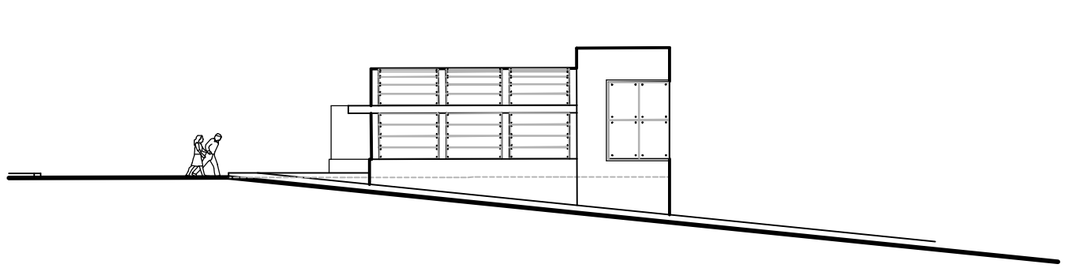
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

0 50 100 Feet

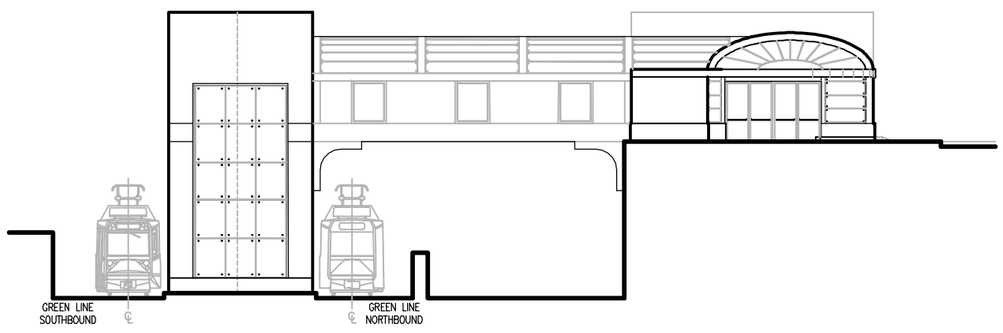
Figure 3.7-12
Gilman Square Station
Circulation



SOUTH ELEVATION



NORTH ELEVATION

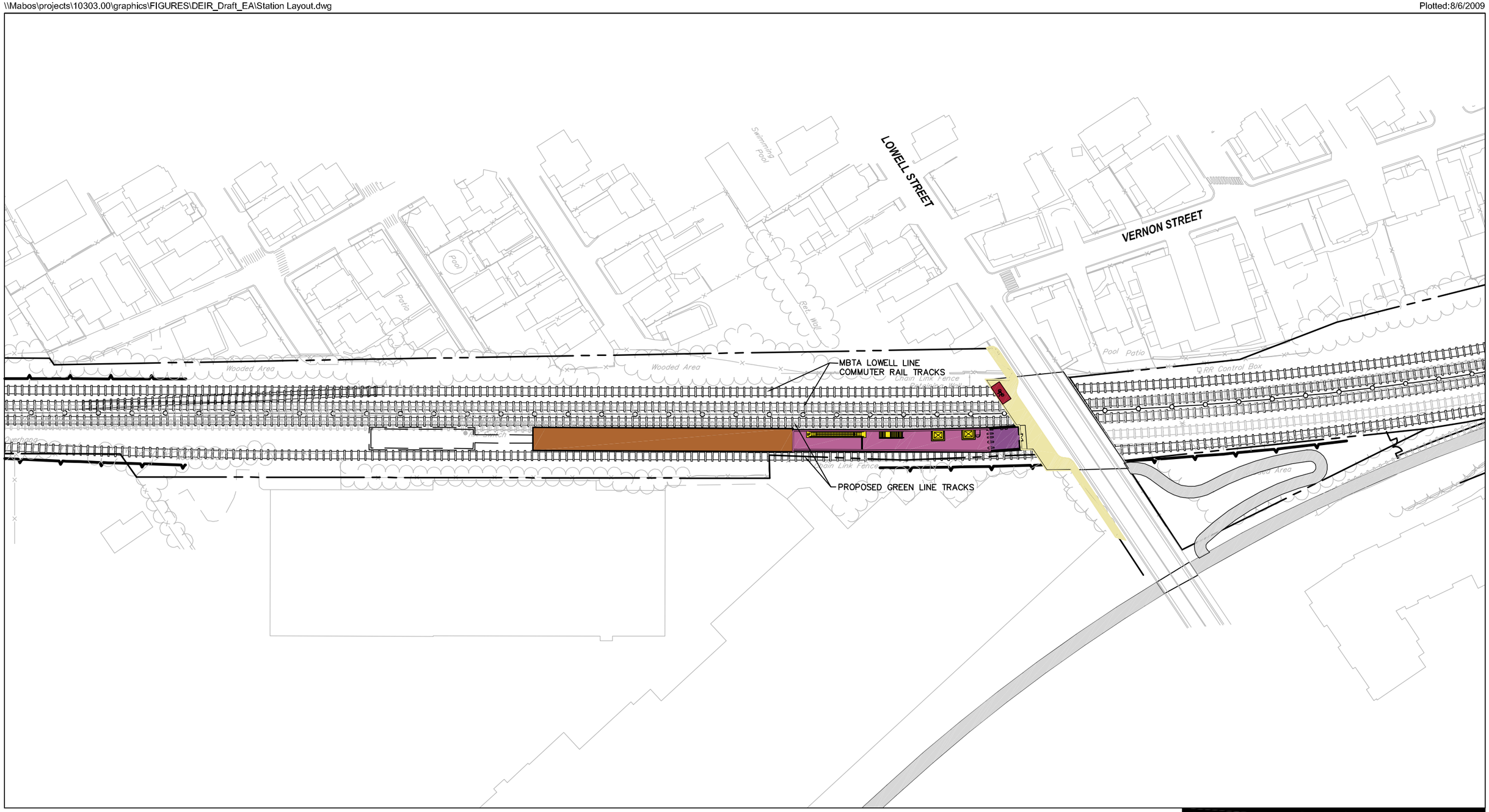


EAST ELEVATION

0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-13
Gilman Square Station
Elevation



Legend

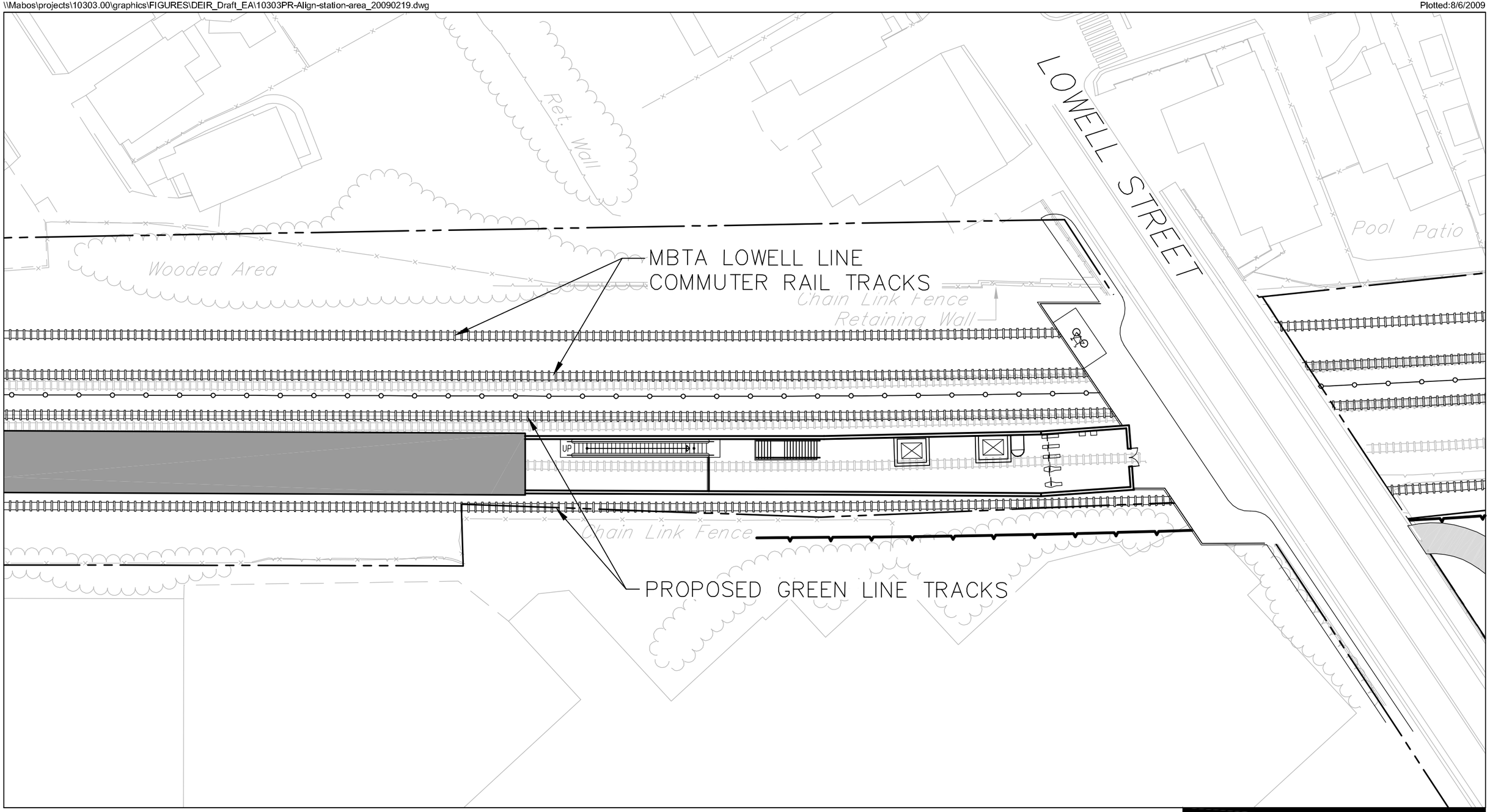
- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

Green Line Extension Project

Figure 3.7-14

Lowell Street Station
Station Layout



Green Line Extension Project

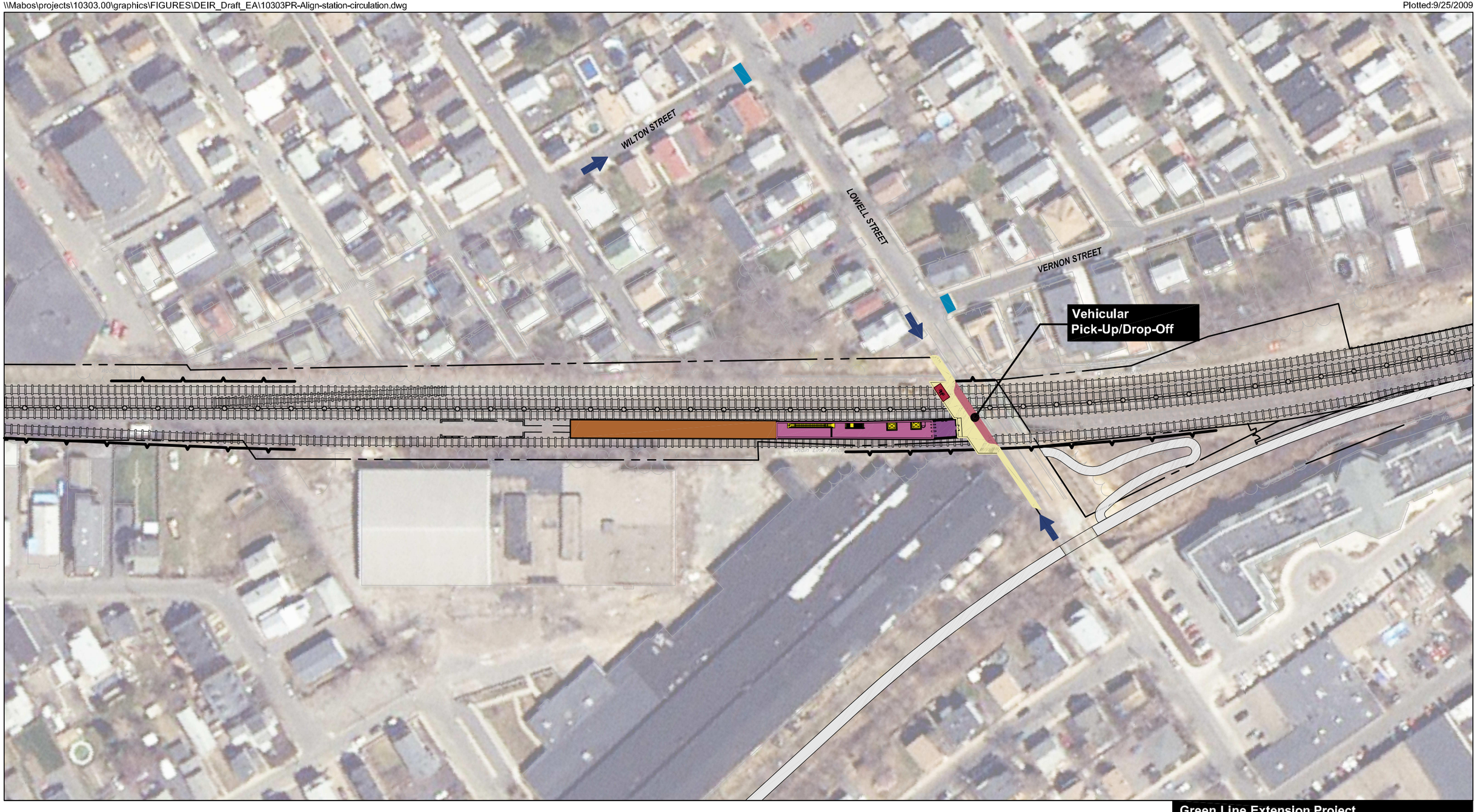
0 15 30 Feet

Legend

- *Platform*
- *Property Line*
- *Retaining Wall*
- *Fence*
- *Proposed Track*
- *Existing Track*
- *Proposed Community Path*
- *Limit of Structure*
- *MBTA Bus Stop*
- *Proposed Traffic Signal*
- *Bicycle Storage*
- *Area of Refuge*
- *Doors*
- *Turnstiles*
- *Elevators*
- *Escalators*
- *Stairs*

Figure 3.7-15

Lowell Street Station
Station Plan



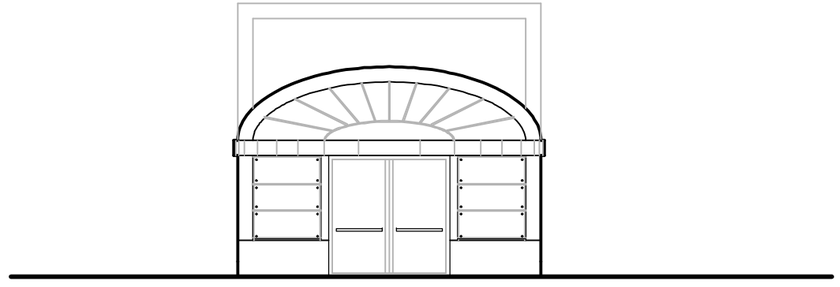
Green Line Extension Project

0 50 100 Feet

Legend

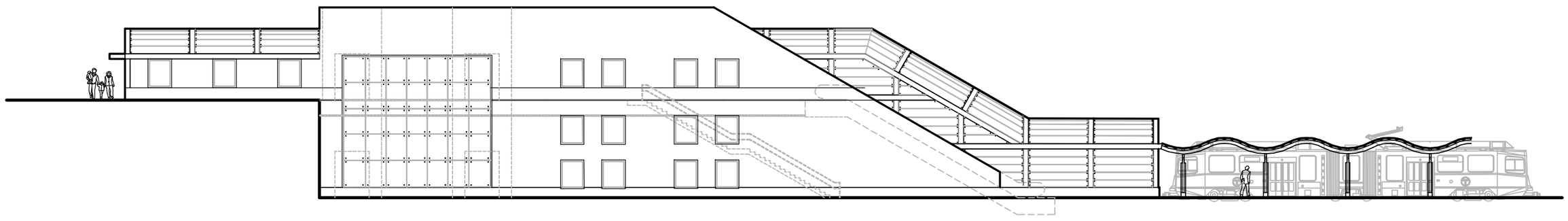
- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

Figure 3.7-16
Lowell Street Station
Circulation



0 5Feet 10 Feet

EAST ELEVATION



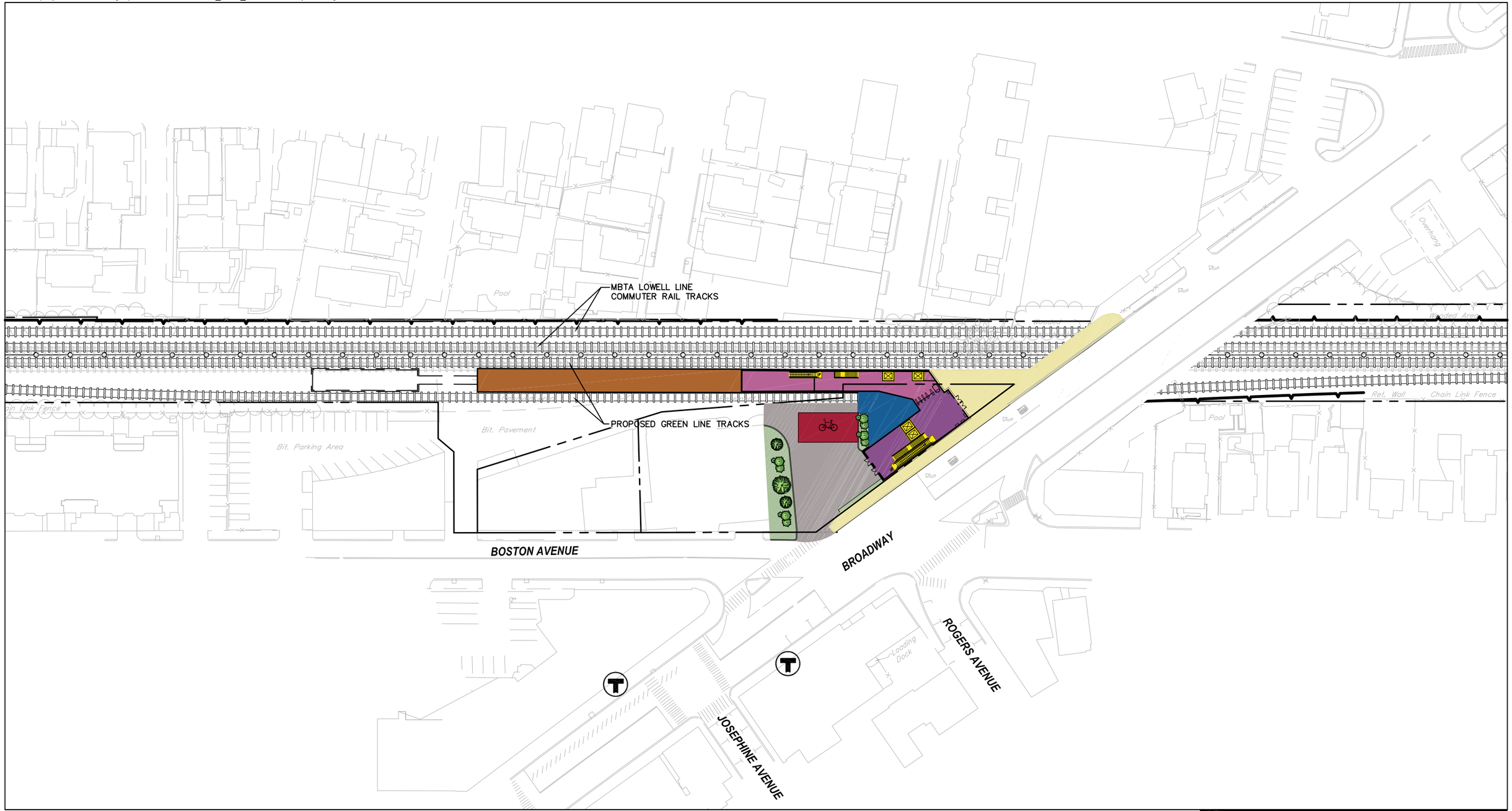
0 10 Feet 20 Feet

NORTH ELEVATION

Green Line Extension Project

Figure 3.7-17

Lowell Street Proposed Station Elevation



Legend

- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

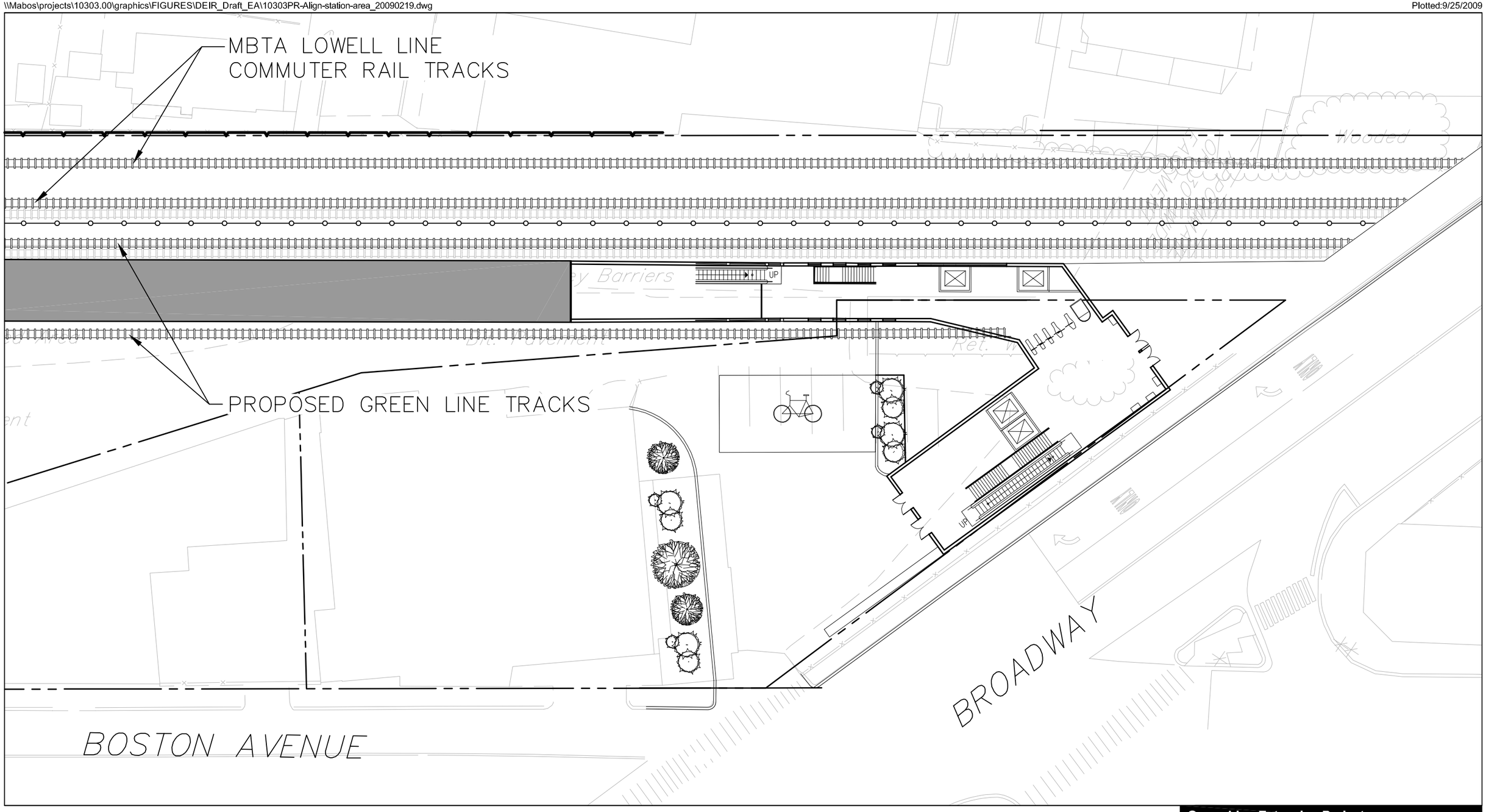
0 40 80 Feet

Green Line Extension Project

EOT

Figure 3.7-18

Ball Square Station
Station Layout



Green Line Extension Project

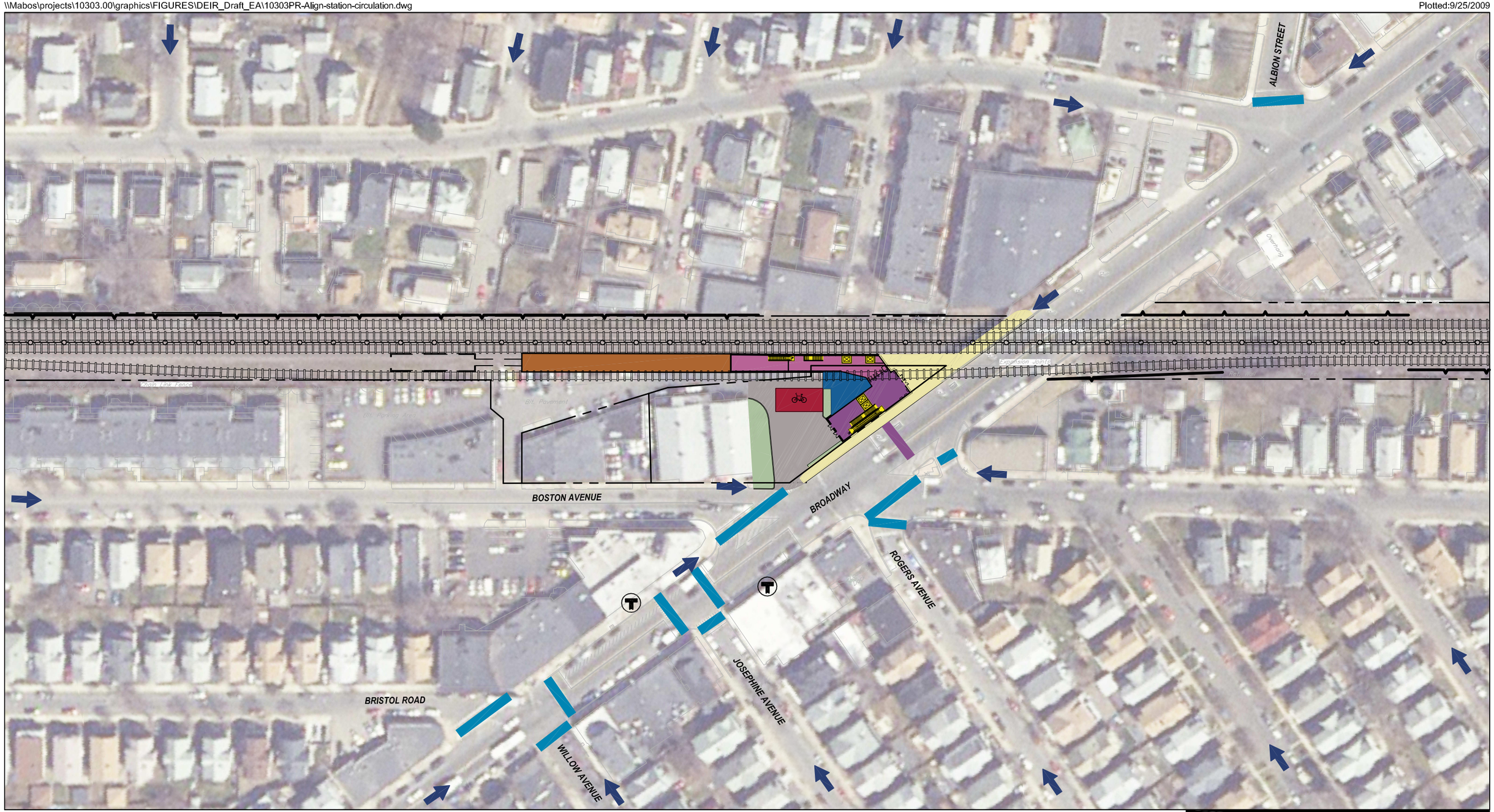
0 15 30 Feet

Legend

- Platform
- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Proposed Community Path
- Limit of Structure
- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Area of Refuge
- Doors
- Turnstiles
- Elevators
- Escalators
- Stairs

Figure 3.7-19

Ball Square Station
Station Plan



Green Line Extension Project

0 50 100 Feet

Legend

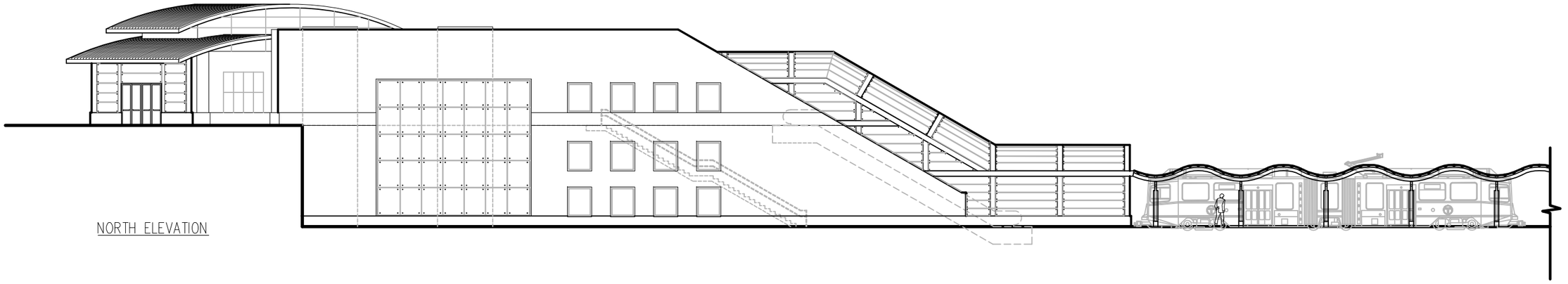
- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access

Note: No vehicular access at this station

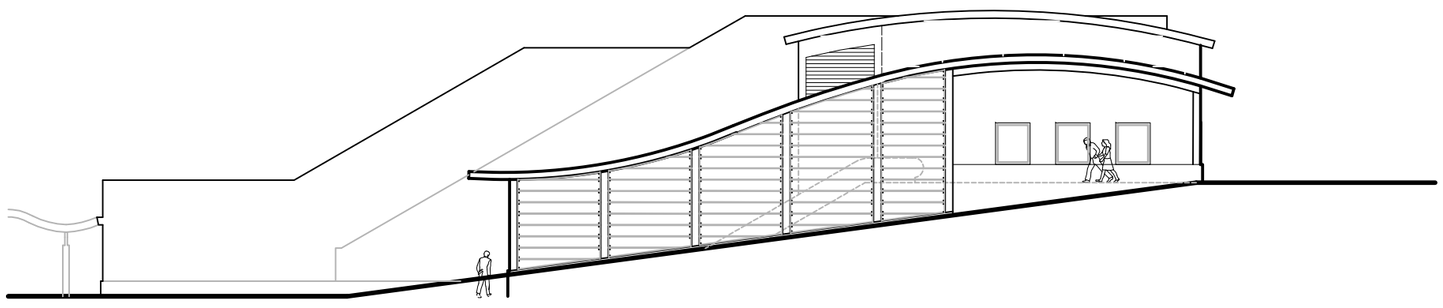
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

Figure 3.7-20

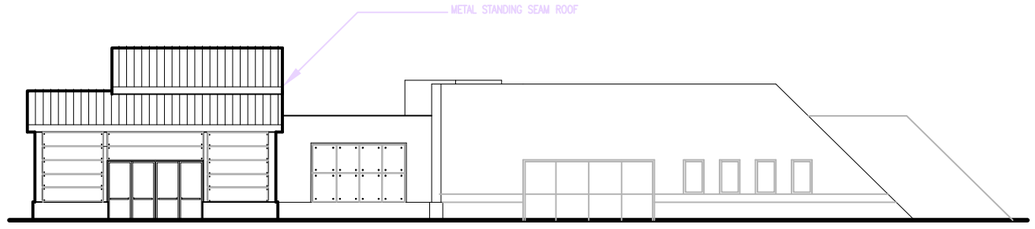
Ball Square Station Circulation



NORTH ELEVATION



SOUTH ELEVATION



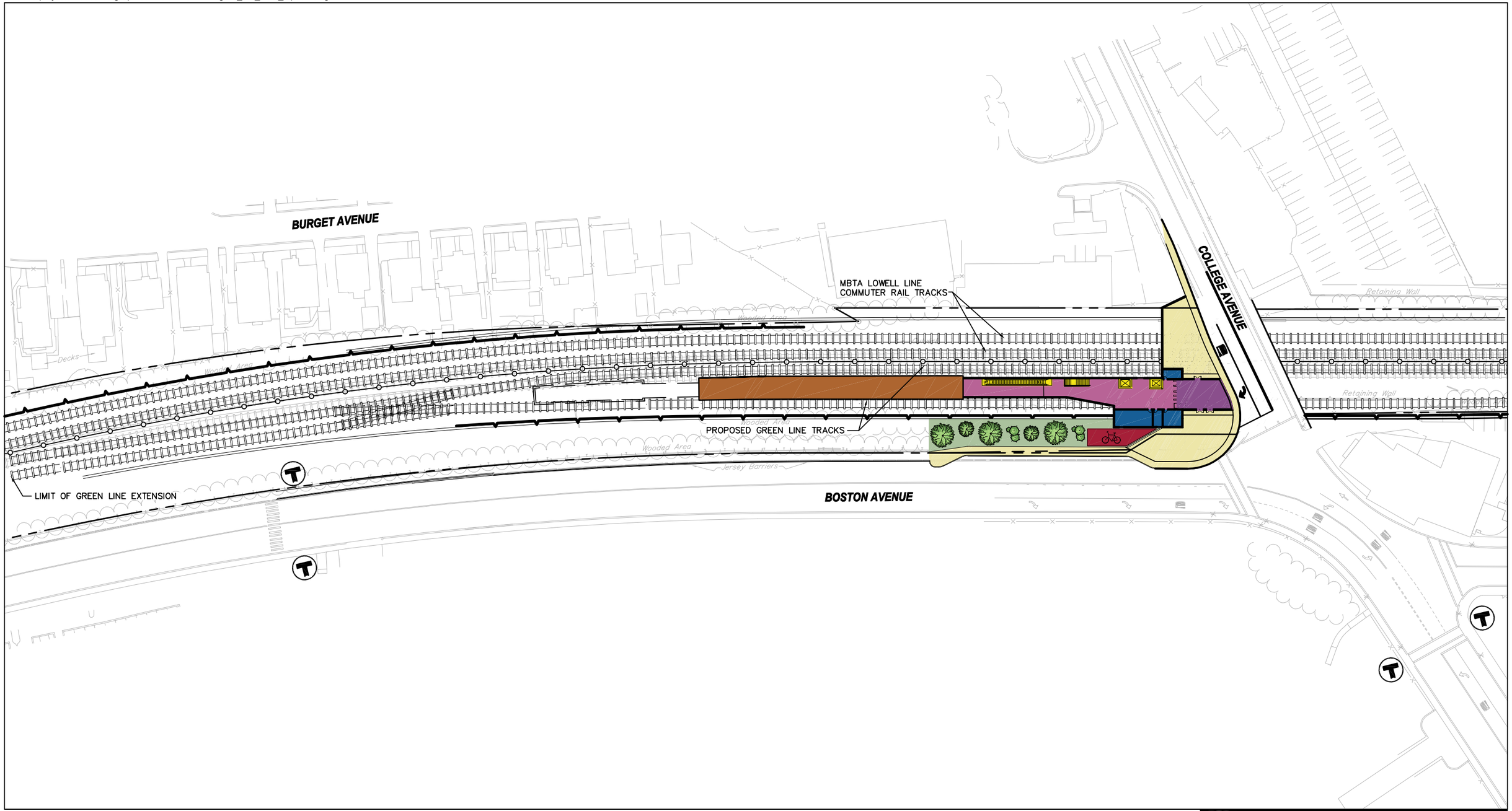
WEST ELEVATION

0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-21

Ball Square Station
Elevation



Green Line Extension Project

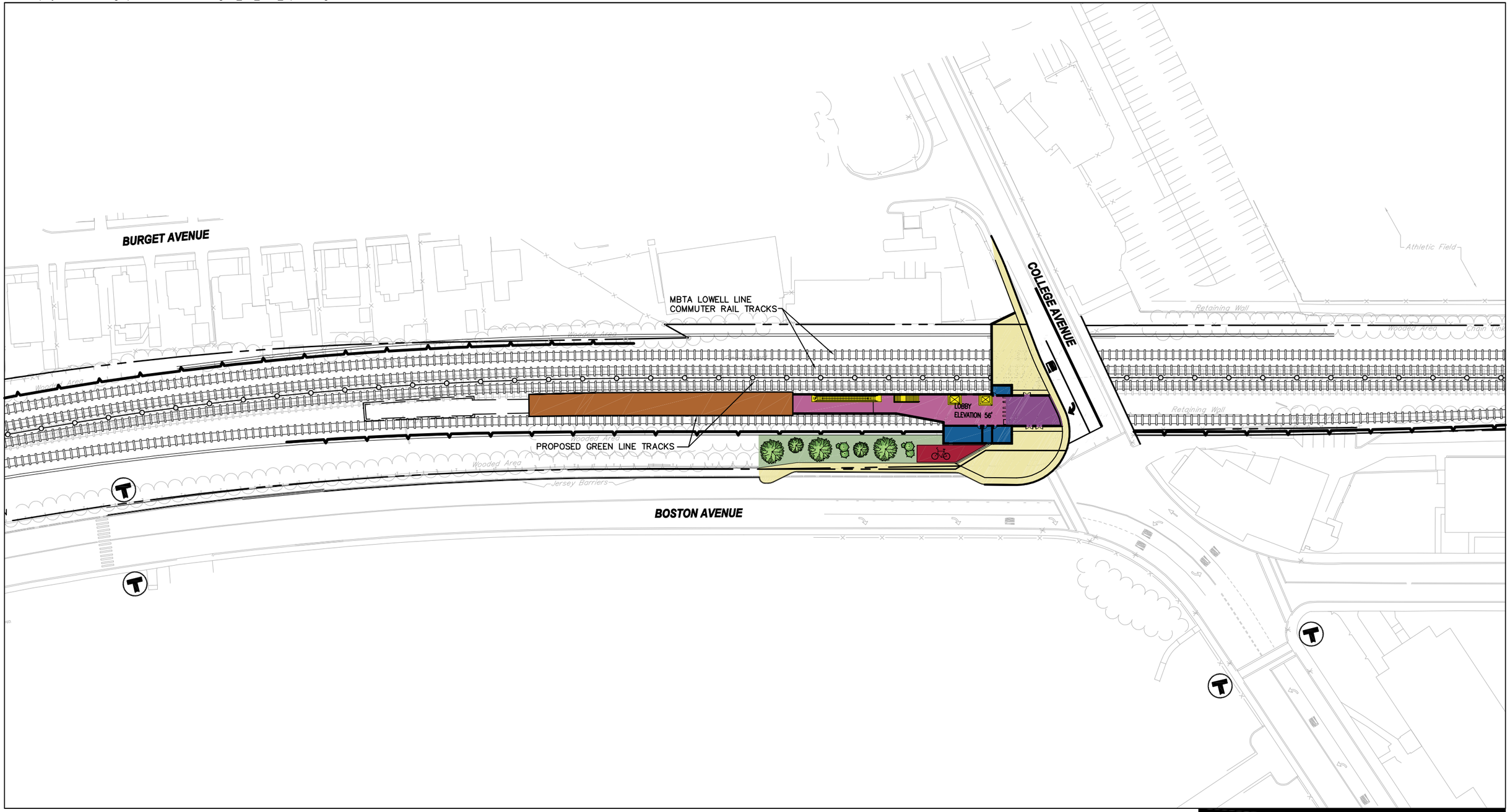
Legend

- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

Figure 3.7-22

College Avenue Station
Medford Hillside Terminus
Alternatives 1, 3
Station Layout



Green Line Extension Project

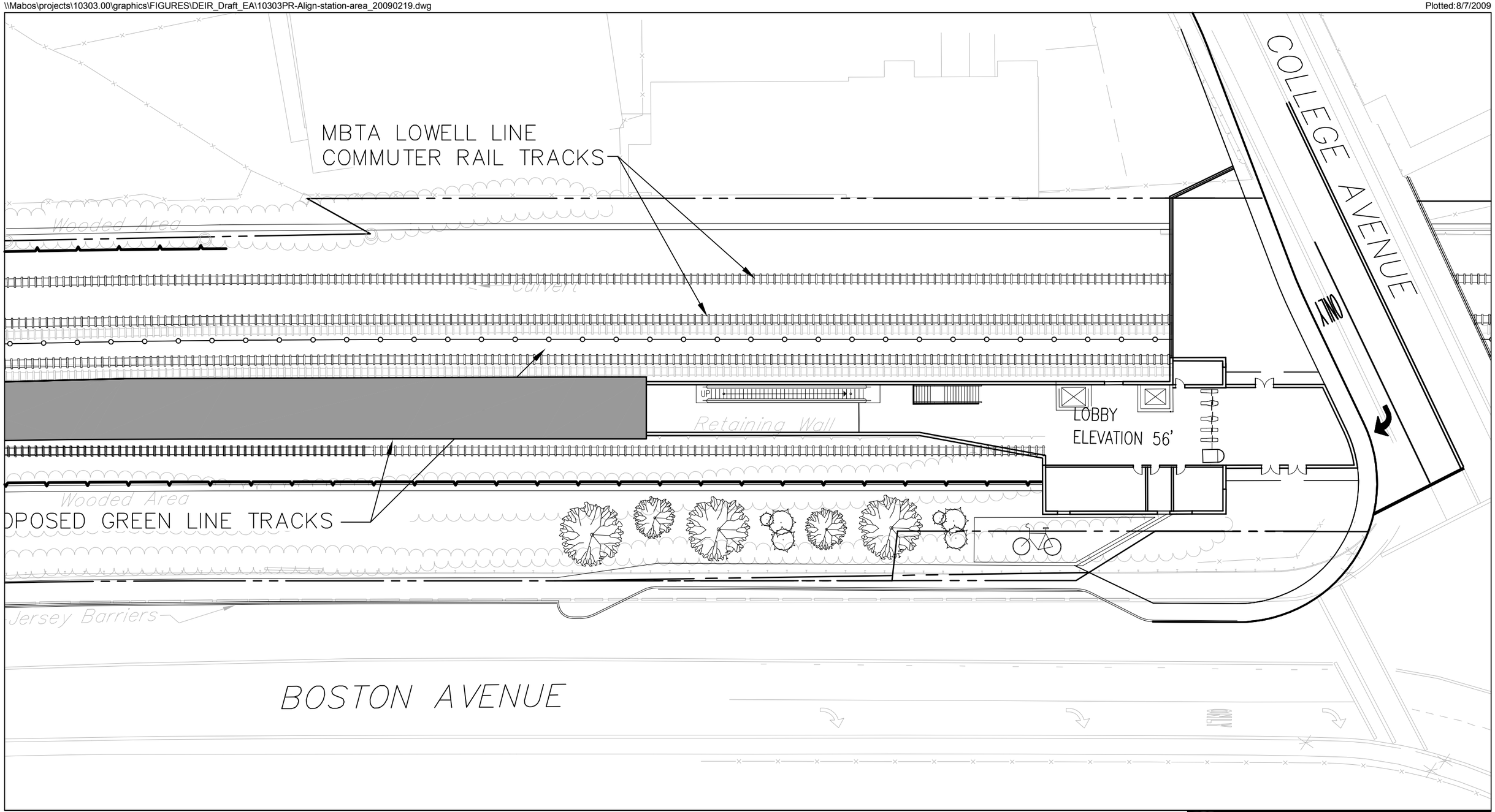
Legend

- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Limit of Structure
- Area of Refuge
- Doors
- Turnstiles
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Elevators
- Escalators
- Stairs
- Bicycle Storage
- MBTA Bus Stop
- Proposed Traffic Signal
- New Sidewalk
- New Landscaping
- New Pavement
- Proposed Community Path

0 40 80 Feet

Figure 3.7-23

College Avenue Station
Alternatives 2, 4, 5
Station Layout



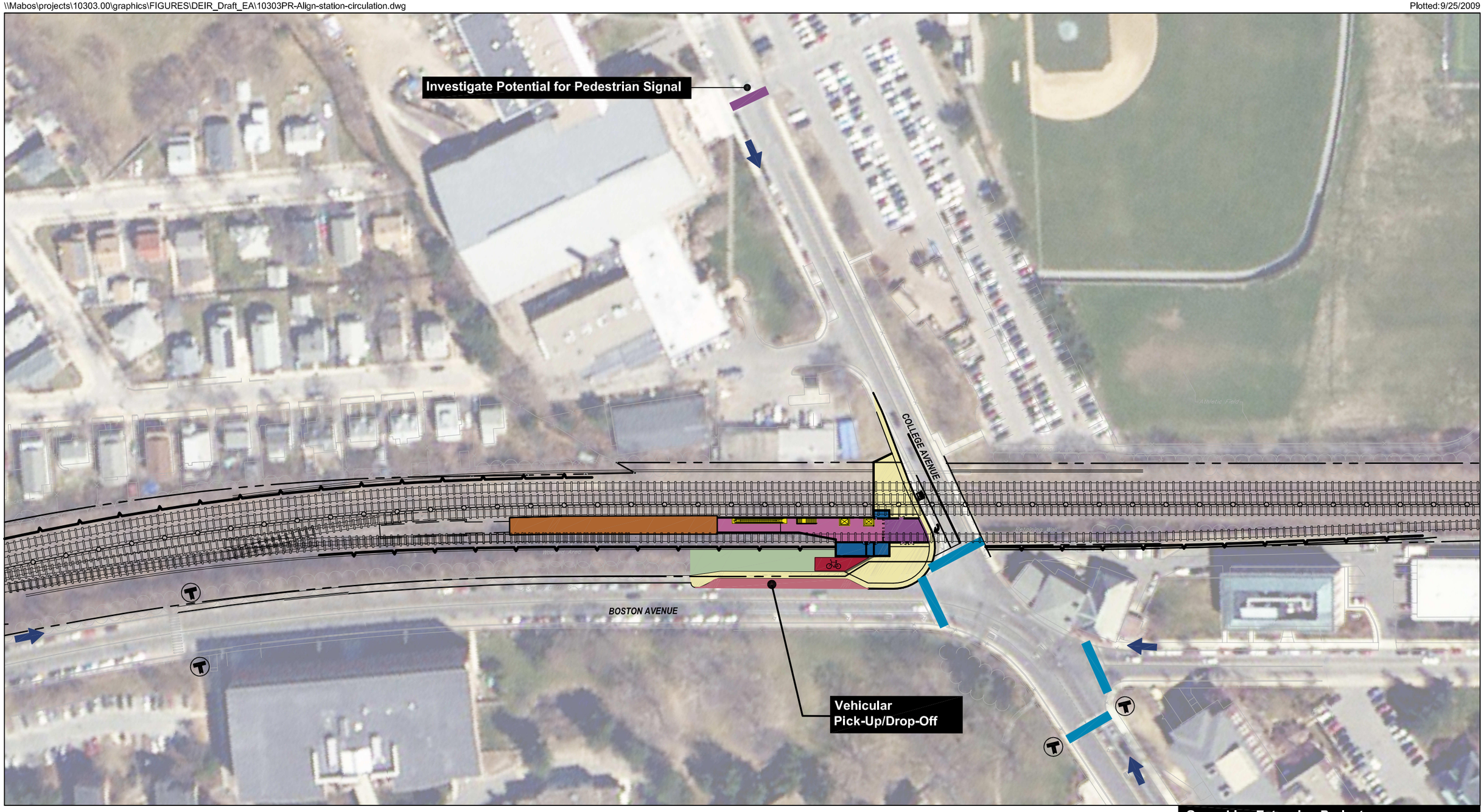
Green Line Extension Project

0 15 30 Feet

Legend

- *Platform*
- *Property Line*
- *Retaining Wall*
- *Fence*
- *Proposed Track*
- *Existing Track*
- *Proposed Community Path*
- *Limit of Structure*
- *MBTA Bus Stop*
- *Proposed Traffic Signal*
- *Bicycle Storage*
- *Area of Refuge*
- *Doors*
- *Turnstiles*
- *Elevators*
- *Escalators*
- *Stairs*

Figure 3.7-24
College Avenue Station
Station Plan



Green Line Extension Project

0 50 100 Feet

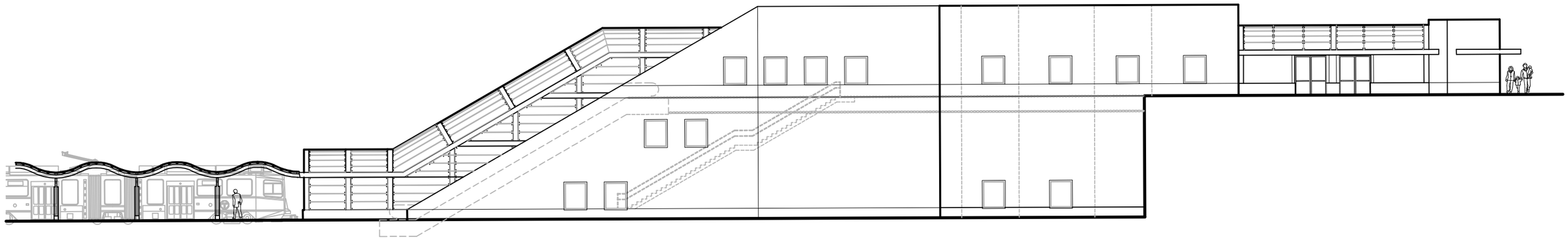
Legend

- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

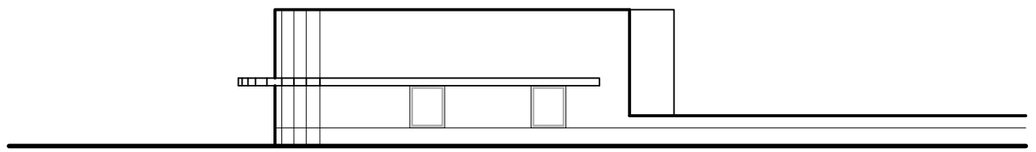
EOT

Figure 3.7-25

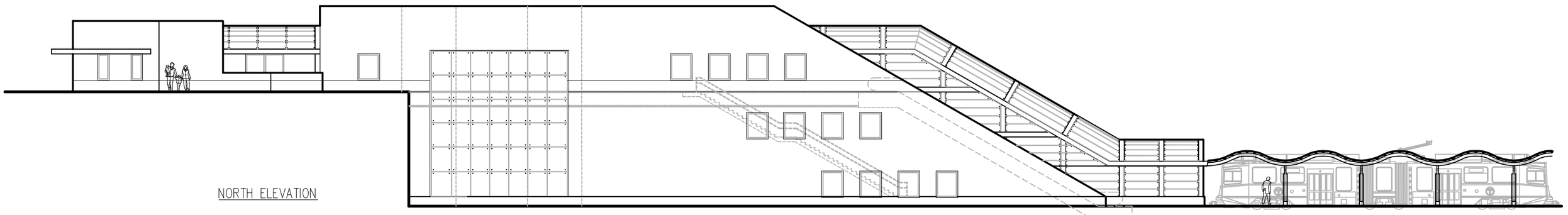
College Avenue Station Circulation



SOUTH ELEVATION



EAST ELEVATION



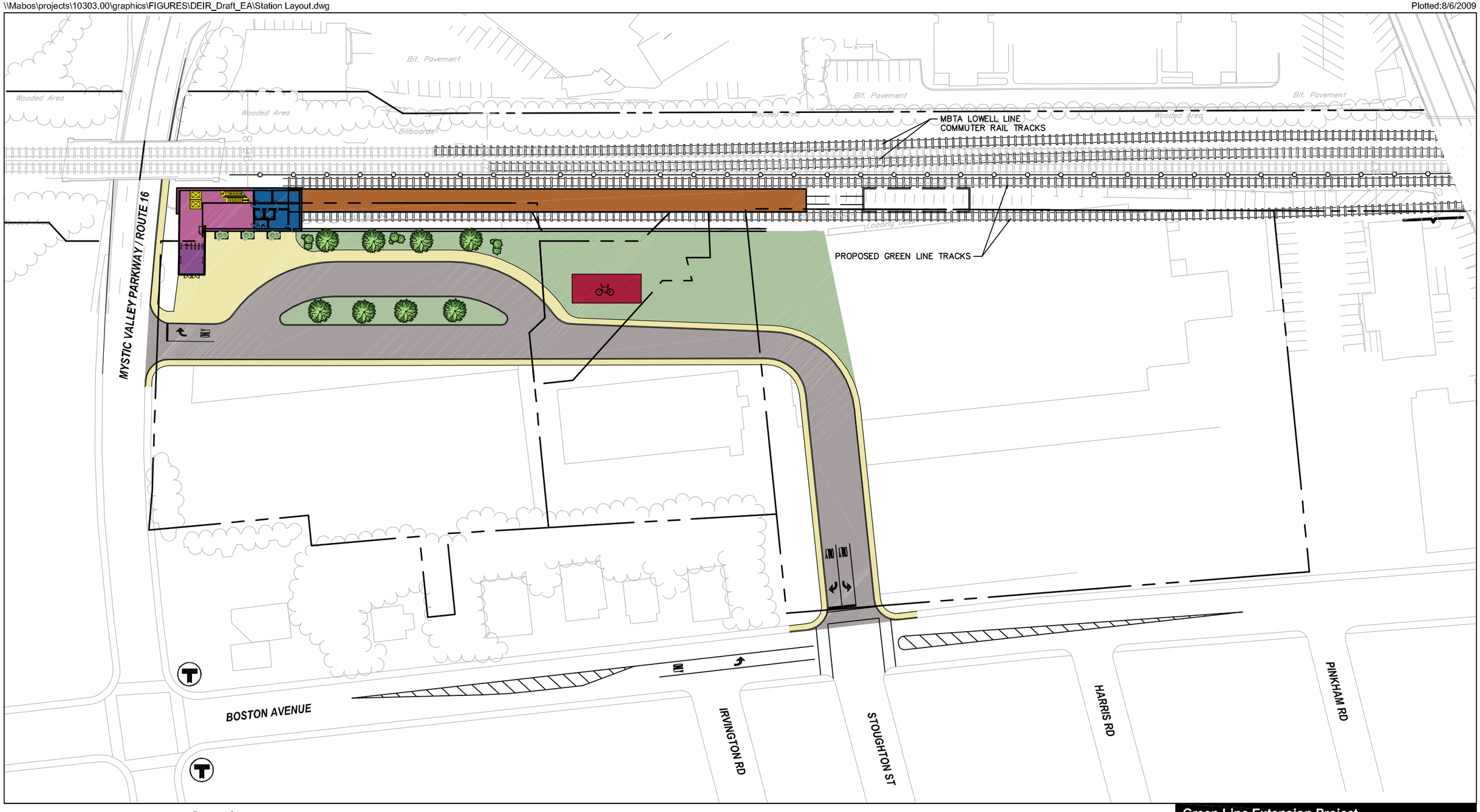
NORTH ELEVATION

0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-26

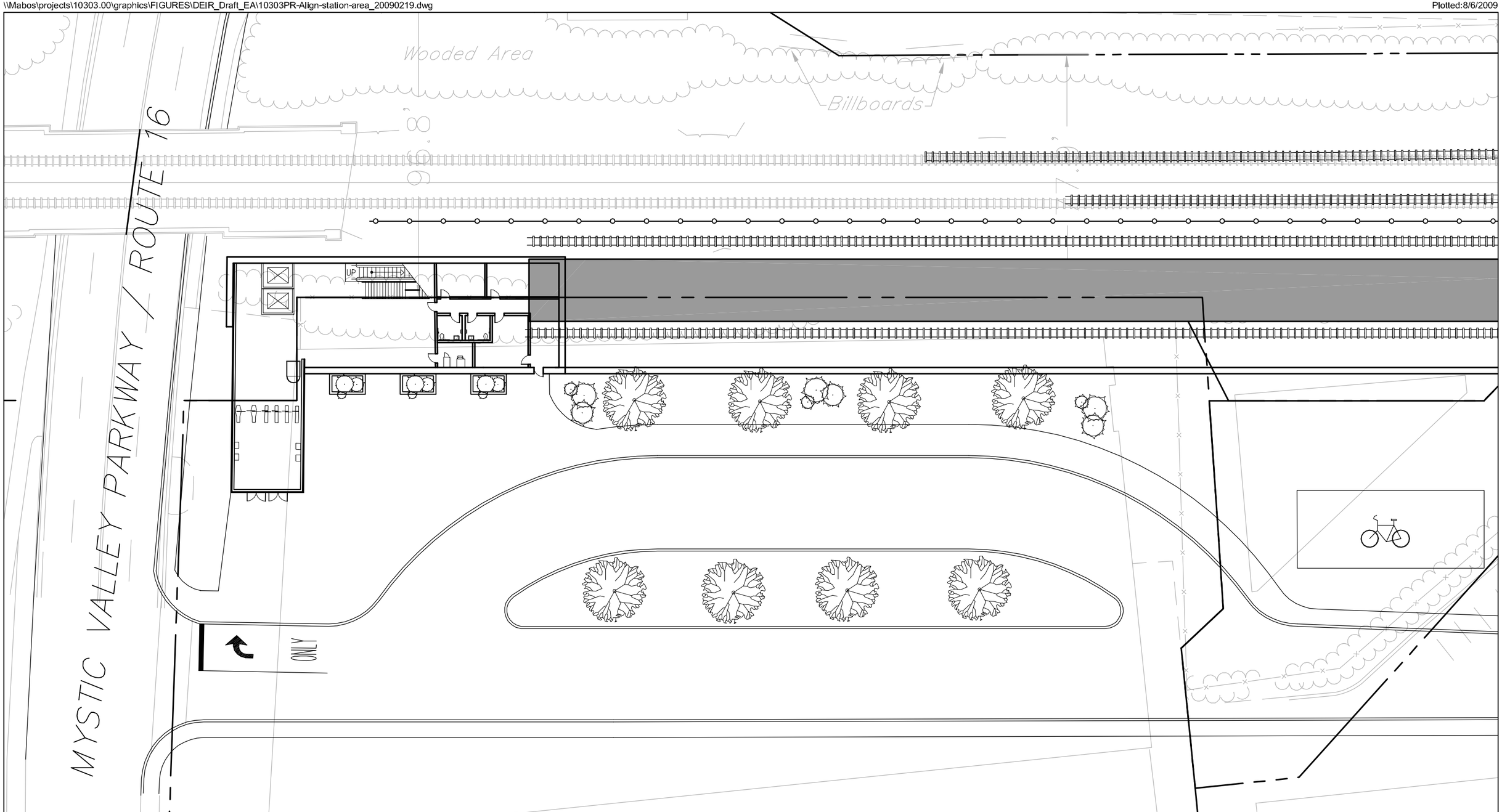
College Avenue Station
Elevation



Green Line Extension Project

Figure 3.7-27

Mystic Valley Parkway / Route 16 Station
Station Layout



Green Line Extension Project

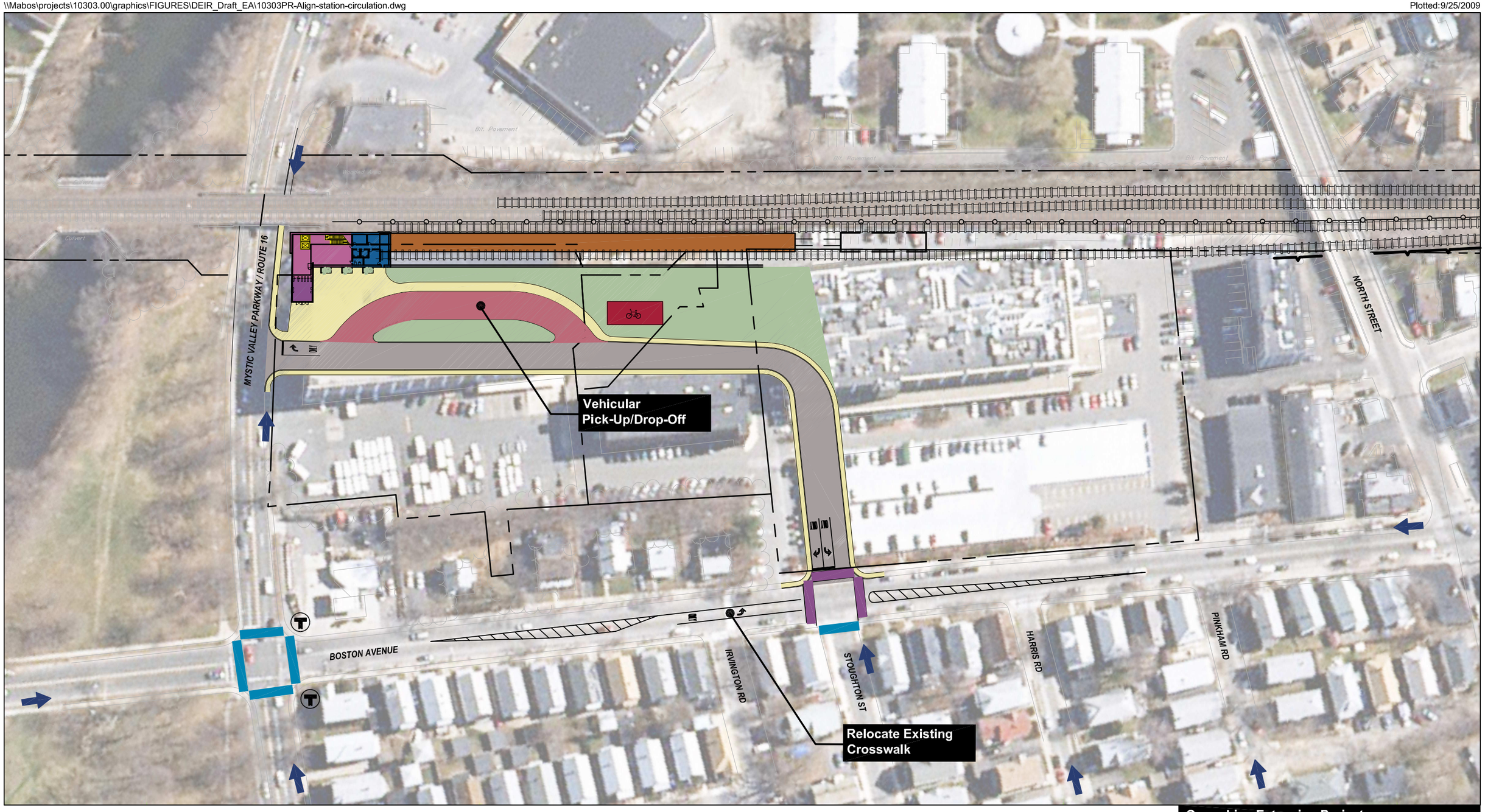
0 15 30 Feet

Legend

- *Platform*
- *Property Line*
- *Retaining Wall*
- *Fence*
- *Proposed Track*
- *Existing Track*
- *Proposed Community Path*
- *Limit of Structure*
- *MBTA Bus Stop*
- *Proposed Traffic Signal*
- *Bicycle Storage*
- *Area of Refuge*
- *Doors*
- *Turnstiles*
- *Elevators*
- *Escalators*
- *Stairs*

Figure 3.7-28

Mystic Valley Parkway / Route 16 Station
Station Plan



Green Line Extension Project

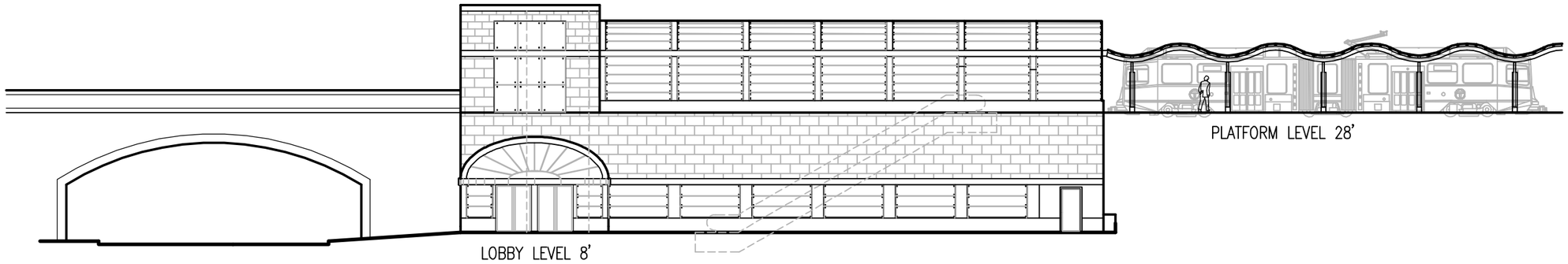
Legend

- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Propoed Community Path

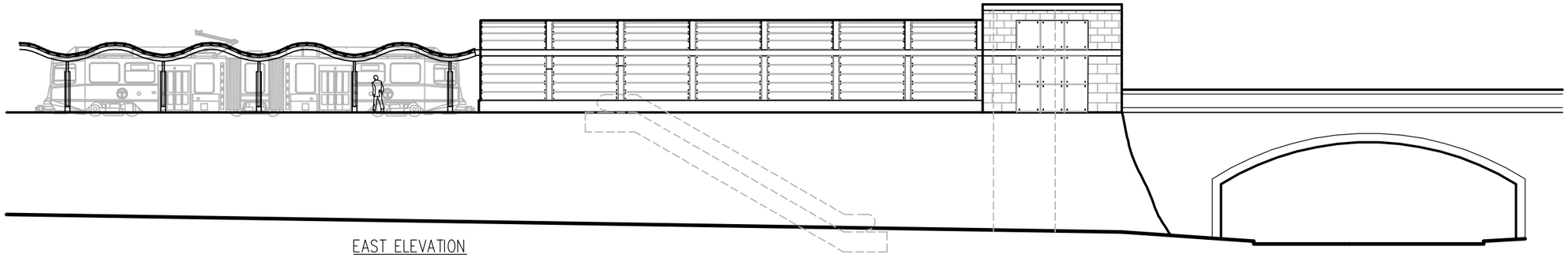
0 50 100 Feet

Figure 3.7-29

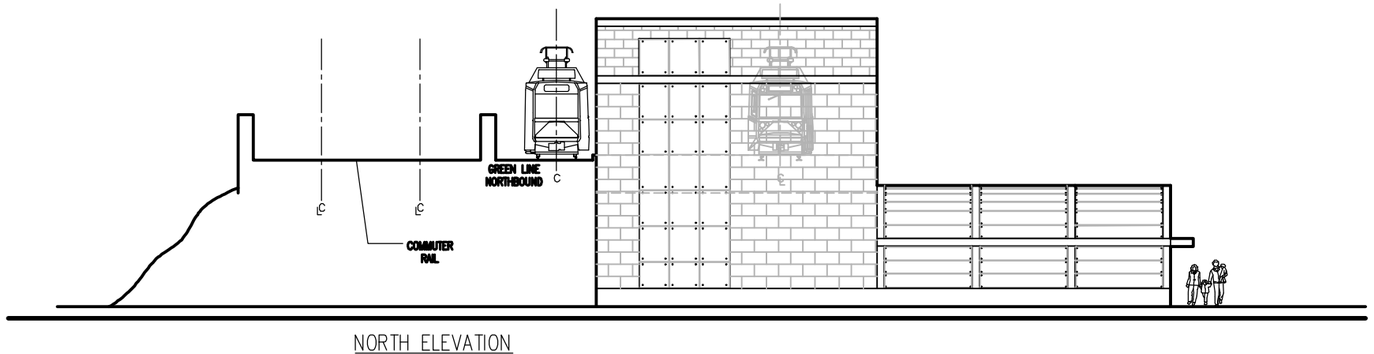
Mystic Valley Parkway / Route 16 Station Circulation



WEST ELEVATION



EAST ELEVATION



NORTH ELEVATION

0 10 Feet 20 Feet

Green Line Extension Project

Figure 3.7-30

Mystic Valley Parkway / Route 16 Station Elevation

SOMERVILLE AVE

EVERETT STREET

EMERSON STREET

PROSPECT STREET

WEBSTER STREET

NEWTON STREET

PROSPECT STREET

PROPOSED GREEN LINE TRACKS

MBTA FITCHBURG LINE COMMUTER RAIL TRACKS

Tank

Pile of Debris

Pile

Fence Gate

Sub-Station

Antenna

Chain Link Fence

Wooded Area

Pipe on Bridge

Bit. Pavement

Dirt

Fence Gate

Legend

Property Line
Retaining Wall
Fence
Proposed Track
Existing Track
Limit of Structure
Area of Refuge
Doors
Turnstiles

Platform
Station Concourse
Station Entry
Service Areas
Elevators
Escalators
Stairs
Bicycle Storage

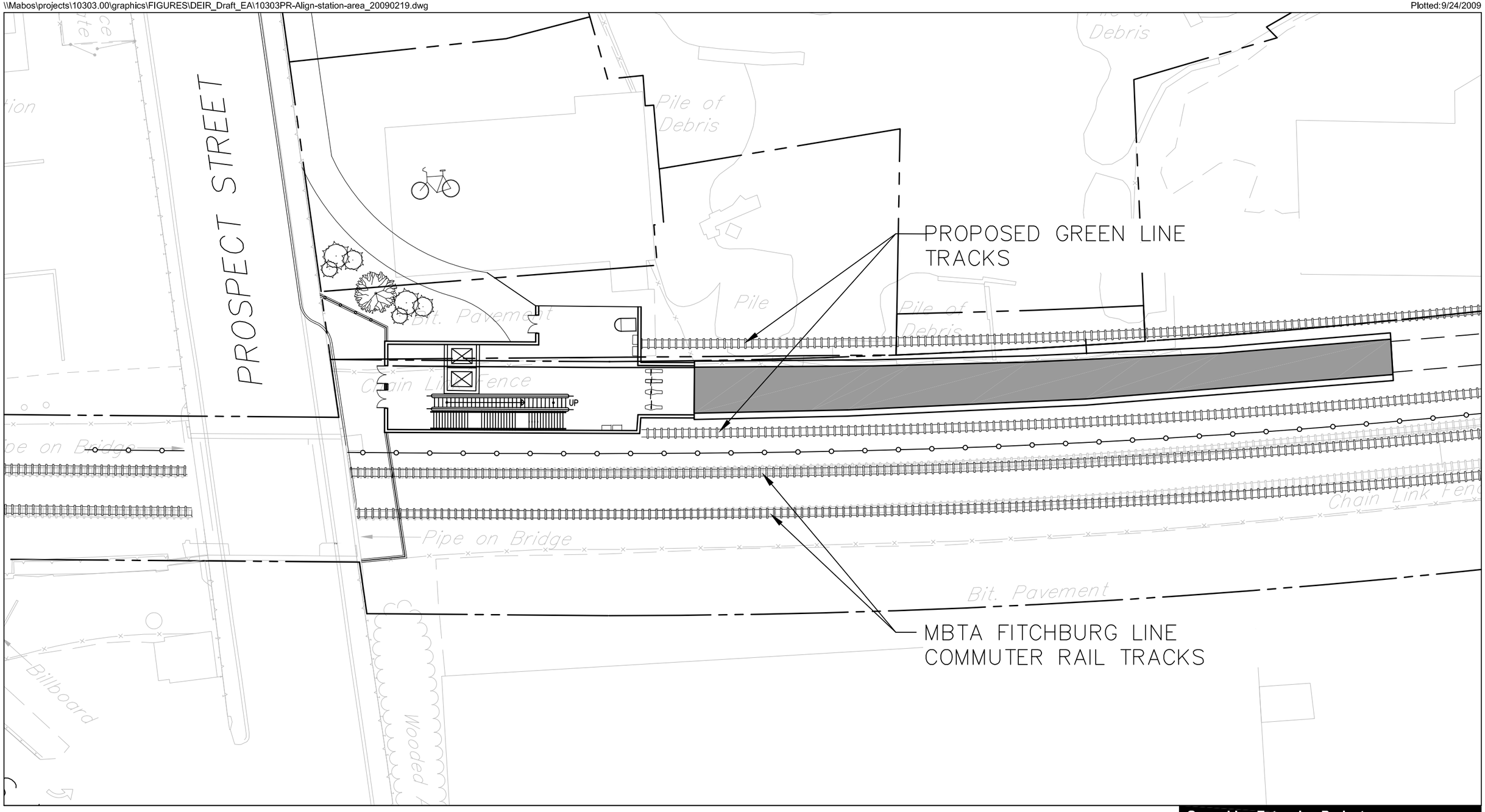
MBTA Bus Stop
Proposed Traffic Signal
New Sidewalk
New Landscaping
New Pavement
Proposed Community Path

0 40 80 Feet

Green Line Extension Project

Figure 3.7-31

Union Square Station
Station Layout



Green Line Extension Project

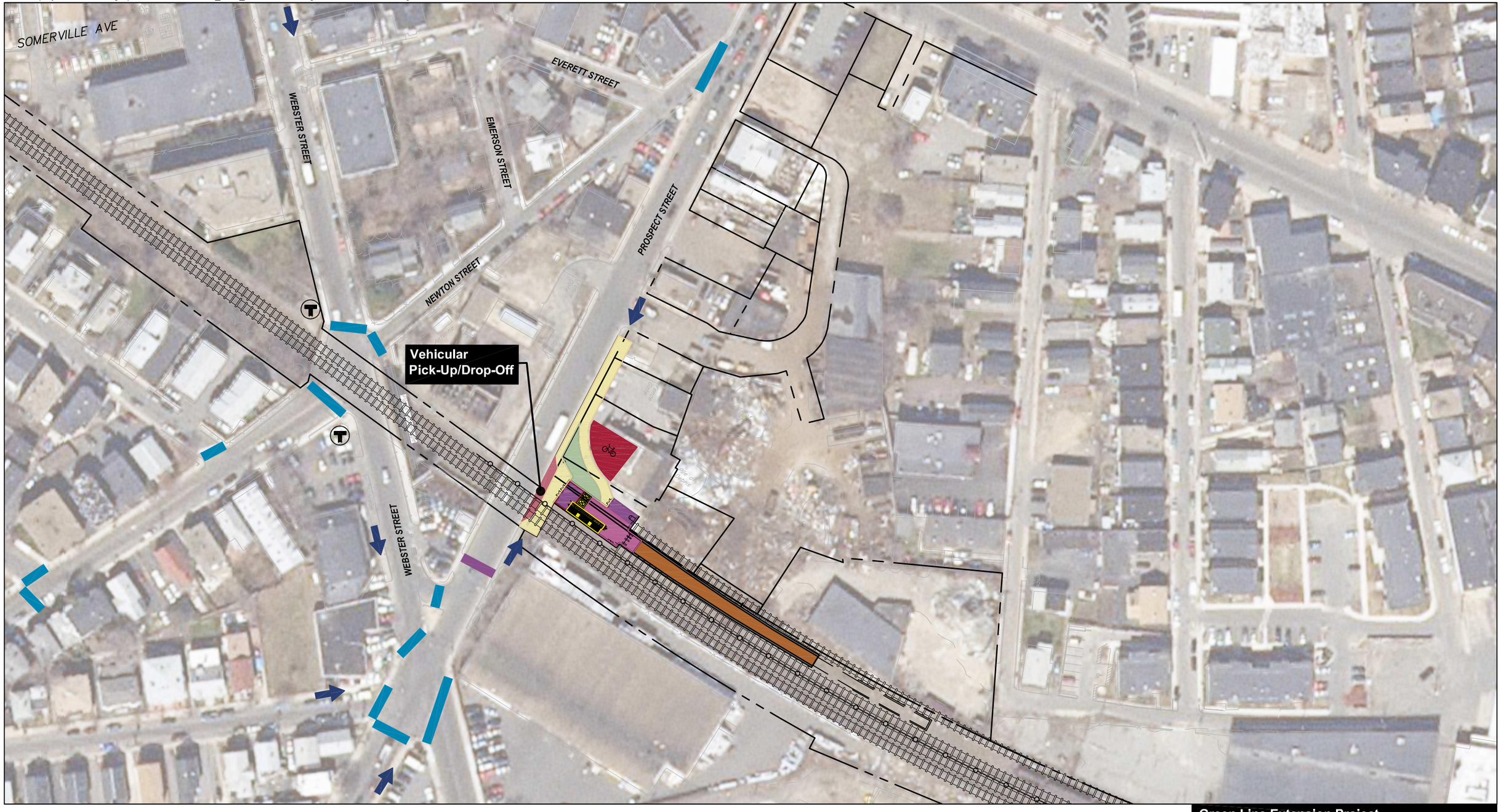
0 15 30 Feet

Legend

- Platform
- Property Line
- Retaining Wall
- Fence
- Proposed Track
- Existing Track
- Proposed Community Path
- Limit of Structure
- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Area of Refuge
- Doors
- Turnstiles
- Elevators
- Escalators
- Stairs

Figure 3.7-32

Union Square Station
Station Plan



Green Line Extension Project

0 50 100 Feet

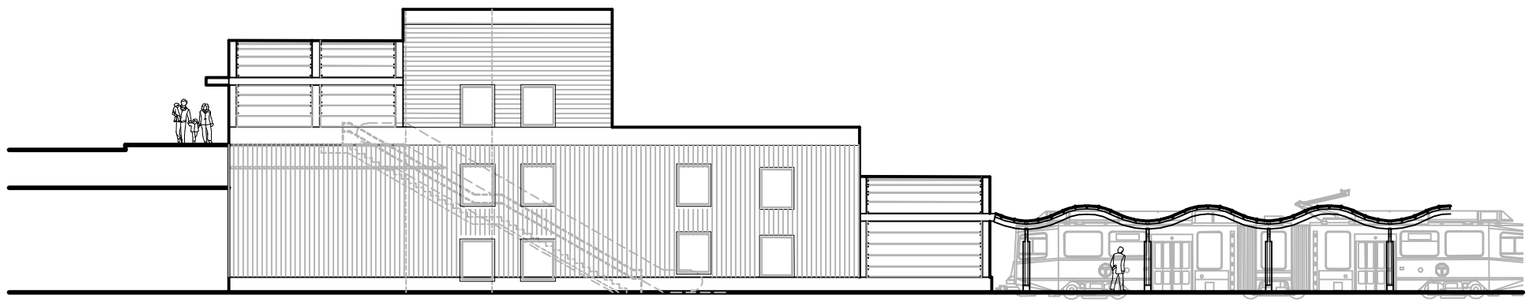
Legend

- MBTA Bus Stop
- Proposed Traffic Signal
- Bicycle Storage
- Existing Crosswalks
- Proposed Crosswalks
- Pick-Up/Drop-Off Area
- Pedestrian/Bicycle Access
- Platform
- Station Concourse
- Station Entry
- Service Areas
- Stairs, Elevators, Escalators
- New Sidewalk
- New Landscaping
- Proposed Community Path

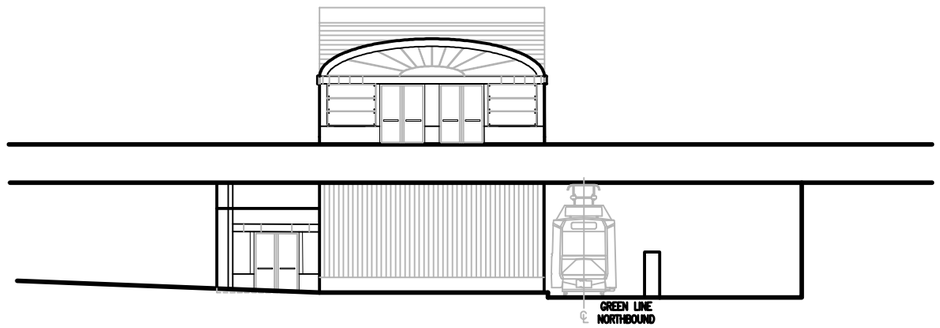
EOT

Figure 3.7-33

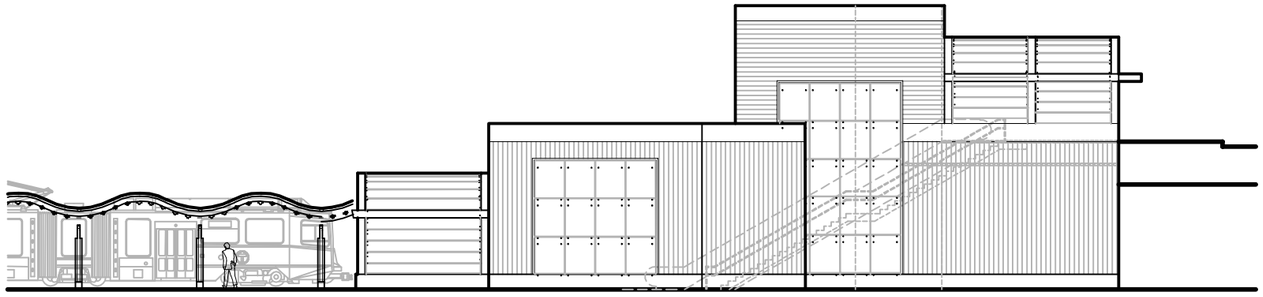
Union Square Station Circulation



SOUTH ELEVATION



NORTH ELEVATION

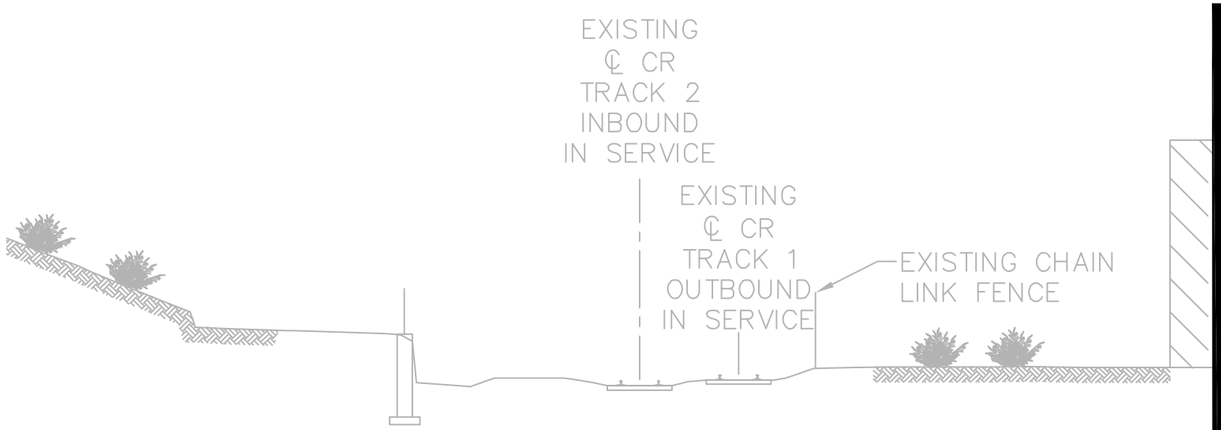


EAST ELEVATION

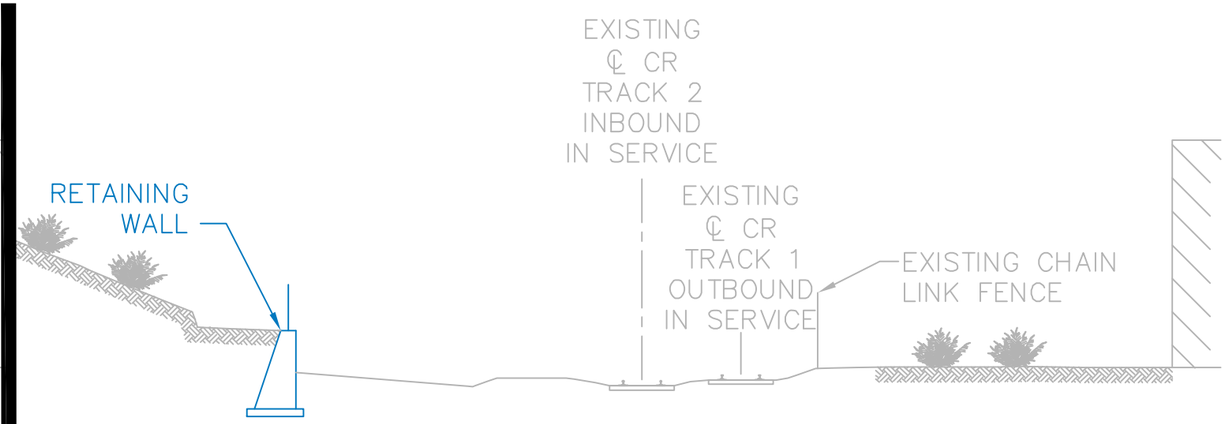
0 10 Feet 20 Feet

Green Line Extension Project

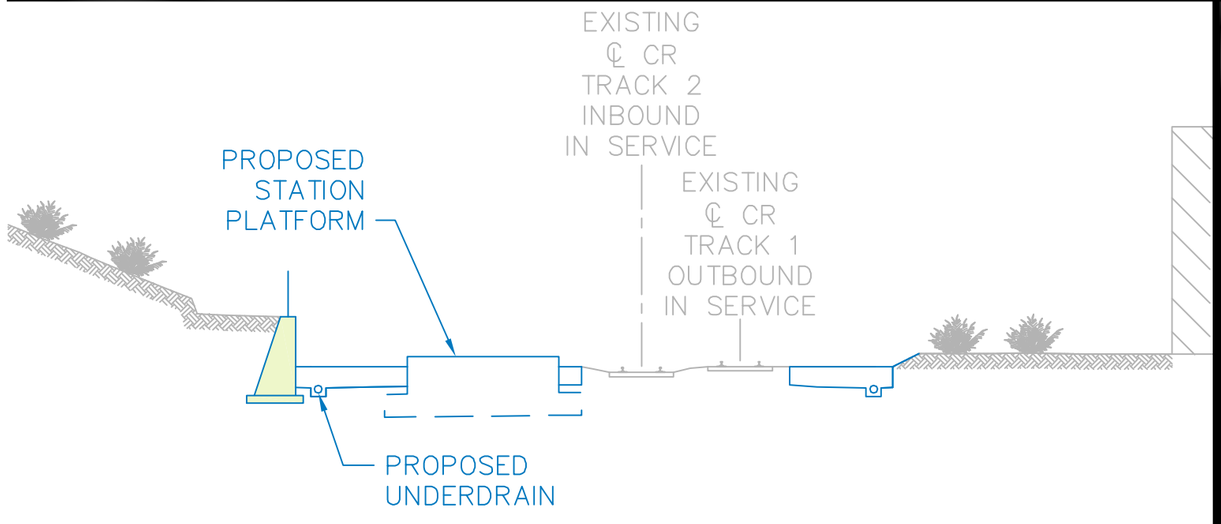
Figure 3.7-34
Union Square Station
Elevation



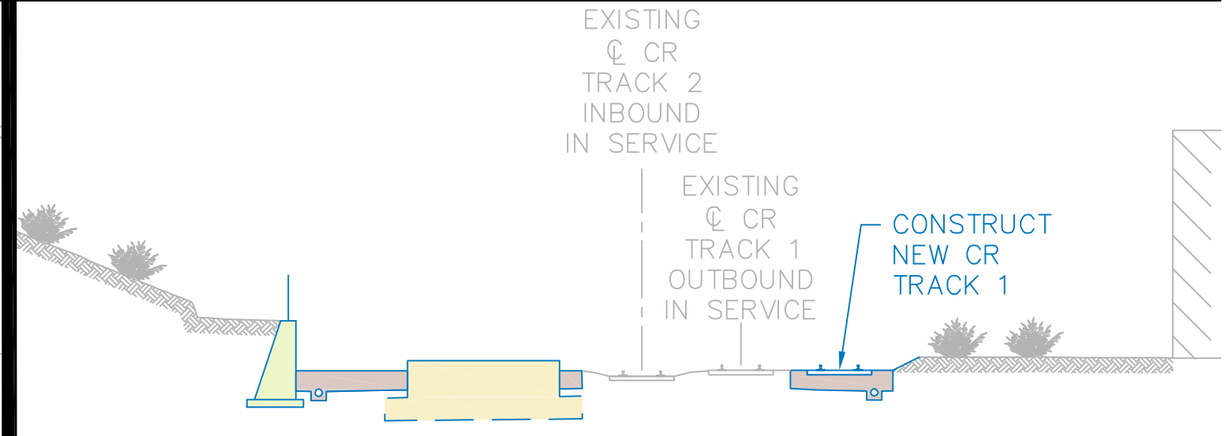
EXISTING CONDITION



STAGE 1
CLEAR CORRIDOR AND CONSTRUCT RETAINING WALLS/ABUTMENT



STAGE 2
INSTALL UTILITIES AND FOUNDATIONS



STAGE 3
CONSTRUCT NEW COMMUTER RAIL TRACK 1

Green Line Extension Project

Figure 3.7-37
Typical Construction Staging
Sheet 1 of 2

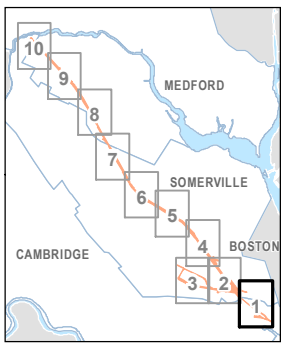
INNER BELT ROAD
INTERSTATE 93
INTERSTATE 93
LEVERETT CONNECTOR
LEVERETT CONNECTOR
SOMERVILLE
CAMBRIDGE
MONSIGNOR OBRIEN HIGHWAY
MONSIGNOR OBRIEN HIGHWAY
SCIARAPPA STREET
WINTER STREET
WATER STREET
LINEHAM COURT
Resources for Human Development School
GORE STREET
CAMBRIDGE FIRE DEPARTMENT
LECHMERE
Relocated Lechmere Station
EAST STREET
THIRD STREET
SECOND STREET
CAMBRIDGE STREET
SILVA PARK
CENTANNI PARK
OTIS STREET
FIRST STREET
LECHMERE CANAL PARK
MIDDLESEX
THORNDIKE STREET
0 100 200 400 Feet

Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-1

Existing Conditions

Sheet 1 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

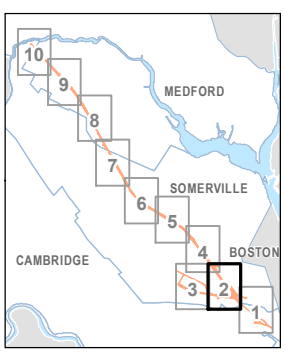


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-2

Existing Conditions

Sheet 2 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

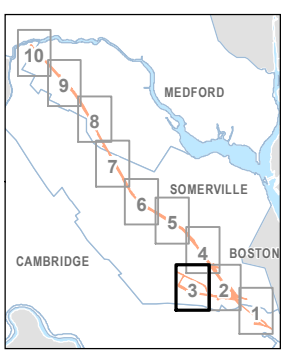


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-3

Existing Conditions

Sheet 3 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

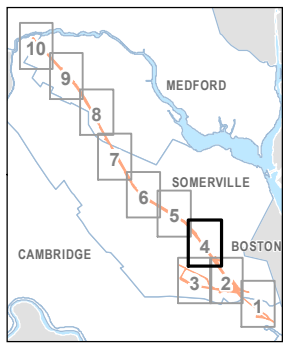


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-4

Existing Conditions

Sheet 4 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

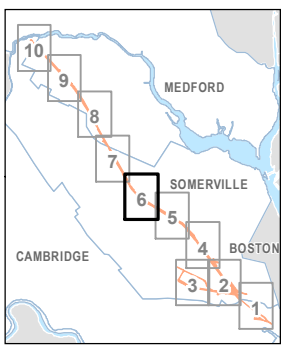


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

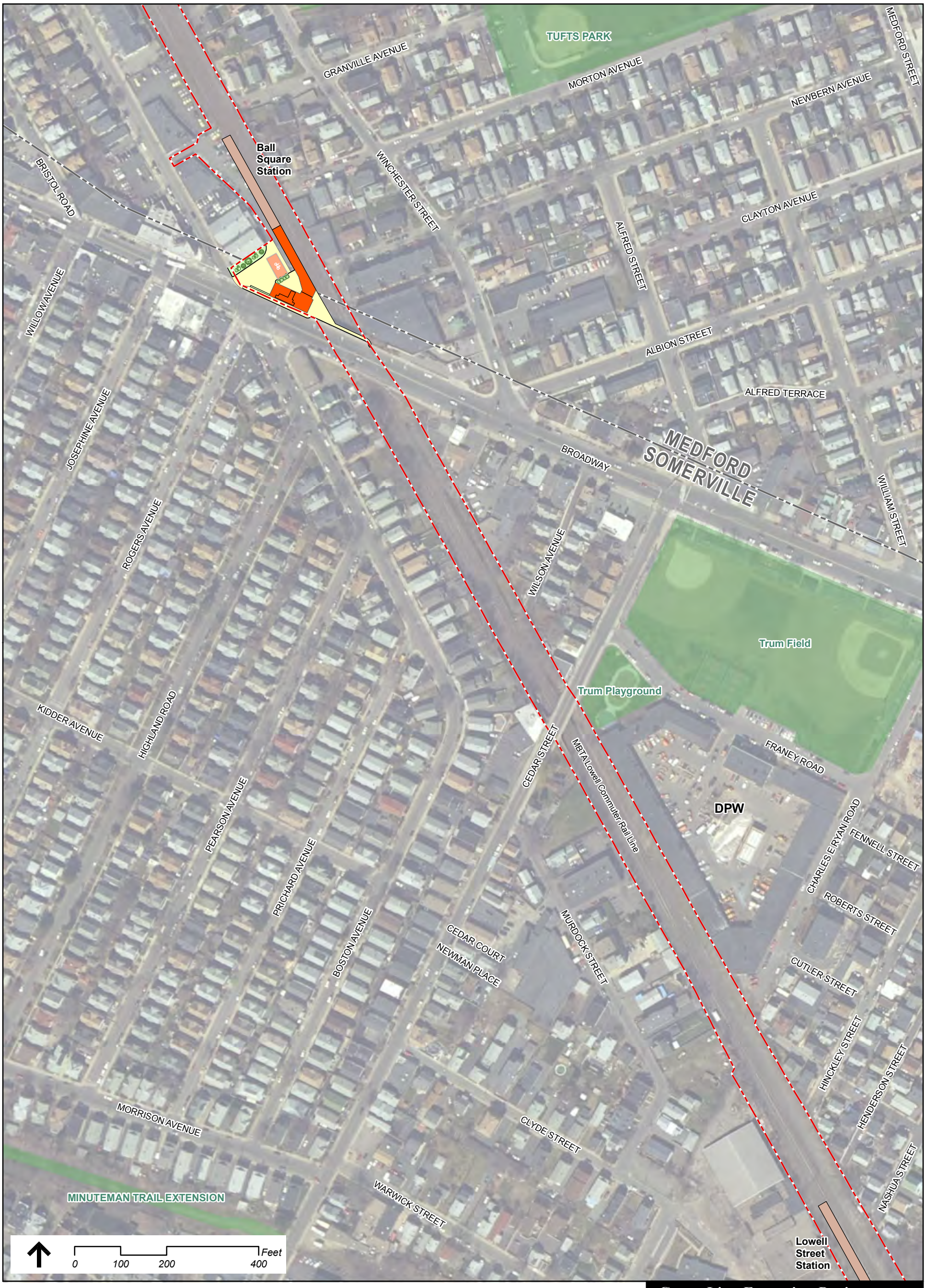
Figure 4.1-6

Existing Conditions

Sheet 6 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

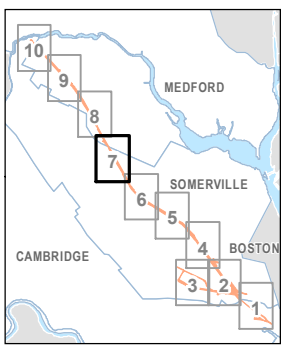


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

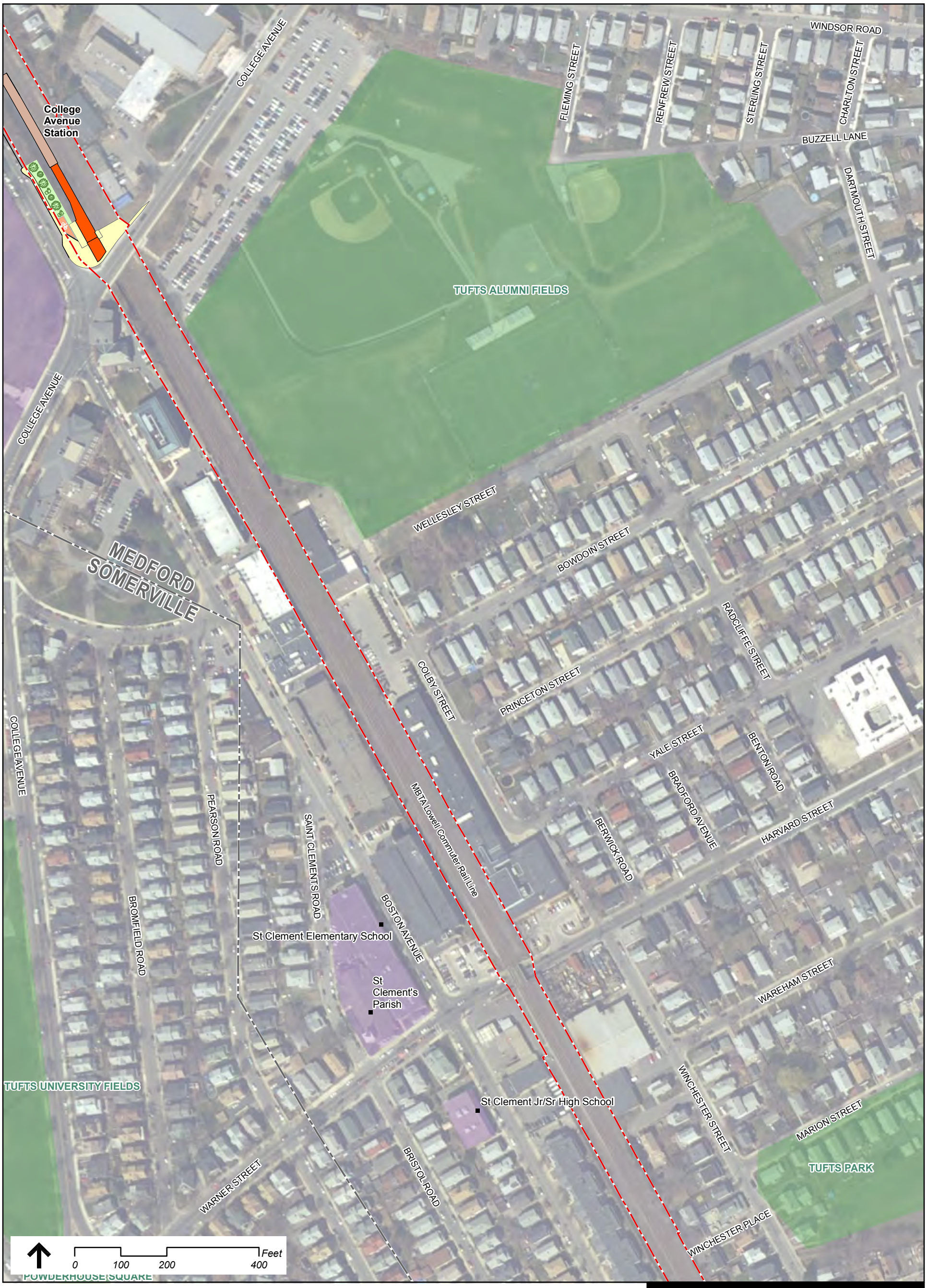
Figure 4.1-7

Existing Conditions

Sheet 7 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

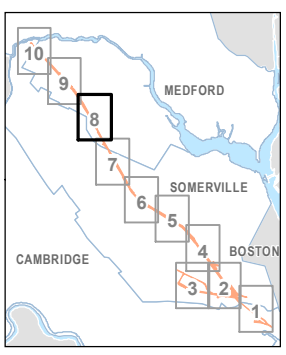


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-8

Existing Conditions

Sheet 8 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

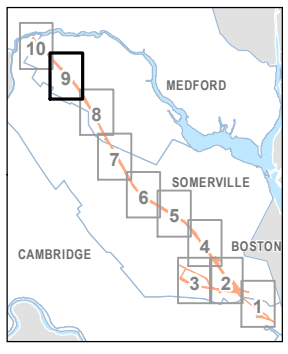


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

Figure 4.1-9

Existing Conditions

Sheet 9 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd

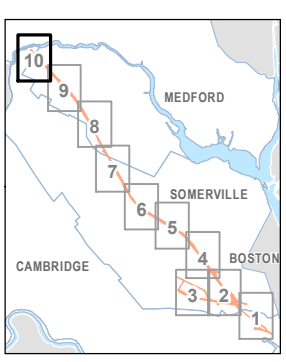


Legend

- Project Area
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building



Green Line Extension Project

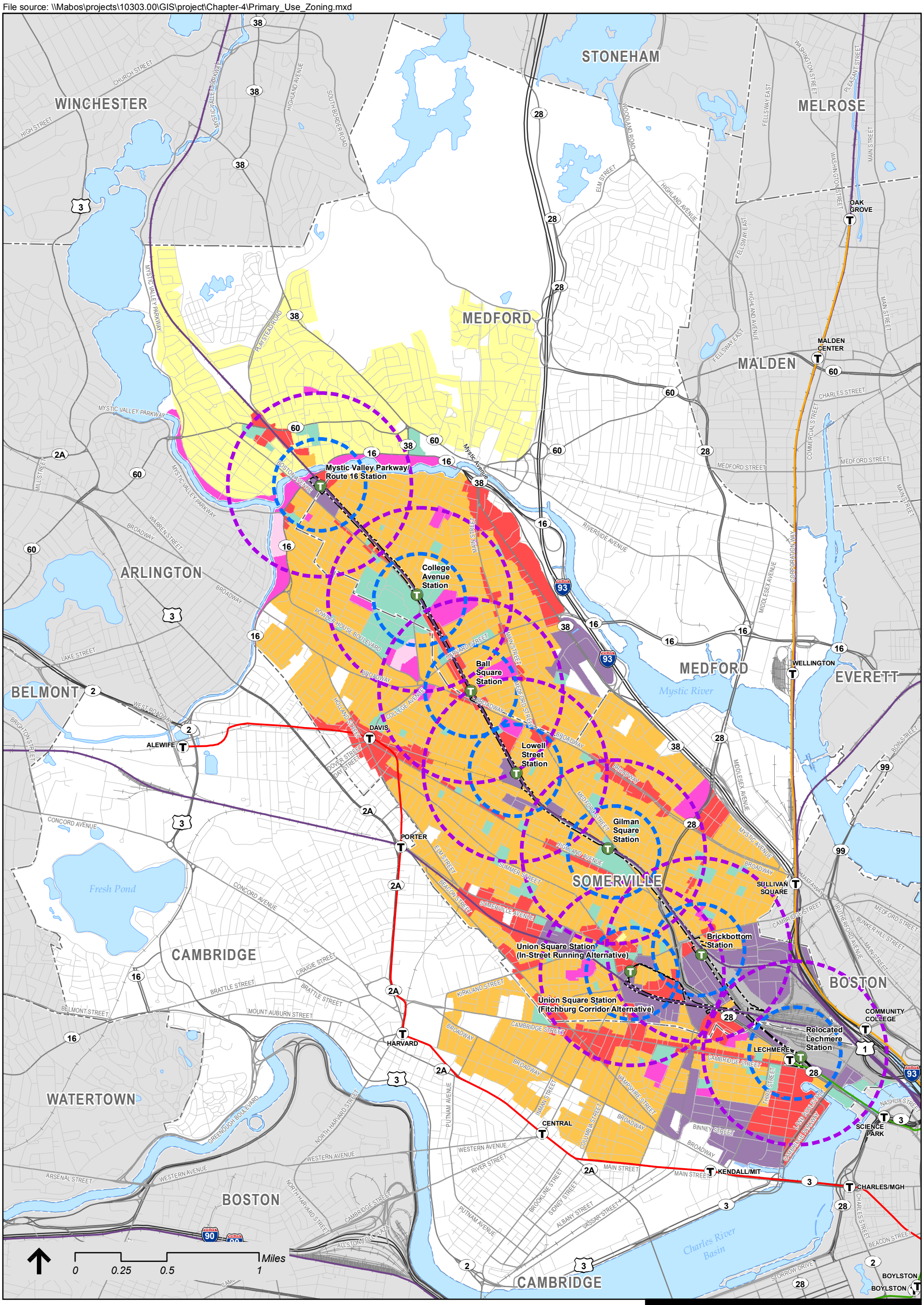
Figure 4.1-10

Existing Conditions

Sheet 10 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\Primary_Use_Zoning.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

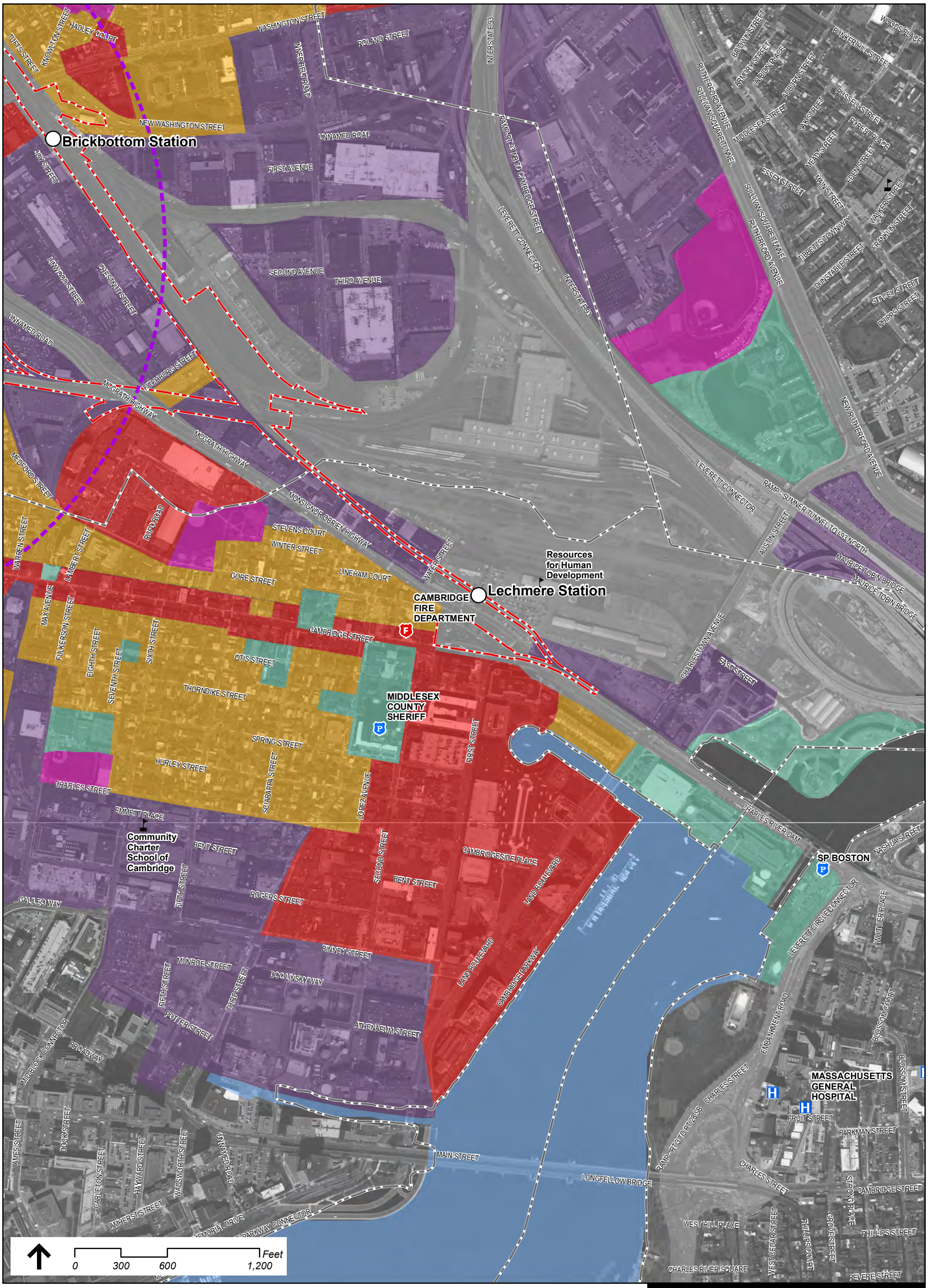
Green Line Extension Project

Figure 4.2-1

Existing Land Use Index

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

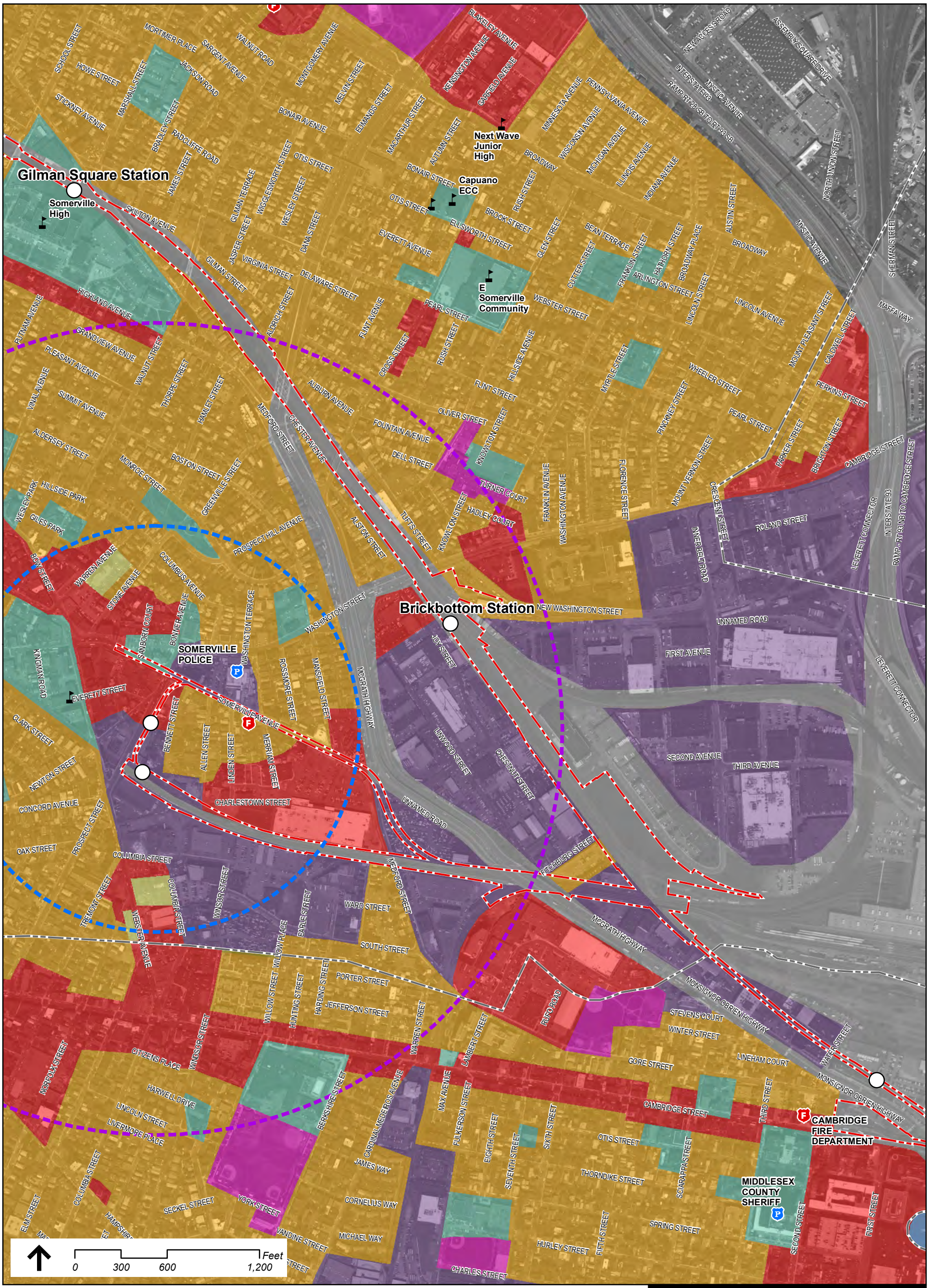
Figure 4.2-2

Existing Land Use

Existing Lechmere Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
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- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

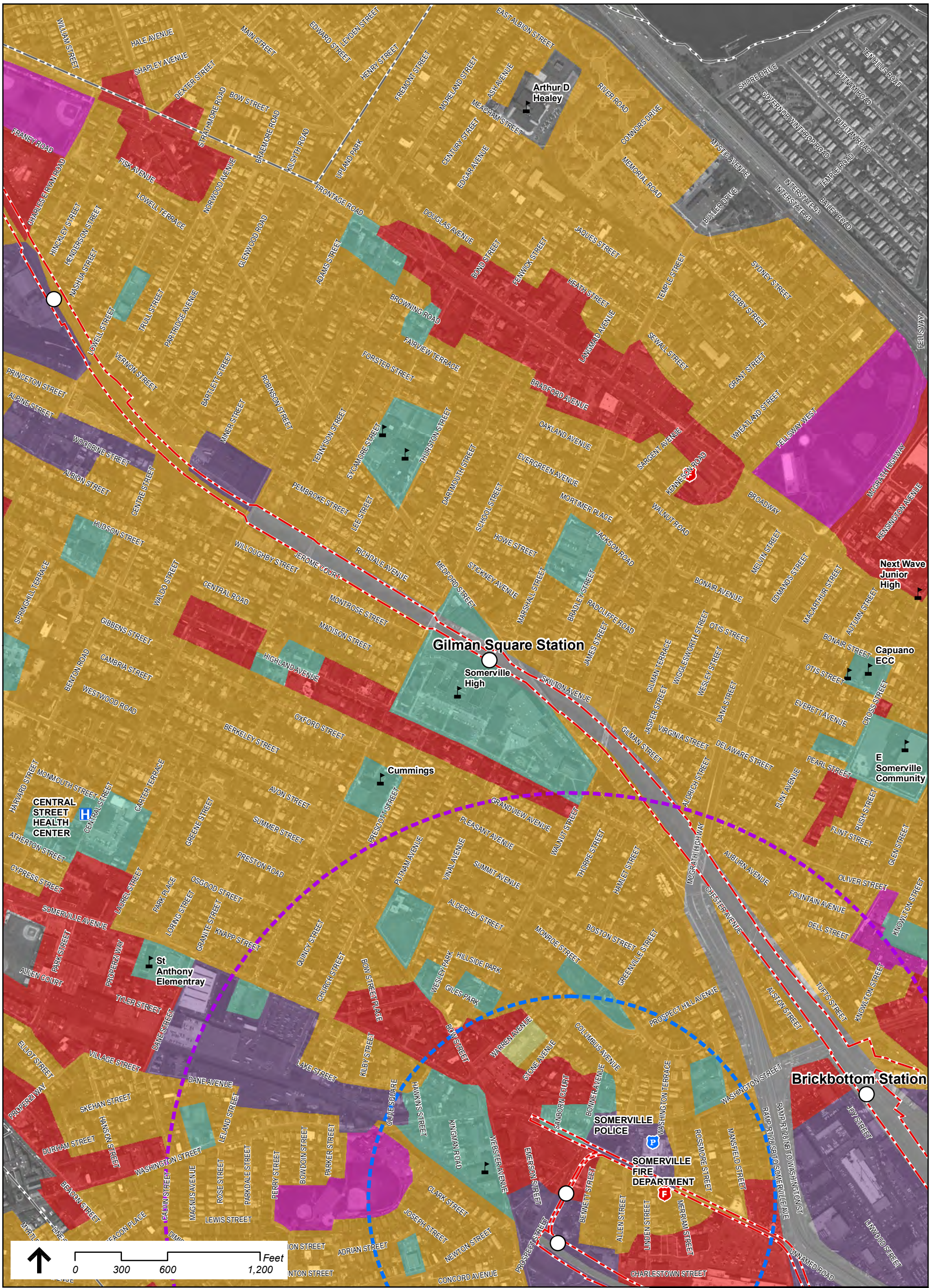
Figure 4.2-3

Existing Land Use

Brickbottom Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

Figure 4.2-4

Existing Land Use

Gilman Square Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

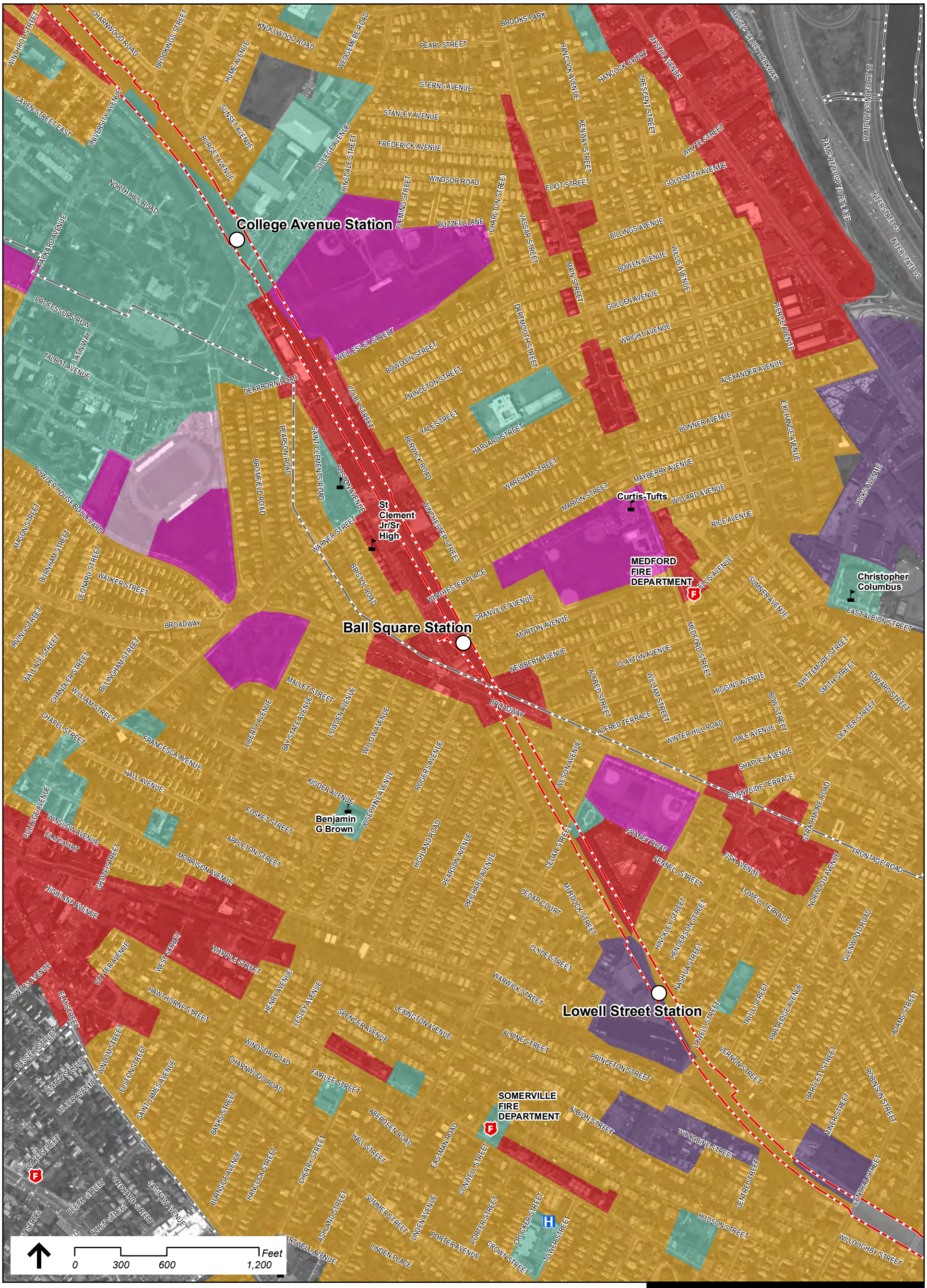
Figure 4.2-5

Existing Land Use

Lowell Street Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

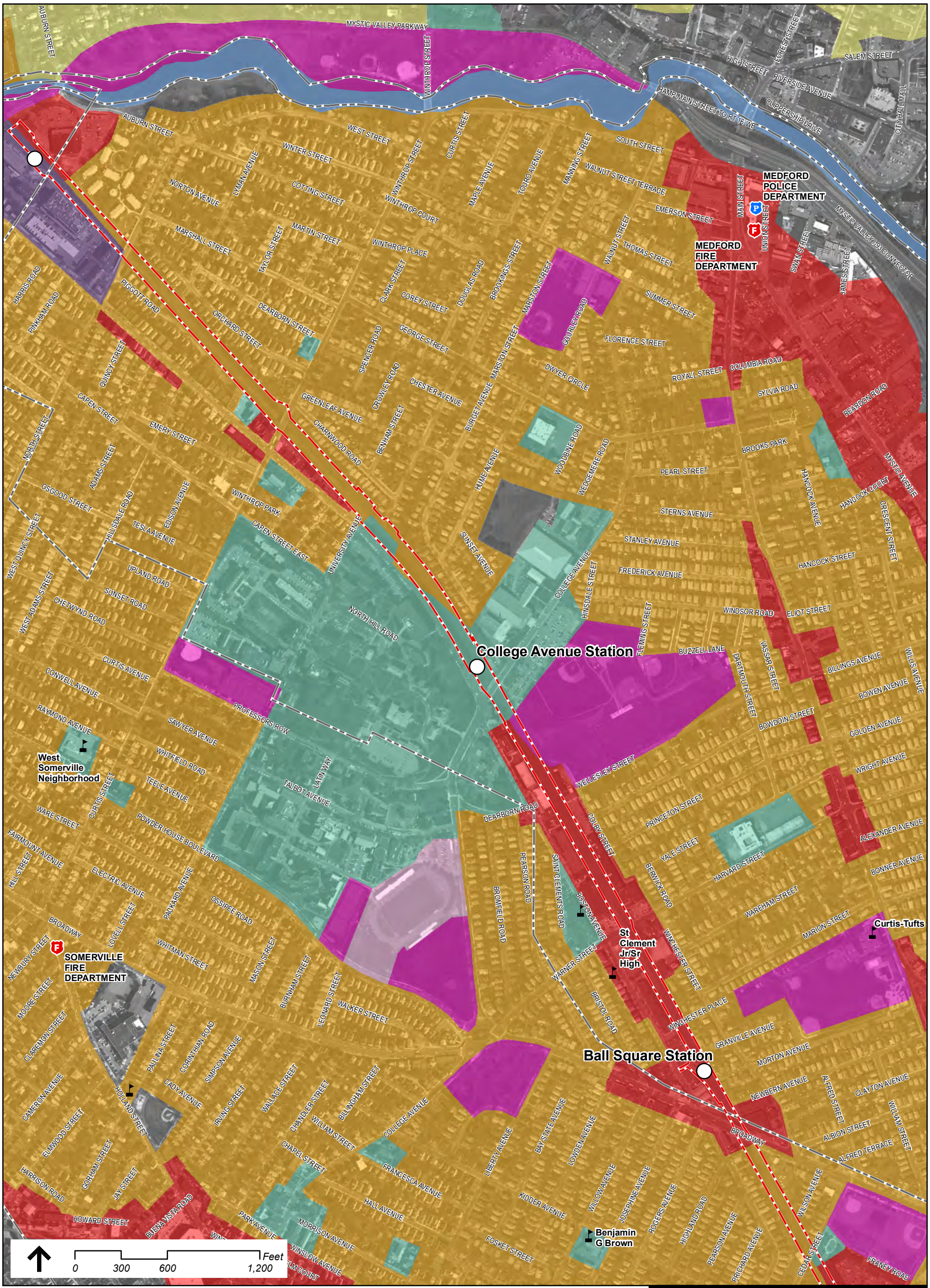
Figure 4.2-6

Existing Land Use

Ball Square Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

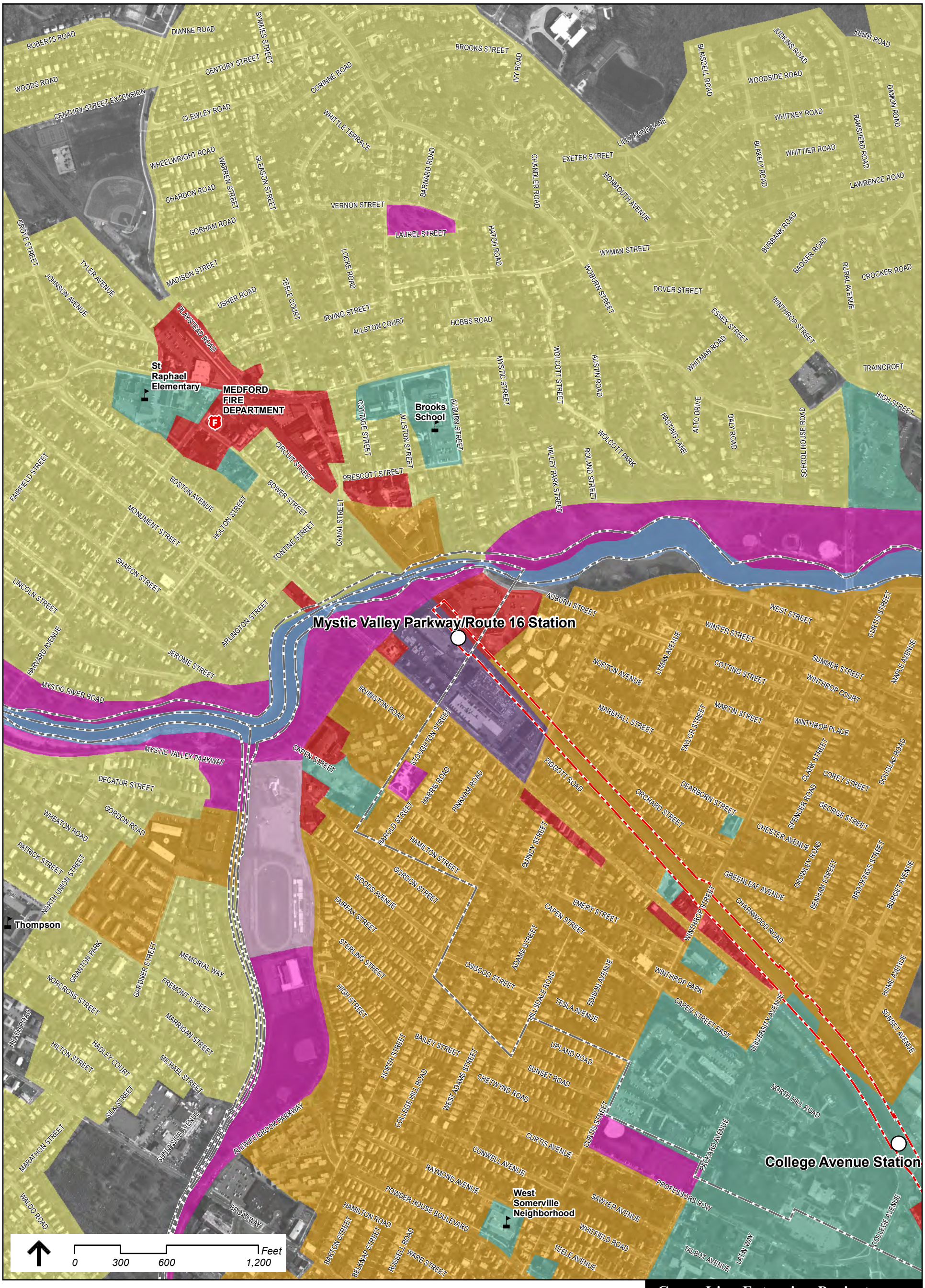
Figure 4.2-7

Existing Land Use

College Avenue Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
- 11 - High Density Resid.
- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

Figure 4.2-8

Existing Land Use

Mystic Valley Parkway/Route 16 Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Land-Use_Evaluation.mxd



Legend

- Proposed Stations
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Land Use Study Area
- 1/4 Mile Buffer of Stations

Land Use

- 6 - Open Land
- 7 - Participation Rec.
- 8 - Spectator Rec.
- 10 - Multi-Family Resid.
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- 15 - Commercial
- 16 - Industrial
- 17 - Parks / Urban Open / Public Land / Educational
- 18 - Trans.
- 19 - Waste Disp.
- 20 - Water

Green Line Extension Project

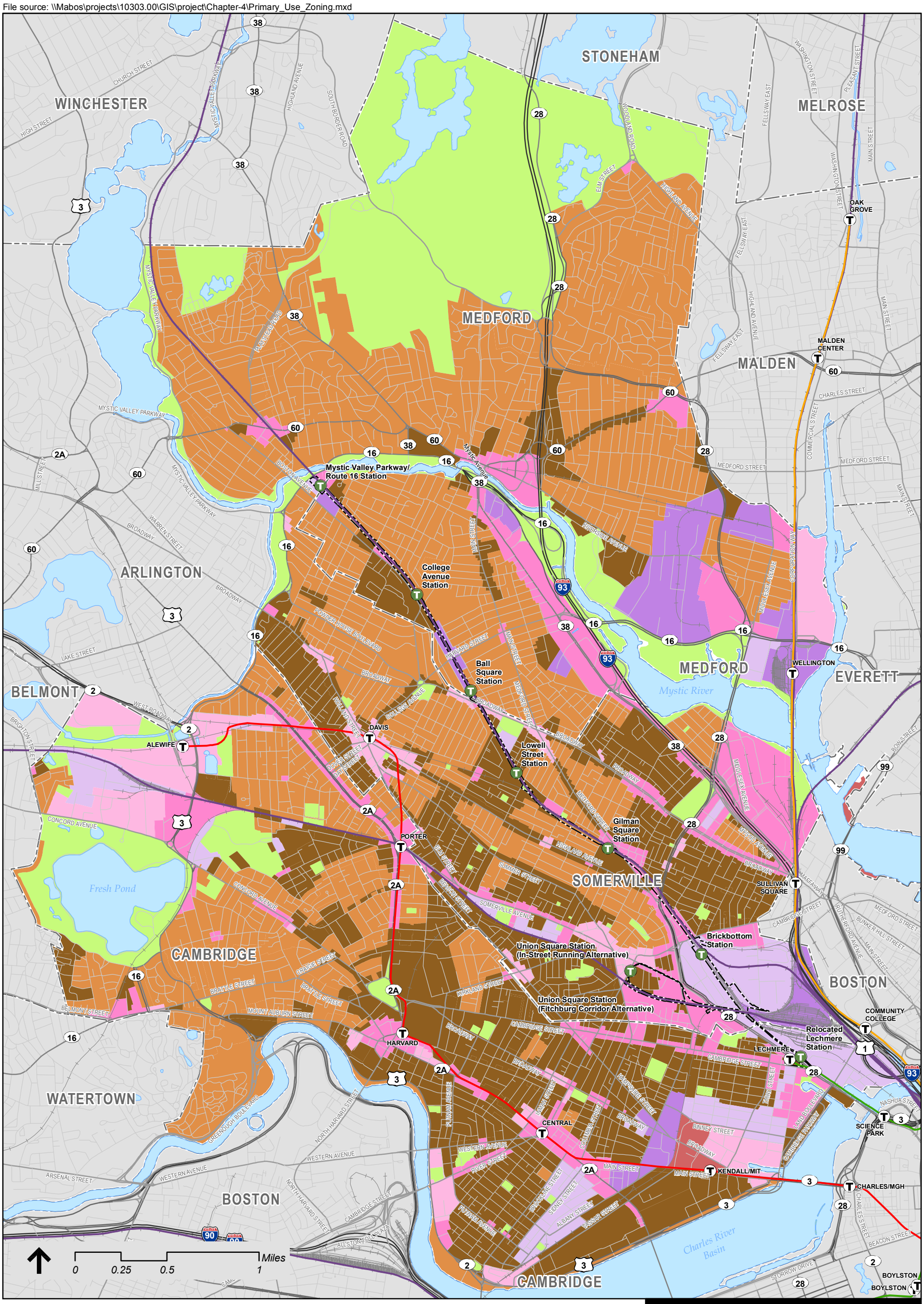
Figure 4.2-9

Existing Land Use

Union Square Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\Primary_Use_Zoning.mxd



Legend

- Proposed Stations
- Existing MBTA Station
- Project Area
- Municipal Boundaries
- MBTA Commuter Rail

MBTA Subway Lines

- Blue
- Green
- Orange
- Red
- Silver

Zoning by Primary Use

- Conservation/Passive Recreation
- General Business
- Limited, Central, Hwy Business; Office Park
- General Industrial
- Light Industrial
- Institutional; Health Care
- Mixed Use
- Residential: 80k+ sq ft / Agricultural
- Residential: 40-80k sq ft
- Residential: 15-40k sq ft
- Residential: 5-15k sq ft & Multi-family Low-density
- Multi-family Med./ High-density Residential
- Not Zoned

Green Line Extension Project

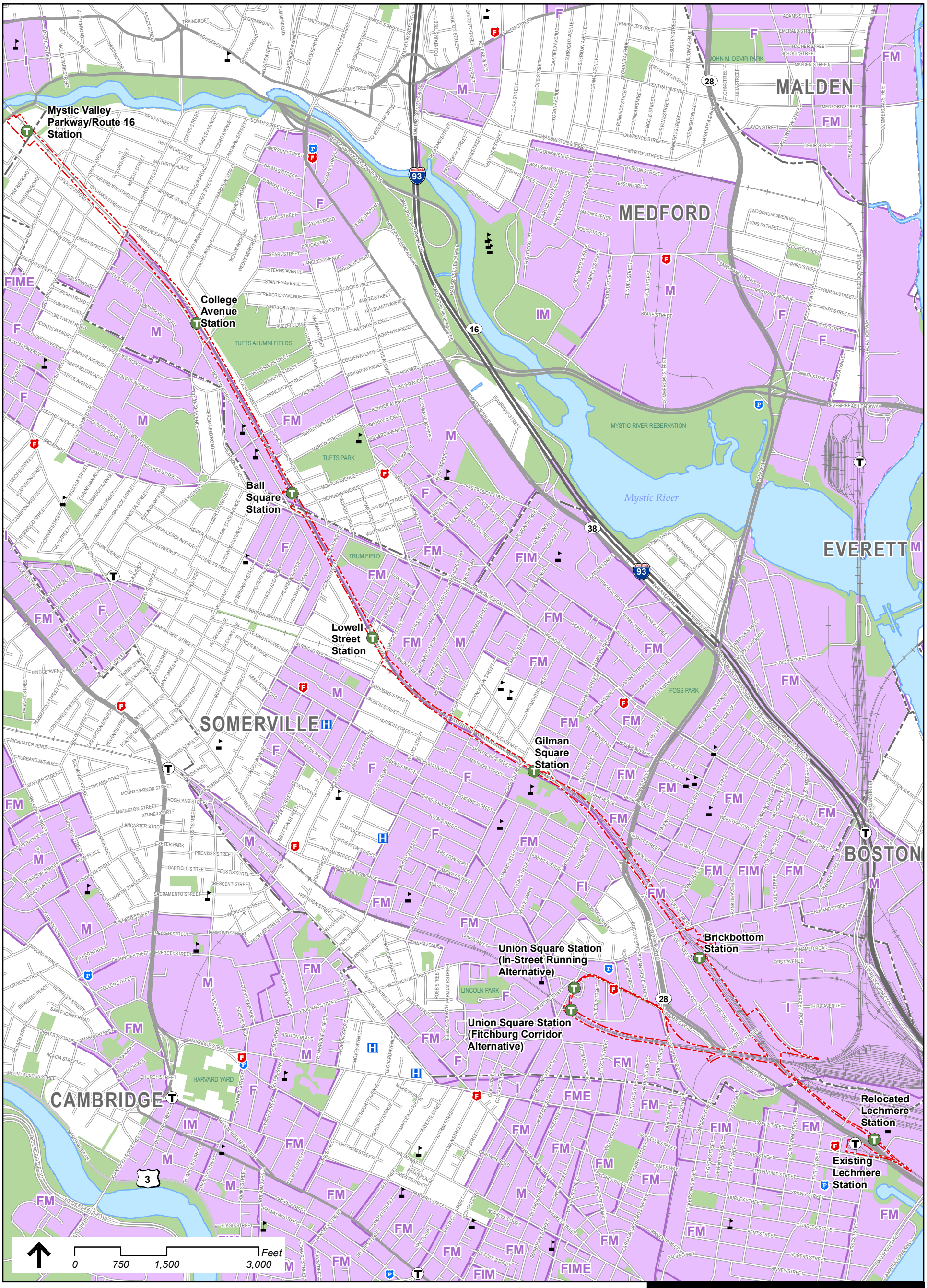
Figure 4.2-10

Primary Use Zoning

Cities of Somerville, Medford and Cambridge

Source:
MassGIS -2007 Zoning (Primary use is the highest density of development permitted as a matter of right)

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\EJ_Populations.mxd


Mystic Valley Parkway/Route 16 Station
College Avenue Station
Ball Square Station
Lowell Street Station
Gilman Square Station
Union Square Station (In-Street Running Alternative)
Union Square Station (Fitchburg Corridor Alternative)
Brickbottom Station
Relocated Lechmere Station
Existing Lechmere Station
MALDEN
MEDFORD
EVERETT
SOMERVILLE
CAMBRIDGE
BOSTON
TUFTS ALUMNI FIELDS
TUFTS PARK
TRUM FIELD
HARVARD YARD
FOSS PARK
LINCOLN PARK
JOHN M. DEVIR PARK
MYSTIC RIVER RESERVATION
Mystic River
Mystic Valley Parkway
Mystic Avenue Connector
Ramp from SB 93 to NB Rte 16
Ramp from NB 93 to SB Rte 16
Ramp from SB Rte 16 to 93
Ramp from NB Rte 16 to 93
Ramp from NB 93 to Rte 16
Ramp from SB 93 to Rte 16
Ramp from Rte 16 to NB 93
Ramp from Rte 16 to SB 93
Ramp from NB 93 to SB 93
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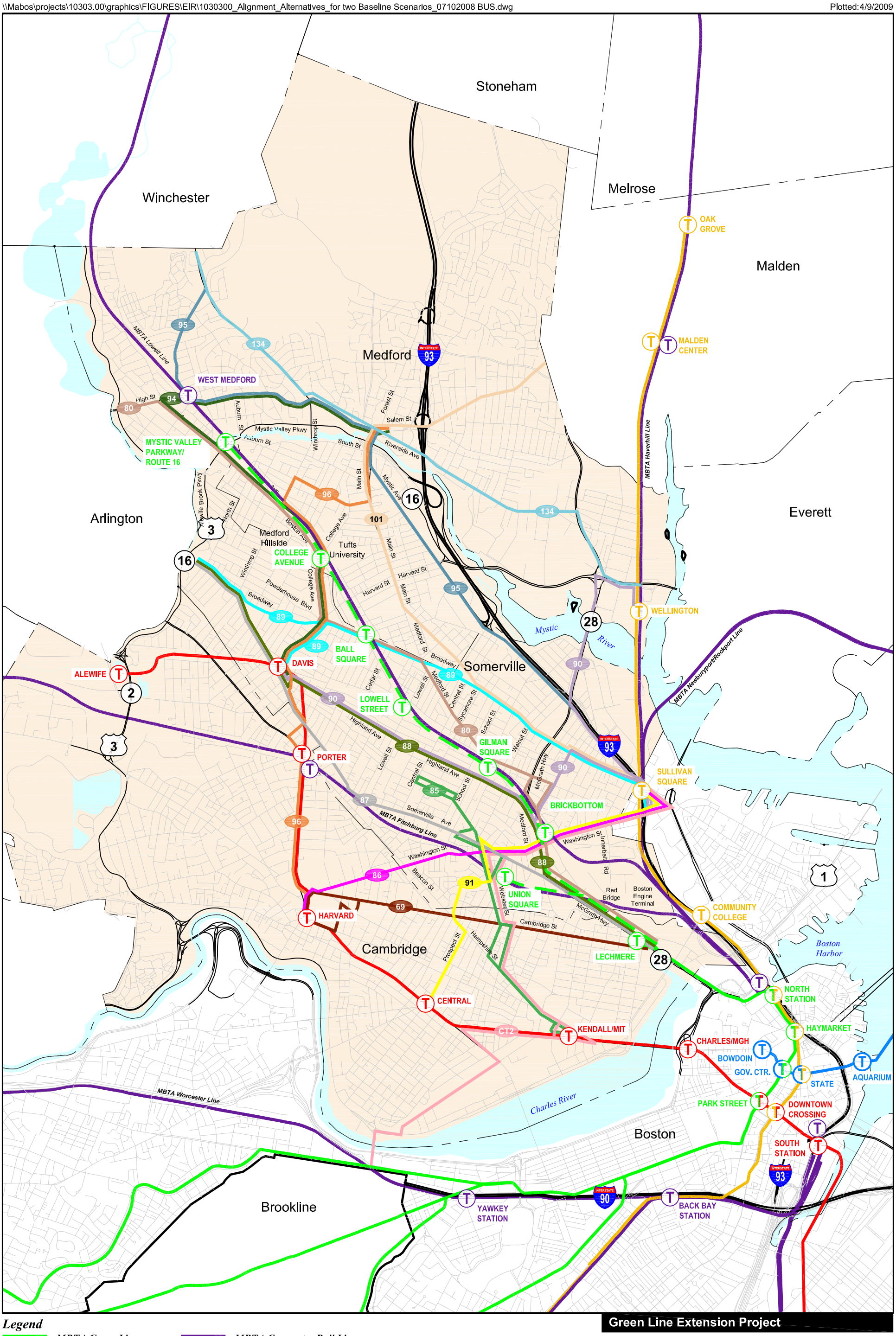


Figure 4.5-1

Existing and Proposed
MBTA Bus and Transit System

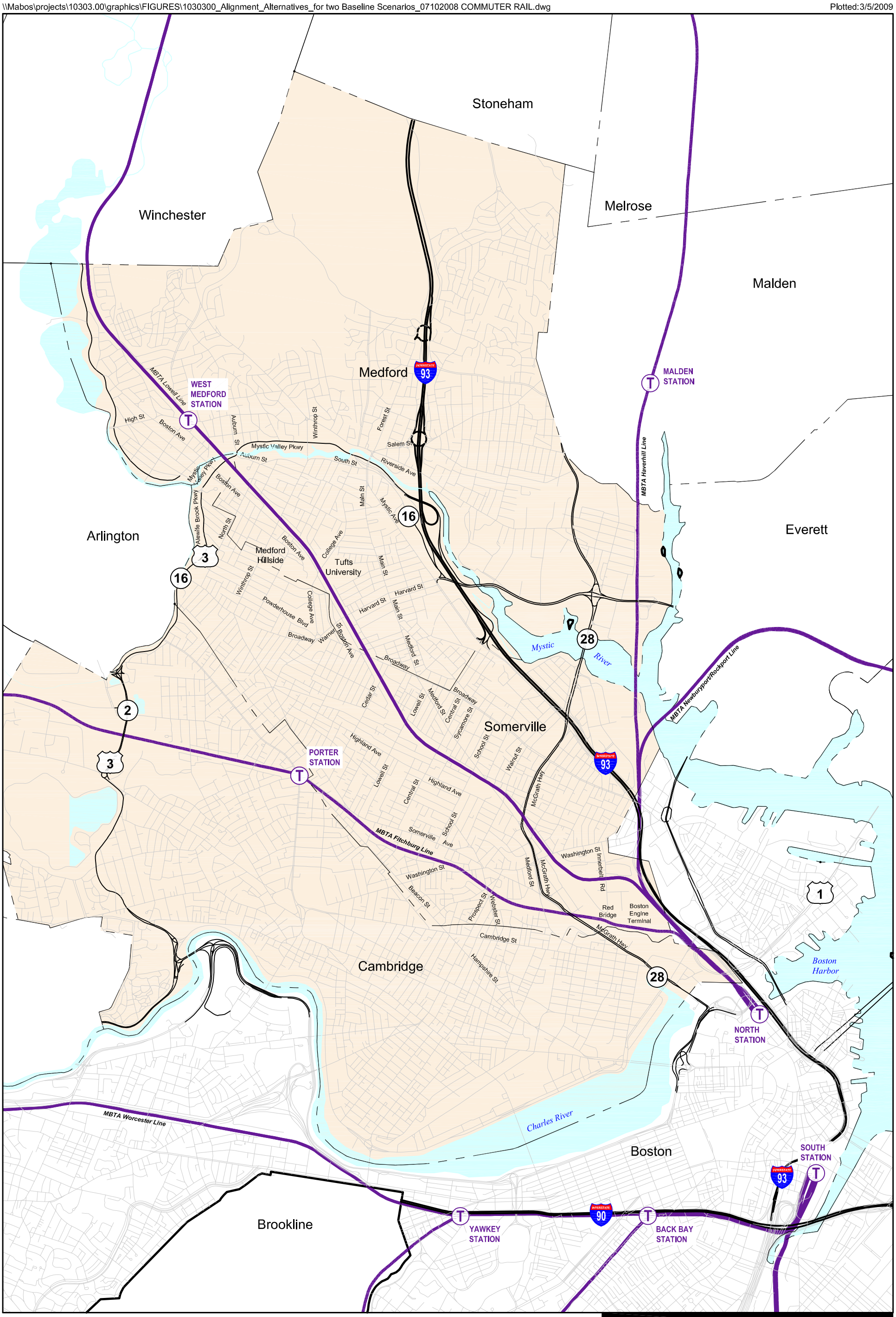
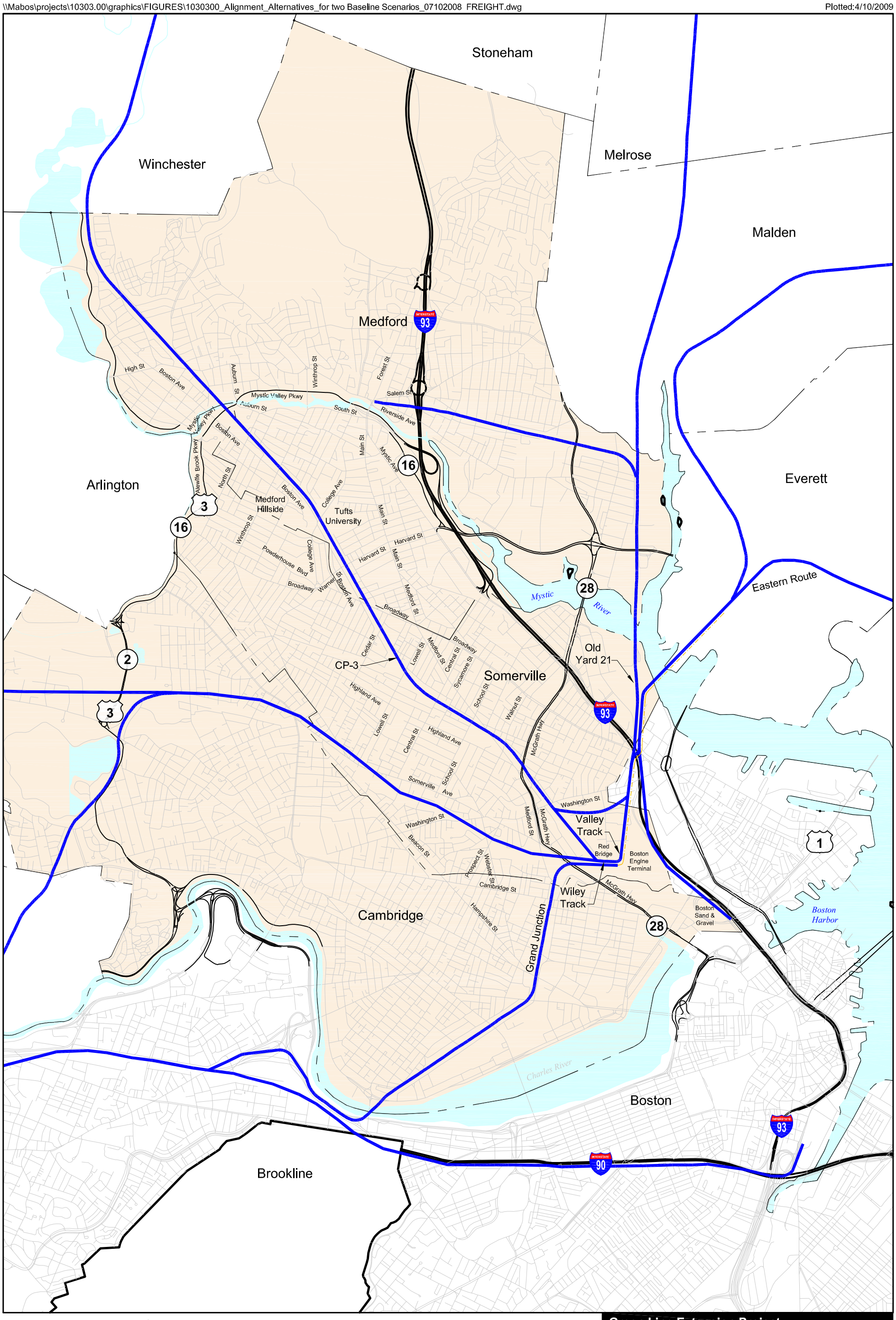


Figure 4.5-2
Existing MBTA Commuter Rail Routes



Legend

Existing Freight Line

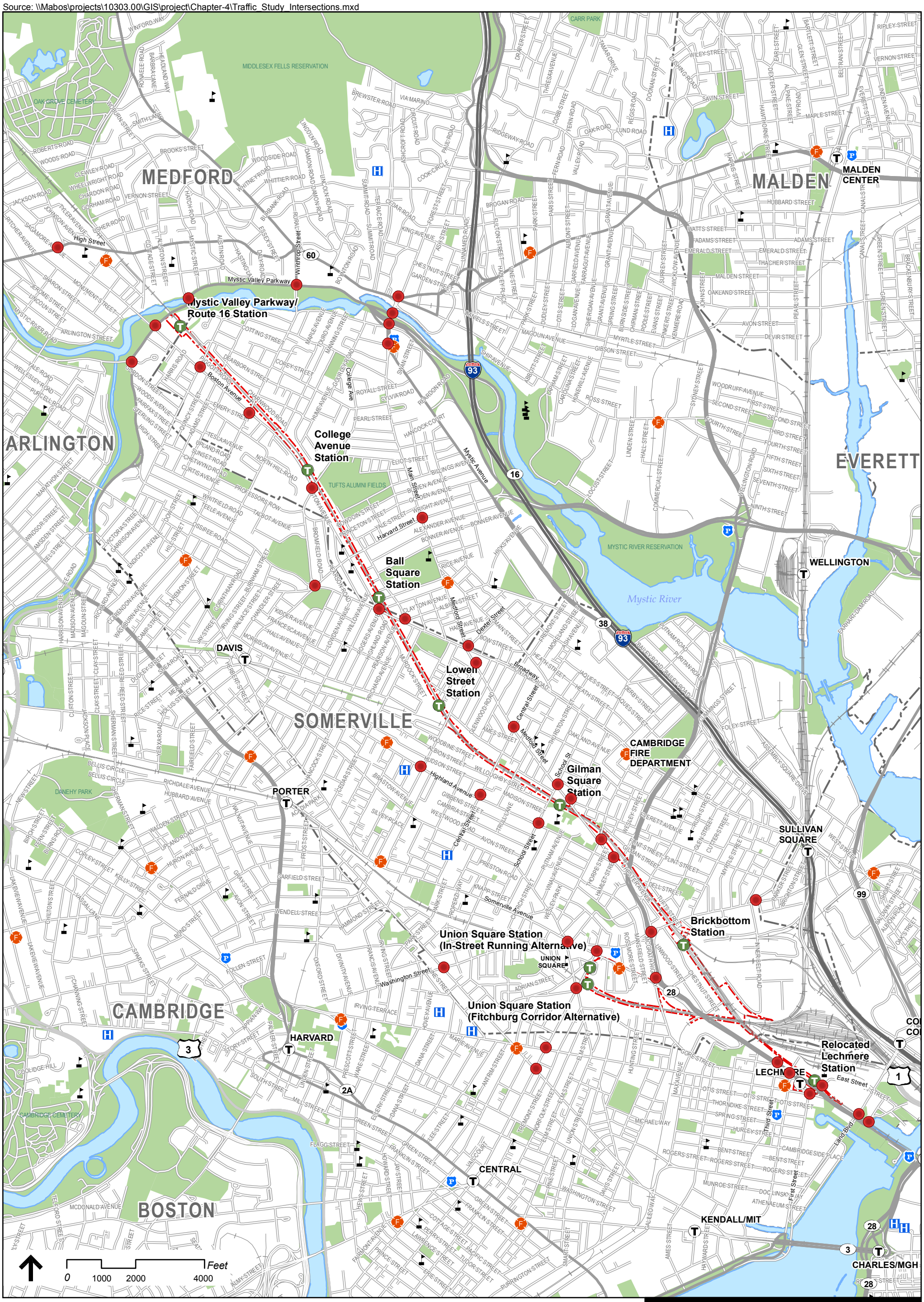
0 1500 3000 Feet

Green Line Extension Project

Figure 4.5-3

Existing Freight Rail Routes

Source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\Traffic_Study_Intersections.mxd



Legend

- Proposed Stations
- Existing MBTA Station
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space
- Study Intersections

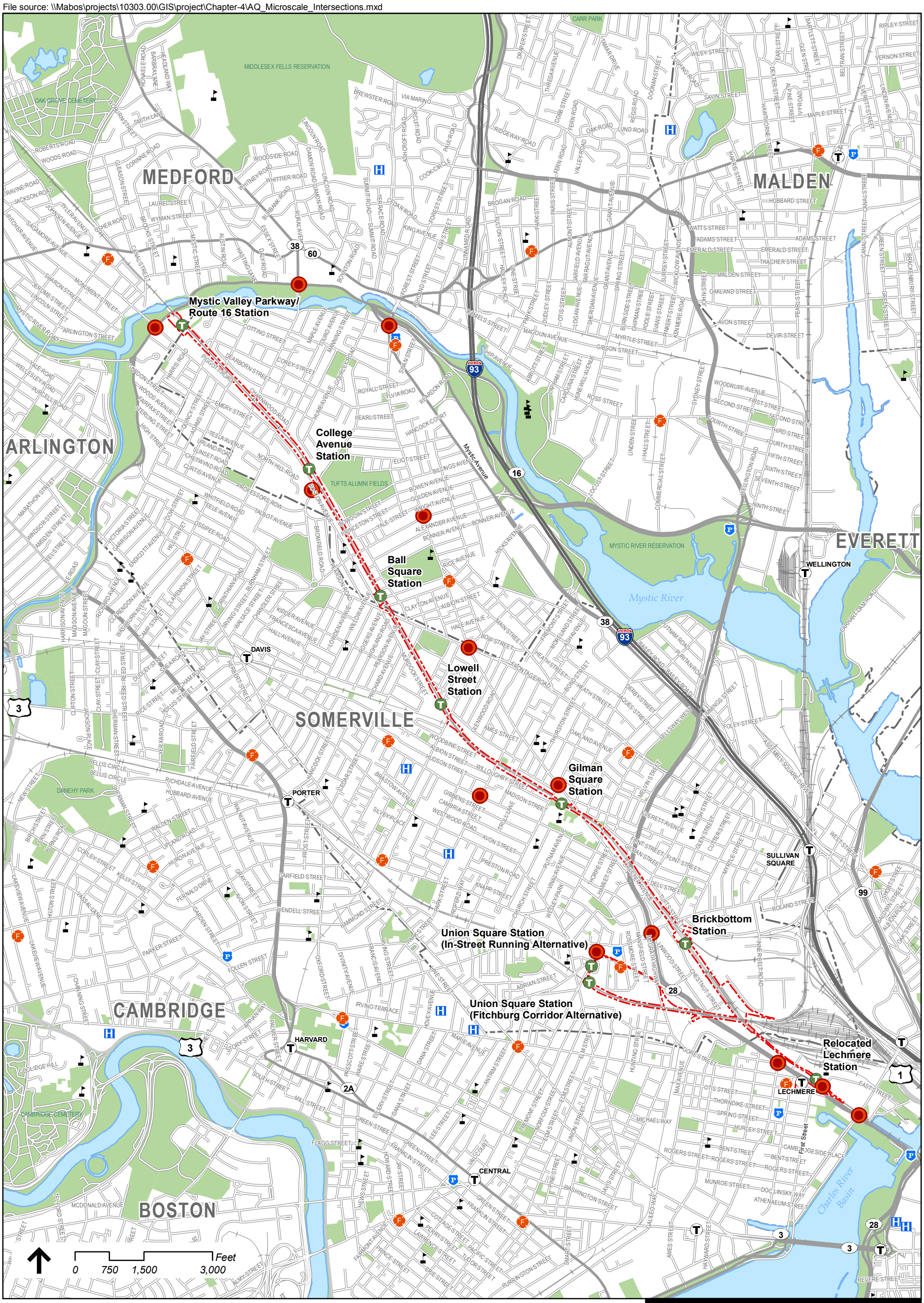
Green Line Extension Project

Figure 4.6-1

Traffic Study Intersections

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\AQ_Microscale_Intersections.mxd



Legend

- Proposed Stations
- Existing MBTA Station
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space
- Study Intersections

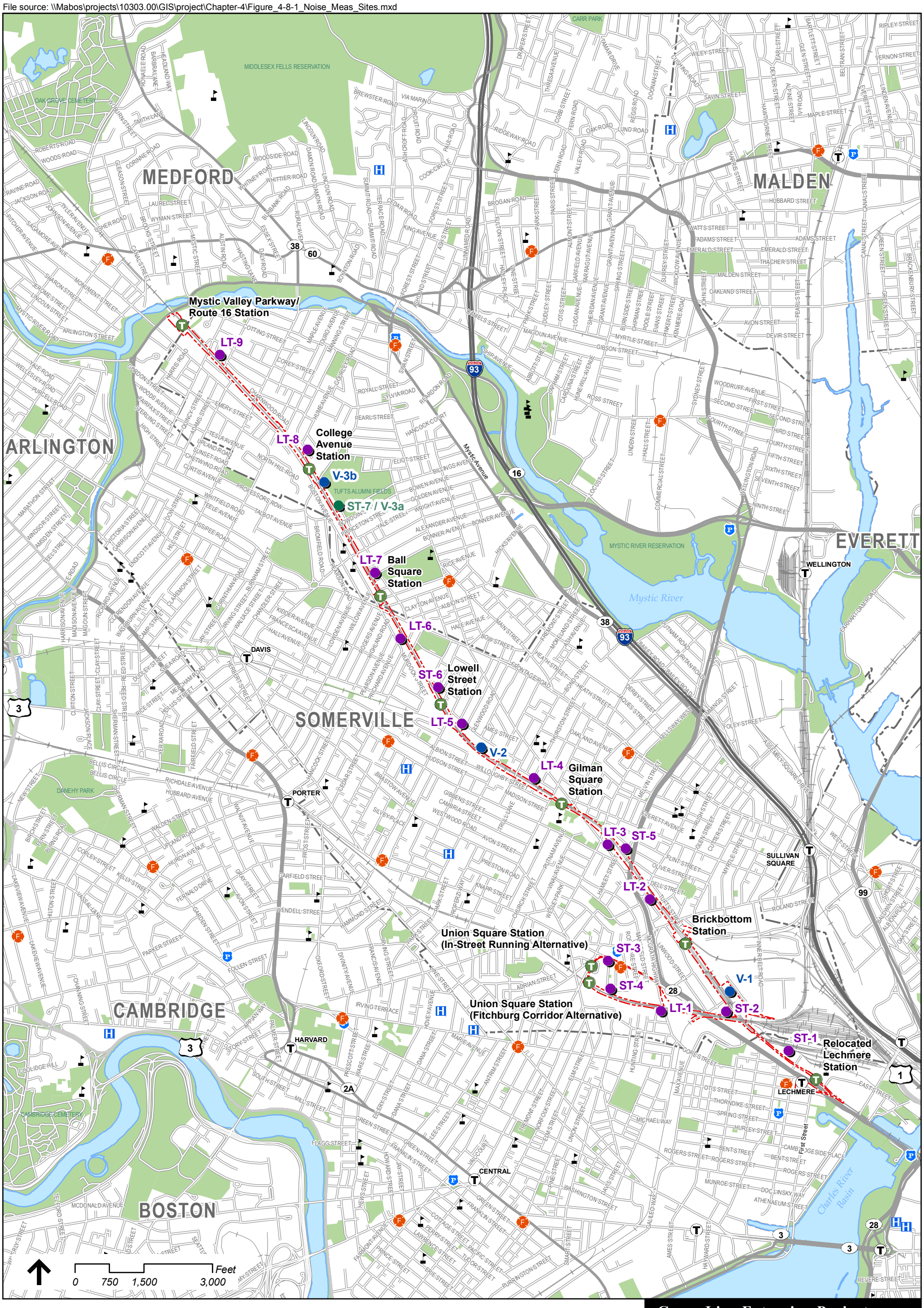
Green Line Extension Project

Figure 4.7-1

Microscale Air Quality Study Intersections

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-4\Figure_4-8-1_Noise_Meas_Sites.mxd



Legend

- Proposed Stations
- MBTA Station
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space
- Noise Measurement Site
- Vibration Measurement Site
- Combined Noise / Vibration Measurement Site

Green Line Extension Project

Figure 4.8-3

Noise and Vibration Measurement Sites

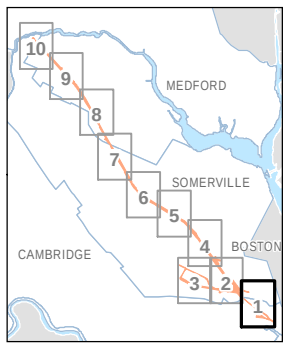
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Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

Figure 4.15-1

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 1 of 10

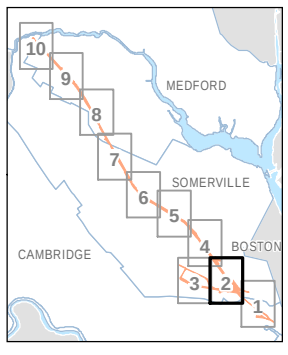
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File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
- Existing
- Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



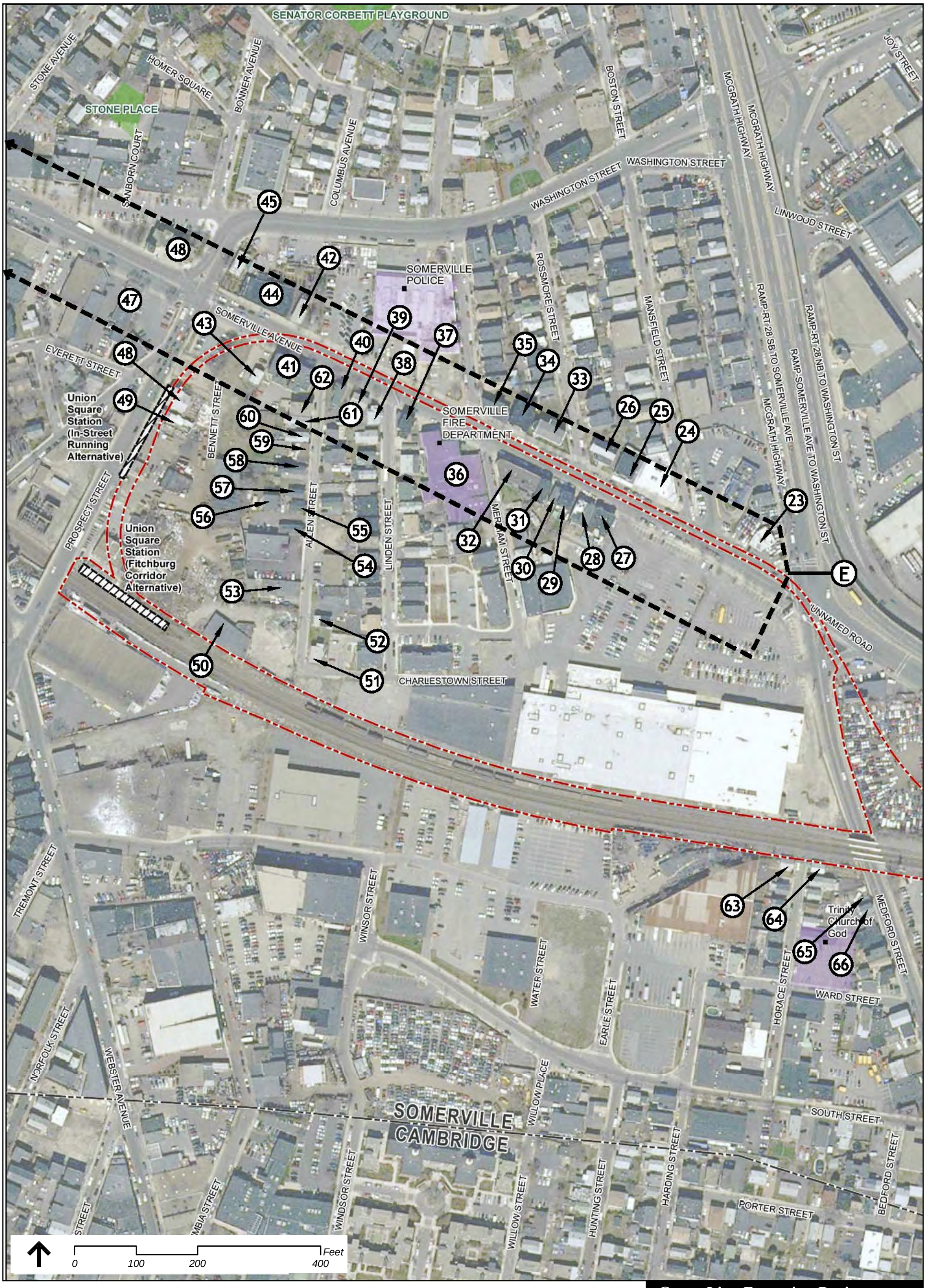
Green Line Extension Project

Figure 4.15-2

Location of Historic Resources Identified within the Green Line Extension Project APE

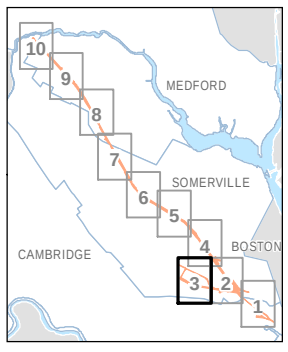
Sheet 2 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs



Legend

- Project Area
- **Station Platform**
- Existing
- Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

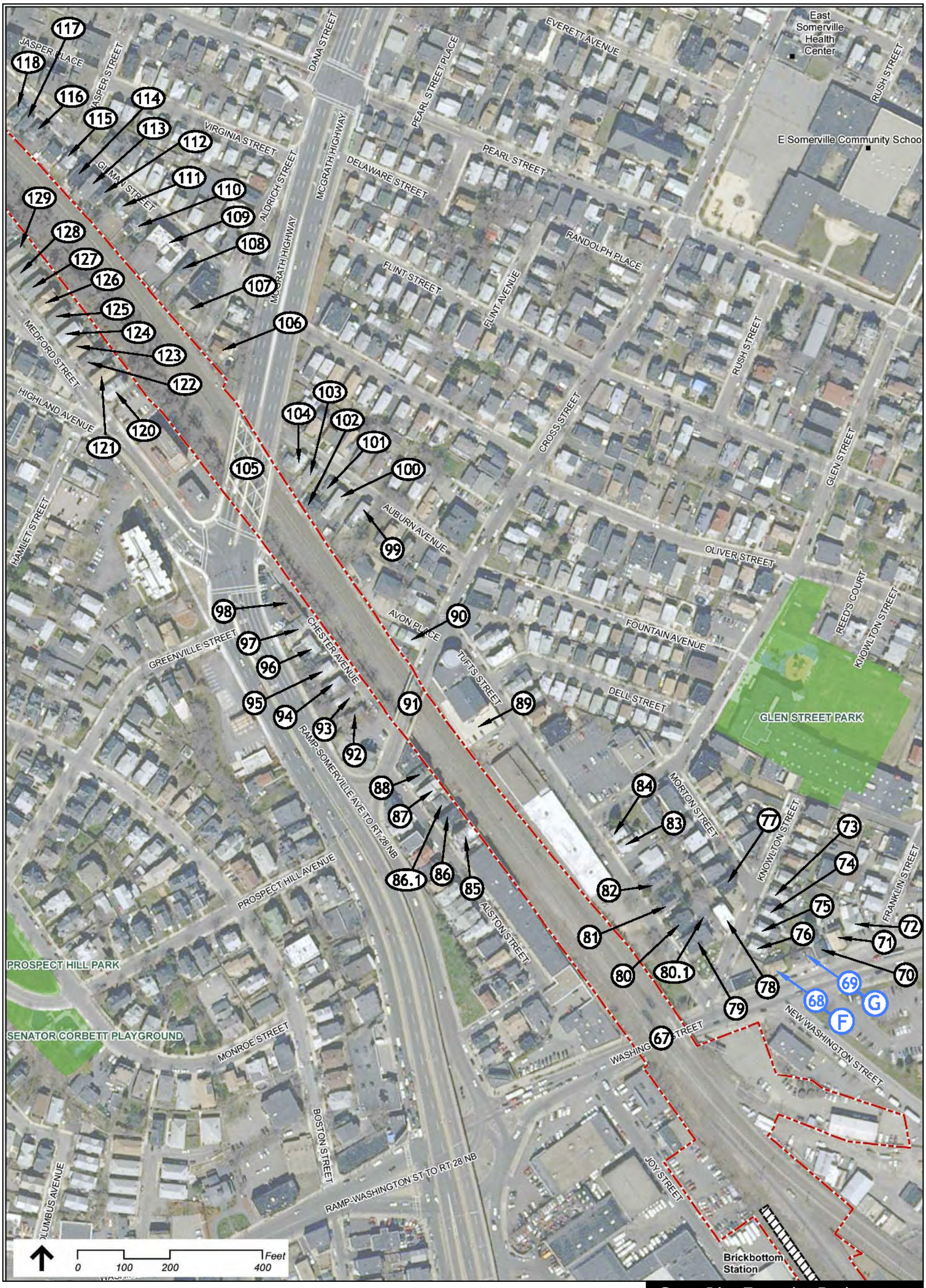
Figure 4.15-3

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 3 of 10

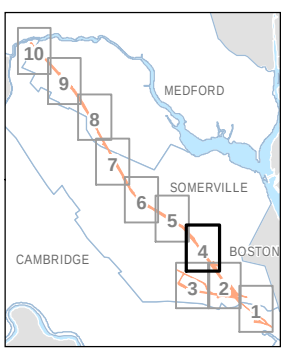
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Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

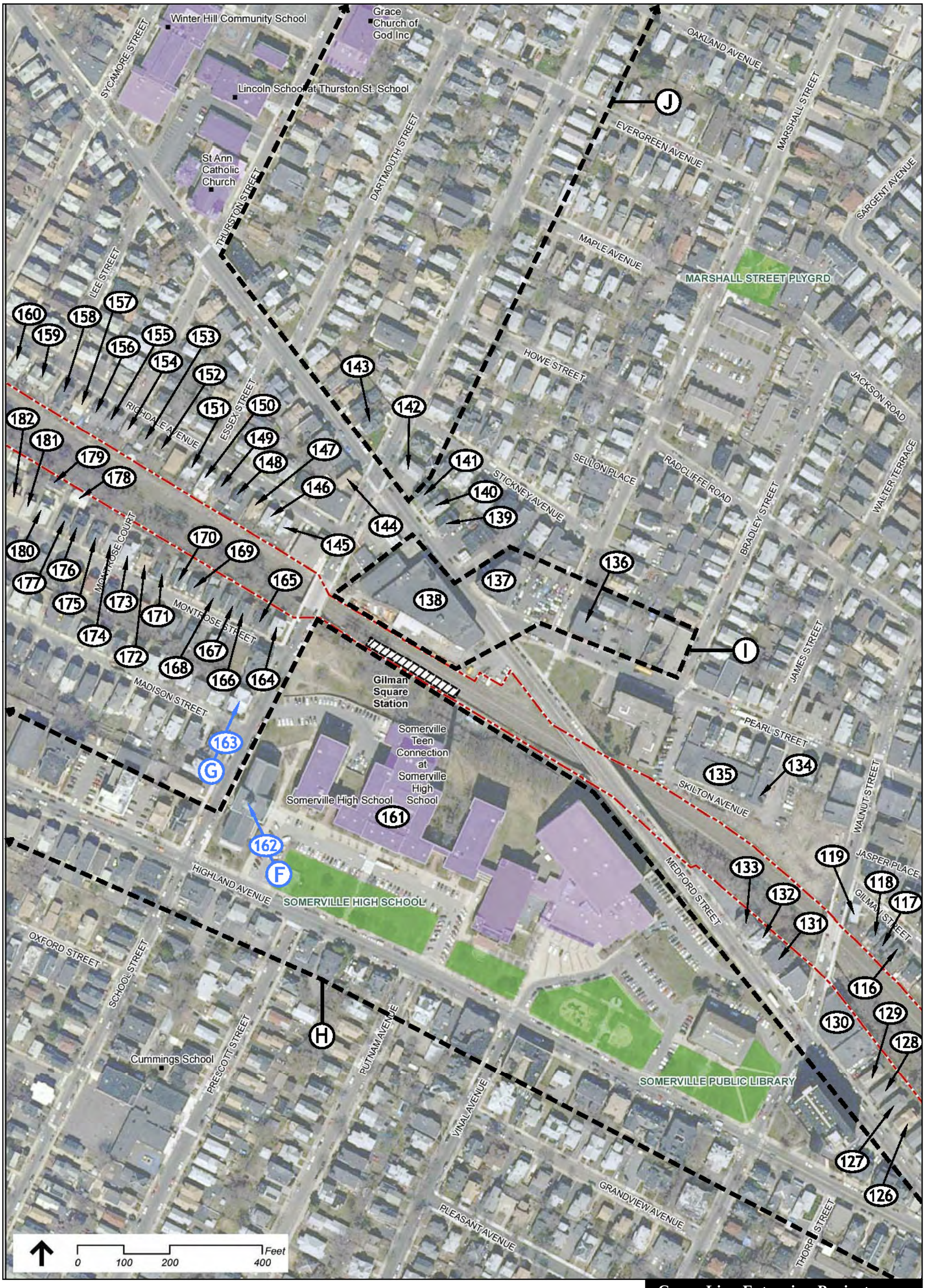
Figure 4.15-4

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 4 of 10

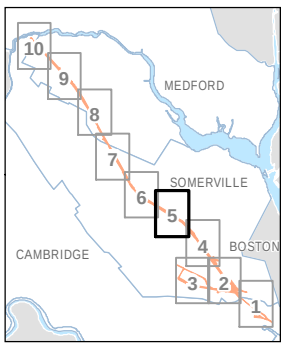
Source:
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File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

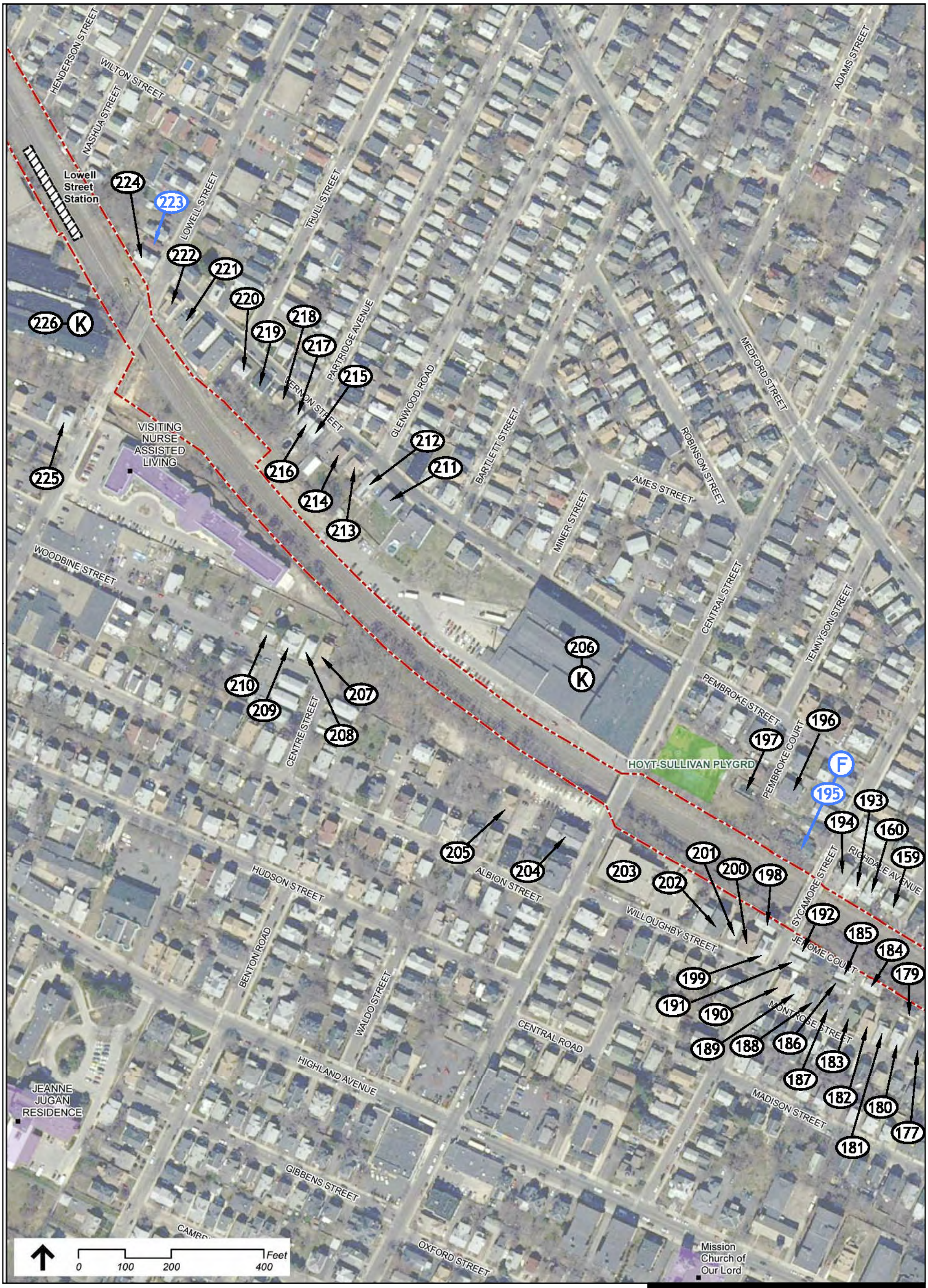
Figure 4.15-5

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 5 of 10

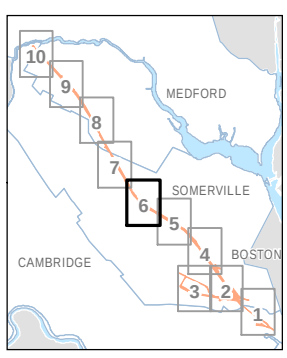
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Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

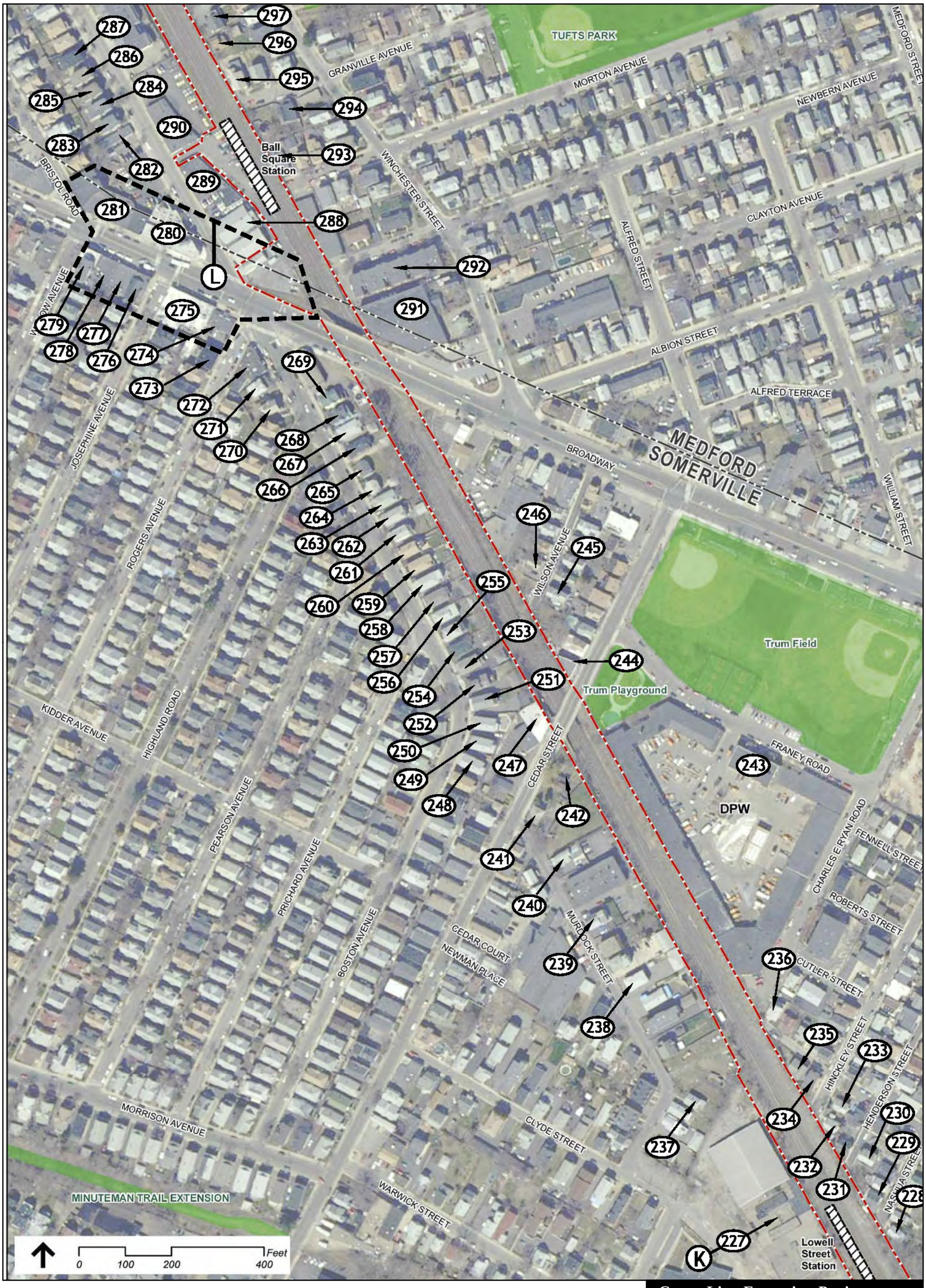
Figure 4.15-6

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 6 of 10

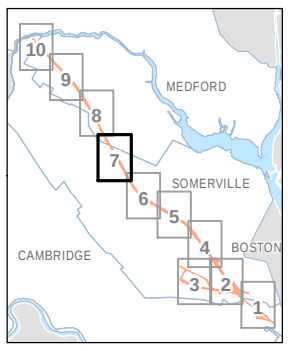
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File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

Figure 4.15-7

Location of Historic Resources Identified within the Green Line Extension Project APE

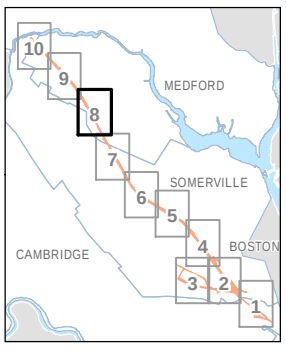
Sheet 7 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

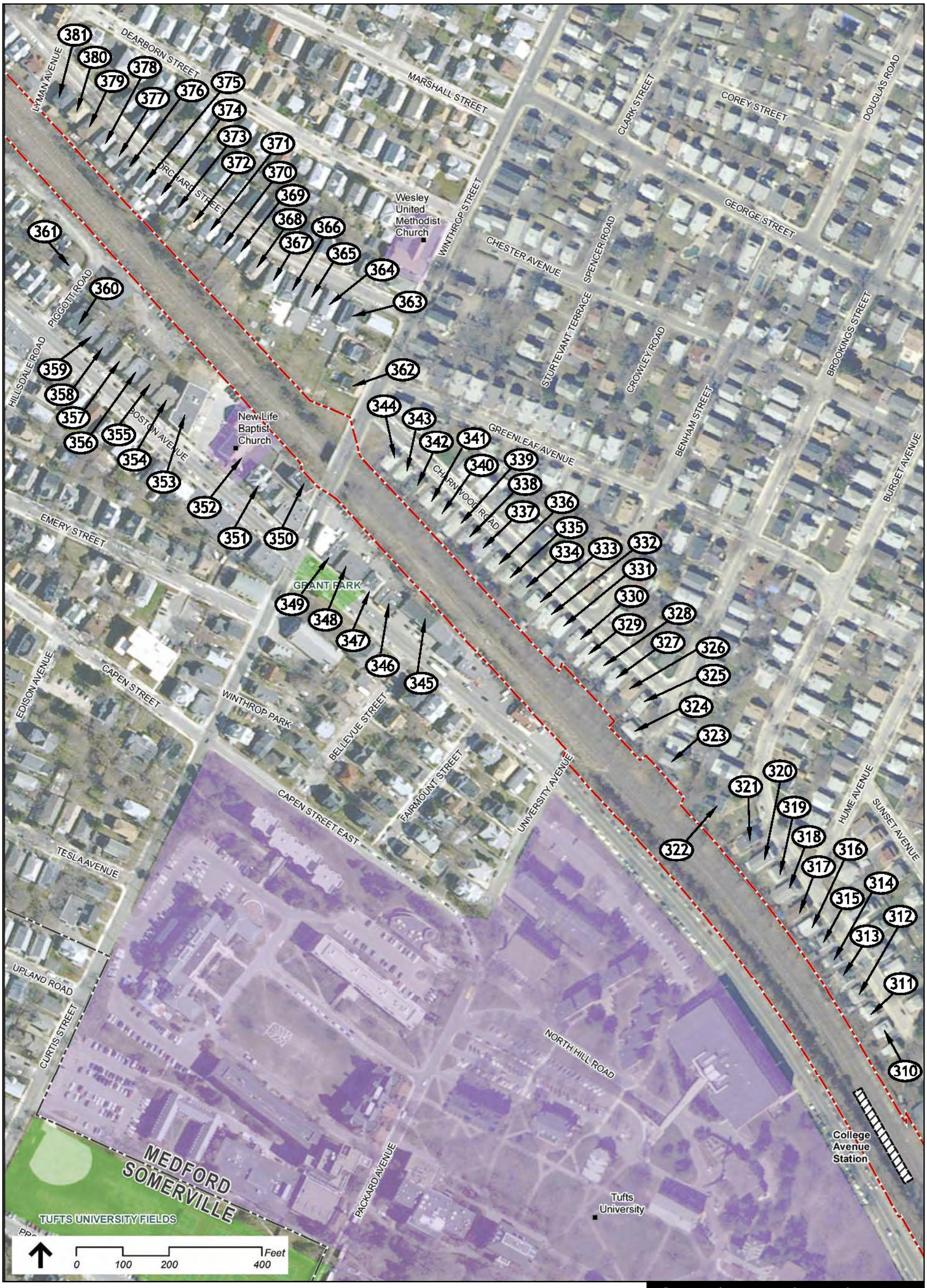
Figure 4.15-8

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 8 of 10

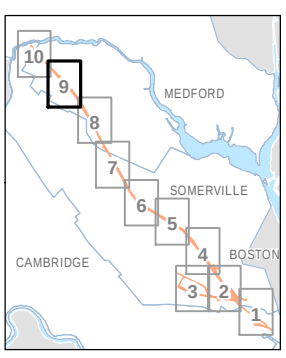
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Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

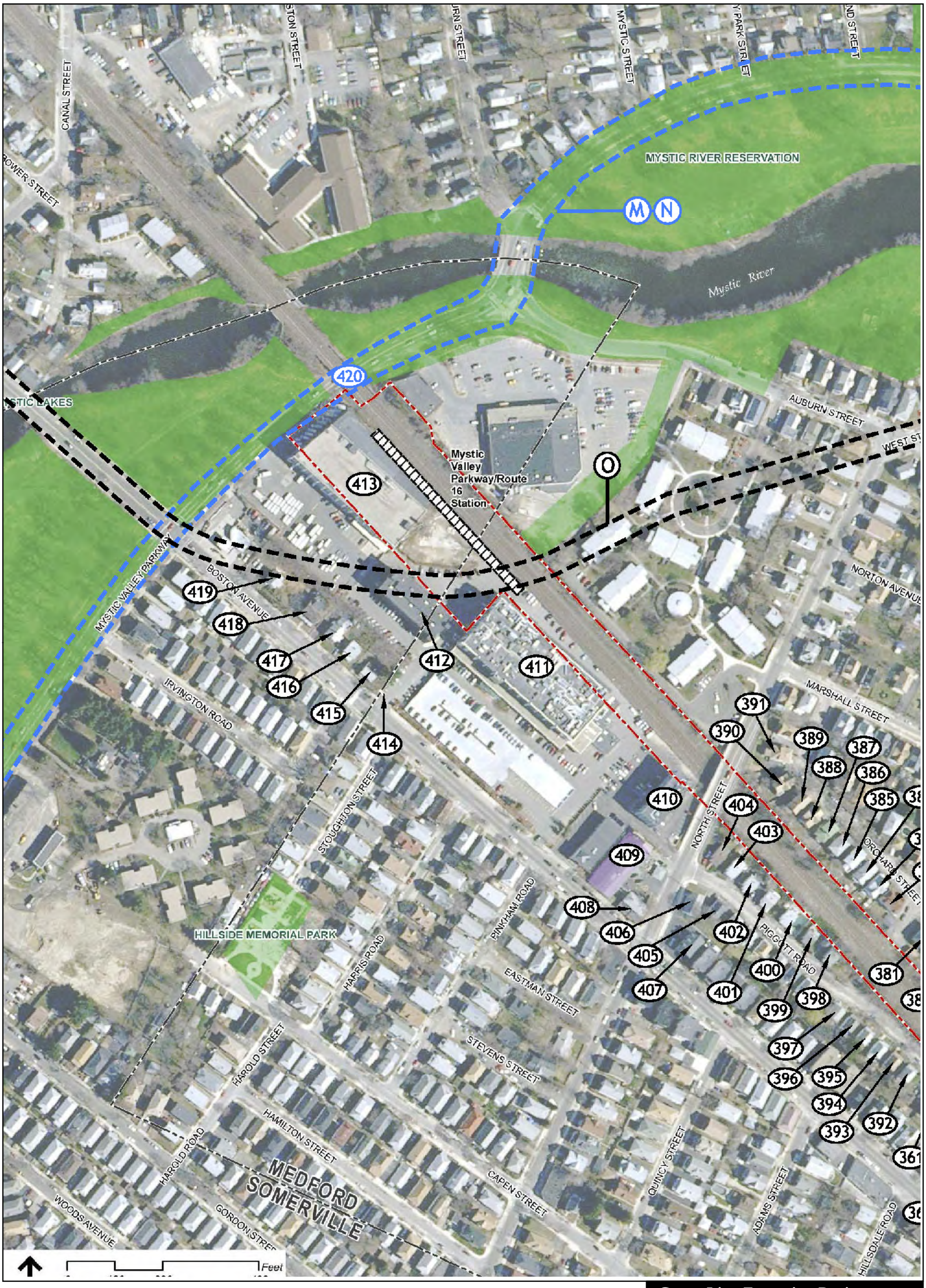
Figure 4.15-9

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 9 of 10

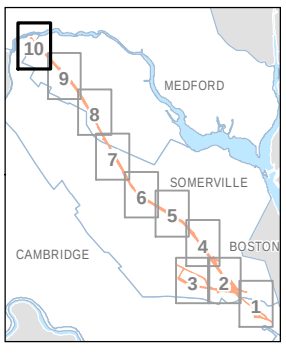
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File source: \\Mabos\projects\10303.00\GIS\project\Base_Maps\Chapter-4_Base_Maps_11x17.mxd



Legend

- Project Area
- **Station Platform**
  - Existing
  - Proposed
- Municipal Boundaries
- Public Facilities
- Protected and Recreational Open Space
- (1) PAL Survey Number - Individual Resource
- (A) PAL Survey Identification - Area or District
- Area or District Boundary
- (1) National/State Register listed individual Property
- (A) National/State Register listed District
- National/State Register District Boundary



Green Line Extension Project

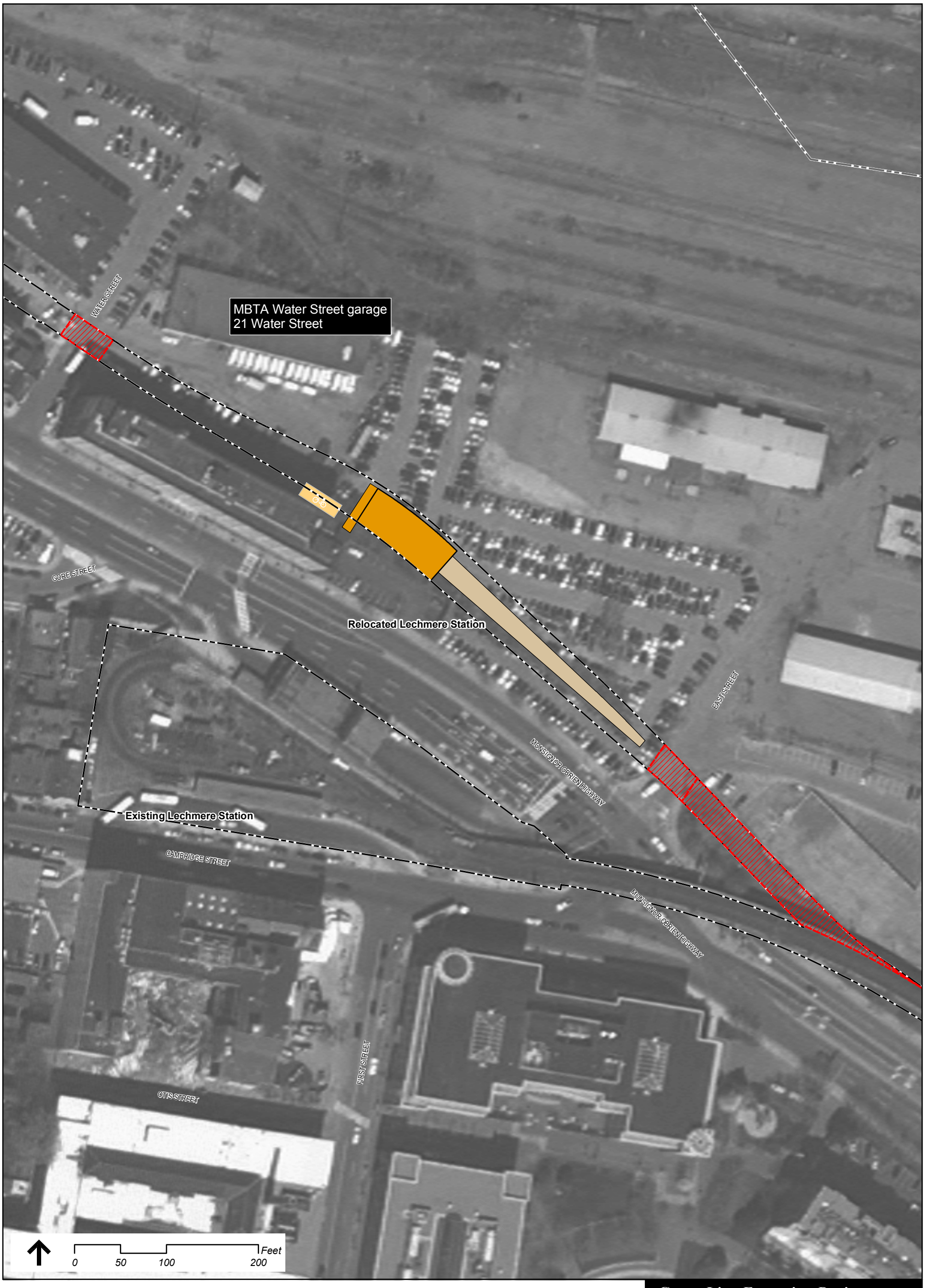
Figure 4.15-10

Location of Historic Resources Identified within the Green Line Extension Project APE

Sheet 10 of 10

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Lechmere_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

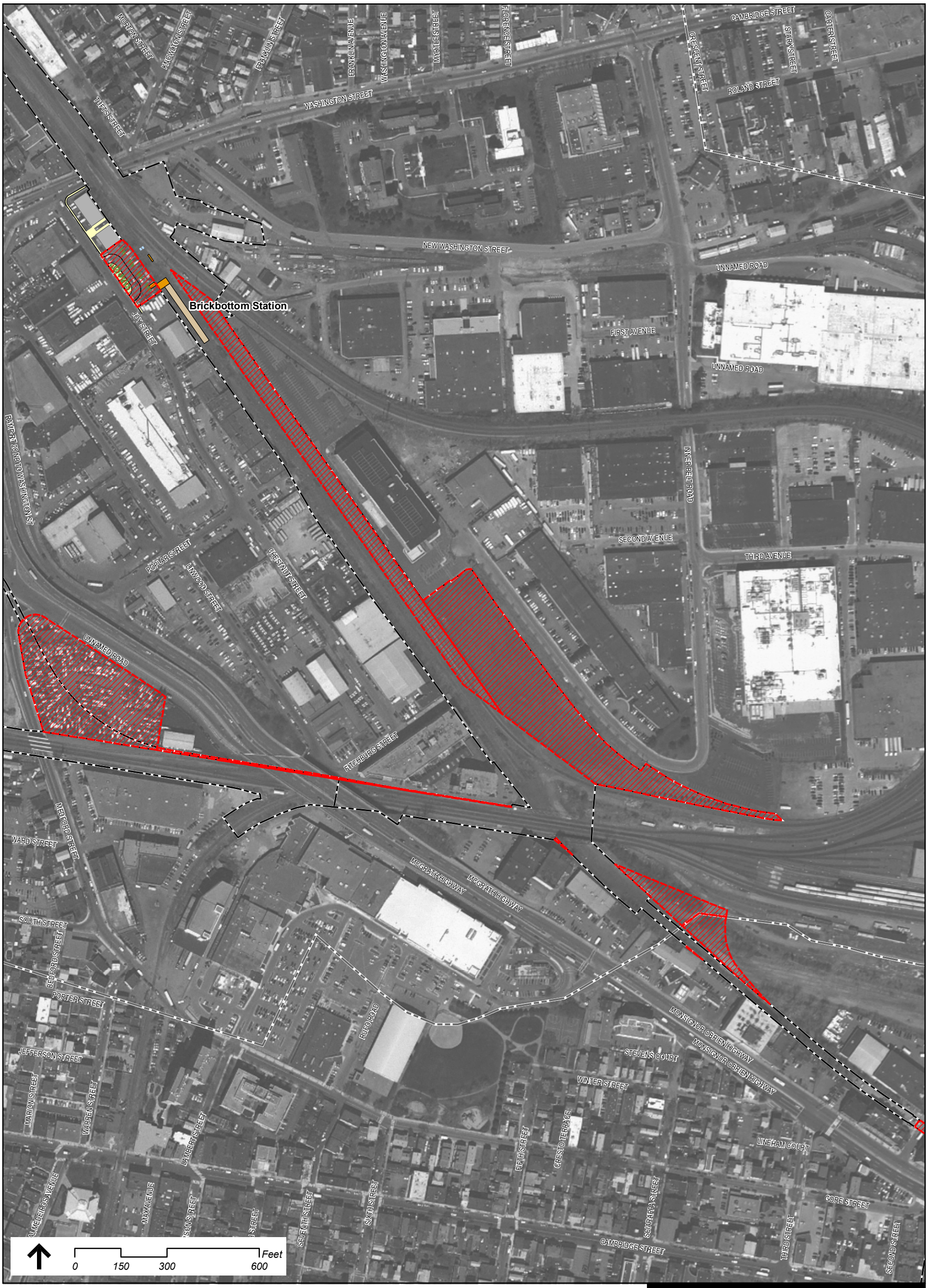
Figure 5.2-1

Proposed Property Acquisitions

Lechmere Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Brickbottom_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-2

Proposed Property Acquisitions

Brickbottom Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Lowell-Street_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-3

Proposed Property Acquisitions

Gilman Square Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Lowell-Street_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-4

Proposed Property Acquisitions

Lowell Street Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Ball-Sq_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-5

Proposed Property Acquisitions

Ball Square Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_College-Ave_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-6

Proposed Property Acquisitions

College Avenue Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition_Rt16-Mystic-Valley_Station.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

Green Line Extension Project

Figure 5.2-7

Proposed Property Acquisitions

Mystic Valley Parkway/Route16 Station

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Property_Acquisition\Property_Aquisition_Union-Sq_Station_3.mxd



Legend

- Property Acquisitions
- Project Area

Proposed Stations

- Areas of Grass and Planting
- Platform
- Bike Storage
- Pavement / Sidewalks
- Station Building

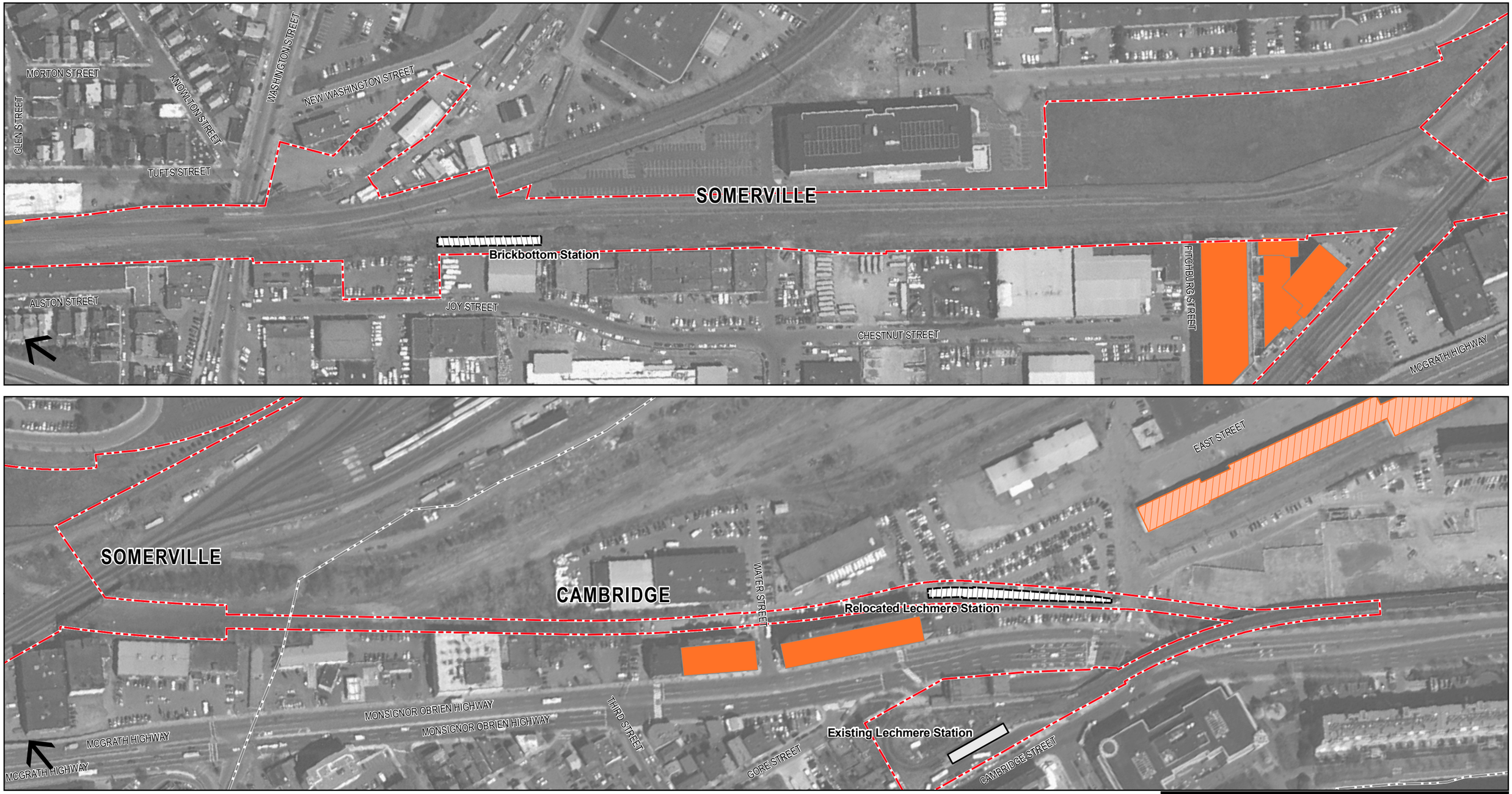
Green Line Extension Project

Figure 5.2-8

Proposed Property Acquisitions

Union Square Station
(Fitchburg Corridor Alternative)

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs



Legend

Project Area

Station Platform

Proposed

Existing

Buildings Impacted by Noise Without Mitigation

Moderate Impact

Severe Impact

Moderate Impact - Alt. 5 Only

Severe Impact - Alts 5,6

Proposed Noise Barriers

Alts. 1,2,3,4 and 5

Alts. 1,2,3,4 and 6

Alt. 5 Only

Alts. 2,4 and 5

0 50 100 200 Feet

Green Line Extension Project

Figure 5.7-2

Noise Impacts and Mitigation Measures

Sheet 1 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

Project Area

Station Platform

Proposed

Existing

Buildings Impacted by Noise Without Mitigation

Moderate Impact

Severe Impact

Moderate Impact - Alt. 5 Only

Severe Impact - Alts 5,6

Proposed Noise Barriers

Alts. 1,2,3,4 and 5

Alts. 1,2,3,4 and 6

Alt. 5 Only

Alts. 2,4 and 5

0 50 100 200 Feet

Green Line Extension Project

Figure 5.7-3

Noise Impacts and Mitigation Measures

Sheet 2 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

Project Area

Station Platform

Proposed

Existing

Buildings Impacted by Noise Without Mitigation

Moderate Impact

Severe Impact

Moderate Impact - Alt. 5 Only

Severe Impact - Alts 5,6

Proposed Noise Barriers

Alts. 1,2,3,4 and 5

Alts. 1,2,3,4 and 6

Alt. 5 Only

Alts. 2,4 and 5

0 50 100 200 Feet

Green Line Extension Project

Figure 5.7-4

Noise Impacts and Mitigation Measures

Sheet 3 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- **Station Platform**
  - Proposed
  - Existing
- **Buildings Impacted by Noise Without Mitigation**
  - Moderate Impact
  - Severe Impact
  - Moderate Impact - Alt. 5 Only
  - Severe Impact - Alts 5,6
- **Proposed Noise Barriers**
  - Alts. 1,2,3,4 and 5
  - Alts. 1,2,3,4 and 6
  - Alt. 5 Only
  - Alts. 2,4 and 5

0 50 100 200 Feet

Green Line Extension Project

Figure 5.7-5

Noise Impacts and Mitigation Measures

Sheet 4 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

Project Area

Station Platform

Proposed

Existing

Buildings Impacted by Noise Without Mitigation

Moderate Impact

Severe Impact

Moderate Impact - Alt. 5 Only

Severe Impact - Alts 5,6

Proposed Noise Barriers

Alts. 1,2,3,4 and 5

Alts. 1,2,3,4 and 6

Alt. 5 Only

Alts. 2,4 and 5

0 50 100 200 Feet

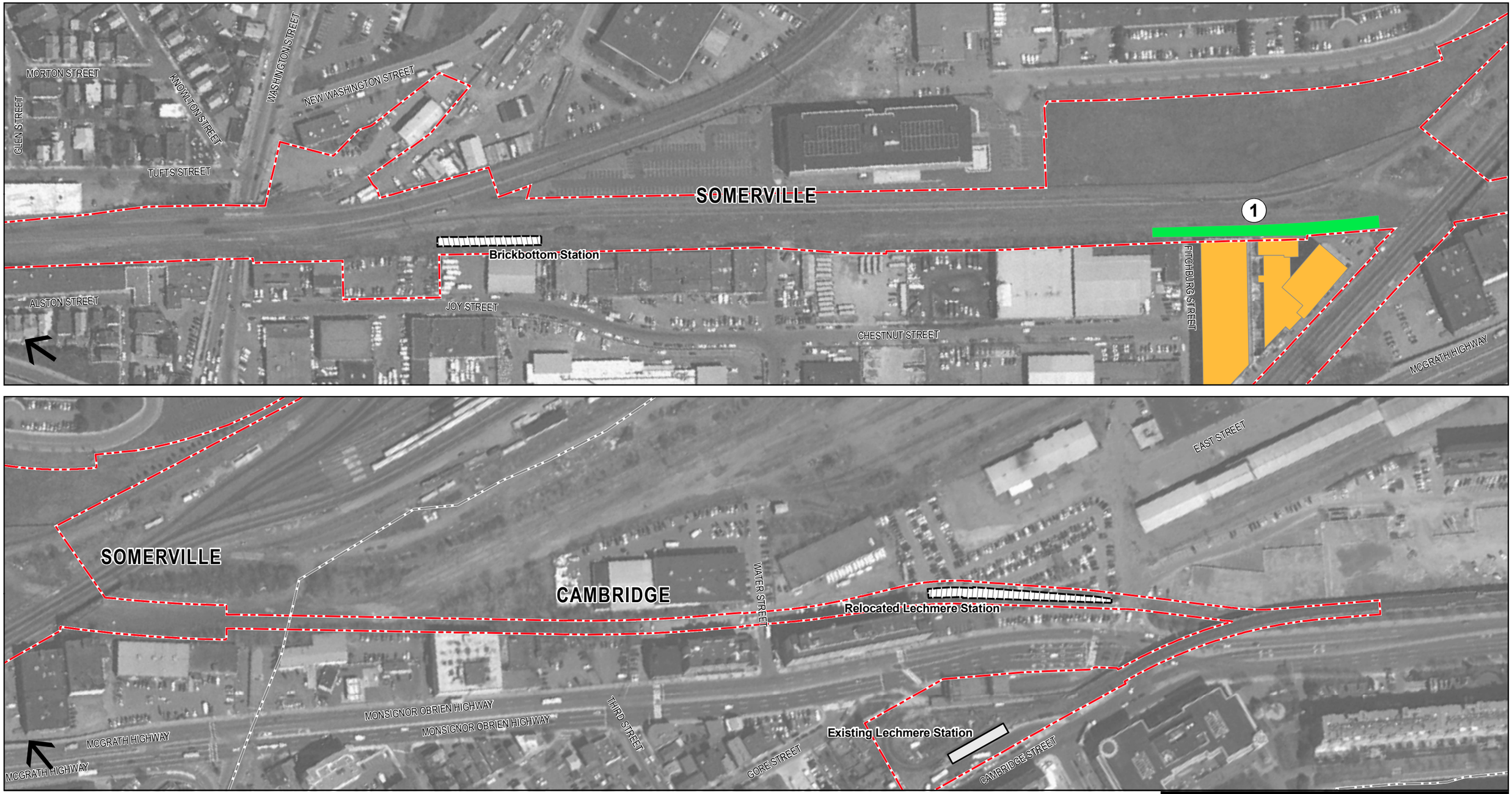
Green Line Extension Project

Figure 5.7-6

Noise Impacts and Mitigation Measures

Sheet 5 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- Buildings Impacted by Vibration

Station Platform

- Proposed
- Existing

Vibration Mitigation

- Commuter Rail Mitigation
- Green Line Mitigation

0 50 100 200 Feet

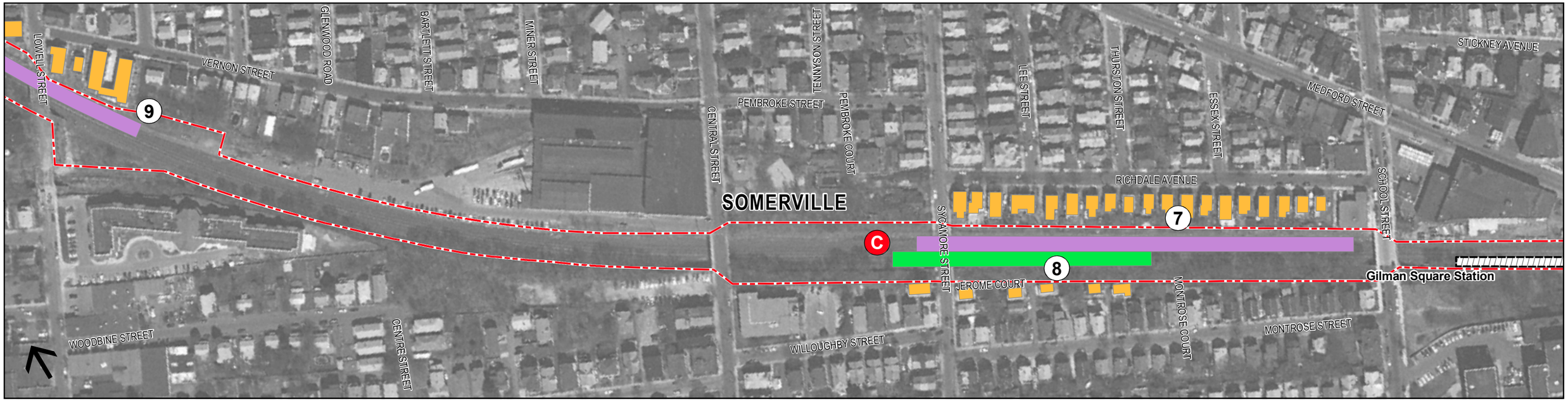
Green Line Extension Project

Figure 5.8-2

Vibration Impacts and Mitigation Measures

Sheet 1 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- Buildings Impacted by Vibration

Station Platform

- Proposed
- Existing

Vibration Mitigation

- Commuter Rail Mitigation
- Green Line Mitigation

0 50 100 200 Feet

Green Line Extension Project

Figure 5.8-3

Vibration Impacts and Mitigation Measures

Sheet 2 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- Buildings Impacted by Vibration

Station Plaform

- Proposed
- Existing

Vibration Mitigation

- Commuter Rail Mitigation
- Green Line Mitigation

0 50 100 200 Feet

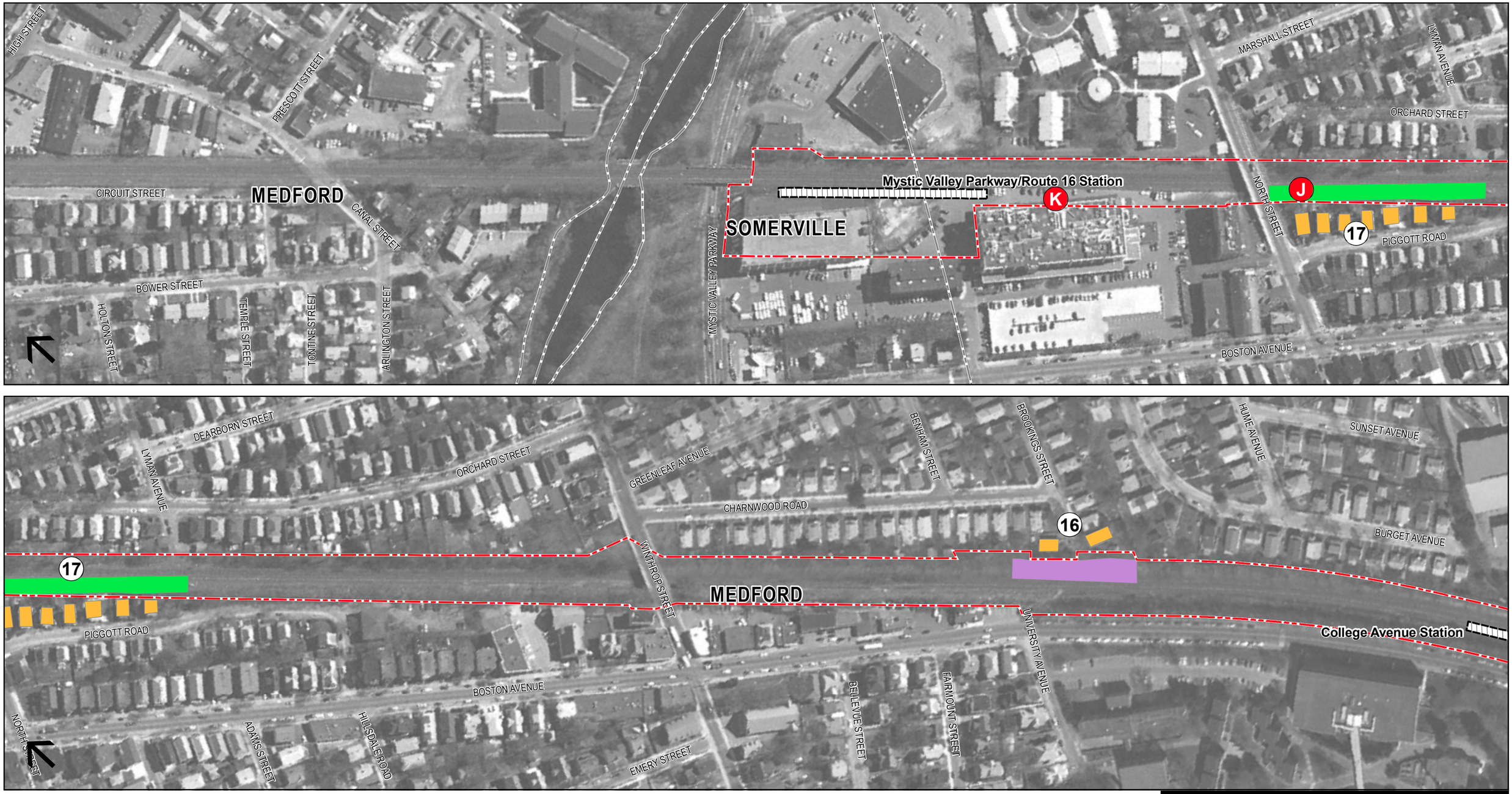
Green Line Extension Project

Figure 5.8-4

Vibration Impacts and Mitigation Measures

Sheet 3 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- **Station Platform**
  - Proposed
  - Existing
- Buildings Impacted by Vibration
- **Vibration Mitigation**
  - Commuter Rail Mitigation
  - Green Line Mitigation

0 50 100 200 Feet

Green Line Extension Project

Figure 5.8-5

Vibration Impacts and Mitigation Measures

Sheet 4 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- Buildings Impacted by Vibration

Station Platform

- Proposed
- Existing

Vibration Mitigation

- Commuter Rail Mitigation
- Green Line Mitigation

0 50 100 200 Feet

Green Line Extension Project

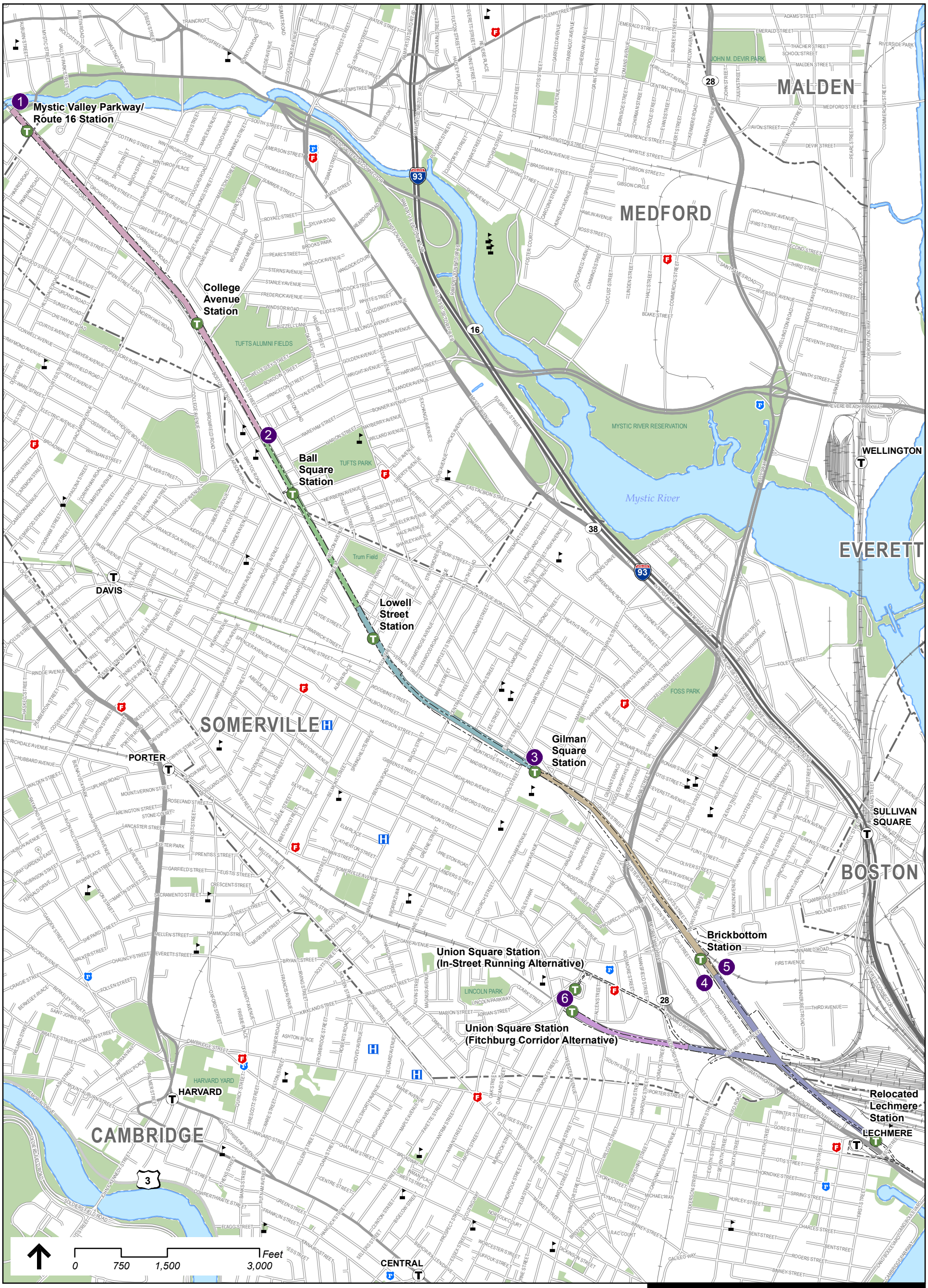
Figure 5.8-6

Vibration Impacts and Mitigation Measures

Sheet 5 of 5

Sources: Harris Miller Miller & Hanson Inc.

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EOT
MASSACHUSETTS
EXECUTIVE OFFICE
OF TRANSPORTATION

Legend

- Proposed Stations
- MBTA Station
- Hospitals
- Schools
- Fire Stations
- Police Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space

Drainage Areas
by Area ID

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Proposed Connection Points to Existing Drainage Systems

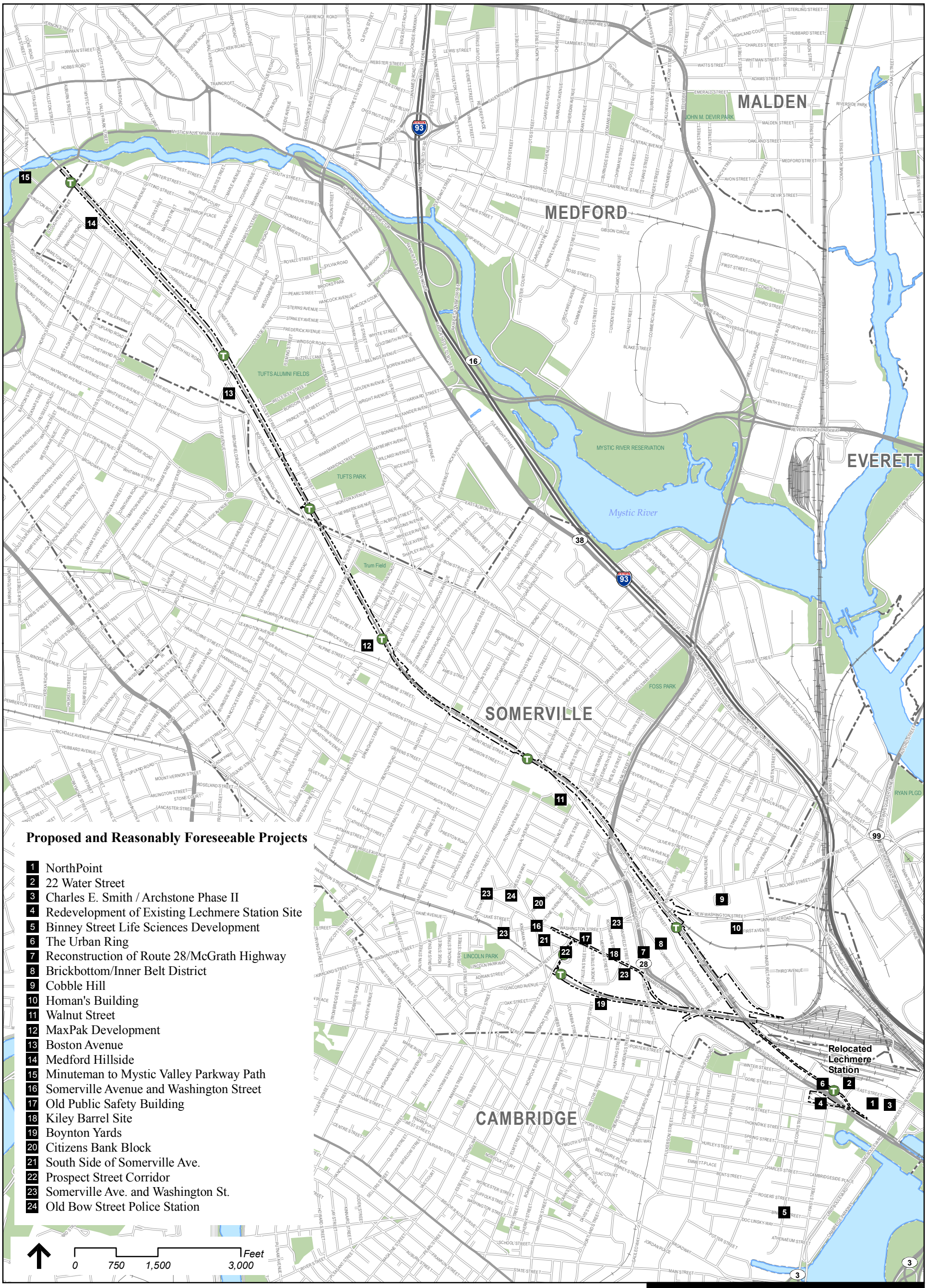
Green Line Extension Project

Figure 5.9-1

Proposed Stormwater Drainage

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

File source: \\Mabos\projects\10303.00\GIS\project\Chapter-5\Proposed_Projects.mxd



Legend

- Proposed Stations
- Project Area
- Municipal Boundaries
- Protected and Recreational Open Space

Green Line Extension Project

Figure 5.15-1

Proposed and Reasonably Foreseeable Projects

Source:
Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs