EXECUTIVE OFFICE OF TRANSPORTATION

Allston Multimodal Station Study

Allston-Brighton Community Meeting

June 15, 2009

Agenda

- **Background**
- **Alternatives considered**
- **Evaluation criteria**
- **Findings and Recommendations**
- **Discussion**
- **Next Steps**

Study Purpose

Study funded by 2006 Economic Stimulus Package

Study Goal – Improve local transit access via the Worcester/Framingham commuter rail line

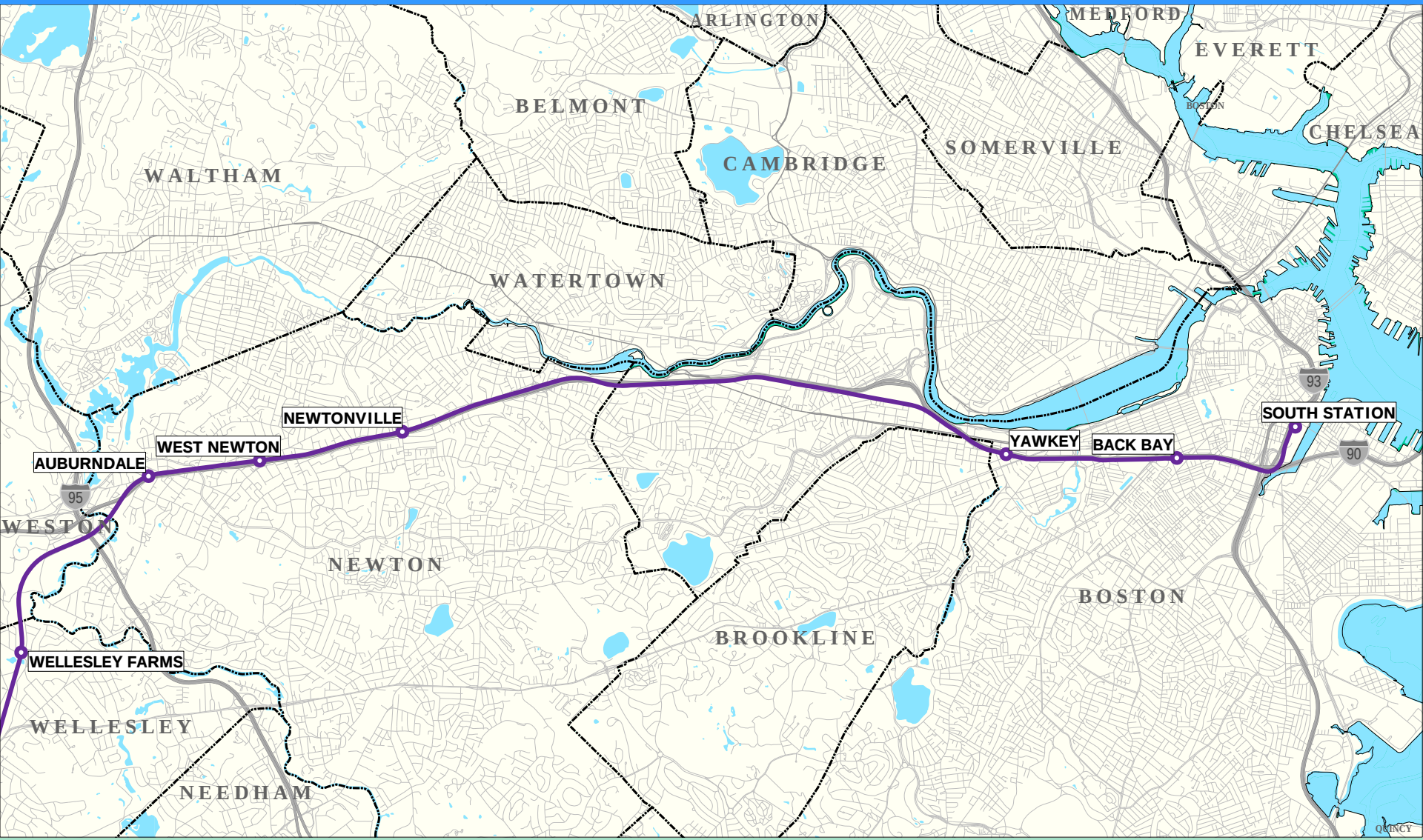
- Feasibility of multimodal transportation station in Allston/ Brighton
- Feasibility of connections with broad range of modes: commuter rail, bus, Urban Ring Bus Rapid Transit, auto access
- Access for residential neighborhood
- Existing and future development opportunities

Project Background and Context

- History of line presented at prior meetings, neighborhood had commuter rail service prior to Turnpike extension
- Coordinate with other relevant planning efforts
  - 1998 Allston Brighton Commuter Rail Feasibility Study
  - City of Boston – Community Wide Plan
  - City of Boston – Fast Track DMU
  - Urban Ring Phase 2 – Bus Rapid Transit
  - Harvard Allston Initiative
  - Commonwealth purchase of CSX property interests

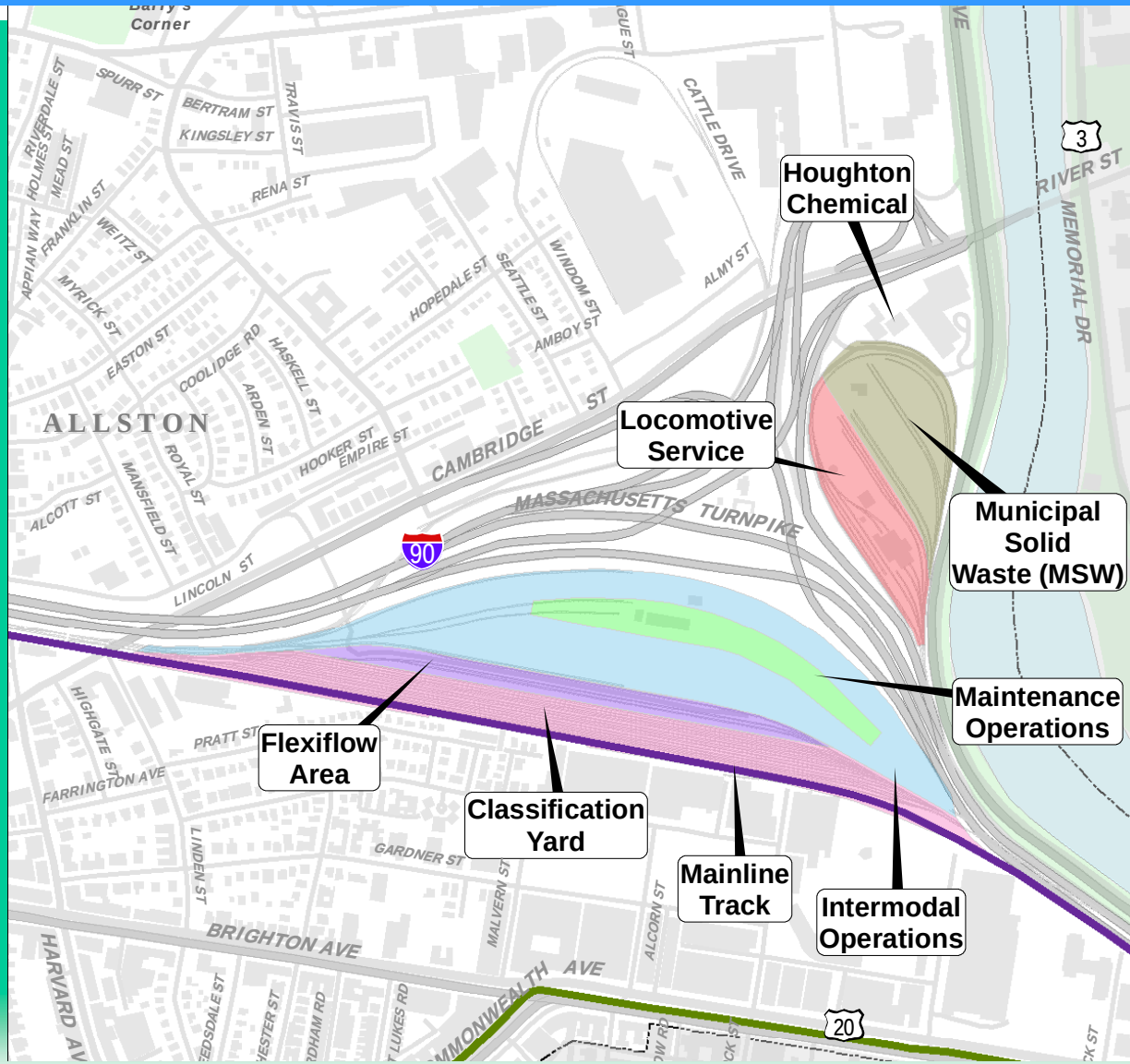
Framingham/Worcester Line

Study Area


ARLINGTON
MEDFORD
EVERETT
BELMONT
CHELSEA
SOMERVILLE
CAMBRIDGE
WALTHAM
WATERTOWN
NEWTONVILLE
WEST NEWTON
AUBURNDALE
YAWKEY
BACK BAY
SOUTH STATION
95
93
90
WESTON
NEWTON
BOSTON
BROOKLINE
WELLESLEY FARMS
WELLESLEY
NEEDHAM
QUINCY

Future Commonwealth Control of Rail Line

- Commonwealth purchase from CSX requires
  - Rail yard relocation
  - Double-stack to Westborough
- Double-track Framingham/ Worcester line
  - More commuter trains
  - Feasibility for Allston Brighton station



Multimodal Station Evaluation Criteria

- **Design feasibility – physical and operational**
- **Access and mobility benefits/ridership**
- **Connectivity**
  - **Neighborhood – pedestrian, bicycle**
  - **Other transportation modes – bus, Urban Ring BRT, automobile**
- **Local/neighborhood impacts**
- **Cost**

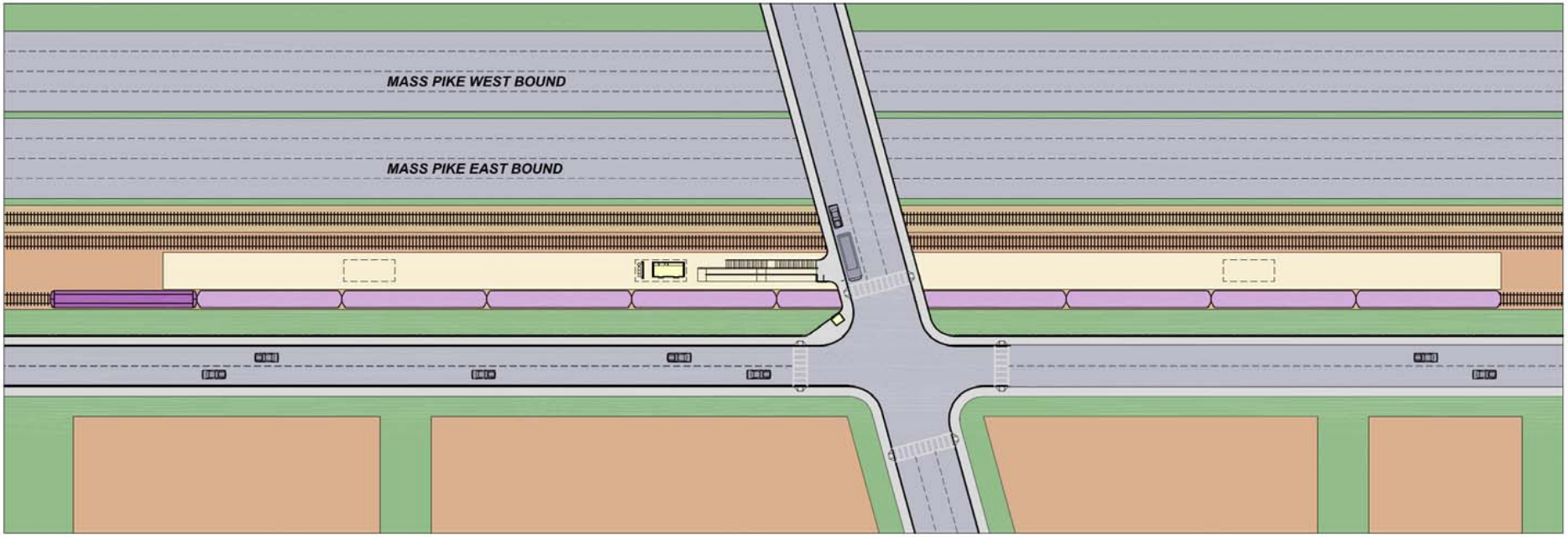
Rail Modes Evaluated

- **Commuter Rail**
  - Locomotive pushes/pulls passenger coaches
  - Service on existing Framingham/ Worcester line
  - Locomotives have slow acceleration/ deceleration, generally serve fewer stops
- **Fast Track/ Diesel Multiple Unit (DMU)**
  - Self-propelled rail vehicles - faster acceleration/deceleration
  - City of Boston proposal for Fast Track service
  - South Station expansion required

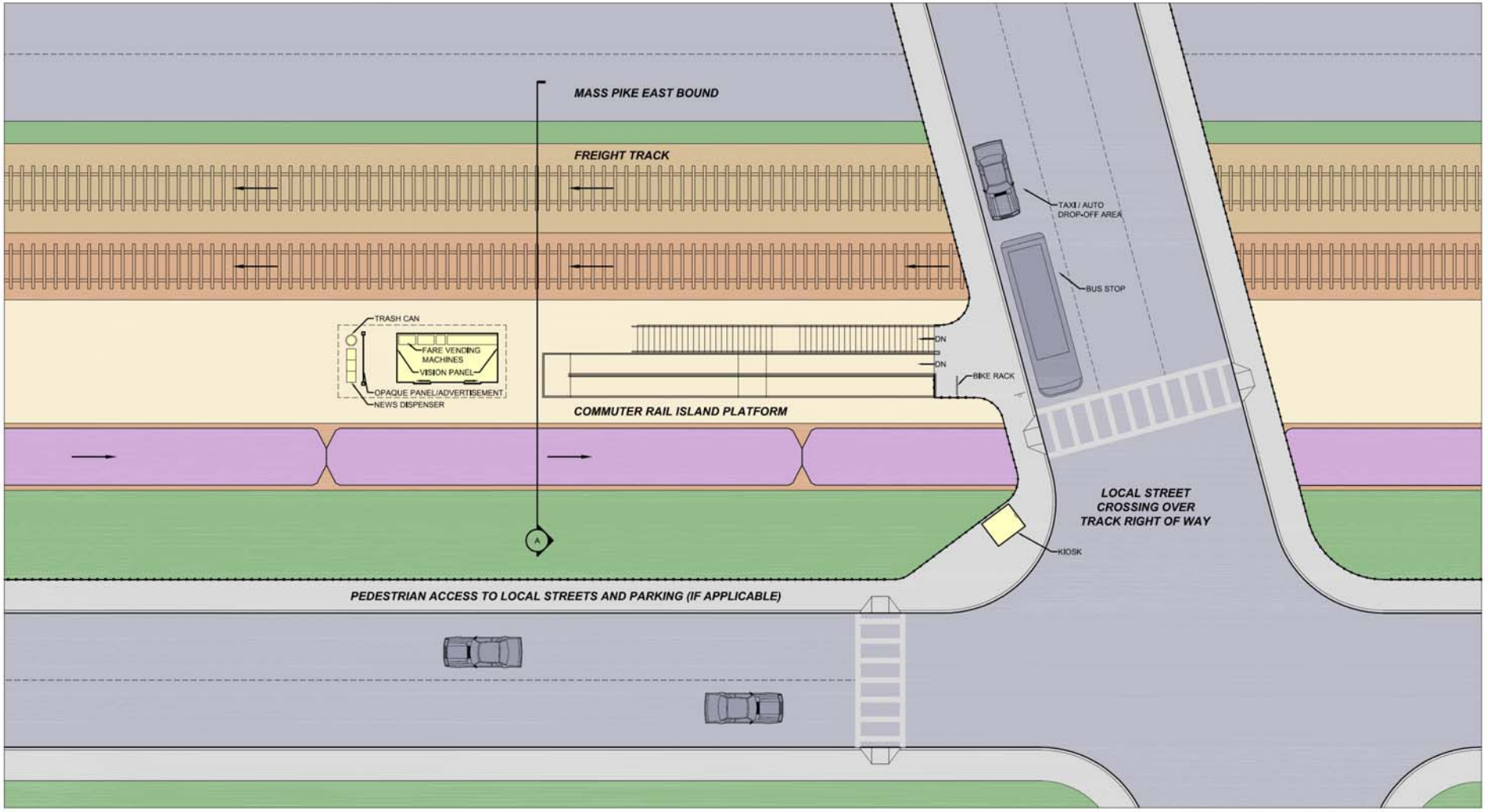
Commuter Rail Design Criteria

- **Platform Design Standards**
  - Platform length – minimum 785’ (9-car trains, ~900 seat capacity)
  - Platform access to both tracks – center island or double side platforms
  - Platform height – high level very desirable (possible mini-high)
  - Platform accessibility – ADA accessible to roadway/sidewalk system
- **Track Design and Railroad Operations**
  - Straight track preferred
  - High train speed
  - Freight access
    - 3rd freight only track highly desirable (required w/ high-level platform)
    - 2 tracks possible with mini-high platforms

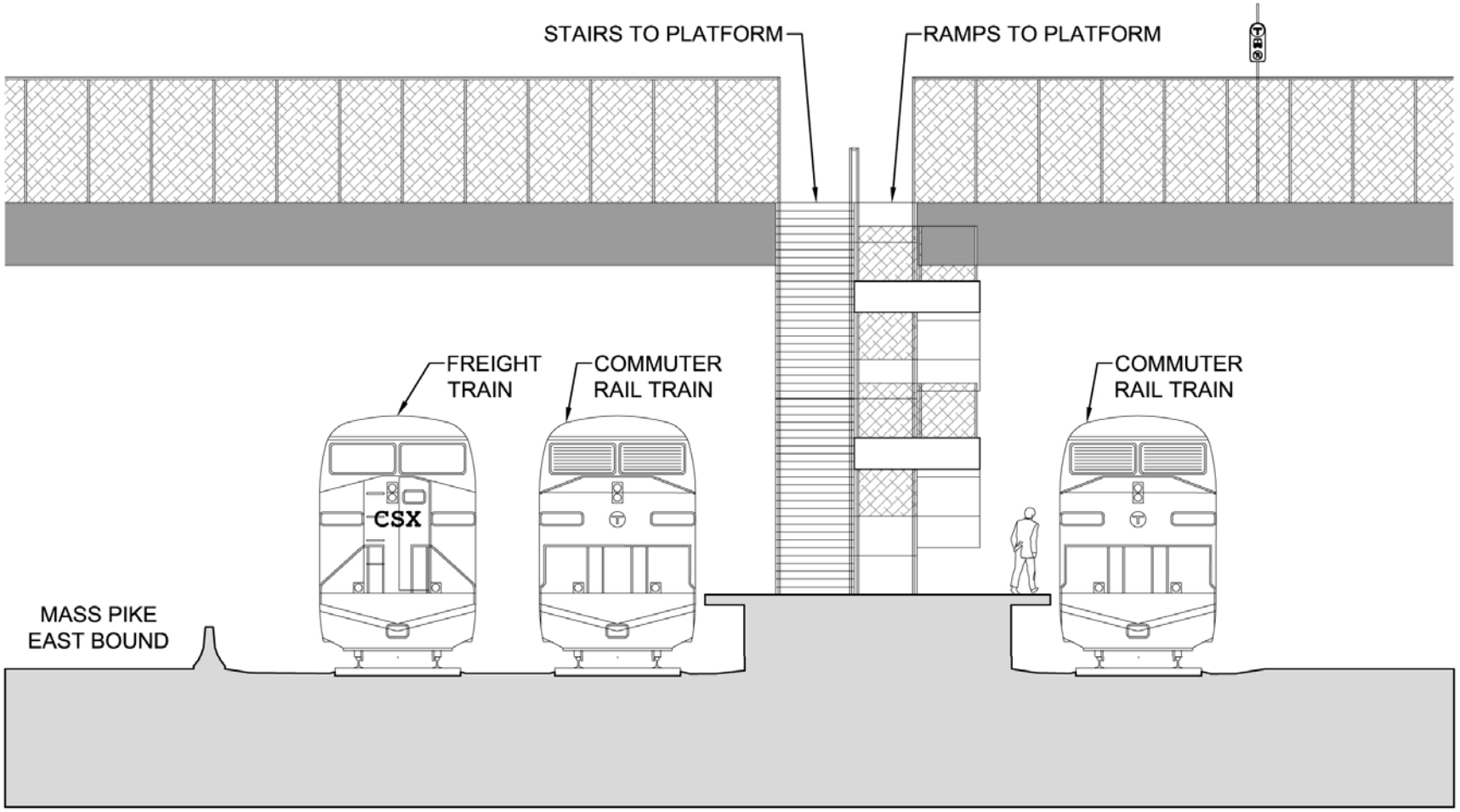
Prototypical New Center Island Platform Commuter Rail



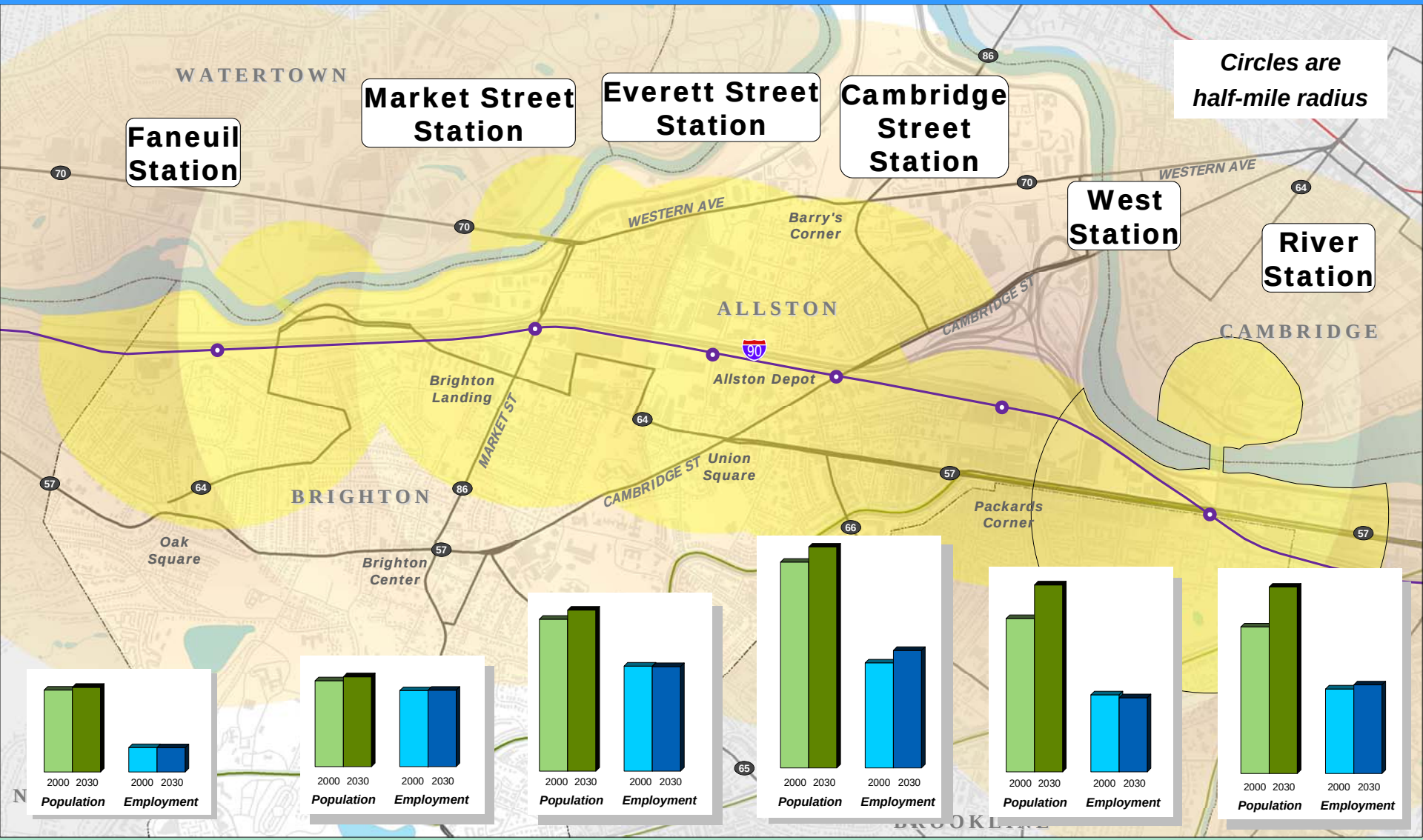
Prototypical New Center Island Platform Commuter Rail



Prototypical New Center Island Platform – Cross Section Commuter Rail



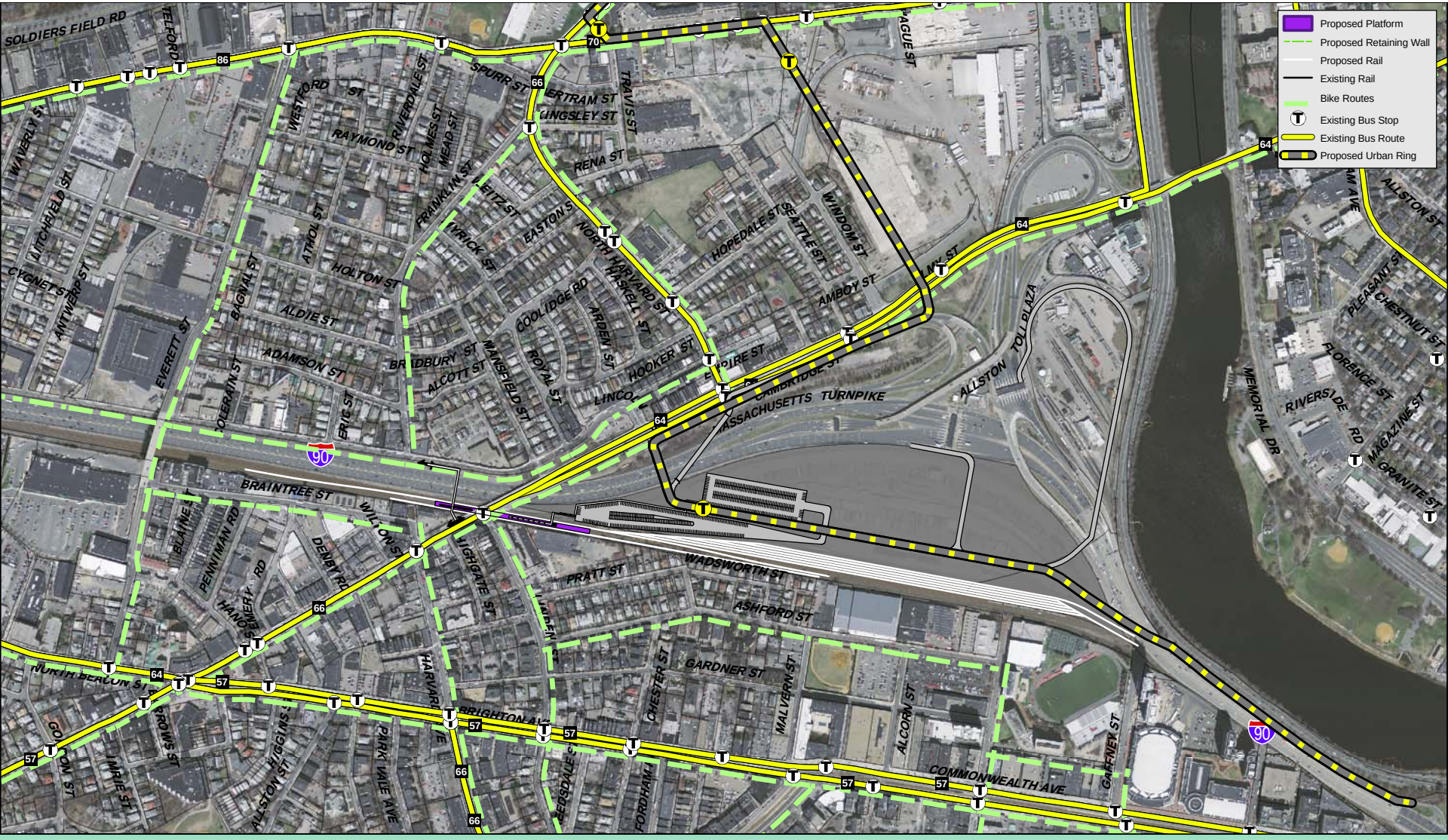
Station Catchment Areas
Existing and Future Population & Employment



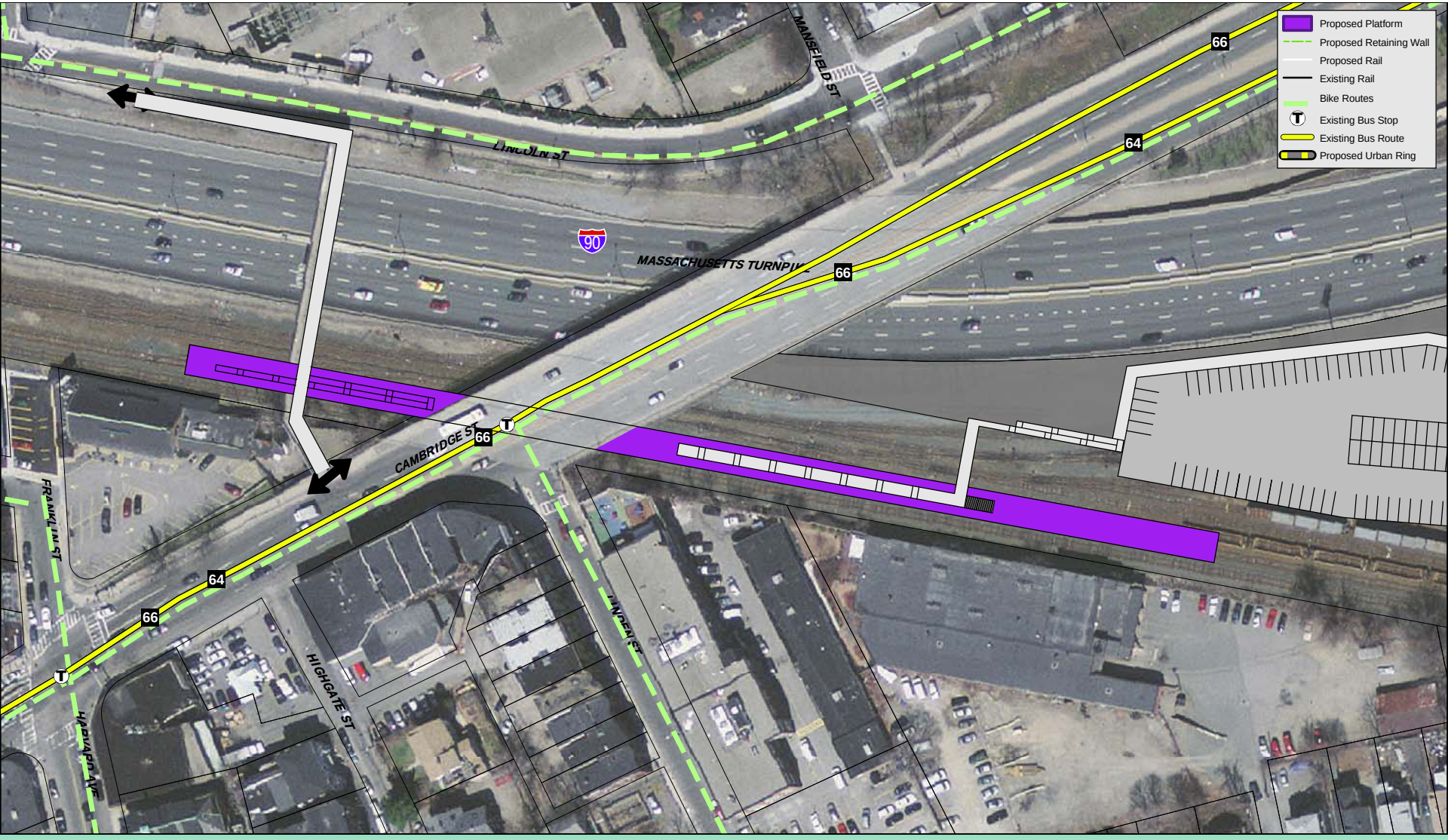
Evaluation Results

- **Most promising Commuter Rail multimodal station locations are:**
  - **Cambridge Street**
  - **Everett Street**
- **These two locations were further developed and evaluated as shown in the following slides**

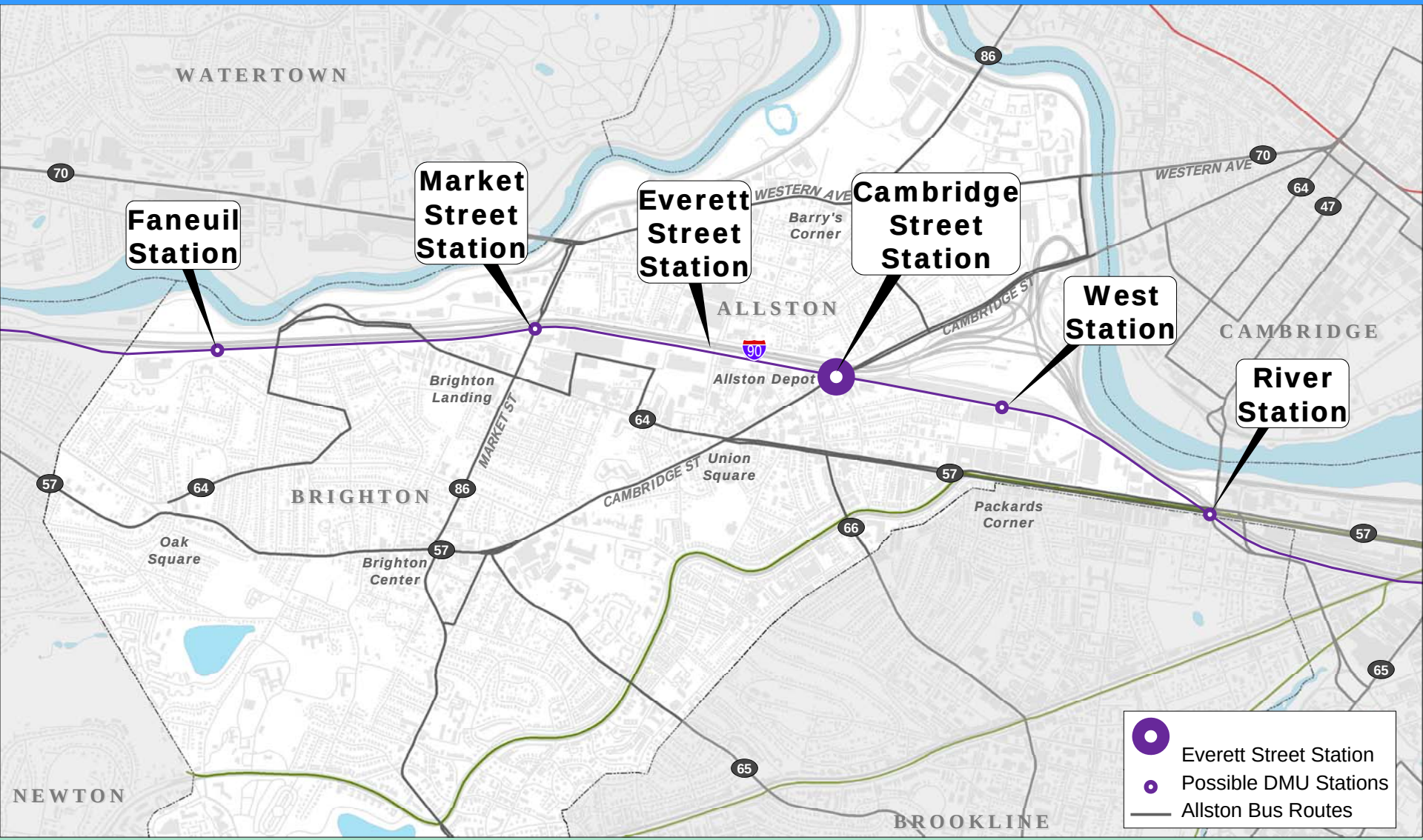
Cambridge Street Station



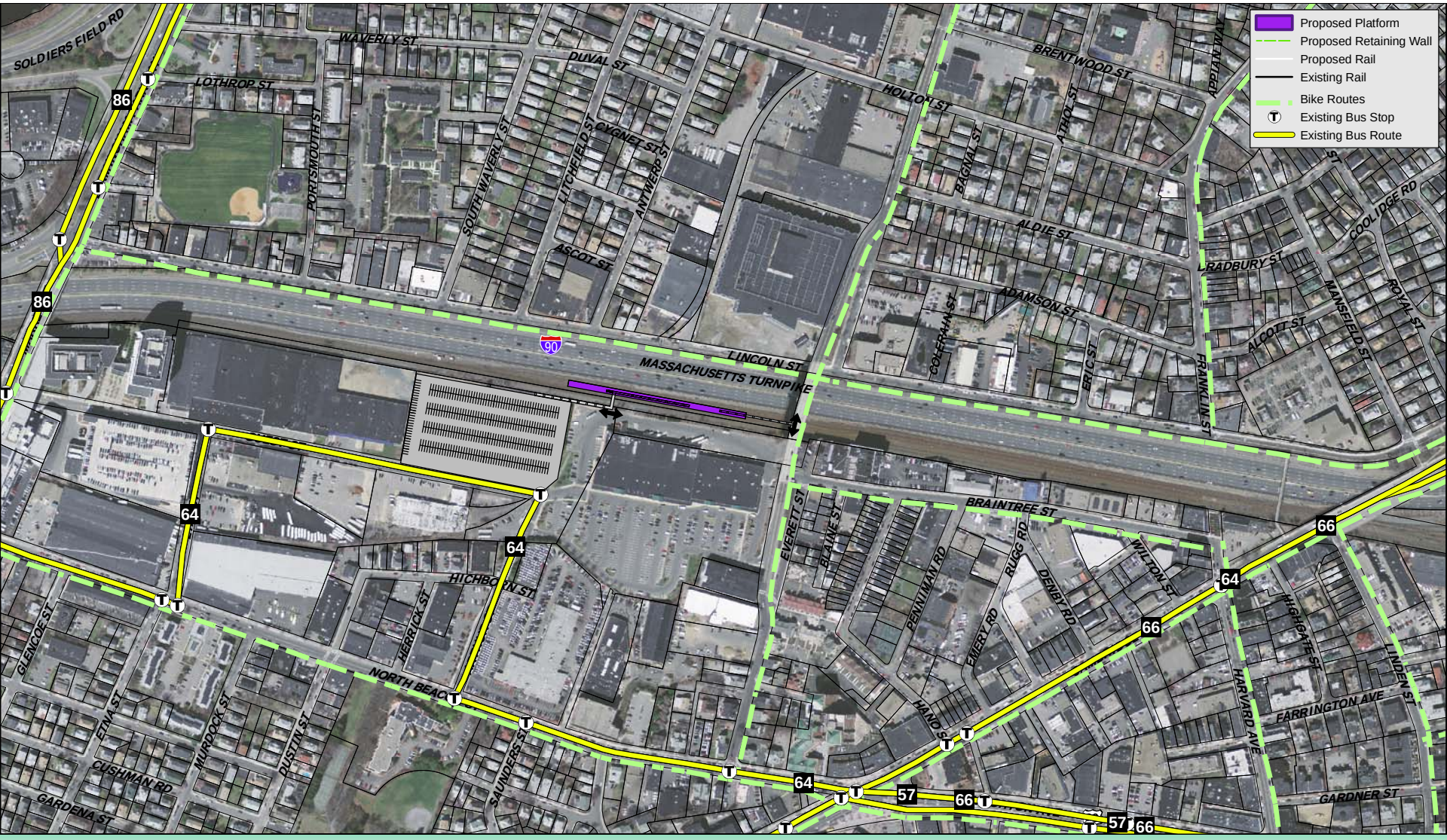
Cambridge Street Station



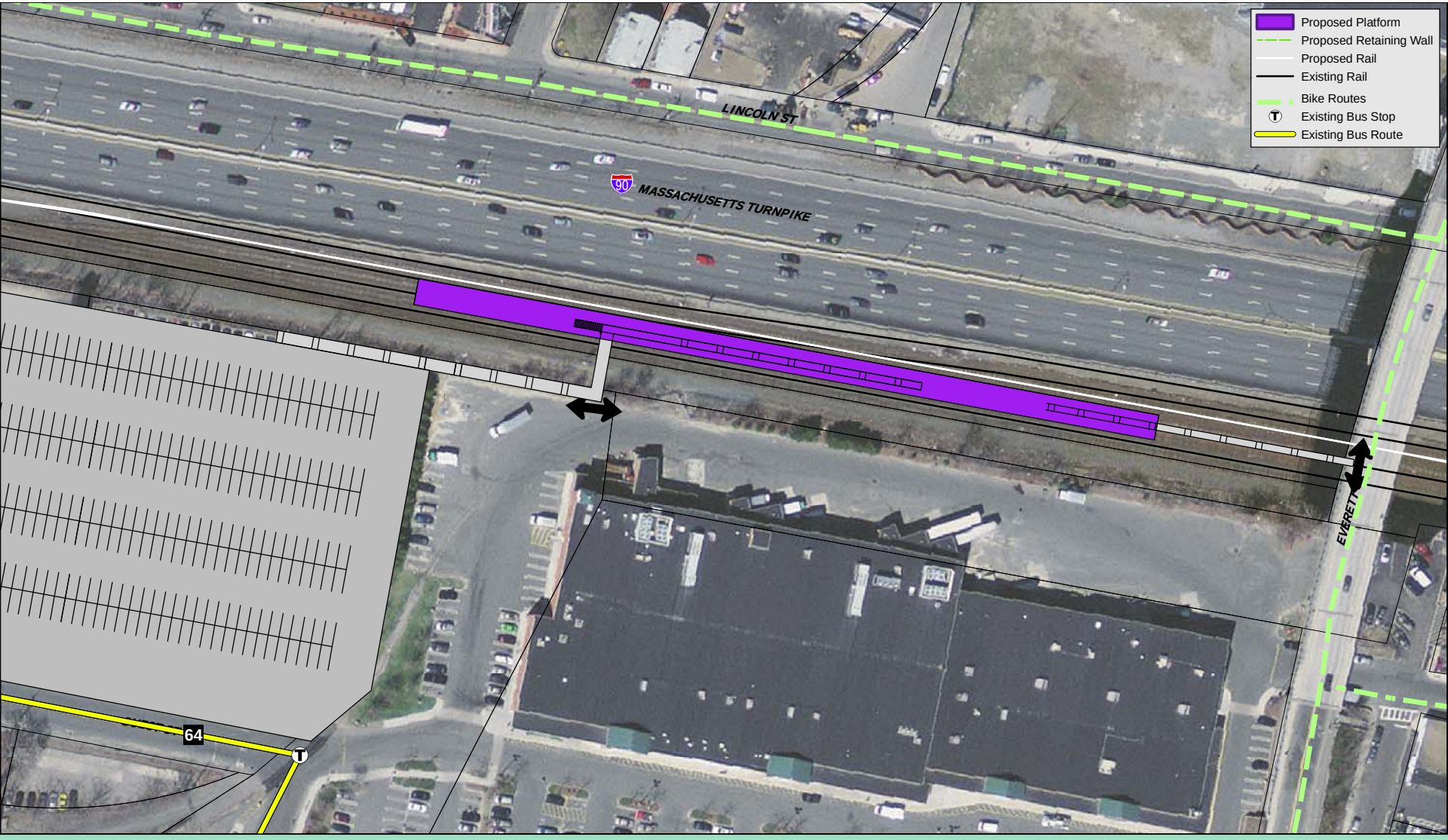
Cambridge Street Multimodal Station
Corridor View with Potential DMU Locations



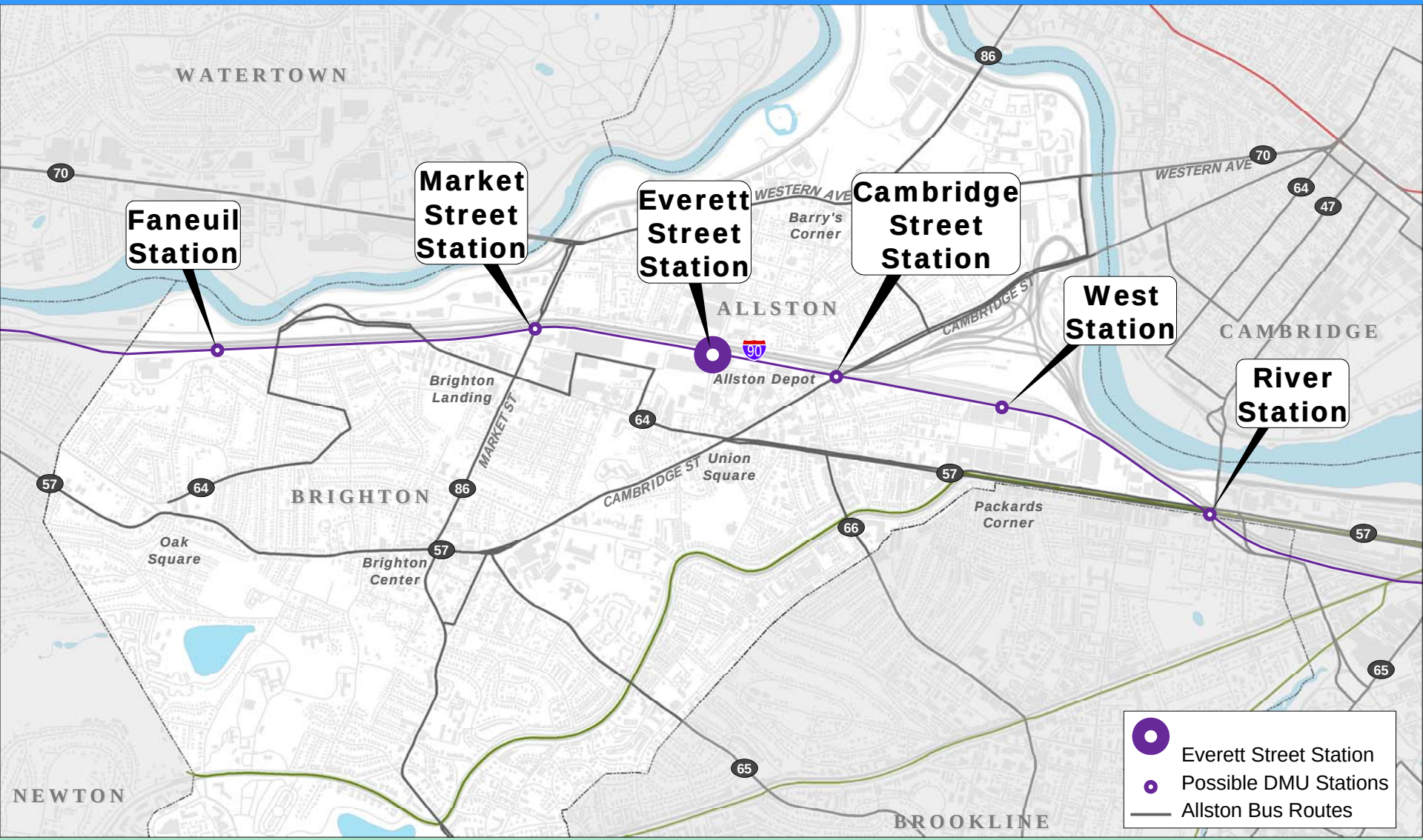
Everett Street Station



Everett Street Station



Everett Street Station
Corridor View with Potential DMU Locations



Evaluation Summary
Center Island Commuter Rail Station

GOOD / FAIR / POOR	Faneuil Station	Market Street Station	Everett Street Station	Cambridge Street Station	West Station	River Station
Design	Straight track ROW taking No 3rd track	Curve, tight radius ROW taking No 3rd track	Straight track Wider ROW 3rd track feasible	Straight track Wide ROW 3rd track feasible	Straight track Wide ROW 3rd track feasible	Curve, tight radius ROW taking No 3rd track
Demographic **2030 Population** **2030 Employment**	 6,980 2,384	 7,016 5,492	 12,773 8,289	 17,541 9,385	 14,821 5,871	 14,780 7,021
Daily Boardings **Year 2030**	1,500	2,000	2,400	2,200	1,600	1,000
Connectivity	River blocks walk access Limited bus access	River blocks walk access Moderate bus access	Moderate bus access Potential parking	Good bus access Potential parking and Pike access Potential Urban Ring connection	Interchange blocks walk access Limited bus access Potential parking and Pike access Potential Urban Ring connection	River blocks walk access Good bus access, Green Line access Potential Urban Ring connection
Local Impacts	Open space impacts	Major property, road impacts	Rail line reconfiguration	Railyard reconfiguration	Pedestrian bridges	Major bridge reconstruction
Capital Costs (Preliminary)	$30 million	$45 million	$10 million	$10 million	$15 million	$60 million

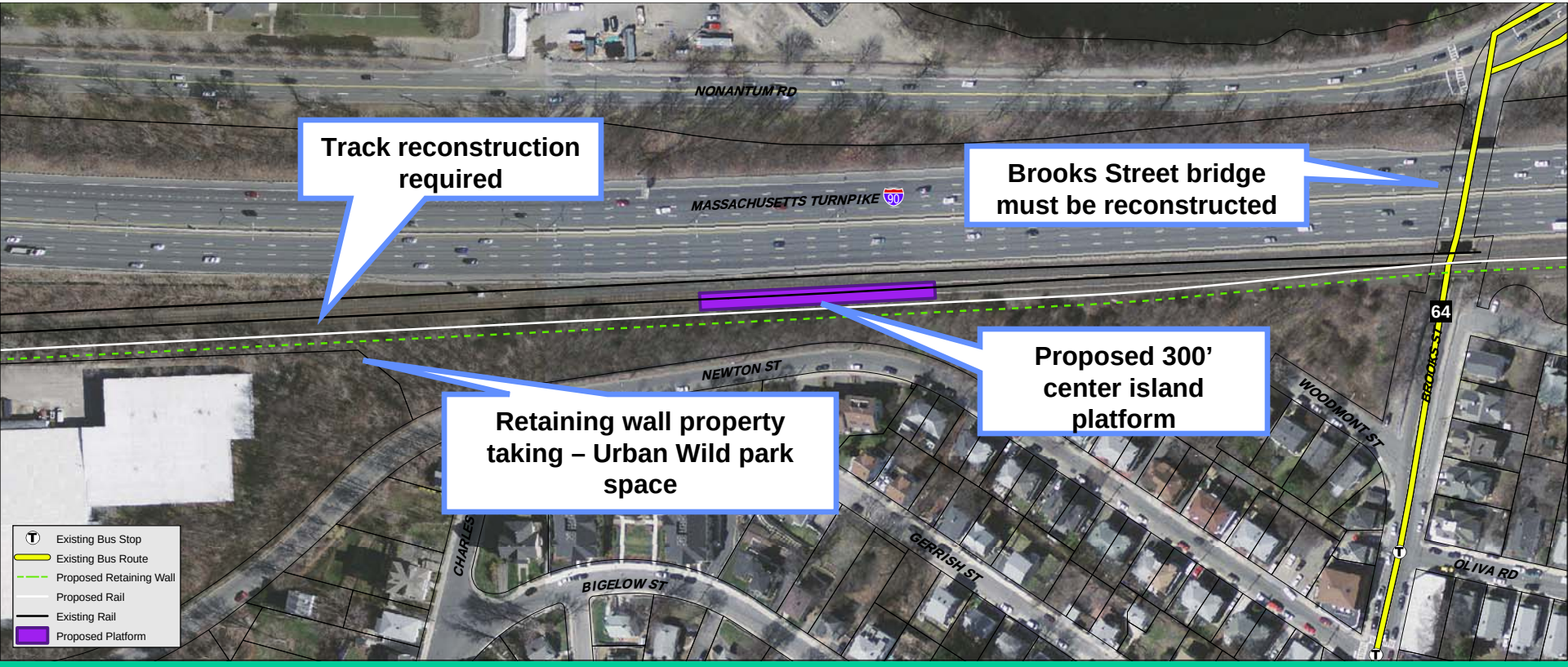
Fast Track/DMU Service

- **Share track with heavy commuter rail and freight trains**
  - **High crash standards**
  - **No current domestic vehicle supplier**
- **No DMUs on MBTA system**
- **Need to study physical and operational feasibility of DMUs**

Fast Track/DMU Design Criteria

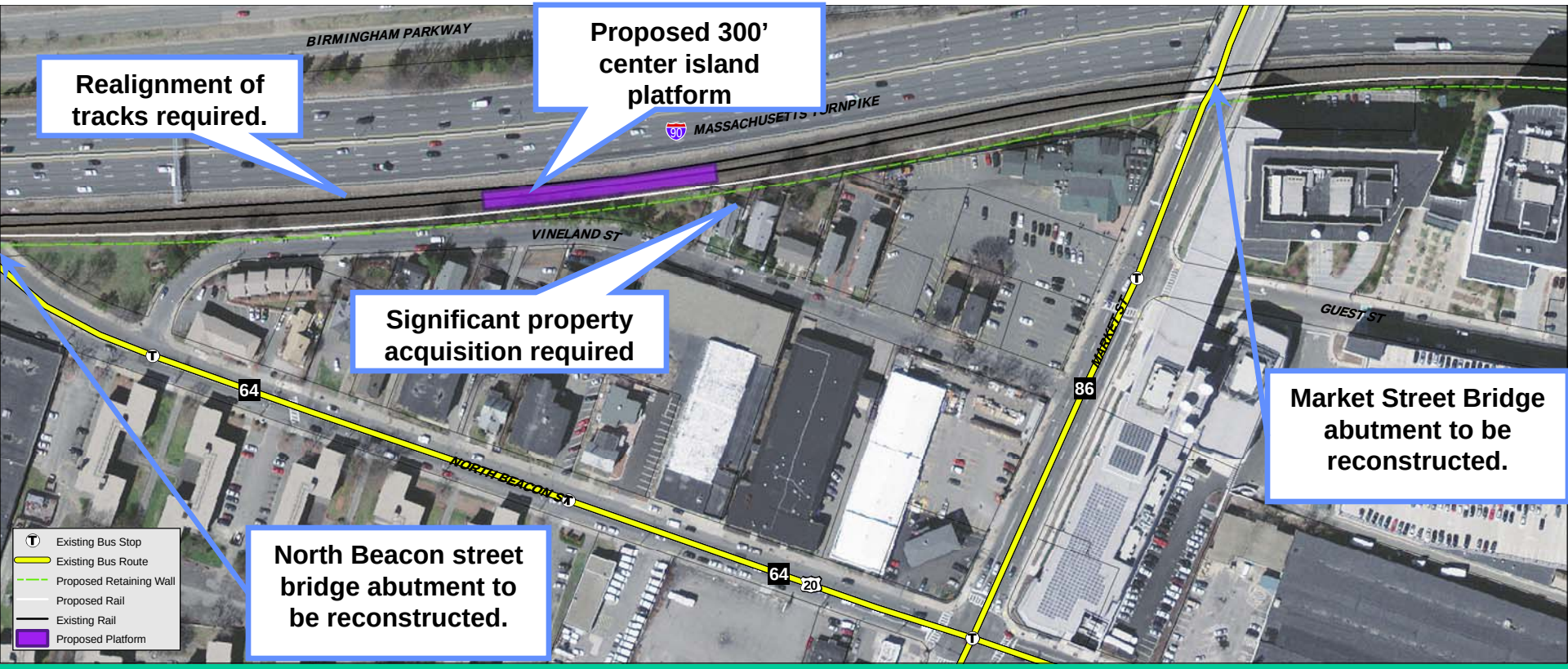
- **Platform Design Standards**
  - Platform length – *minimum 300' (3-car trains, ~250-300 seat capacity)*
  - Platform access to both tracks – center island preferred
  - Platform height – dependent on equipment, but high level preferred for compatibility with commuter rail
  - Platform accessibility – ADA accessible to roadway/sidewalk system
- **Track Design and Railroad Operations**
  - Straight track preferred
  - Separate track alignment preferred
  - Freight only track desirable
  - Station spacing closer than commuter rail

Faneuil Street Station – DMU



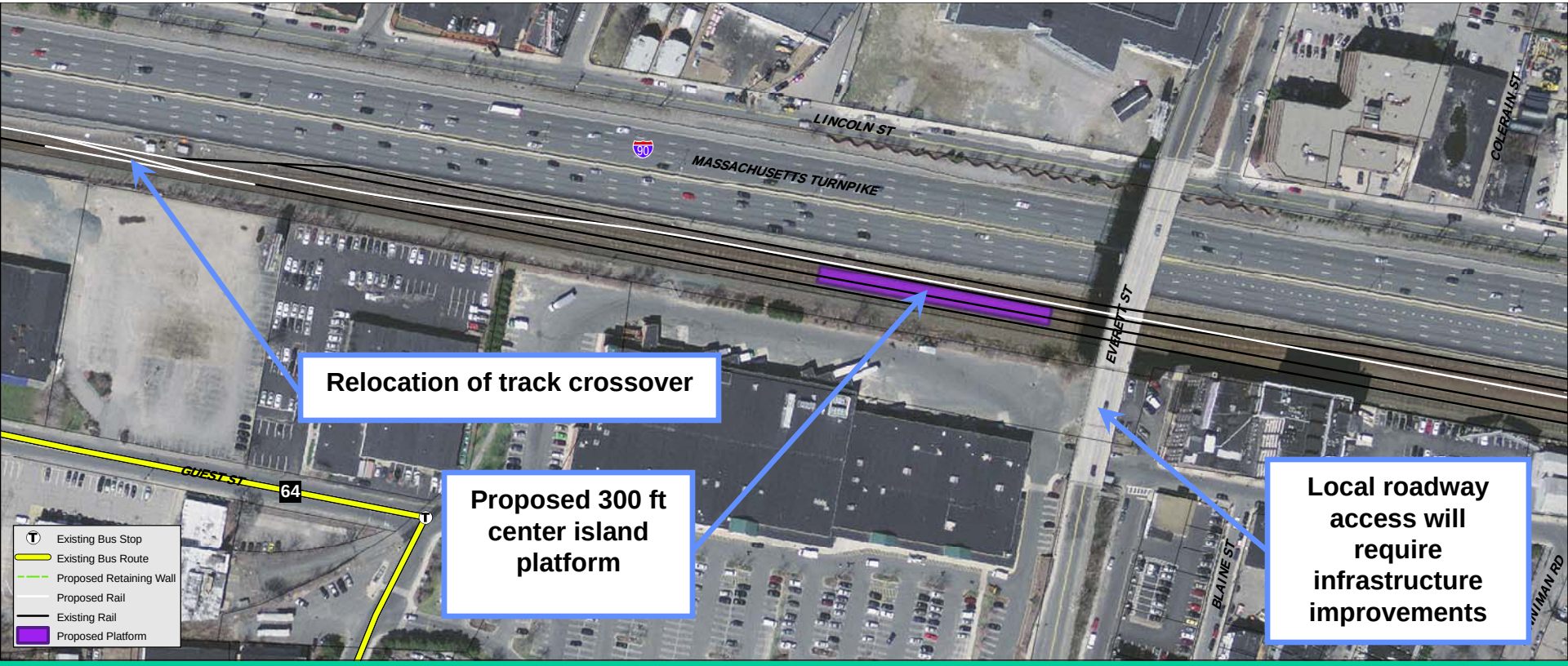
- **Straight track (good)**
- **Narrow property – requires takings, 3rd track for freight infeasible – requires mini-high platforms**
- **Low population and employment relative to other sites**

Market Street Station – DMU



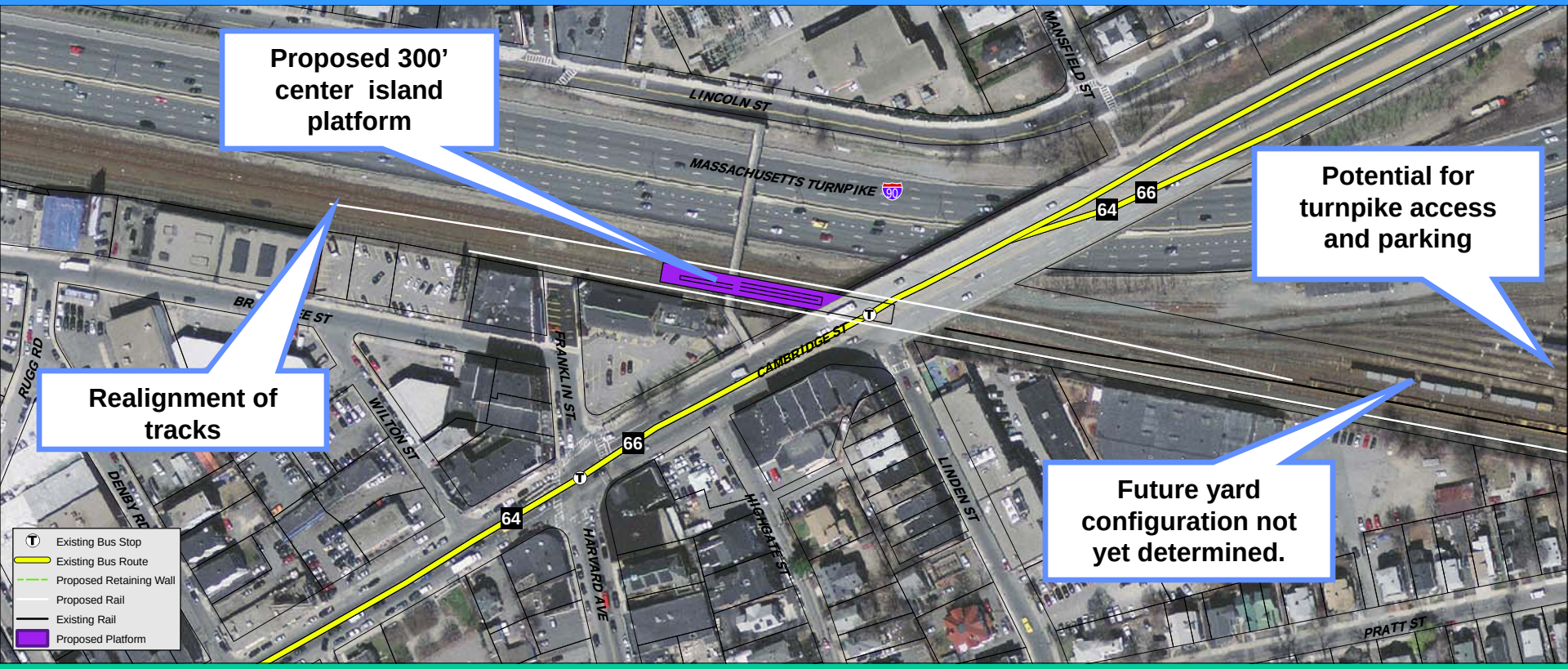
- Curved track (not good)
- Narrow property – requires takings, 3rd track for freight infeasible – requires mini-high platforms
- Access to Market Street challenging

Everett Street Station – DMU



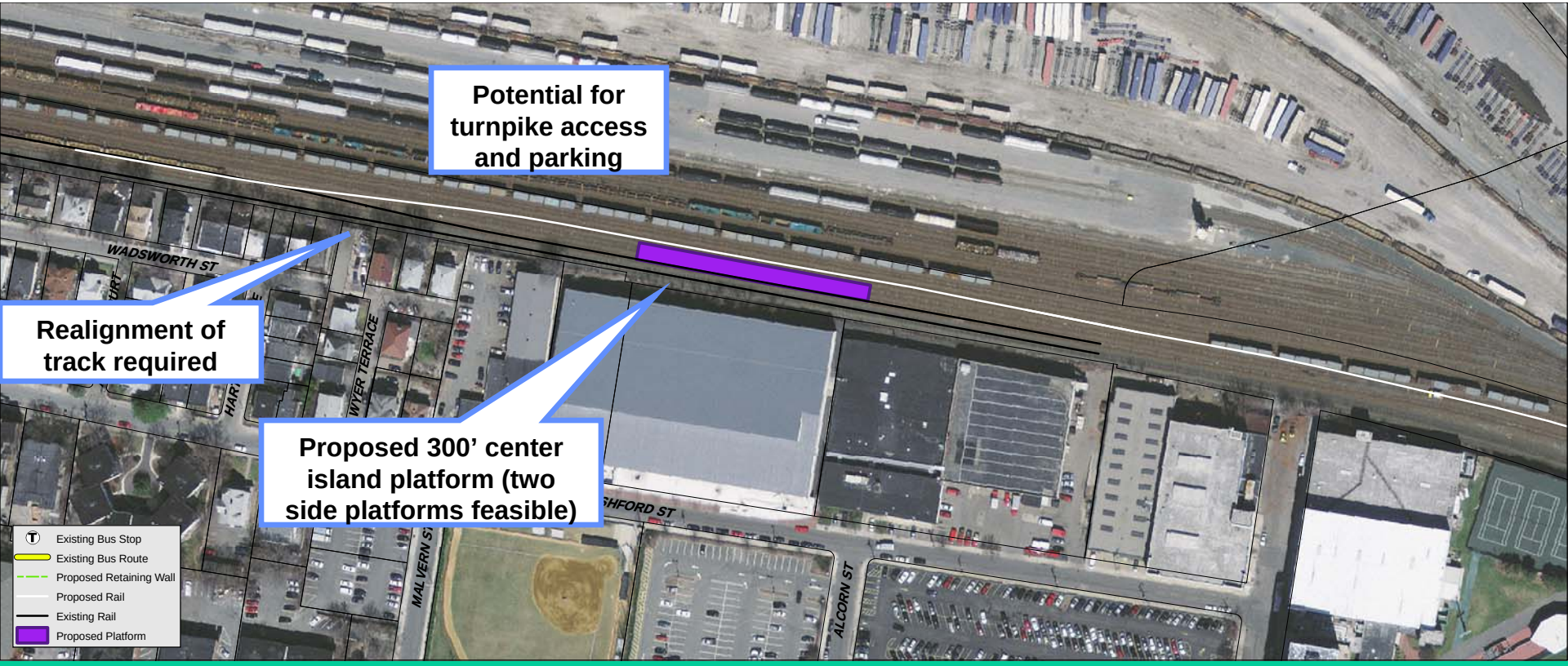
- Straight track (good), but requires relocation of crossover switch
- Wider ROW allow 3rd track for rail access
- Close to potential Cambridge Street Station commuter rail station

Cambridge Street Station – DMU



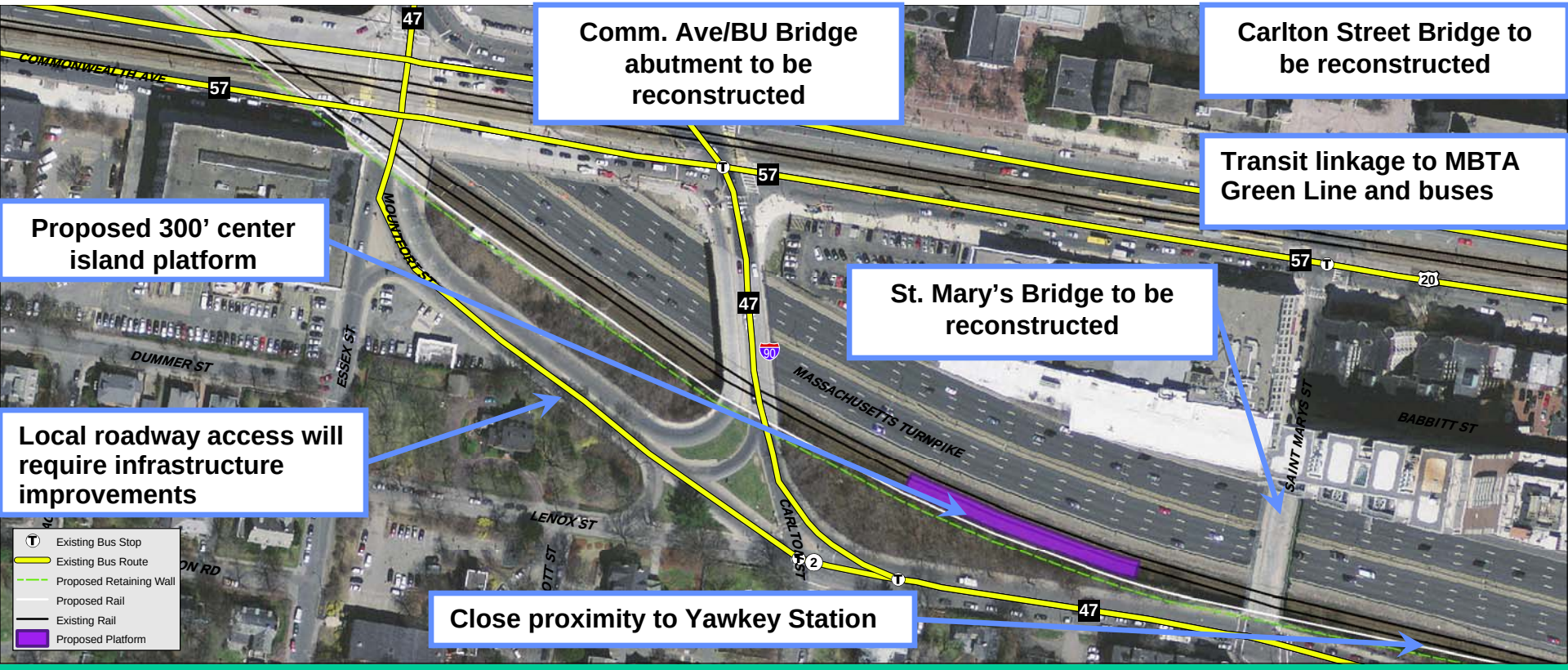
- **Straight track (good)**
- **Wider ROW allow 3rd track for rail access**
- **Multiple bus connections on Cambridge Street possible**
- **Close to potential Everett Street commuter rail station**

West Station – DMU



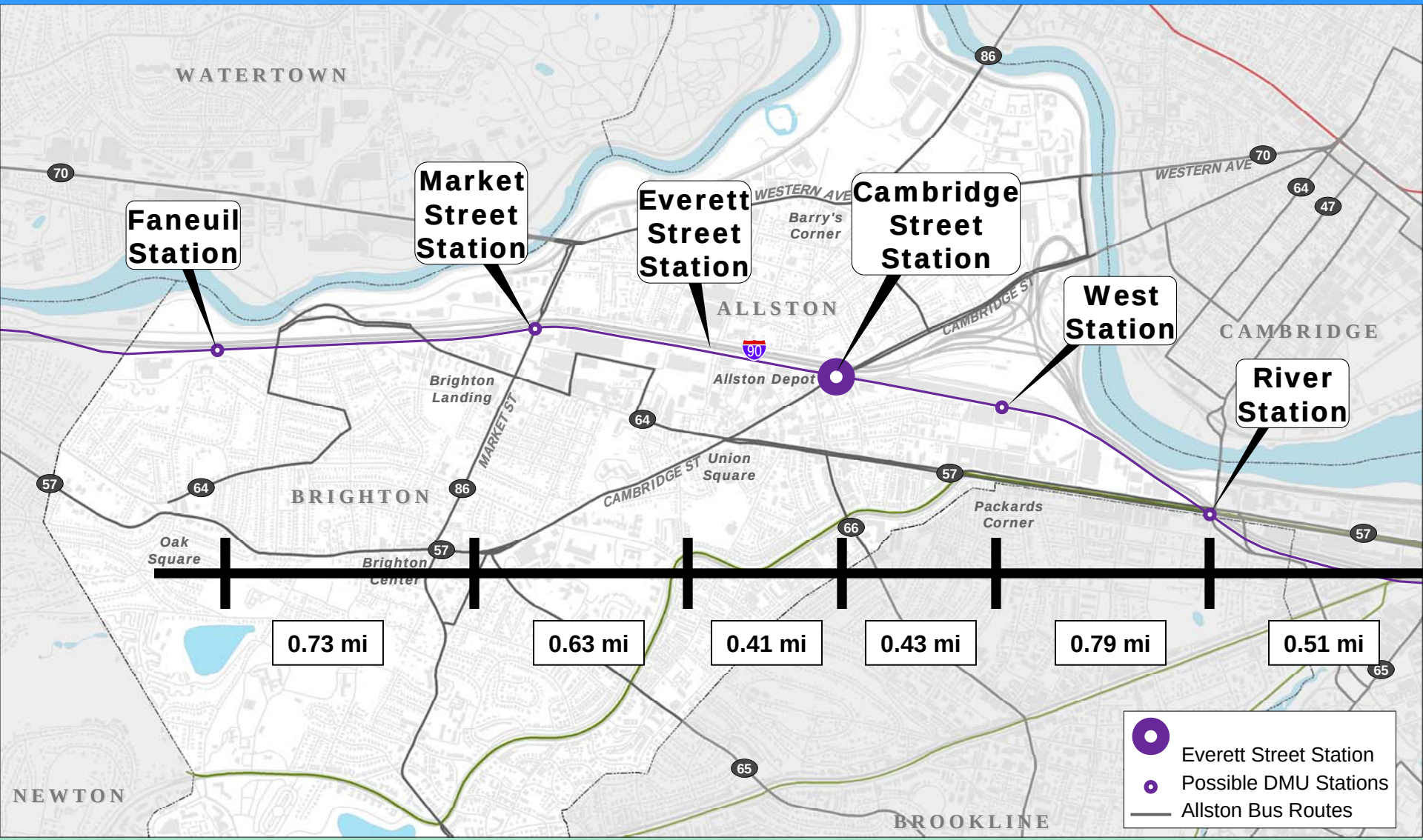
- **Straight track (good)**
- **Wider ROW allow 3rd track for rail access**
- **Access to community is challenging**
- **Close to potential Cambridge Street commuter rail station**

River Station – DMU



- Curved track (not good), narrow right-of-way requires significant takings
- Narrow property – requires takings, 3rd track for freight infeasible – requires mini-high platforms
- Close to potential West Station commuter rail station

Station Spacing



Station Evaluation Summary
Alternate Rail Technology – Fast Track DMU

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Local Impacts	Open space impacts	Residential property impacts New Balance and WGBH property impacts	Local Roadway	Rail Yard to be Reconfigured	Pedestrian bridges	Major bridge reconstruction

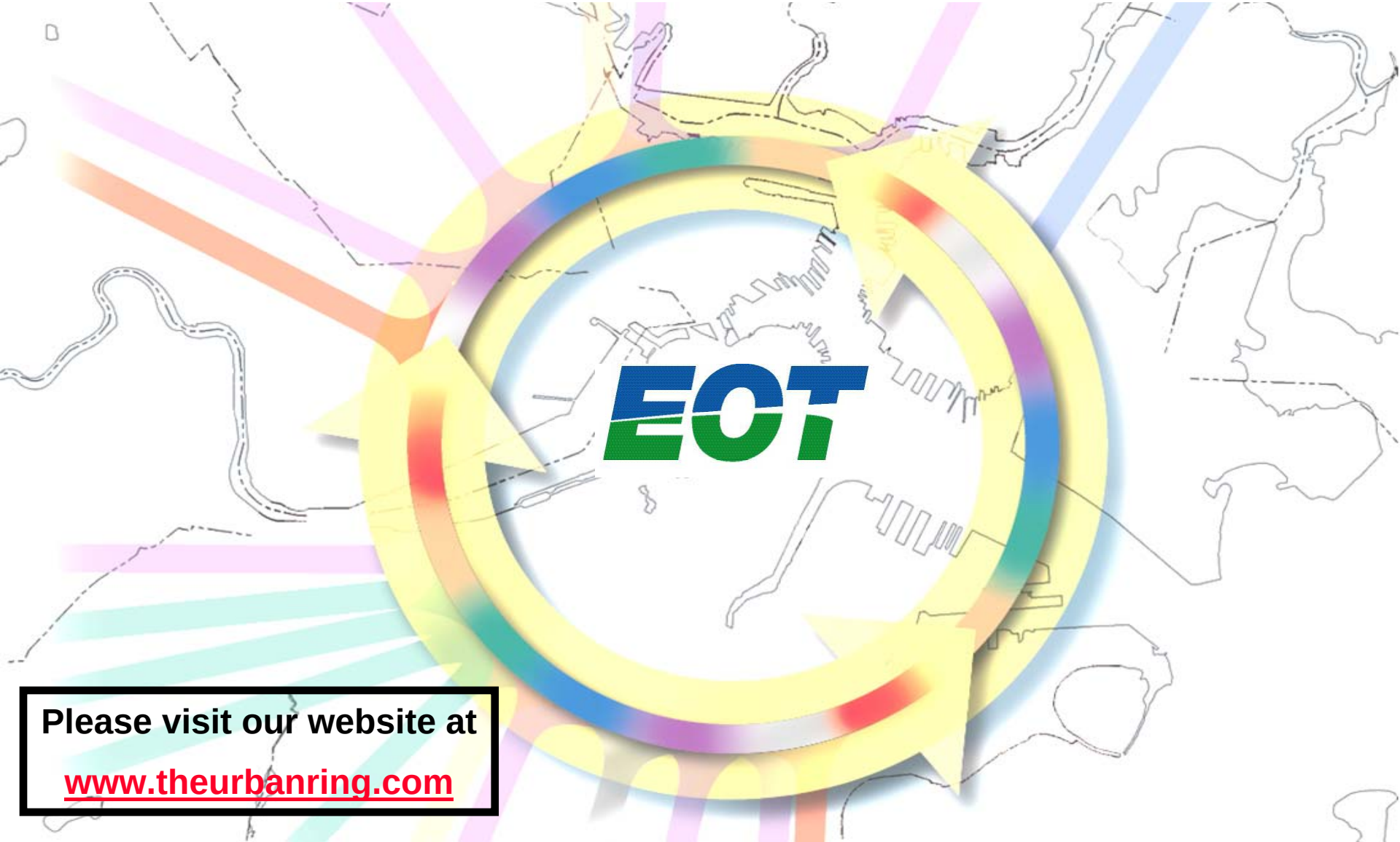
Coordination with Other Projects

- North Allston/Brighton Community Wide Plan
- Harvard University Institutional Master Plan
- Boston University Master Plan
- Fenway/Longwood/Kenmore Transportation Plan
- Charles River Basin Bridge Reconstruction
- Urban Ring Phase 2
- Fast Track/DMU Service

Next Steps

- **Final Report – June/July**
- **Incorporate into BRA neighborhood planning and plans such as Program for Mass Transportation**
- **Enable further planning and environmental for the Allston Multimodal Station through the MPO process**
- **Continue “Fast Track” DMU coordination**
- **Complete the CSX transaction**

Discussion



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