

# MBTA Bus Facility Modernization Program New Quincy Maintenance Facility Update

Virtual Public Meeting  
June 24, 2020  
5:30 p.m.

# How to Participate in the Meeting

Virtual Public Meeting  
June 24, 2020  
5:30 p.m.

## Participate In The Meeting

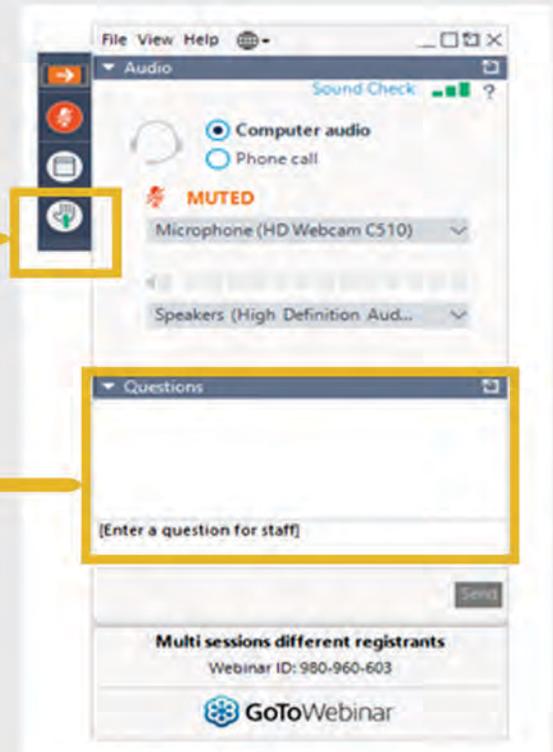


Click the “**Raise Hand**” button to ask a question

OR

Question

Type a question in the question box.

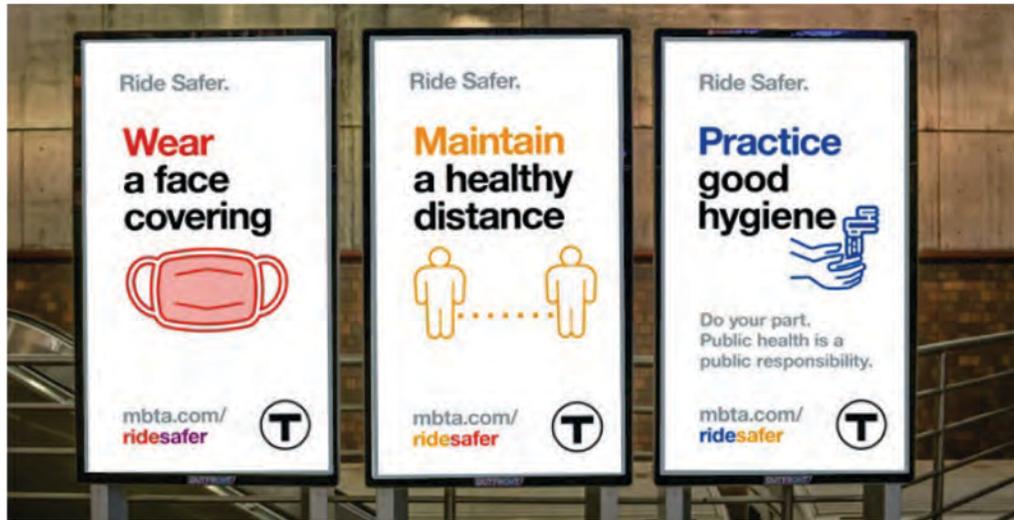


Attendees will be called upon in the order they raise their hands.

# Agenda

- MBTA Bus Facility Modernization Program Overview
- Issues Raised at January 29, 2020 Community Meeting
- Overview of Proposed Project
- Next Steps
- Questions and Comments

# Safety Moment: Ride Safer



# MBTA Bus System Overview

- In September 2019, the MBTA served **1.26 million trips every weekday**, helping to support a sustainable and economically competitive metropolitan Boston region.
- After the subway, MBTA bus carries **the largest share of riders (about 33%)**.
- MBTA operates **1,050 buses on 170 routes**, serving over 8,000 bus stops across 51 cities and towns.
- Bus plays an important role in helping the MBTA meet **regional equity, economic development and environmental goals**.



# Bus Role in Meeting Regional Goals - Equity

Buses serve significantly more minority riders and more low-income riders than other modes.

Mode	% Low-income	% Minority
Bus	41.5%	48.0%
Commuter Rail	6.8%	14.6%
Ferry	3.7%	1.7%
Rapid Transit	26.5%	30.8%
Quincy Buses	43.7%	45.0%

Bus routes operated out of the Quincy garage mirror the bus system as a whole.



# Bus Role in Meeting Regional Goals - Economy

Massachusetts and its expanding economy has reached a tipping point for congestion.

Investment in transit resources is essential to the reliability of current operation and support of growing ridership.

## CONGESTION IN THE COMMONWEALTH

REPORT TO THE GOVERNOR **2019**



THE BOSTON GLOBE SPOTLIGHT TEAM

## SEEING RED

We endure some of the nation's worst rush-hour traffic. Our aging transit system is maddeningly unreliable. It is a crisis — a very slow moving crisis — that puts our region's economic prosperity at risk. Who is to blame? Can anything be done? The Globe Spotlight Team investigates.

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A stylized illustration of several cars in a traffic jam, rendered in white and yellow outlines against a dark background. The cars are positioned on a road with lane markings, and some have red motion blur or heat-like effects behind them, suggesting slow movement or frustration.

# Bus Role in Meeting Regional Goals - Economy

**Quincy Center is undergoing one of the largest urban revitalization efforts anywhere in Massachusetts.**

- 50 acres of mixed-use development
- Significant increase in retail and residential space
- Investment in transportation infrastructure critical to support growth



# Bus Role in Meeting Regional Goals - Environment

**MBTA committed to promoting sustainability and delivering a more reliable bus system:**

- Growing bus fleet to meet growing ridership and reduce the number of single occupancy vehicles
- Procuring advanced hybrid buses and testing battery electric buses (BEBs) to reduce greenhouse gas emissions
- Offering incentives to build more density near transit



# Bus Facility Modernization Program Goals



1. Create state-of-the-art, efficient **work environments for our employees** who keep the fleet clean and reliable
2. Expand the capacity of the system so we can **add more buses and extra service**, especially during peak periods
3. Design the facilities to accommodate a **zero-emissions fleet** of battery-electric buses

# Existing Bus Maintenance Facilities



9

Maintenance garages

54

Average age of a facility

1925

Year of the oldest bus facility constructed

**Quincy** - In operation initially as streetcar facility (1904 or earlier); accommodates 86 buses



# Top Priority: Replace the Quincy Bus Garage



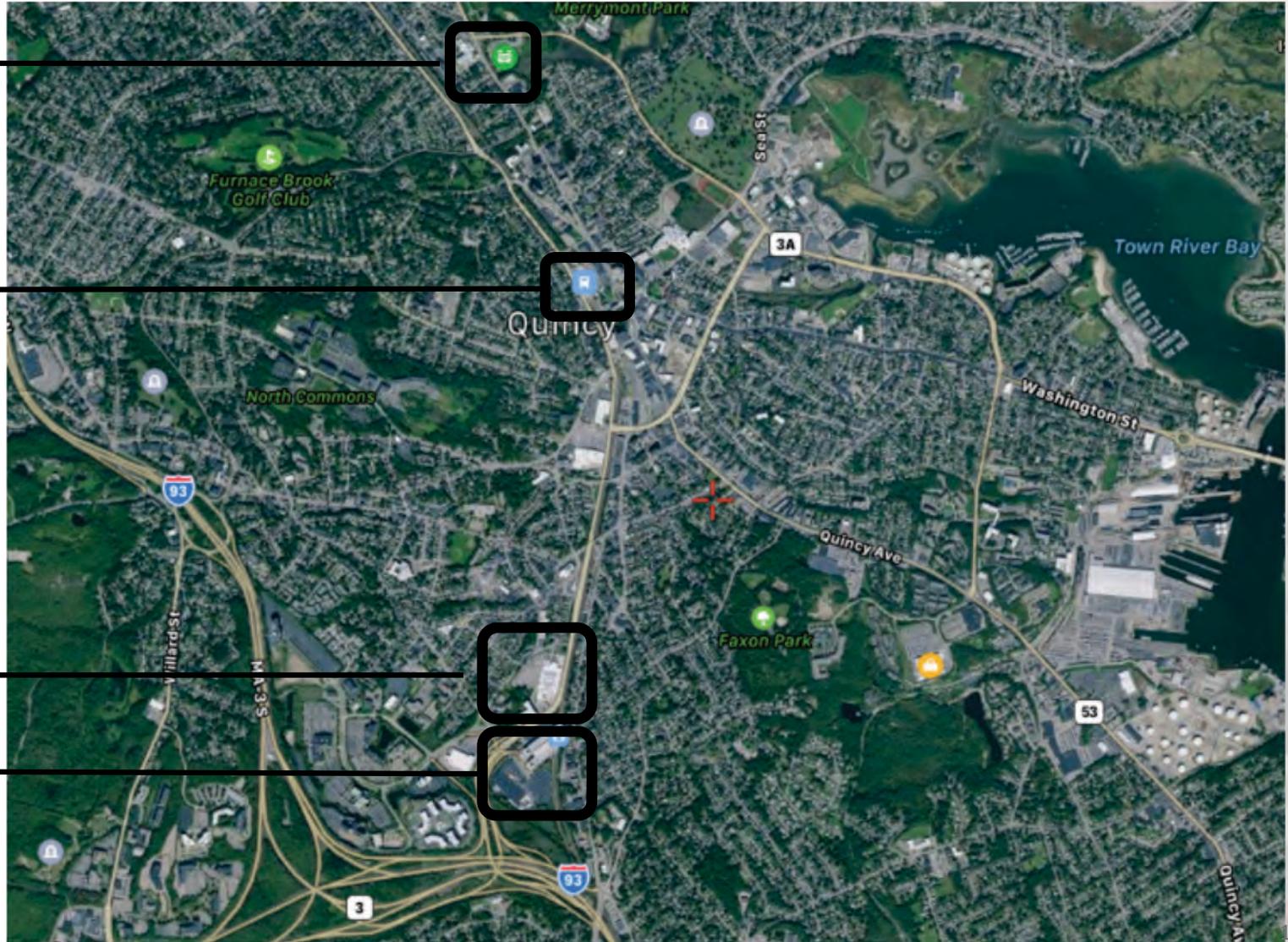
# Location Map

Existing Quincy Bus Facility

Quincy Center Station

New Quincy Bus Facility

Quincy Adams Station



# We heard you – Issues Raised at the Community Meeting (1/29/2020)

- Need for new cleaner and reliable buses to serve Quincy
- Site selection
- Property acquisition
- Pedestrian safety and access
- Interface with neighboring properties
- Traffic congestion
- Noise pollution
- Air pollution
- MBTA project communication



# New Facility Supports Cleaner Buses, Better Service

- Provides *immediate* benefits
  - More reliable, cleaner service with newer, hybrid vehicles
  - Quiet, clean indoor operations
  - Environmentally friendly, resilient design
  - Larger capacity could support additional service for Quincy
- Supports *future* zero-emissions fleet
  - Facility as pre-cursor to procuring battery electric buses
  - Requires technological advancement to meet service needs and conditions



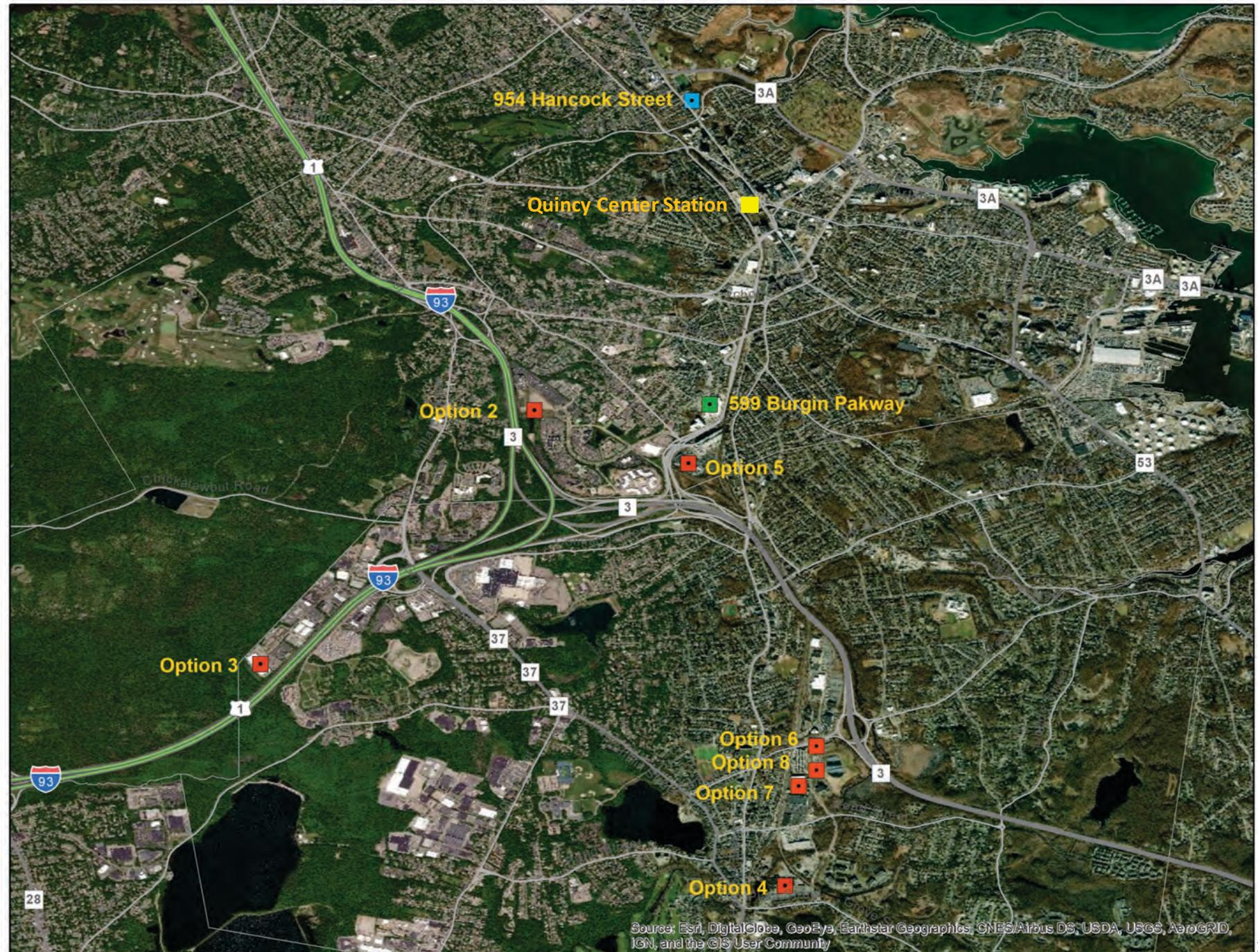
Source: Metro Link

# New Quincy Bus Maintenance Facility

## Site Selection Criteria

Criteria	Description
Active Use	Vacant, available for lease, or for sale
Parcel Size and Shape	+/-10 acres, with potential to accommodate an expanded facility
Location to Bus Routes	Minimizes non-revenue miles for Quincy Routes
Environmental/EJ Concerns	Minimal potential environmental concerns, adverse impacts to EJ communities
Roadway Access	Provides access to the arterial road network
Internal Circulation	Accommodates internal bus circulation, parking, and driveway access
Zoning/Land Use	Consistency with local zoning; consistency with previous land use
Site Development Risk	Potential for high construction/demo costs, site contamination, or other risks

# Potential Sites Evaluated



# Site Selection Matrix

	Option 1 Burgin Parkway Quincy	Option 2 Crown Colony Quincy	Option 3 Wood Rd Braintree	Option 4 Plain St Braintree	Option 5 Centre St Quincy	Option 6 Union St Braintree	Option 7 Ivory St Braintree	Option 8 Sites 6 + 7 Braintree
Active Use	●	●	●	●	○	●	○	○
Parcel Size and Shape	●	○	○	●	●	○	○	○
Location to Bus Routes	●	◐	○	○	●	○	○	○
Environmental/EJ Concerns	◐	◐	◐	◐	◐	◐	◐	◐
Roadway Access	●	○	○	◐	●	○	◐	◐
Internal Circulation	●	○	○	◐	●	○	○	○
Zoning/Land Use	◐	●	●	●	●	●	●	●
Site Development Risk	●	◐	●	○	◐	●	○	○



# Near-Term MBTA Uses will Reactivate Site

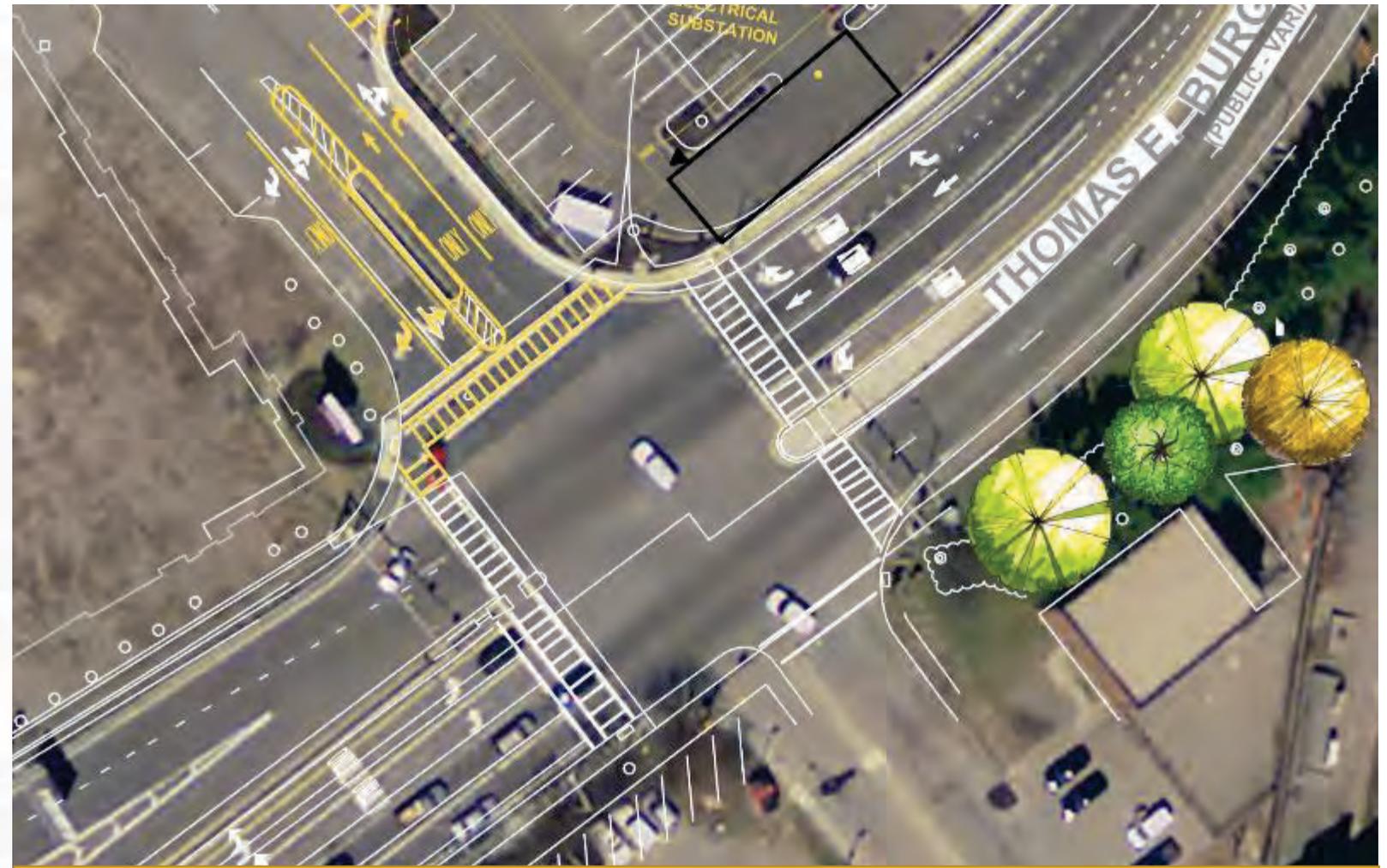


- Indoor storage for spare parts and other equipment
- Overflow commuter parking as needed to expedite Quincy Adams garage reconstruction



# Intersection Improvements @ Burgin Parkway/ Penn St

Signal improvement has been shown to reduce pedestrian-vehicle collisions at intersections by as much as 60%.



- Re-stripe the crosswalks and stop lines
  - New leading pedestrian intervals (LPI)
  - Upgraded signage for pedestrian safety
- Existing Pavement Marking ———
- Proposed Pavement Marking ———

# Key Components of Proposed Project

## Site

- New sidewalk on Burgin Parkway
- New pedestrian access from the Columbia/Plain/Taber Street neighborhood through the site and Grasso Park to Quincy Adams MBTA Station
- 235 parking spaces
- Site design to consider quality and aesthetic in the selection of building materials and incorporate landscaping and greenery where feasible
- Proposed electrical substation sited adjacent Burgin Parkway

## Building

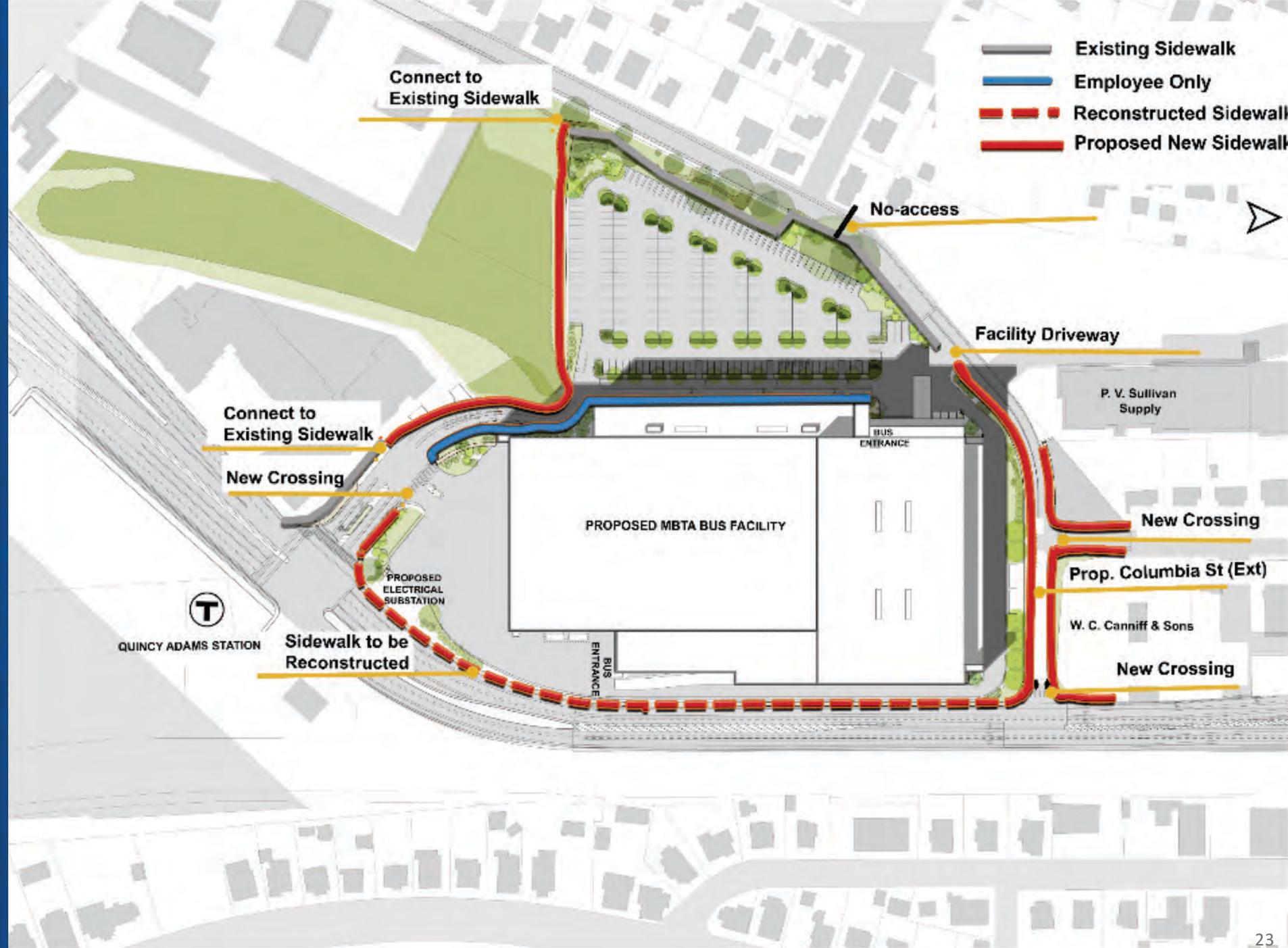
- Capacity to store and maintain up to 135 battery-electric buses and supporting administrative needs
- Additional storage and office space for MBTA employees

## Area

- New signalized intersection on Burgin Parkway/Columbia Street
- Pedestrian improvements at Burgin Parkway/Penn Street

# Site Plan and Pedestrian Access and Safety

- Entry/Exit: Penn Street
- Entry/Exit: Columbia St. Ext.
- Security fencing & gate
- Pedestrian access to MBTA station
- ADA-compliant accessible path of travel
- New sidewalks
- Lighting



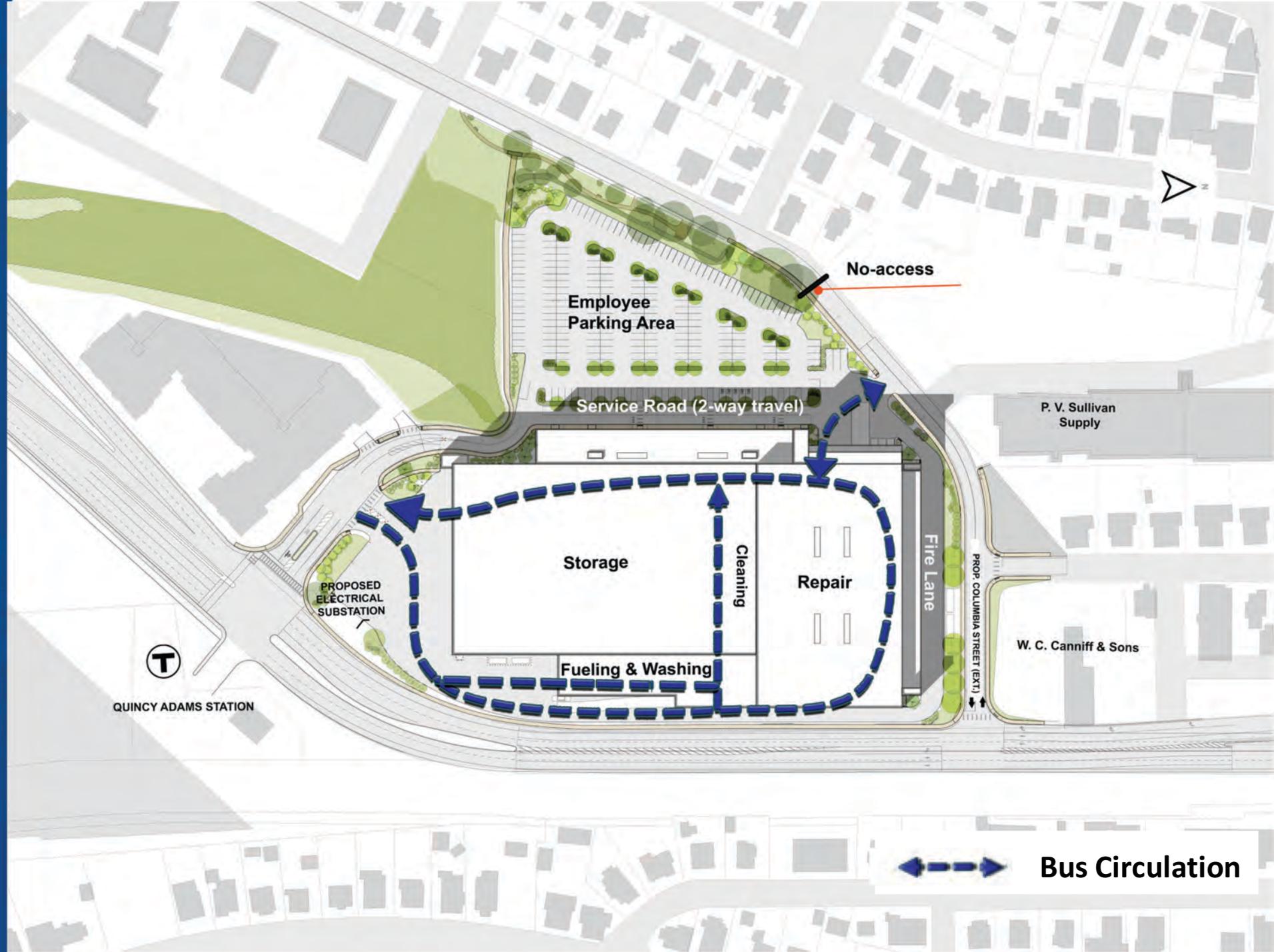
# New Signalized Intersection

- Columbia Street/Thomas Burgin Parkway – **New signal, restricted access**
- Columbia Street/Penn Street – **New intersection, restricted access**
- Crosswalks



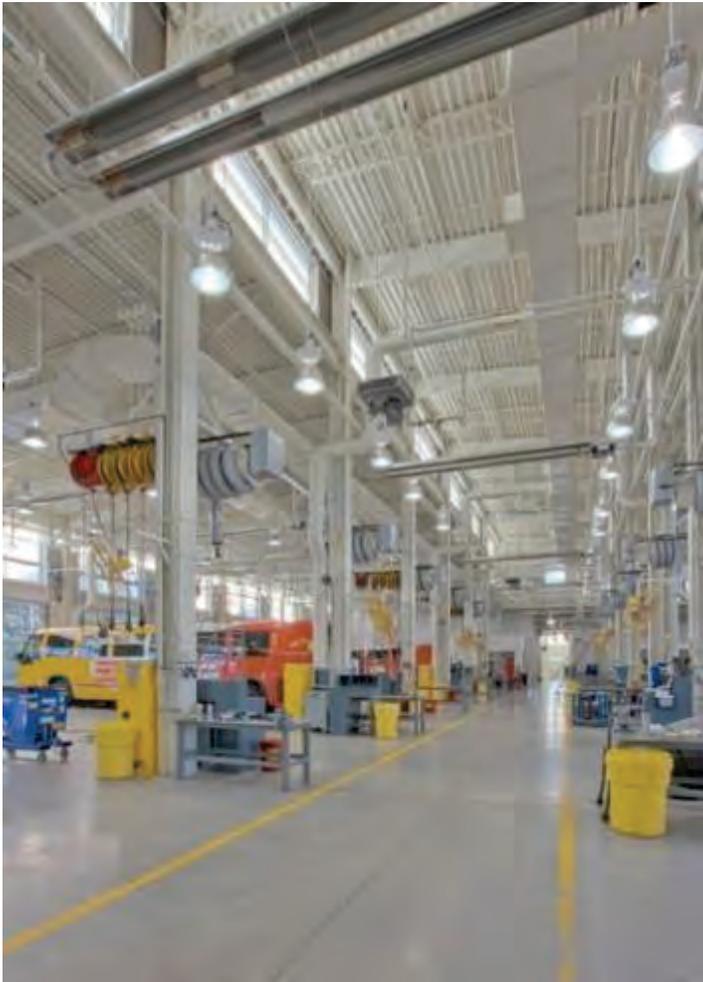
# Quincy Bus Maintenance Facility – Site Plan and Circulation

- **Primary Entry/Exit: Penn Street**
- **Secondary Entry/Exit: Columbia St. Ext.**
- **Security fencing & gate**
- **Pedestrian accessibility**
- **Generator location**



← → Bus Circulation

# Sample Interior Design

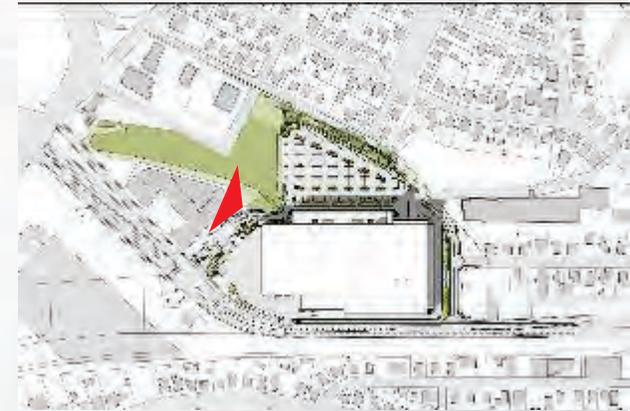


# Views from Grasso Park Walkway



DRAFT Concept for Planning Purposes

# Views from Deco Complex



DRAFT Concept for Planning Purposes

# View from Taber Street



DRAFT Concept for Planning Purposes

# View from Columbia Street



DRAFT Concept for Planning Purposes

# View from Burgin Pkwy South



DRAFT Concept for Planning Purposes

# Traffic Impacts Lower than Prior Use

## Trip Generation Comparison

	Lowe's Home Improvement Store	New Bus Maintenance Facility - All Trips	Bus Trips New Facility
<b>Weekday</b>	<b>AM (7:45-8:45)</b>	<b>AM (7:45-8:45)</b>	<b>AM (7:45-8:45)</b>
Enter	75	161	22
Exit	34	59	0
<b>Total</b>	<b>109</b>	<b>220</b>	<b>22</b>
<b>Weekday</b>	<b>PM (5:00-6:00)</b>	<b>PM (5:00-6:00)</b>	<b>PM (5:00-6:00)</b>
Enter	135	62	4
Exit	150	153	17
<b>Total</b>	<b>285</b>	<b>215</b>	<b>21</b>
<b>Daily</b>	<b>Totals</b>	<b>Totals</b>	<b>Totals</b>
Enter	1,725	1,178	267
Exit	1,725	1,178	267
<b>Total</b>	<b>3,450</b>	<b>2,356</b>	<b>534</b>

- Similar distribution of trips as Lowe's, as it's less peak-focused
- Different peak hour – highest concentration of buses leaving facility is before 7am
- To be conservative this analysis was based on the facility's maximum 135 bus capacity

# Noise and Air Quality Analyses

**Environmental filings will include the findings from these and future analyses.**

## **Noise Results:**

- Noise from buses on Burgin Parkway accessing the site will increase noise levels by only 2 dBA
- Project includes a new electrical substation that will be designed to have **minimal noise impacts**

## **Air Quality Results:**

- **Air quality emissions would not result in any exceedance of the NAAQS; no direct Project air quality mitigation is necessary**
- Construction air quality impacts (fugitive road dust and engine exhaust emissions) will be controlled by implementing best practice methods such as watering of construction areas, covering dust-producing materials during transport, maintaining equipment, minimizing idle time, etc.

# Next Steps

- Complete state and federal environmental review for the bus maintenance facility
- Continue preliminary design process
- Continue stakeholder engagement and communication – visit [mbta.com/quincybus](http://mbta.com/quincybus) for updates

# Q/A

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