

# Massachusetts Bay Transportation Authority

## East Street Bridge Replacement Project Request for B91CN15 Construction Contract Approval

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MBTA Board of Directors

Christopher E. Brennan, P.E., Chief of Capital Delivery

April 25, 2024

# Contract Action

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- Today's action is to request the approval from the MBTA Board of Directors to authorize the MBTA General Manager or his designee to award and execute MBTA Construction Contract B91CN15 – East Street Bridge Replacement project to P. Gioioso & Sons, Inc. in the amount of \$16,469,932



# Project Goals

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- Replace the existing bridge with a long-design-life structure that meets the current design standards.
- Improve the Safety on and below the bridge
  - Increased vertical clearance will minimize the over-height vehicle collisions
  - The widened roadway section under the bridge will include new sidewalks along East Street for pedestrian safety
- Improve reliability
  - Reduces Commuter Rail service interruptions due to bridge collisions.
  - Reduces the East St. Traffic closures and town emergency personnel responses to the collisions.
- Project DBE goal is 20%
  - Low bidder DBE participation meets the goal



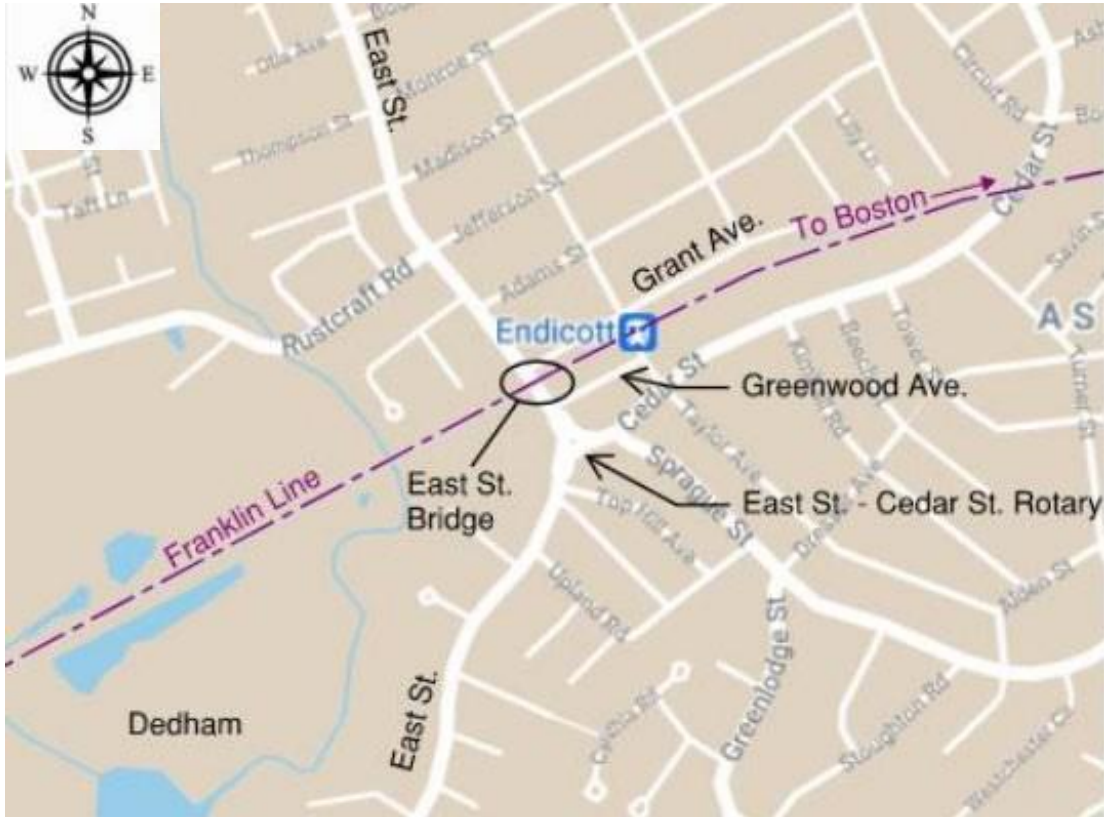
# Project Scope

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- Construction:
  - Bridge Construction:
    - Installation of drilled micropiles, precast concrete substructure, approach slabs, .
    - Erection of proposed steel superstructure on temporary supports adjacent to existing bridge.
    - Demolition of existing superstructure and the existing substructure.
    - Installation of proposed superstructure to final position using Accelerated Bridge Construction (ABC) methods in a limited 52-hour double track outage period.
    - Installation of proposed cast-in-place concrete retaining wall facing.
  - Track Construction:
    - Removal of existing tracks (ballast, ties and running rails) at bridge and on approaches.
    - Installation of new ballast, ties, running rails and emergency guard rails.
  - Roadway Construction:
    - Constructing new roadway and sidewalks with associated driveway modifications.
    - Relocation of overhead and underground utilities.
    - Drainage improvement/modifications.



# Project Location and Existing Conditions



Franklin Line over East St. in Dedham, MA



East St. Bridge – West Elevation



# Project New Proposed Conditions



Rendering of the proposed bridge



# Project Timeline

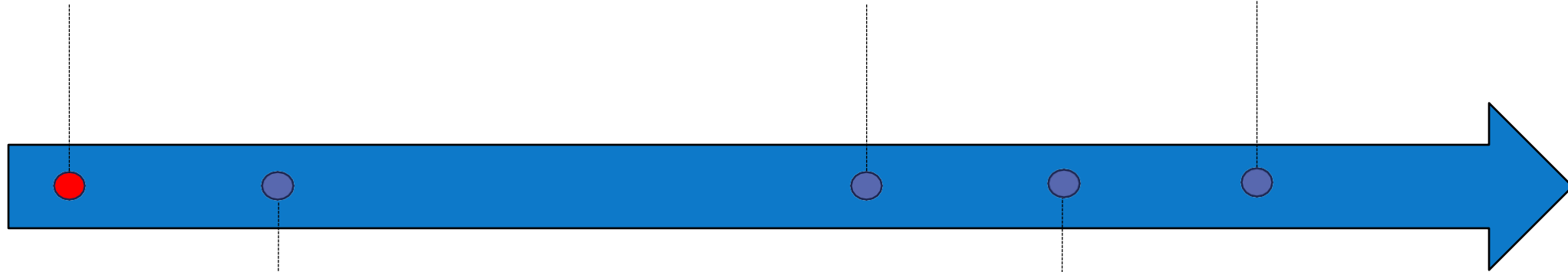
**April 25, 2024**  
Board Action

**June 3, 2024**  
Notice to Proceed

**May 20, 2026**  
Substantial Completion

**August 24, 2026**  
Final Completion

**December 31, 2026**  
Project Closeout



# Board action

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## VOTE:

That the MBTA Board of Directors hereby authorizes the General Manager or his designee to execute MBTA Construction Contract B91CN15 – East Street Bridge Replacement Project to P. Gioioso & Sons, Inc. in the amount of \$16,469,932, in a form approved by the General Counsel, and to execute any necessary or ancillary documents in the name of and on behalf of the Massachusetts Bay Transportation Authority to effectuate this Agreement.





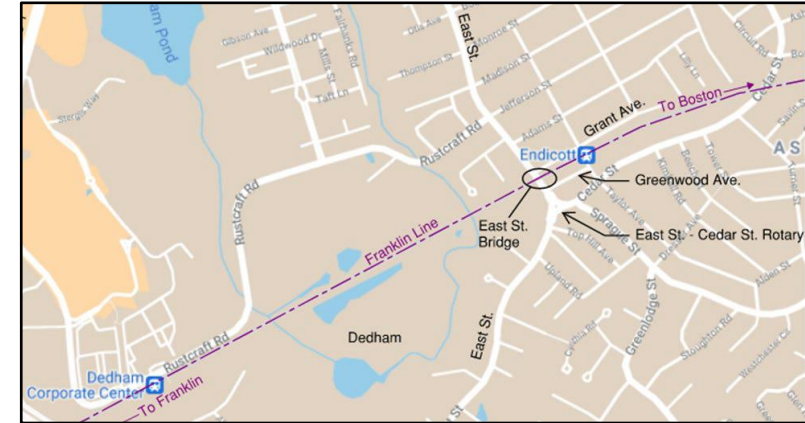
# Appendix

## Project Scope Details



# Project Overview

- Improve safety on and below the bridge
  - Minimize over-height vehicle collisions
  - Eliminate “bottleneck” and provide sidewalks under the bridge
  - Allow for better traffic flow on East St.
- Improve reliability by reducing:
  - East St. traffic closures due to bridge collisions
  - Collisions that require Town emergency personnel response
  - Commuter Rail service interruptions
- Estimated project cost: \$23.1M



*Bridge location is between Endicott and Dedham Corporate Center stations.*



*Looking west on East St.*



# Safety Concerns

- Recent bridge strikes
  - September 26: hit and run that caused serious damage, including track misalignment, bridge off bearings, and impact to girders. This resulted in a roadway closure and safety concerns for the railway.
  - August 16: hit by construction equipment.
  - July 29: hit by over height tractor trailer.
  - 11 major collisions between July 2019 and September 2023.
- Need to increase vertical clearance
  - Maximum legal truck height under Massachusetts law: 13'-6"
  - Existing bridge is 12'-3"
  - Proposed design clearance: 14'-0"



# Project Funding Source

- State funding grant R21A30 that will be federalized in the future
- DBE – 20% goal

| <b>Cost Category</b>        | <b>Budget</b>           |
|-----------------------------|-------------------------|
| Professional Services (CPS) | \$ 500,000.00           |
| Construction                | \$ 16,469,932.00        |
| External Force Account      | \$ 1,000,613.00         |
| Internal Force Account      | \$ 0.00                 |
| Field Inspection            | \$ 1,135,013.00         |
| Project Administration      | \$ 1,854,090.00         |
| Real Estate                 | \$ 500,000.00           |
| Other (e.g. Travel)         | \$ 5,000.00             |
| Unallocated Contingency     | \$ 1,686,032.00         |
| <b>TOTAL</b>                | <b>\$ 23,150,680.00</b> |



# September 26 Incident



# Existing Condition – New Clearance Signs

- Improve awareness on the Existing Bridge vertical clearance:
  - VMS boards installed on both approaches on 05/23/23
  - New signs installed on 08/23-25/23 for increased visibility

