





Governor

**Maura Healey** 

Lieutenant Governor

**Kim Driscoll** 

**Energy and Environmental Secretary** 

Rebecca Tepper

Department of Conservation and Recreation Commissioner

**Douglas Rice** 



### **DCR Mission Statement**

To protect, promote and enhance our commonwealth of natural, cultural and recreational resources for the well-being of all.



### Meeting Logistics

- Two ways to ask questions during the Q&A portion of the meeting:
  - Raise your hand
  - Use chat feature
- You will have the opportunity to submit comments until Friday, April 14<sup>th</sup> at:
  - DCR Public Comments
     https://www.mass.gov/forms/dcr-public-comments
- Please note that this meeting will be recorded; the recording will be a public record



### Meeting Purpose

- Introduce the Project and Team
  - Stella, Shanta, Michael
- Summarize Project Goals
- Introduce Our Design Process
  - Site Observations
  - Design Guidelines and Regulations
  - Project Elements: Bridge and Landings
- Listen to <u>YOU</u>, the public
- Review Next Steps



Special recognition to HUBLUV and Conine Family Foundation for the design grant





### **Neponset River Greenway Development**



PEDESTRIAN BRIDGE KICKOFF

**NEPONSET - BLUE HILLS** 



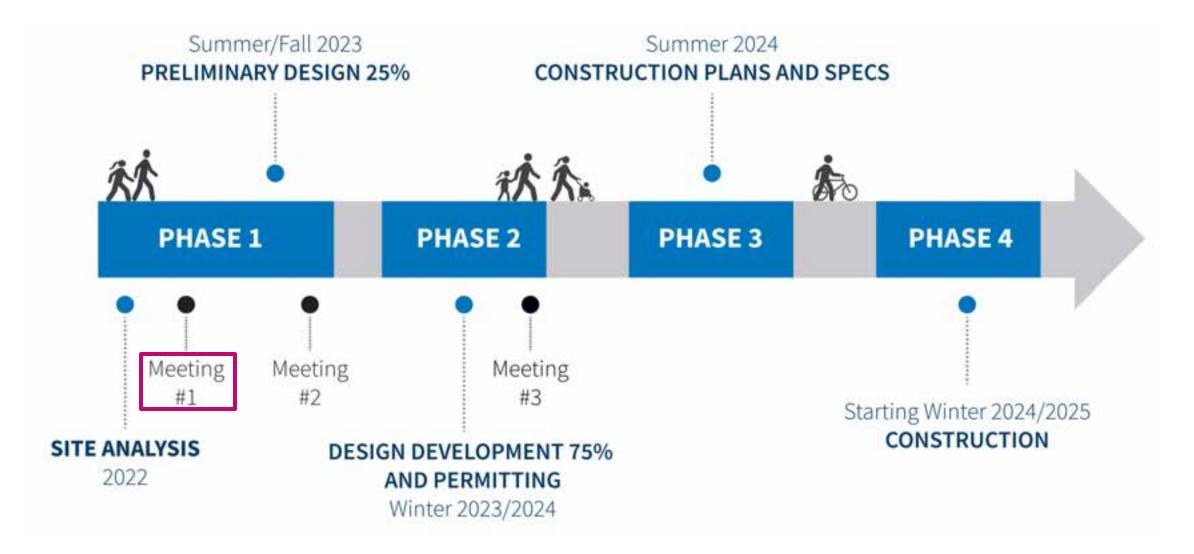
### Project Goals

- Enhance community connectivity
- Improve access to recreation and healthy living for all
- Increase safety and convenience
- Enhance and protect the natural and cultural resources
- Contribute to climate resiliency
- Develop a constructible and maintainable facility



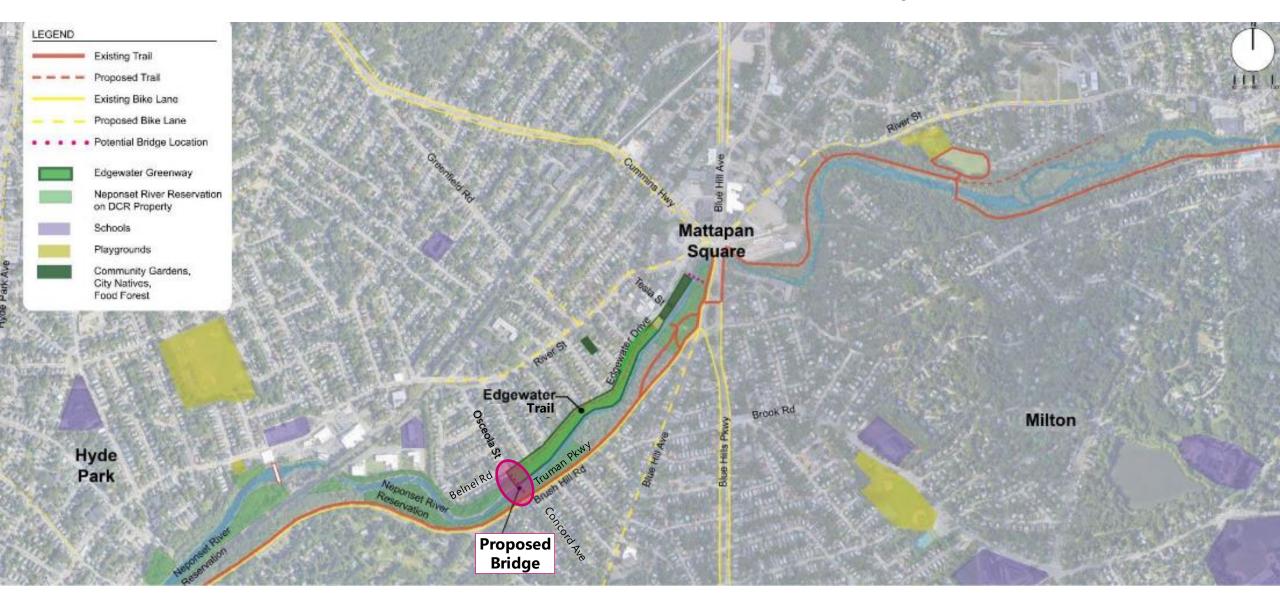


### Project Schedule



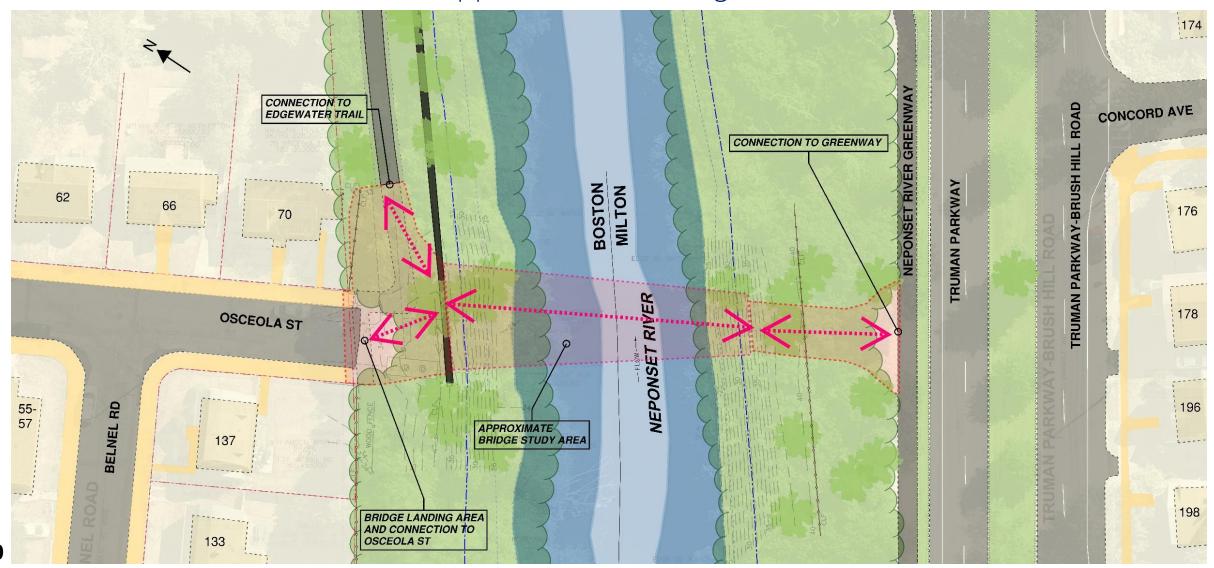


### Project Locus





#### Site Plan – Connections and Approximate Crossing Location



#### Site Photos - Milton



Proposed location of bridge entrance, Truman Pkwy



Neponset River Greenway, looking East



Neponset River near prop. Bridge crossing location



Neponset River Greenway, looking West



Photo map

#### Site Photos – Neponset River



Mattapan bank from Neponset River



Neponset River upstream

12



Milton bank from Neponset River



Neponset River downstream



Photo map

#### Site Photos – Mattapan



End of Osceola Street, proposed bridge entrance



Edgewater Trail connection location, looking East



View of river over historic wall, near prop. bridge



Looking west from end of Osceola Street



Photo map



## Bridge Design Guidelines and Regulations

- ADA Accessibility: Americans with Disabilities Act (ADA), AAB
  - Standards for Accessible Design
- MassDOT: Massachusetts Department of Transportation
  - Bridge Design Manual
  - Project Development & Design Guidelines (PDDG) Complete Streets
- AASHTO: American Association of Highway and Transportation Officials (AASHTO)
  - Guide Specifications for Design of Pedestrian Bridges
  - LRFD Bridge Design Specifications
  - Guide for the Development of Bicycle Facilities
- DCR Trails Guidelines and Best Practices Manual
- City of Boston Standards (Public Works Dept Roadway Design Standards, BWSC)
- U.S. Forest Service Trail Accessibility Guidelines (FSTAG)
- International Building Code (IBC)
- State, Local, and Federal Laws and Permit Requirements



# Bridge Design Loading





**Pedestrian / Cyclist** 

 $90 \, \text{LB/FT}^2$ 

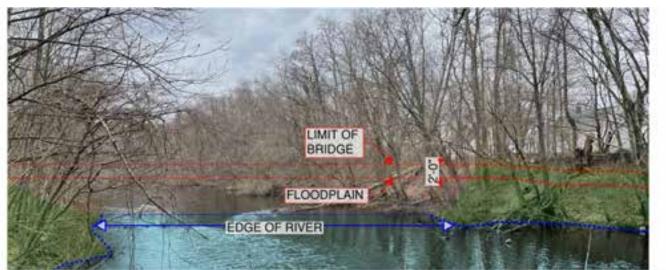
#### **Emergency Vehicle**

"H10"

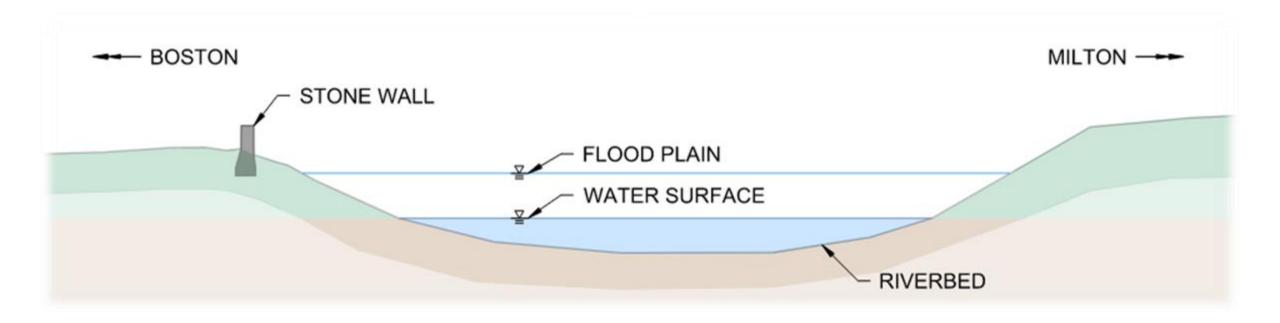
Front Axle = 4,000 LB Back Axle = 16,000 LB





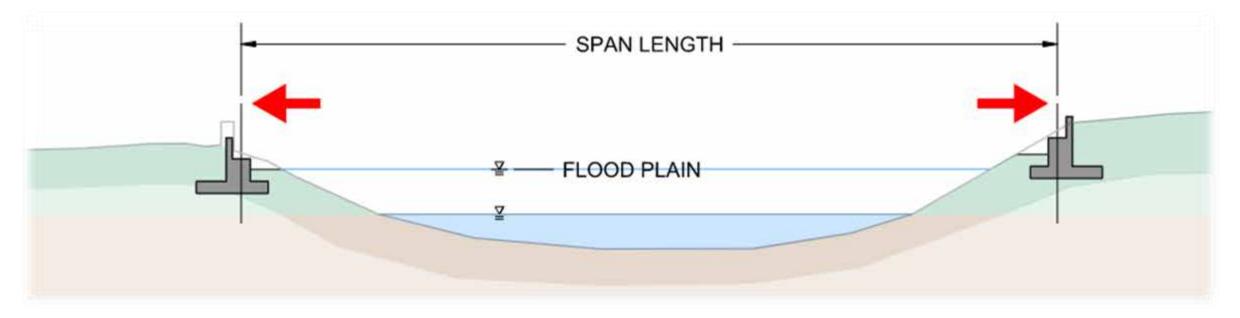






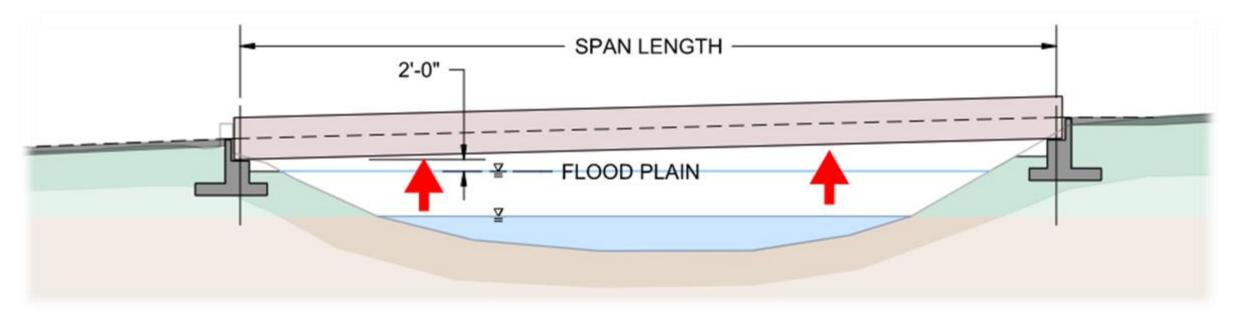


#### **Constraints - Horizontal**



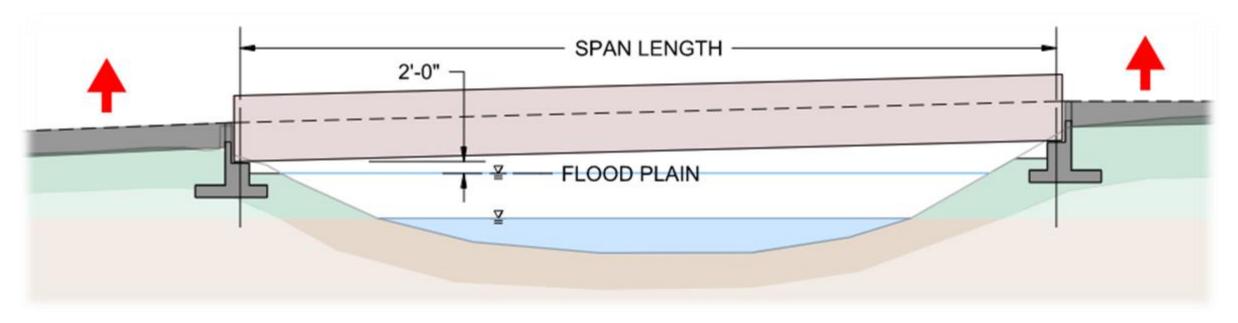


#### **Constraints - Vertical**





#### **Constraints - Vertical**



Impacts of a deeper structure on profile grade

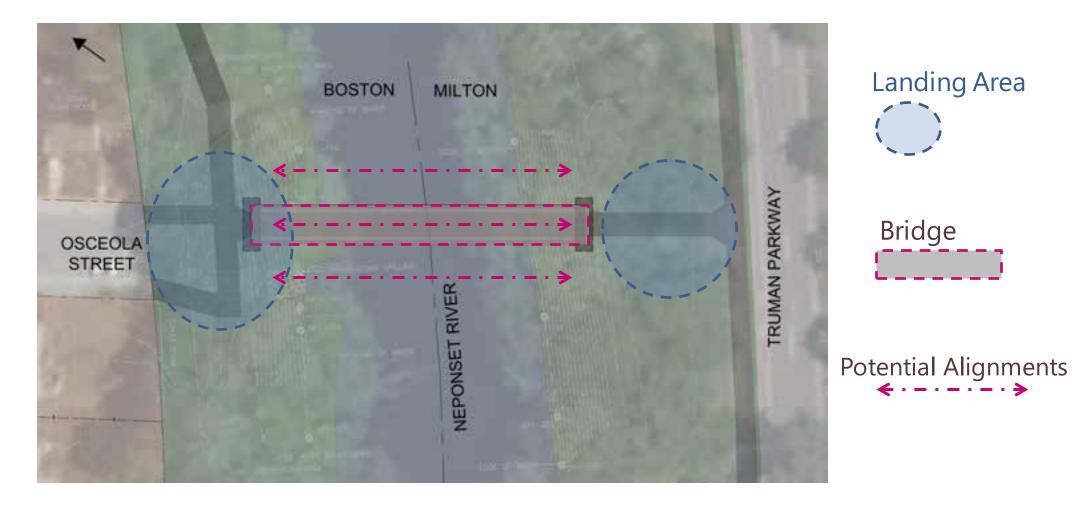


#### **Alignment - Connections**





**Alignment – Square (perpendicular to river)** 





# Other Bridge Considerations

- Deck Width
- Right of Way (and adjacency to private properties)
- Profile Grades (ADA compliant slopes, retaining walls)
- Constructability
- Maintainability
- Safety and Security
- Vehicular Restrictions, Emergency Vehicle Access
- Bridge Structure Types and Aesthetics



# Bridge Examples – Trusses





Thompson Br - Watertown

Bass River Bridge – Yarmouth, 14ft width, concrete deck



Bridge Structure Types - Truss





25 • Schematic diagrams only, not proposed bridge type or scale



## Bridge Examples – Through-Plate Girder (TPG)



- Blackstone River Greenway (above, right-bottom)
- Columbia Greenway (right-top)







Bridge Structure Types - TPG





**27** • Schematic diagrams only, not proposed bridge type or scale



# Bridge Examples - Arches



Blue Heron Bridge - Newton



Harvest River Bridge – Boston-Milton



Bridge Structure Types - Arch





29 • Schematic diagrams only, not proposed bridge type or scale



### Resource and Permitting Considerations

#### **Environmental and Water Resources**

- Wetlands Protection Act Riverfront Area
- Chapter 91 Navigable Waterways License
- Stormwater Management
- Flood Plain

#### City of Boston

- City of Boston PIC (Public Improvement Commission)
- Utility Coordination public and private, underground and overhead

#### **Cultural**

Refer to next slide





### Archaeology Coordination

#### <u>Status</u>

- Consultation initiated October 2022
- State Archaeologist permit for intensive-level survey by Gray & Pape issued November 2022
- Intensive-level survey with test pits in progress

#### **Consultation**

- Massachusetts Historical Commission/ State Archaeologist
- Boston Landmarks Commission/City of Boston Archaeologist
- Milton Historical Commission
- Mashpee Wampanoag Tribe
- Wampanoag Tribe of Gay Head (Aquinnah)
- Massachusett Tribe at Ponkapoag
- Massachusetts Commission on Indian Affairs



S'W'ly, near sta 156+00--Nepenset River F.C.--0296--0/28/G7 Photo Maley 0296--145



## Bridge Entrances and Landscaping Considerations

#### **Bridge Landings and Connections**

- Visibility and safety
- ADA accessibility
- Emergency access to bridge
- Signage (interpretive and wayfinding)
- Lighting
- Plantings
- Site Amenities and Materials
- Match / coordinated with Bridge Materials

#### Connection to Edgewater Trail and Osceola Street in Boston

- Elevation change to bridge
- Create a stopping/ gathering spot? Or Simple connection?
- Edgewater Trail Trailhead

#### Connection to Neponset River Greenway in Milton

- Connection point along Greenway
- Intersection details. Gateway?







# Bridge Entrances and Landscaping













#### DCR "Kit of Parts"—Amenities





Rustic granite Seat

Outdoor Game Table







Plaza with Signs and Seat Wall

Shurcliff Bench

Trash Receptacle

**Drinking Fountian** 

### dcr & MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION







### DCR "Kit of Parts"—Signage



Granite Pier—Trailhead Marker





### Additional Information

#### For more information:

www.mass.gov/dcr/past-public-meetings

#### If you have comments or suggestions on this project:

Submit online: www.mass.gov/dcr/public-comment

Deadline: April 14, 2023

<u>Note</u>: Public comments submitted to DCR may be posted on the DCR website in their entirety, and no information, including contact information, will be redacted.

**If you wish to subscribe to a DCR general information or project-related listserv:** contact DCR's Office of Community Relations at 617-626-4973 or <a href="mass.parks@mass.gov">Mass.Parks@mass.gov</a>