

# Quinobequin Road and Trail Improvements Phase 1: Concept Design

Stakeholder Listening Session







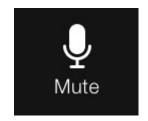
Thursday, June 25, 2020, 6:30 p.m.–8:00 p.m. Virtual Meeting

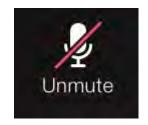


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Meeting Logistics – ZOOM Platform









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Governor

Charles D. Baker

Lieutenant Governor

Karyn E. Polito

**Energy and Environmental Secretary** 

**Katie Theoharides** 

Department of Conservation and Recreation Commissioner

**Jim Montgomery** 





#### **DCR Mission Statement**

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



### Meeting Purpose

- Introduce the Project and the Project Team
- Summarize Project Goals
- Introduce Our Design Process
  - Design Guidelines and Regulations
  - Site Observations
  - Project Elements
- Listen to Stakeholder Comments
- Review the Project Schedule and Next Steps



## Project Goals

- Improve safety for drivers, cyclists, and walkers
- Create an accessible recreational path along the river
- Improve the ecosystem function of the Charles River Reservation
- Preserve the scenic character of the roadway and parkland, while accommodating both safety and access



#### Project Team

DCR

CONSULTANT TEAM

Principal-in-Charge

Tracie Lenhardt, PE, ENV SP

**Project Manager** 

Pete Sorensen, PE, ENV SP

QA/QC

Susan Kremer, PE, ENV SP

**Deputy Project Manager** 

Margot Schoenfelder, PE, AICP

Structural Engineer

Shanta Keller, PE, ENV SP

Traffic

Val Lenhardt, PE, IMSA III Dave Greenberg, PE, IMSA III

**Public Outreach** 

Geoffrey Morrison-Logan

**Cultural Resources** 

Nicole Benjamin-Ma

Environmental

Dan Cannata

Stormwater

Eric Monkiewicz, PE, LEED AP, ENV SP

Landscape Architecture/ Trail Signage

IBI Placemaking (formerly CRJA Landscape Architects) Rick Williams, RLA

Jeff Bittenbender, RLA

Survey

Craig Robertson

Construction

Jack Lydon, PE

**Geotechnical Engineer** 

Lahlaf Geotechnical Consulting, Inc. (LGCI)

Lighting

Thompson Engineering Company, Inc.



#### Project Locus





### Project Scope

#### Phase 1—Concept Design

- Topographical survey
  - Wetland delineation
  - Resource areas
  - Utilities
- Existing conditions inventory
  - Draft traffic technical memorandum
    - » Traffic counts, speed, classification
    - » Crash summary and analysis
    - » Intersection analysis
  - Meet with DCR Planning and Operations staff to understand maintenance activities and challenges
  - Meet with municipal officials, stakeholder groups and/ or abutters to understand community use and goals for the site
- Site analysis plan
  - Plan that diagrams roadway, utilities, natural conditions, topography, existing vegetation as well as the visitor experience of the site, including entry points, circulation and accessibility, views and cultural landmarks
- Meet with DCR Project Team for a design workshop
  - Develop a minimum of 3 design Alternatives
- Conceptual design development
- Public Presentation
  - Present the revised Alternatives and solicit comment and ideas from those in attendance
- Plan Submittal: Revise the Preferred Plan and supporting documents according to DCR direction



## Design Guidelines and Regulations

- DCR Historic Preservation Treatment Guidelines
- MassDOT 2006 Project Development & Design Guidelines
  - Complete Streets
- American Association of Highway and Transportation Officials (AASHTO)
  - Roadside Design Guide
  - Geometric Design of Highways and Streets (2018)
- Manual on Uniform Traffic Control Devices (MUTCD)
- Federal and State Separated Bike Lane Planning and Design Guide
- 2010 ADA Standards for Accessible Design
- 521 CMR Architectural Access Board Regulations
- U.S. Forest Service Trail Accessibility Guidelines (FSTAG)



# Potential Permitting and Regulatory Requirements

#### **Potential Permits**

- Wetlands Protection Act
- Newton Floodplain Ordinance
- USACE 404 Permit
- MWRA 8M Permit
- Mass Historic Commission PNF

#### Resource Areas

- Wetlands
- Riverfront
- Bank
- Bordering land subject to flooding
- Floodplain
- 100 foot buffer zone

#### Stormwater Management

Comply with Massachusetts Stormwater Standards





#### Site Observations

#### **Quinobequin Road:**

- 1.4 mile 2-way Minor Arterial
- Average roadway width of 24'
- Approximately 2,500 vehicles per day
- 25 mph posted speed
- Average travel speed 30mph+(observed)
- Reported vehicle accidents last 5 years (March 2015- June 2020)
  - Quinobequin Rd total of 6 Accidents at various locations (1.2 /yr.)
  - Route 9 Ramps and underpass total of 40 (Average 8/yr)\*
  - \* State classified high accident location
- 11 intersecting streets
- Substandard Guardrails
- Limited site distance at curves





#### Site Observations

#### Pedestrian and Bicycle Accommodations

- Primary and secondary walking trails do not comply with AAB and ADA
  - Narrow width
  - Areas of steep grades
  - Non accessible surface with roots and obstruction
- Intermittent asphalt sidewalk on residential side
  - Radcliff Rd to Larkspur Rd—1150'
  - 400' section between Irwin and Carlton
  - Varick Rd to project limits—650'
- No ADA compliant wheelchair ramps
- No existing crosswalks or formal trailheads
- No bicycle accommodations
  - No shoulders, sharrows or signage





### Site Observations

#### <u>Drainage</u>

- Country drainage with limited drainage structures
- Areas of flooding concern between Carlton Rd and Gould Rd
- Erosion on the edge of road from drainage and parking
- 18 drainage outfalls/swales
- 7 locations were water course crosses existingfoot path



### dcr & MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Permeable resin aggregate



Stabilized stone dust

#### DCR "Kit of Parts"—Surfaces



StaLok aggregate—high traffic/slope



Asphalt pavement

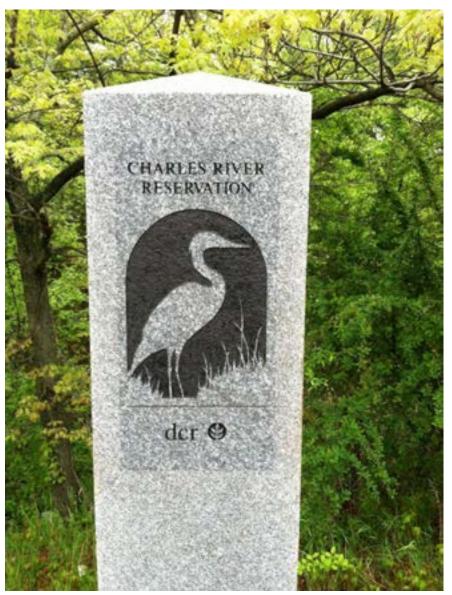
### dcr & MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

Shurcliff Bench



**Interpretive Boulders** 

#### DCR "Kit of Parts"—Amenities



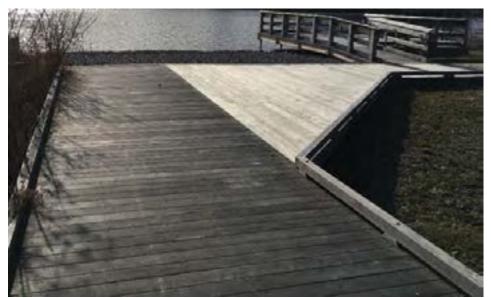
Granite Pier—Trailhead Marker



#### DCR "Kit of Parts"—Boardwalks and Overlooks



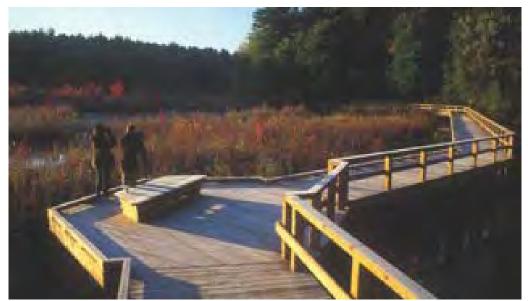
Timber boardwalk with rails



TIMBER boardwalk AND overlook



Timber curb boardwalk



Viewing platforms

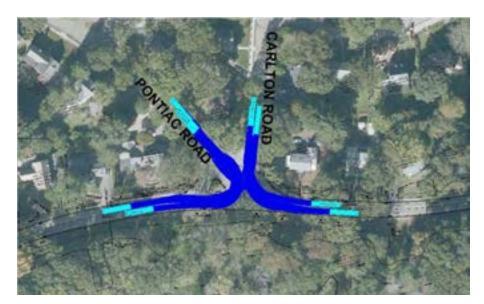


#### DCR "Kit of Parts"—Stormwater Treatment



Wetland Plant Plugs Vegetated Swale—Install Vegetated Swale—Year 2

# 



Consider pavement reduction were possible



Pedestrian crossing



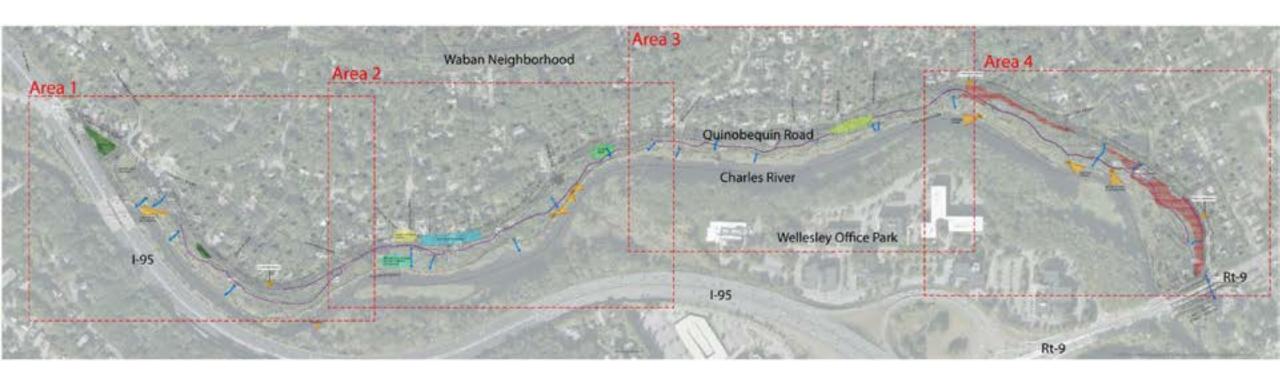
Steel-backed wood guardrail—front



Steel-backed wood guardrail—back



#### Site Key Plan





#### Area 1—Observations





#### Area 1—Site Photos





#### Area 2—Observations





#### Area 2—Site Photos















#### Area 3—Observations





#### Area 3 – Site Photos







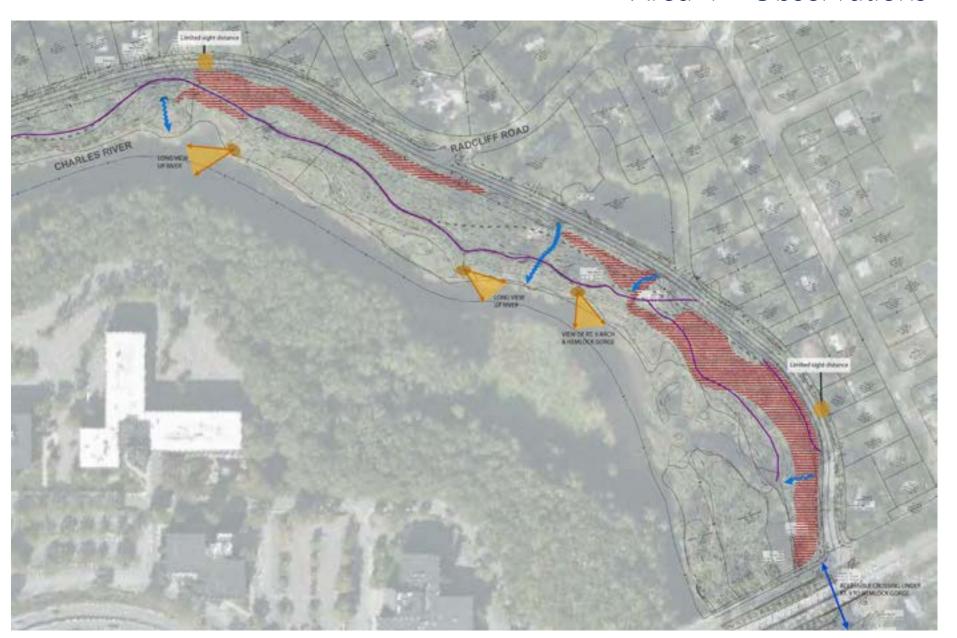








#### Area 4—Observations





#### Area 4——Site Photos



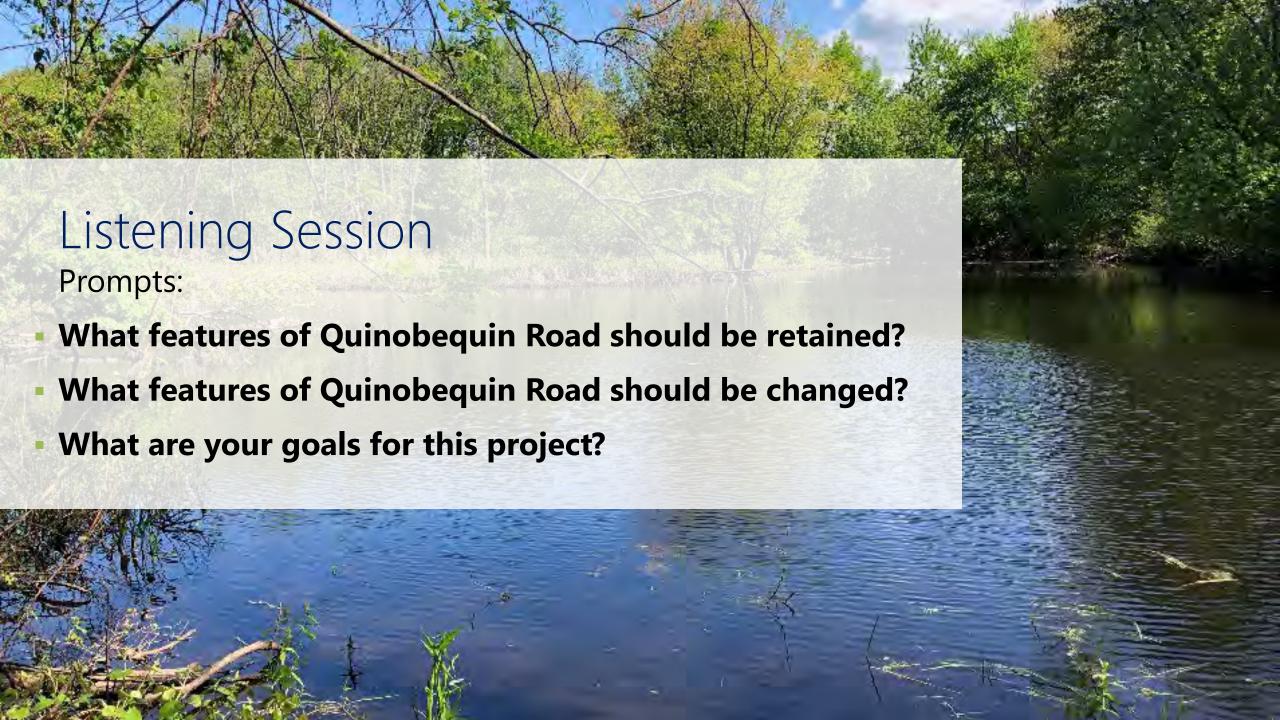










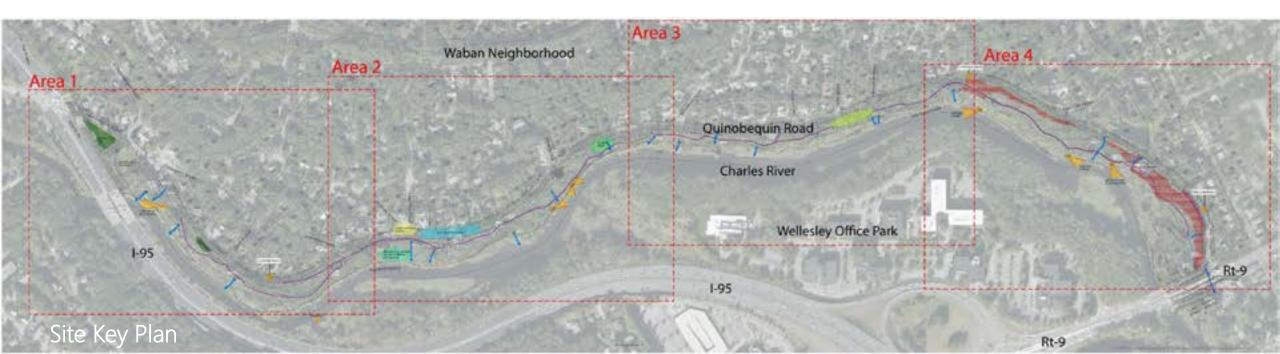




# Listening Session

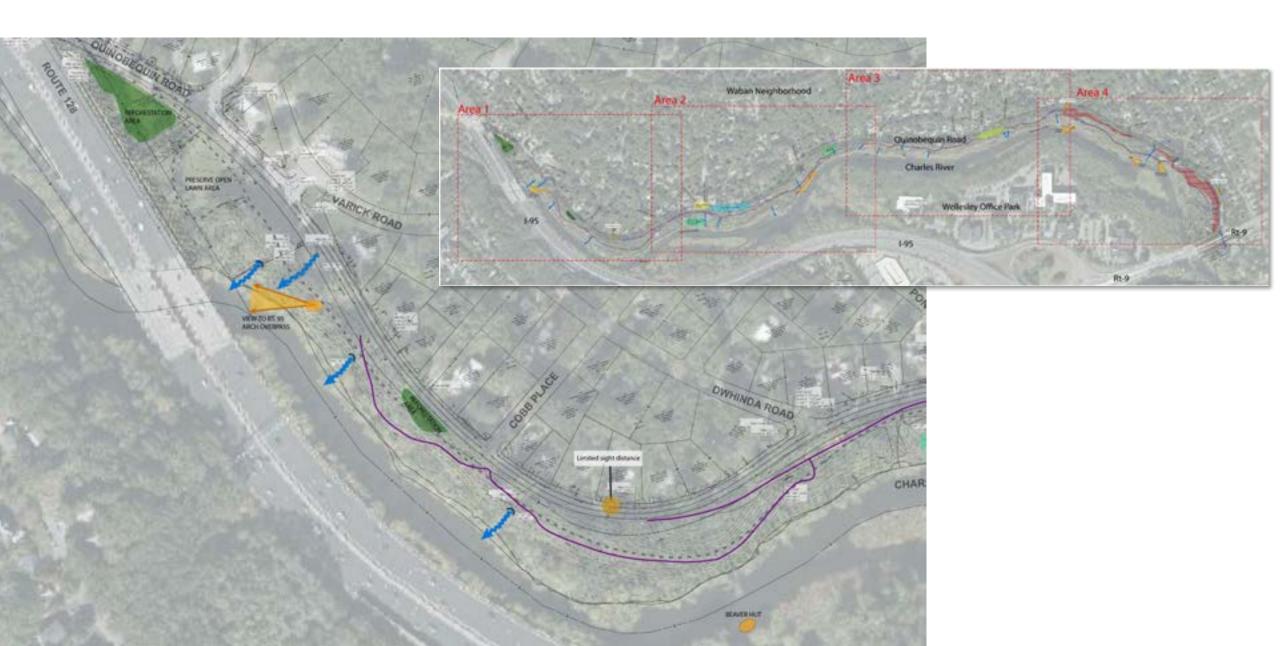
#### Prompts:

- What features of Quinobequin Road should be retained?
- What features of Quinobequin Road should be changed?
- What are your goals for this project?





#### Area 1—Observations



#### Area 2—Observations

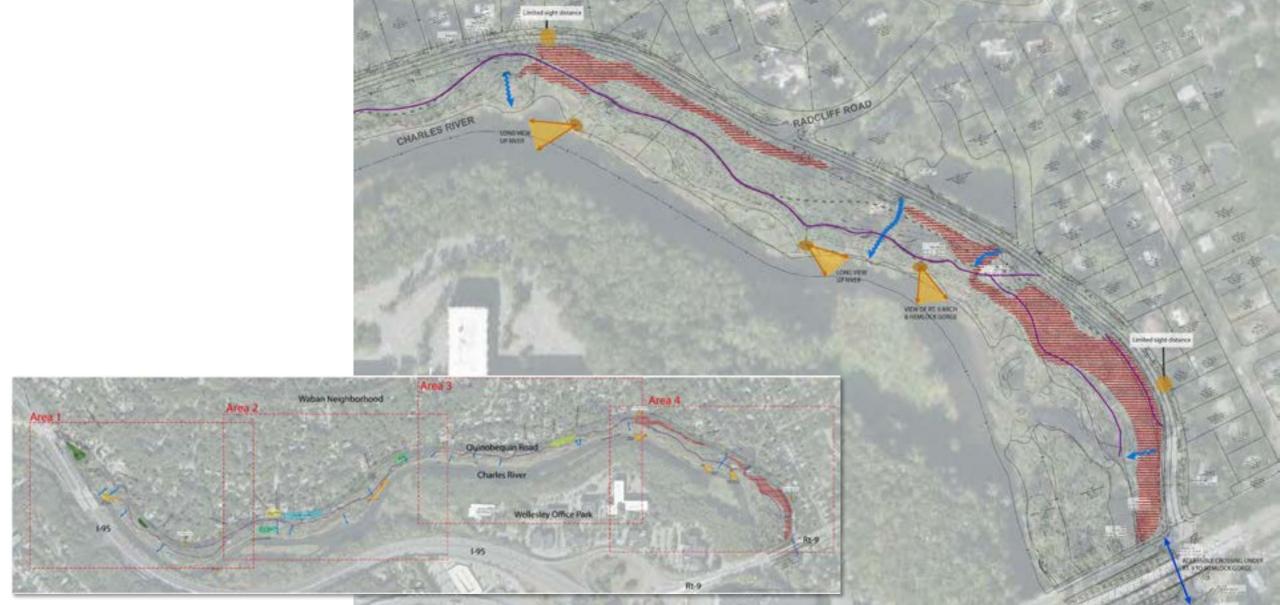




#### Area 3—Observations



#### Area 4—Observations





Project Schedule

|                                     |   | APRIL |   |   | MAY |   |   |   | JUNE |   |   |   | JULY |   |   |   | AUGUST |   |   |   | SEPTEMBER  1 2 3 4 |   |   |  |
|-------------------------------------|---|-------|---|---|-----|---|---|---|------|---|---|---|------|---|---|---|--------|---|---|---|--------------------|---|---|--|
| Phase and Tasks                     | 1 | 2     | 3 | 4 | 1   | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1      | 2 | 3 | 4 | 1                  | 2 | 3 |  |
| Phase 1: Concept Design             |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Notice to proceed                   |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Site Walk w/ Project Team           |   |       |   |   |     | • |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Topographical Survey                |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Existing Conditions Inventory       |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Site Analysis                       |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Sketch Alternatives Design Workshop |   |       |   |   |     |   |   | • |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Shareholder Listening Session       |   |       |   |   |     |   |   |   |      |   | * |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Concept Plan Alternatives           |   |       |   |   |     |   |   |   |      |   | 4 | 1 |      |   |   |   |        |   |   |   |                    |   |   |  |
| Public Presentation                 |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   | •      |   |   |   |                    |   |   |  |
| Preferred Plan                      |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |
| Plan Submittal                      |   |       |   |   |     |   |   |   |      |   |   |   |      |   |   |   |        |   |   |   |                    |   |   |  |

- Meeting/Presentation
- ★ Tonights Meeting
- Deliverable
- Consultant Design/ Production/ CoonStruction
- DCR Review/ Approval/ Coordination



### 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: Friday, July 17, 2020

<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>