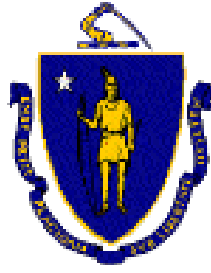


Memorial Drive Phase III 25% Design Public Meeting



**June 30, 2022 – 6:00 p.m. to 7:30 p.m.
Virtual Meeting**



Commonwealth of Massachusetts

Governor

Charles D. Baker

Lieutenant Governor

Karyn E. Polito

Energy and Environmental Secretary

Bethany Card

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

- Our speakers will go through the presentation, asking everyone else to be muted.
- You will have the opportunity to submit comments over the course of the next three weeks at: DCR Public Comments
<https://www.mass.gov/forms/dcr-public-comments>.
- Two ways to ask questions during the meeting
 - Use chat feature
 - Raise your hand using the Zoom function, and you will be given permissions to unmute and speak.
- Please note that this public information meeting will be recorded; the recording will be a public record.

Agenda

- Introduction of Project
- Getting to Today
- Project Background / Goals
- Typical Sections
- Revised 25% Design
- Landscape Design
- Stormwater Improvements
- Permits/Approvals
- Questions and Comments



Introduction of Project

- Project enhances safety and the path-users' experience, while improving water quality and habitat in the historic Charles River Basin.
- DCR Project that serves a larger region and is designed for a variety of users.
- Advances goals of the DCR Charles River Master Plan, DCR Historic Parkway Preservation Guidelines, DCR Parkways Master Plan.



Introduction to the Team

- Project Lead: Department of Conservation and Recreation
- Consultant Team:
 - Stantec Consulting Services Inc.: Design and Permitting
 - Brown, Richardson + Rowe: Landscape Design
 - LEC Environmental Consultants, Inc.: Wetlands Permitting
 - AHS, Inc.: Archaeological/Cultural Resources
 - Brennan Consulting, Inc.: Survey

Getting to Today

2016 – Memorial Drive Phase II completes rehabilitation & restoration of 1.5-mile section

2017 – DCR initiates Memorial Drive Phase III Project

2017-2019 Planning and Traffic Studies

2019 – Public Outreach Process

- April 11, 2019 Public Listening Session & June 25, 2019 Public Meeting
- Project interactive wiki map
- Received over 1,200 comments, many in favor of “road diet”

2020 – 2021 (Project delayed due to COVID-19 pandemic)

- DCR reduces size of initial project based on public feedback and planning studies
- DCR hires Stantec consultant team to complete further design development

2022 Public Outreach Process – DCR re-starts public outreach

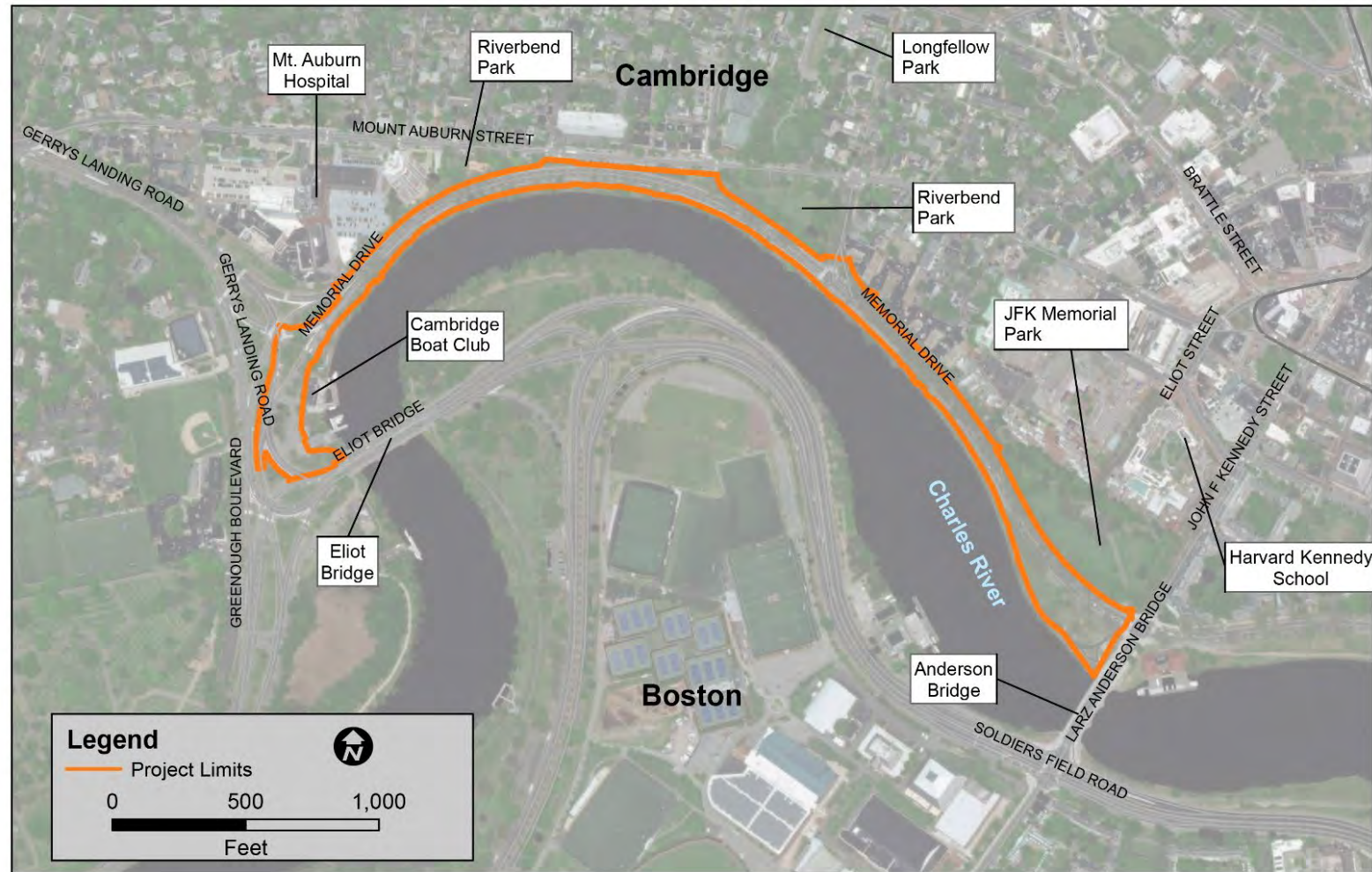
- January 18, 2022 - Public meeting with filing of ENF – received over 200 comments
- April to June 2022 - Individual stakeholder meetings with groups, businesses, and the City of Cambridge
- April 8, 2022 – DCR hosted site walk with 20 attendees from 8 different stakeholder groups and agencies
- June 30, 2022 Public Meeting
- Enhanced outreach to environmental justice communities including translations of project materials

Two Additional Public Meetings planned in 2022

Memorial Drive Phase III Goals

- Provide safe bicycle and pedestrian accommodations through a new paved 10-foot-wide shared use path and a separate aggregate 5-foot-wide pedestrian path.
- Substantially expand parkland through removal of 2 travel lanes and Gerry's Landing Road lane.
- Protect existing London Plane allée to maximum extent possible and plant new London Plane trees and other native species.
- Create two new pedestrian mid-block crossings of Memorial Drive to DCR parkland and restore sidewalk on the north side of the Parkway.
- Design to preserve historic features of Charles River Basin Historic District.
- Improve stormwater treatment through green infrastructure, enhancing water quality of the Charles River.
- Provide enhanced viewing locations and other parkland amenities (i.e., benches, water fountains, etc.).

Project Site



Map Source: Office of Geographic and Environmental
Information (MassGIS), Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs and ArcGIS Online.

Project Location

DCR Cambridge - Memorial Drive Reconstruction
Project Limits - Eliot Bridge to Anderson Bridge
Cambridge, Massachusetts

Memorial Drive Phase III Existing Conditions

Project Area - West



Project Area - East



Memorial Drive Phase III Existing Conditions

Project Area - West

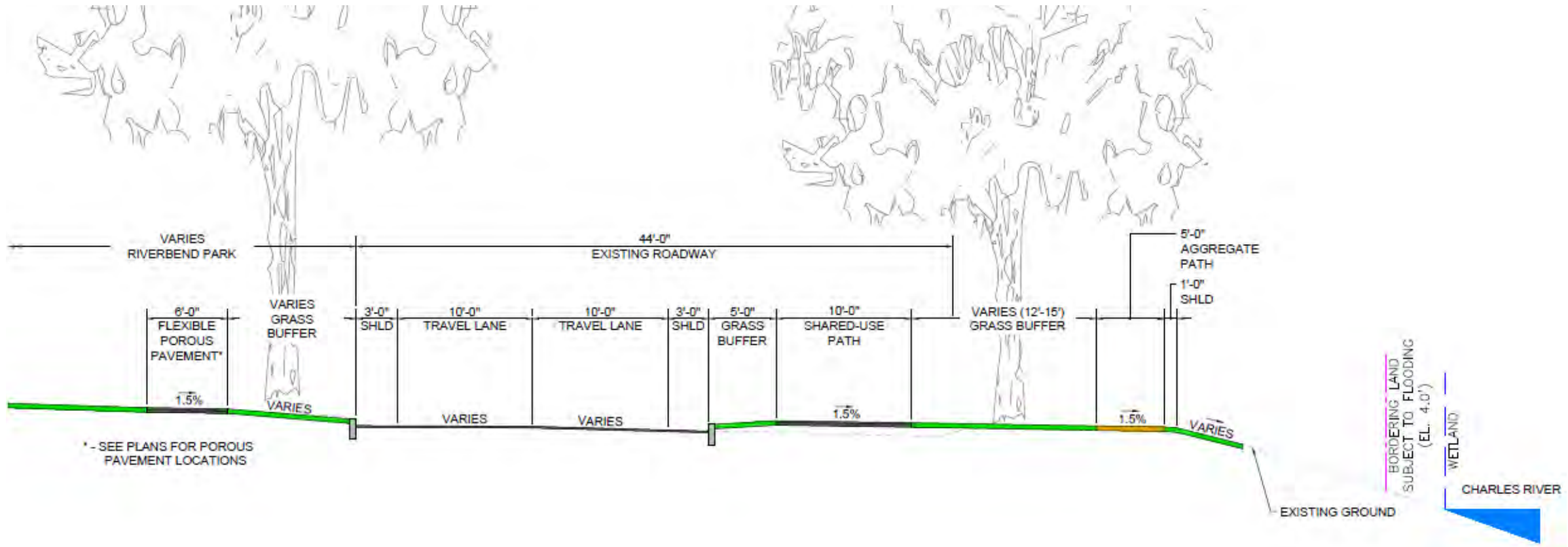


Project Area - East

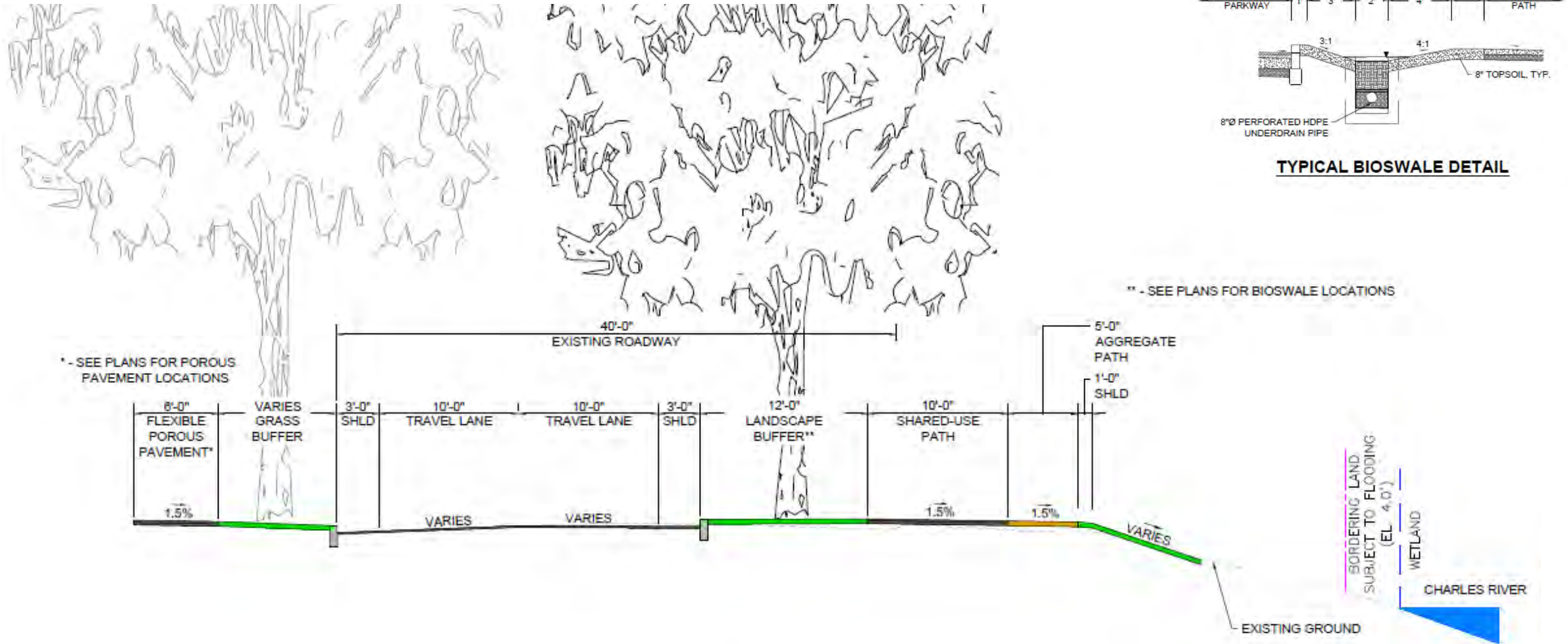


Typical Section Road Diet

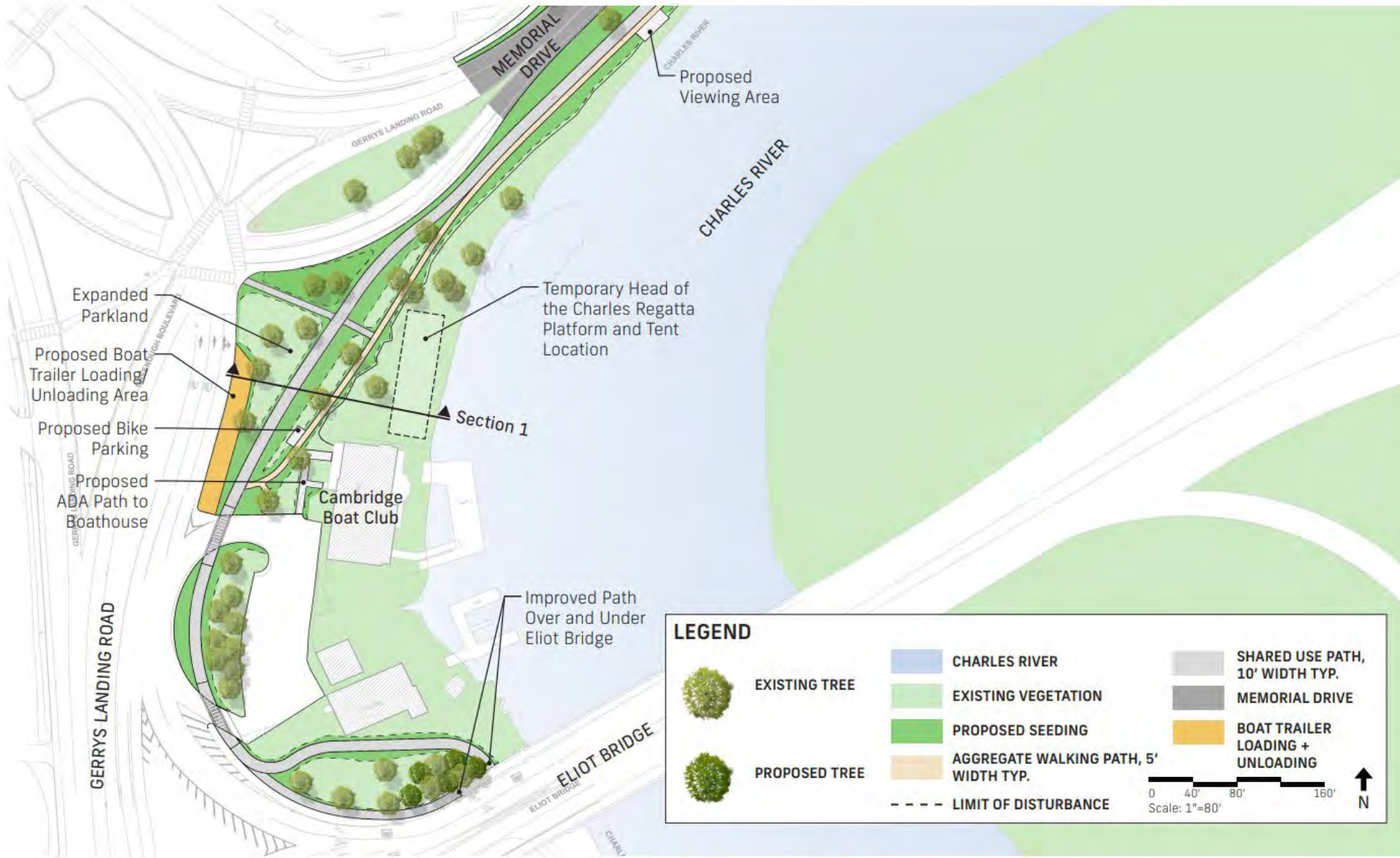
Riverbend Park West to Hawthorn Street



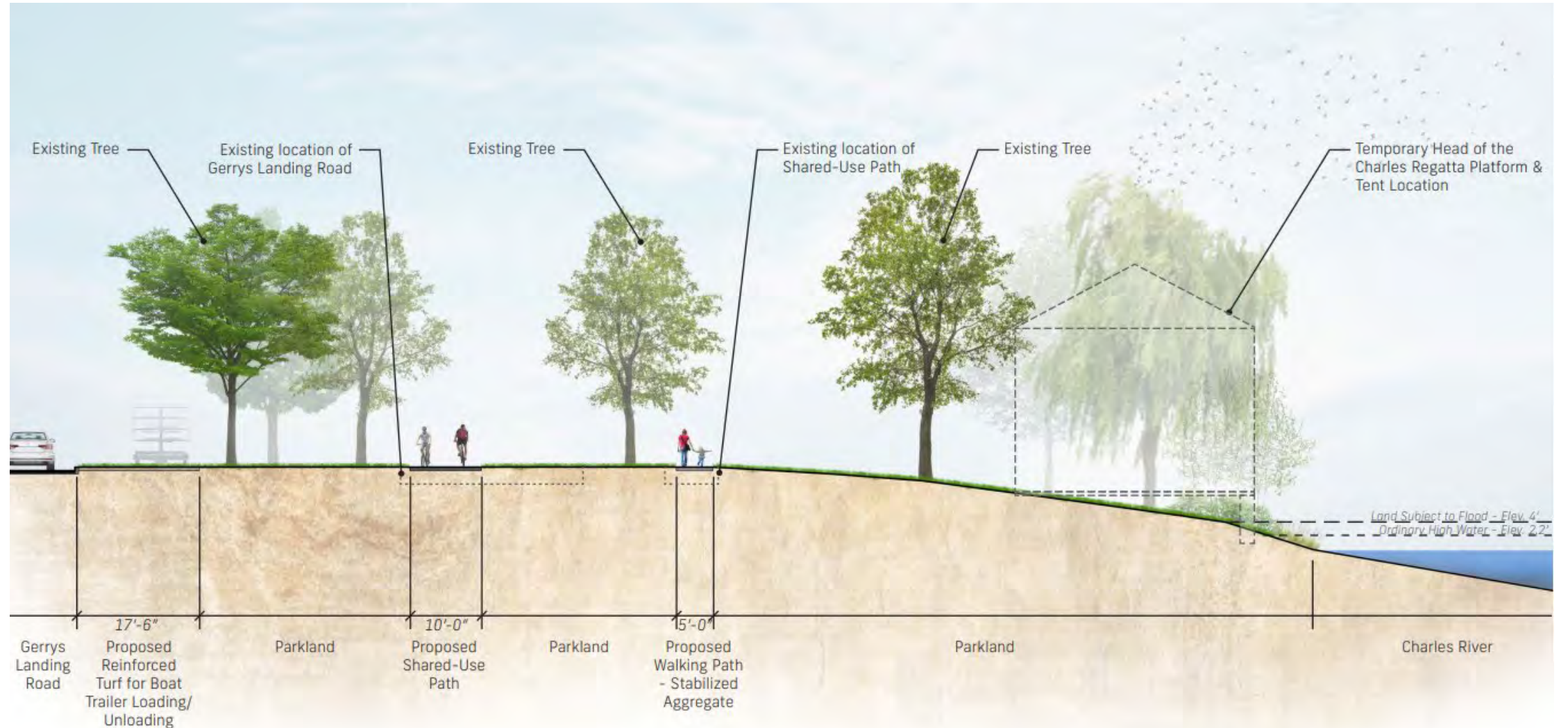
Typical Section Road Diet Hawthorn Street to JFK Memorial Park



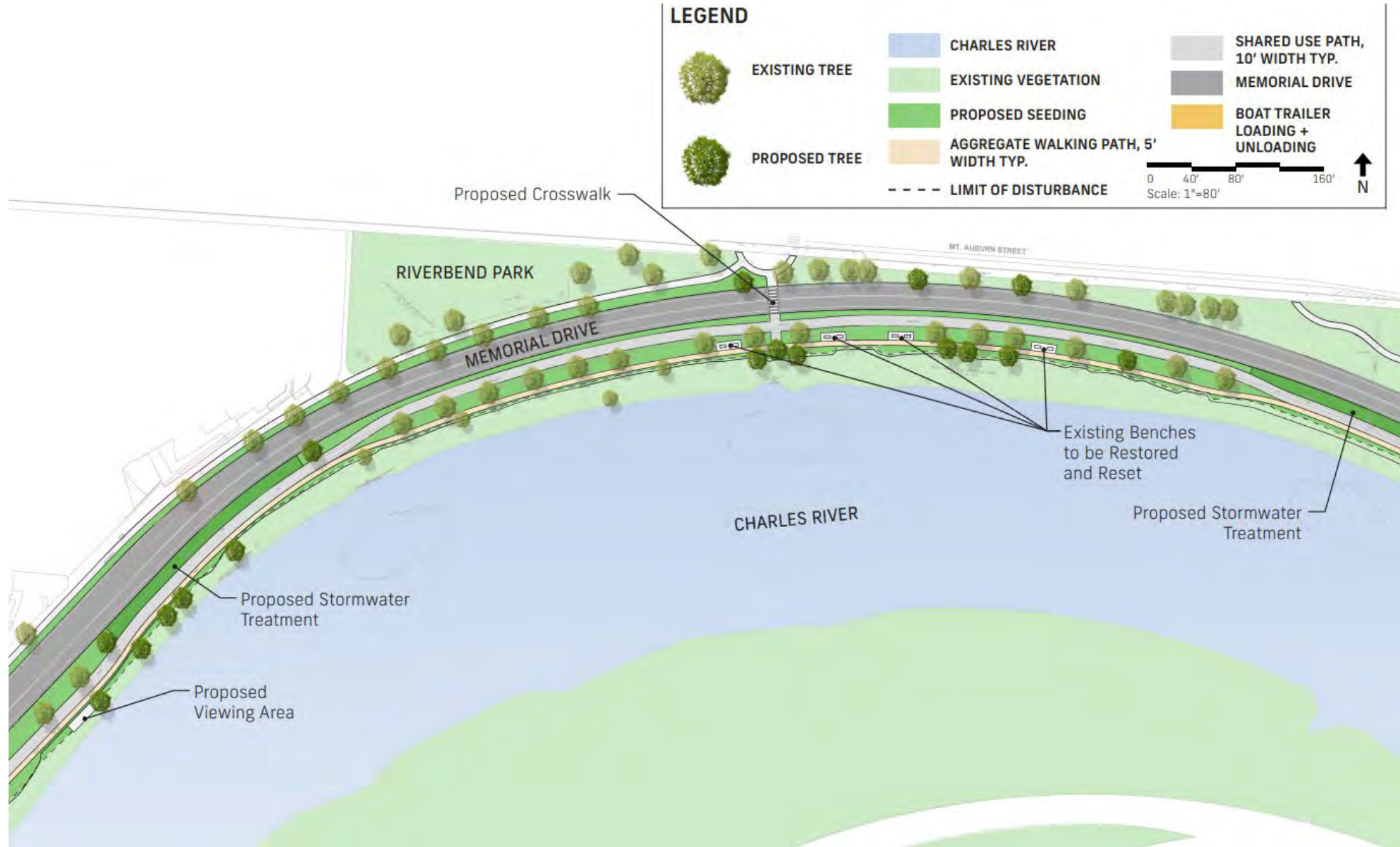
Memorial Drive Phase III Revised 25% Design



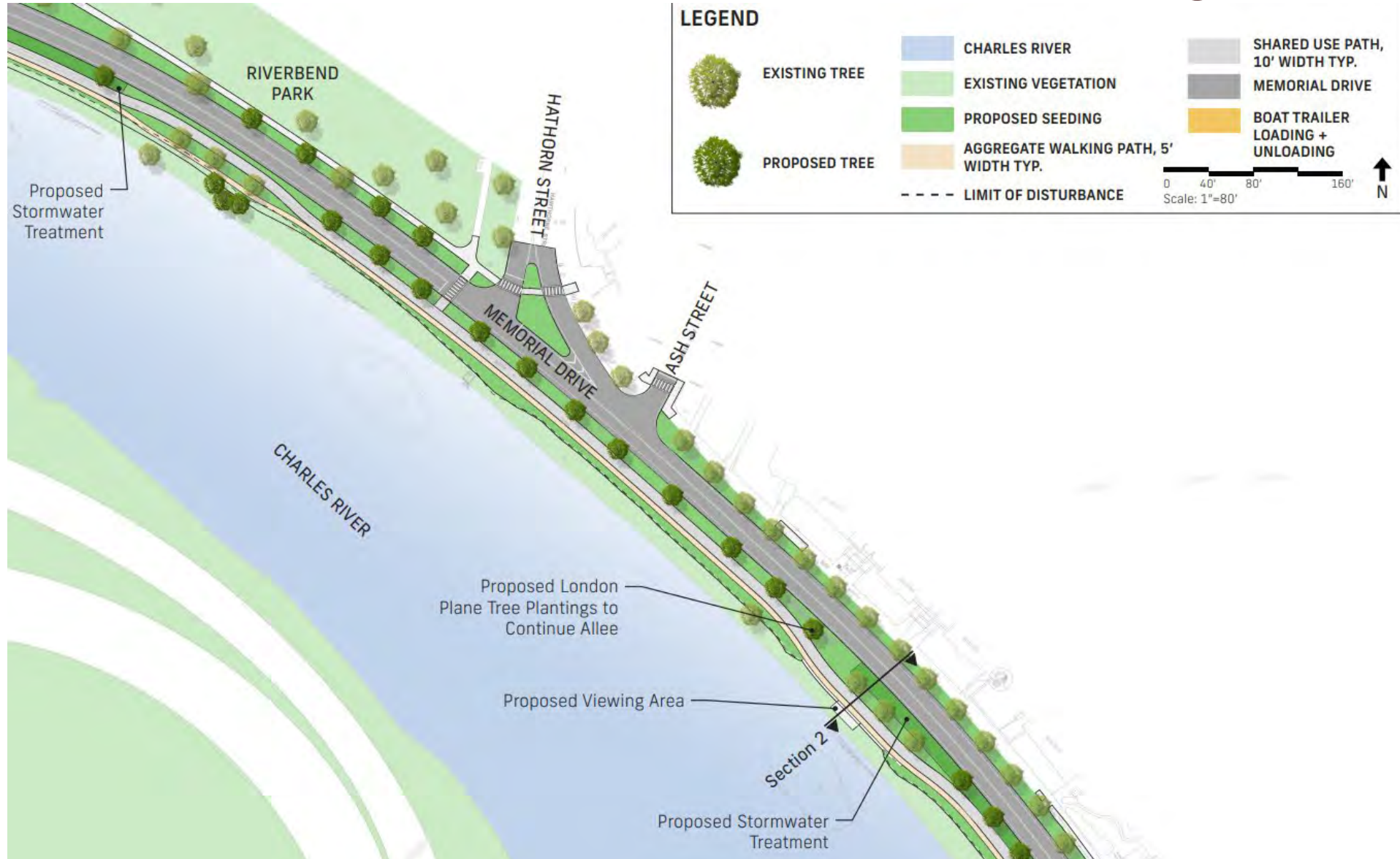
Memorial Drive Phase III Revised 25% Design: Adjacent to Cambridge Boat House



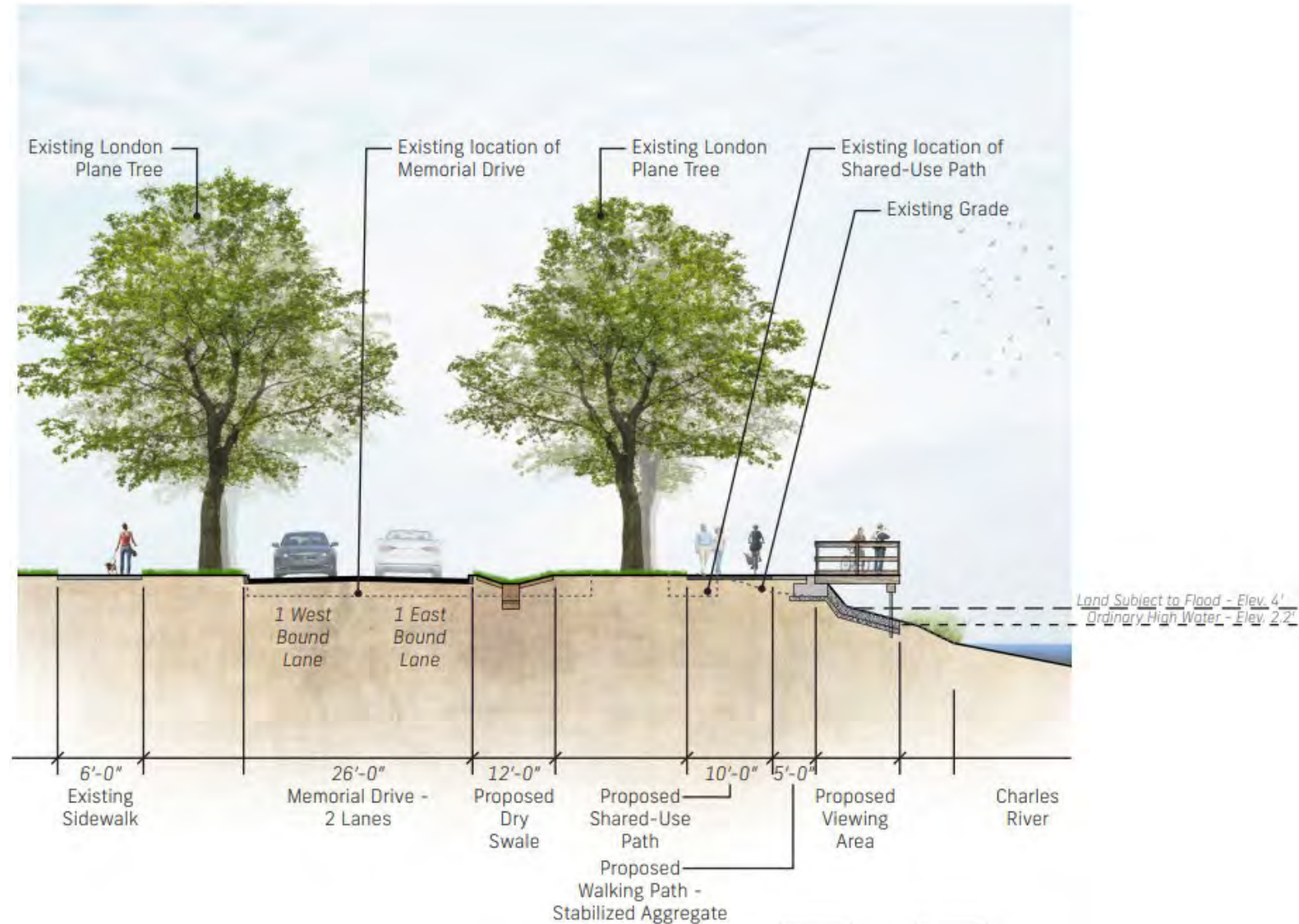
Memorial Drive Phase III Revised 25% Design



Memorial Drive Phase III Revised 25% Design



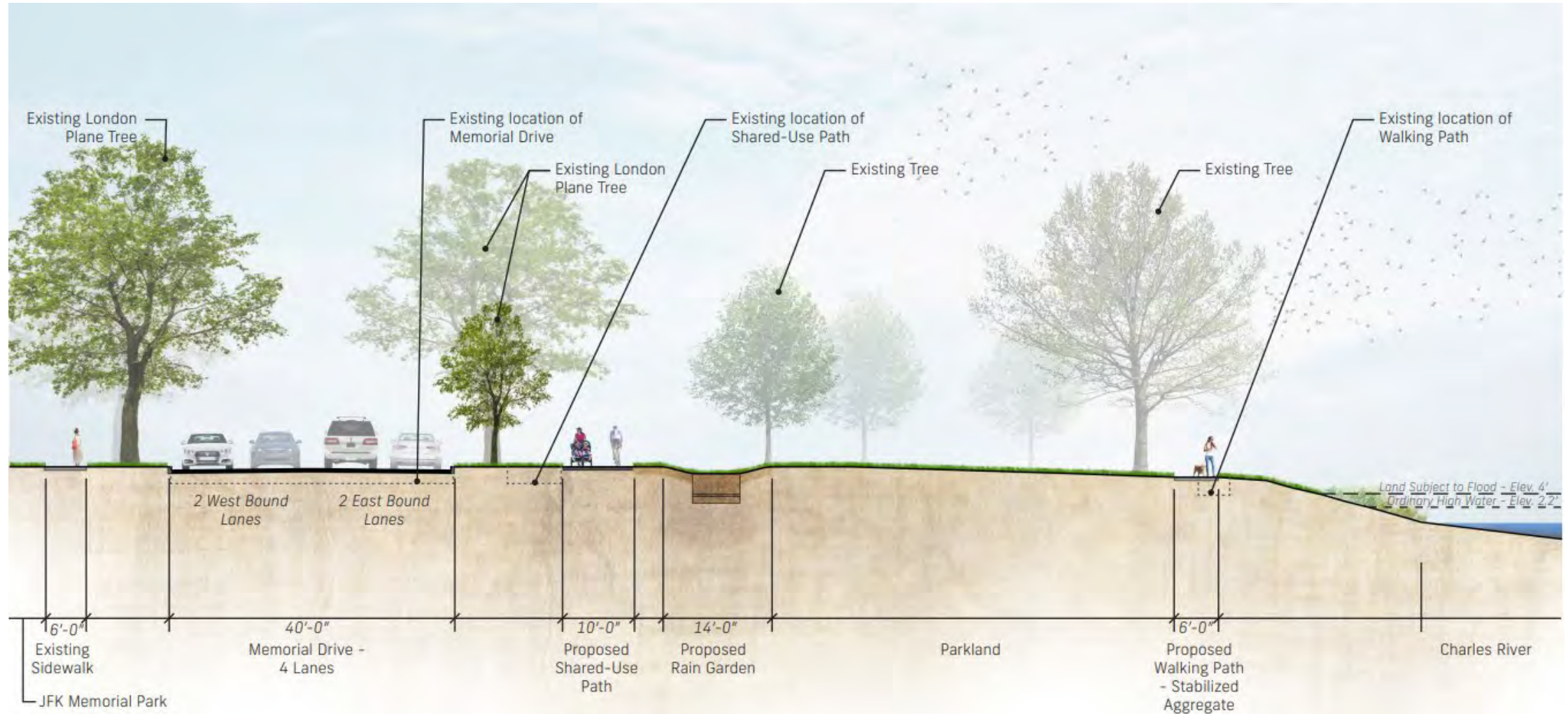
Memorial Drive Phase III Revised 25% Design: London Plane Allée & Viewing Area







Memorial Drive Phase III Revised 25% Design



Memorial Drive Phase III Revised 25% Design: Near Anderson Bridge



Summary of Public Feedback

Public Feedback	Resolution
Do not remove London Plane Trees 	Modified pathway design to preserve three additional healthy London Plane Trees. Seven compromised London Plane trees to be removed per April 8th site walk.
Eliminate or reduce the amount of retaining wall needed. Materials for retaining wall and fencing seem out of character. 	Replaced low height retaining wall with bioengineered coir logs for more sustainable slope stabilization.
Reduce construction impact to London Plane Trees 	Eliminated new curb construction on the north side of Memorial Drive near existing trees and will include specification language requiring mitigation measures for tree protection during construction. Use construction methodologies for north side walkway replacement that are sensitive to sustainability of existing London Plane trees.
Include new plantings of London Plane Trees 	3 to 1 replacement of London Plane Trees: approx. 22 new London Plane Trees will be planted to complete the culturally important London Plane Tree allée on the eastern end of the Project. Proposed tree health improvements such as air spading will be included.

Summary of Public Feedback

Public Feedback	Resolution
Preserve historic features and minimize impacts to Charles River Basin Historic District	Conducting assessment of the District's Historic Landscape Features.
Negatively impacts access to Cambridge Boathouse	Redesigned access to/from parking lot, created safe trailer loading/unloading area for shells, and provided ADA access to Boathouse building. Met with Cambridge Boat Club staff and have a preferred design identified.
Remove Existing Gerrys Landing Road connection to Memorial Drive	Removed Existing Gerrys Landing Road connection to Memorial Drive to provide for expanded parkland uses.
Place separated bicycle path within surplus space created by Memorial Drive Road Diet	<p>Gerrys Landing Road to Hawthorn Street:</p> <ul style="list-style-type: none"> – Implemented suggestion except where London Plane trees remain and where new stormwater treatment is provided. <p>Hawthorn Street to JFK Street:</p> <ul style="list-style-type: none"> – surplus space from road diet used to recreate London Plane tree allée with new London Plane tree plantings.

Landscape Design Goals

- Protect 112 London Plane Trees and preserve and expand the allée.



December 18, 1925 photo by Ernest Henry Wilson Glass negative property of the Arnold Arboretum Horticultural Library of Harvard University: © President and Fellows of Harvard College. Arnold Arboretum Archives

Landscape Design Goals

- Plant new London Plane trees in gaps in the allée.
- Expand parkland adjacent to the Charles River by 1.26 acres.
- Design to preserve historic features of Charles River Basin Historic District such as sloping pastoral lawns, paths, and shade trees. Remove guardrail at edge of parkland. Add shoulders on both sides of roadway.
- Provide seating with access to views to Charles River with two viewing areas and accessible benches near aggregate path.

Landscape Design Goals

- Respect Longfellow Park View Corridor.



Landscape Design Process and Recommendations

- Conducted Tree Inventory with DCR Arborist and Landscape Architecture Consultant, BRR.
- Photographed each tree and assessed condition.
- Remove 7 London Plane Trees over 14" suffering from vehicle strikes, internal decay, and mechanical damage at base as seen on the April 8 site walk with City and community groups.
- Plant at least 22 new London Plane trees to replace the 7 London Plane removals.
- Plant 59 new native trees in accordance with DCR's 2018 Charles River Bank Vegetation Management Plan, Cambridge Urban Forest Master Plan, and Master Plan for the Charles River Basin. Plant native shrubs and perennials on the riverbank.

Planting Palette includes Native Species and London Plane Trees



London Plane Tree



American Elm



Tulip Tree

Planting Palette - Native Species



Autumn Blaze
Freeman Maple



Pin Oak



October Glory
Red Maple

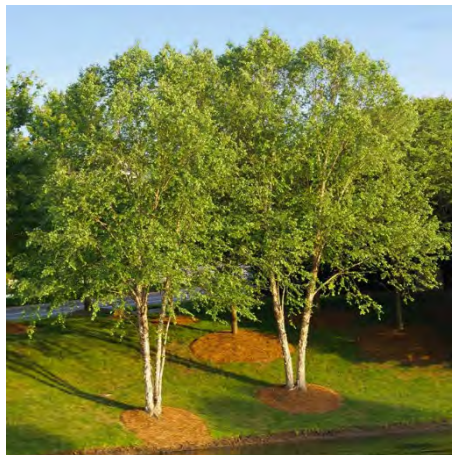
Proposed Multi Stemmed Native Species



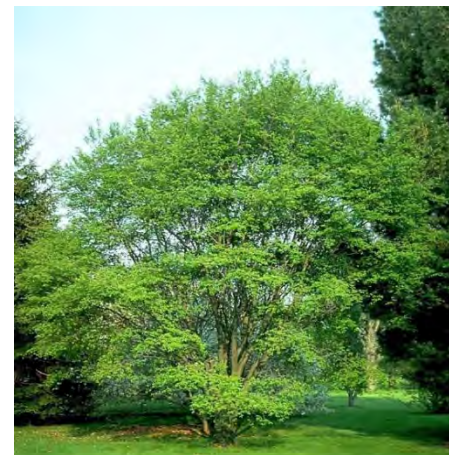
Witch Hazel



Paper Birch



Heritage River Birch



Allegheny Serviceberry

Stormwater Improvements

- **Project Goal:** *Implement improved stormwater treatment through green infrastructure, improving water quality of the Charles River*
- Currently no treatment of stormwater prior to entering Charles River.
- Stormwater management improvements will reduce phosphorus runoff to the Charles River, a Category 5-Impaired waterway including:
 - New stormwater collection system of pipes and catch basins
 - Dry swales and rain gardens to treat stormwater.
 - 1-acre reduction of impervious surface reduces amount of phosphorus entering the Charles River.

Permits/Approvals

- The Environmental Notification Form was filed on December 15, 2021 with the MEPA Office.
- An Environmental Impact Report is currently underway and anticipated to be filed with MEPA Aug/Sept 2022.
- Coordination and review by the Massachusetts Historic Commission and Cambridge Historic Commission.
- Completion of required Wetlands Protection Act permitting with the Cambridge Conservation Commission.
- 8M permit will be filed with the Massachusetts Water Resources Authority.
- Chapter 91 minor modification will be filed with the Massachusetts Waterways Program.

Current Schedule

Summer 2022

File Environmental Impact Report with
Massachusetts Environmental Policy Act Office

Fall 2022

Environmental Impact Report Process Completed

Fall/Winter 2022

75% Design Complete/Public Meeting #2

Spring/Summer 2023

100% Design Complete/Final Public Meeting

Spring 2024
Construction Begins

Questions and Comments

- Public is invited to submit comments after this meeting, with a deadline for receipt by DCR of July 21st, 2022.
- Comments may be submitted online at <https://www.mass.gov/forms/dcr-public-comments>.
- For more information:
 - <https://www.mass.gov/service-details/memorial-drive-greenway-improvements-phase-iii>