



MASSACHUSETTS DEPARTMENT OF
CONSERVATION AND RECREATION



THE LAWRENCE & LILLIAN
SOLOMON FOUNDATION

DCR Public Meeting Proposal for Riverfront Park Restoration along Greenough Boulevard



**Thursday, July 10, 2014, 6:30 p.m. – 8:30 p.m.
Shady Hill School, Cambridge, MA**



Commonwealth of Massachusetts

Governor

Deval L. Patrick

Energy and Environmental Secretary

Maeve Vallely Bartlett

Department of Conservation and Recreation Commissioner

John P. Murray



DCR Mission Statement

*To protect, promote and enhance our
common wealth of natural, cultural
and recreational resources for the
well being of all.*



THE LAWRENCE & LILLIAN
SOLOMON FOUNDATION

Solomon Foundation Mission Statement

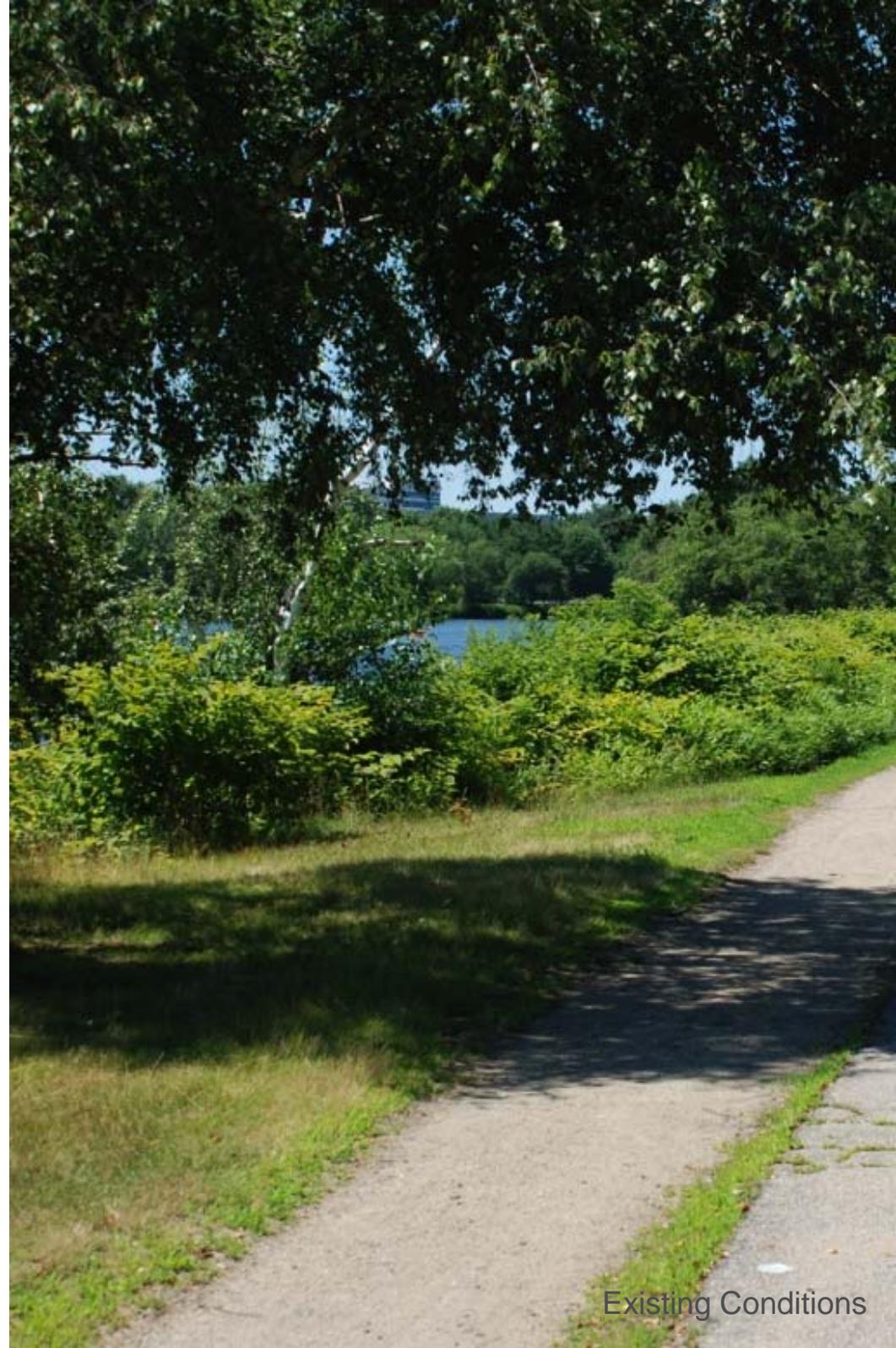
To cultivate innovative projects that enhance the beauty, utility, and accessibility of our major public parks and greenways.

Roles

- **The Department of Conservation and Recreation:** is steward of 450,000 acres across the state - one of the largest state parks systems in the country. Responsible for Charles River Basin including its waterway, parklands, and parkways.
- **The Lawrence and Lillian Solomon Foundation:** A private foundation dedicated to parks in Greater Boston. Taking a leadership position on planning, design, fundraising, and implementation.
- **Vanasse Hangen Brustlin:** Planning, design, and engineering consultant

Meeting purpose

- To review the potential benefits and impacts of reconfiguring Greenough Boulevard
- To present suggested refinements to the parkway and park design to address concerns
- To outline next steps and solicit further feedback

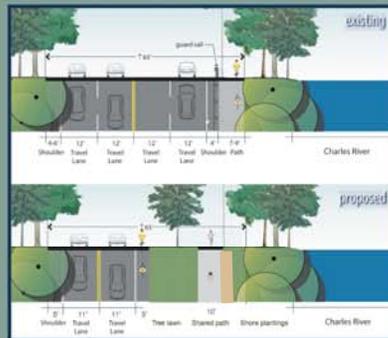


Outreach

- Preliminary briefings - 2012
- DCR kick off meeting - January 2013
- Consult city agencies and elected officials - 2013 ongoing
- Neighborhood meetings - February 2014
- Public Meeting - March 6th, 2014
- **Public Meeting – July 10, 2014**
- Project presentations and reports available online

Greenough Greenway

A proposed mile-long greenway path along the north bank of the Charles River joining Cambridge and Watertown



Proposal: To reclaim riverside parkland and establish a mile-long tree-lined river path between Eliot Bridge and Arsenal Street.

Project Goals

- Improve public safety for drivers, cyclists, and walkers.
- Provide a fully accessible recreational path along the river.
- Maintain efficient traffic flow on Greenough Boulevard and Grove Street.
- Reclaim parkland and enhance the visitor experience.
- Improve the environmental quality of the Charles River.
- Demonstrate a new cost effective Public / Private partnership model.

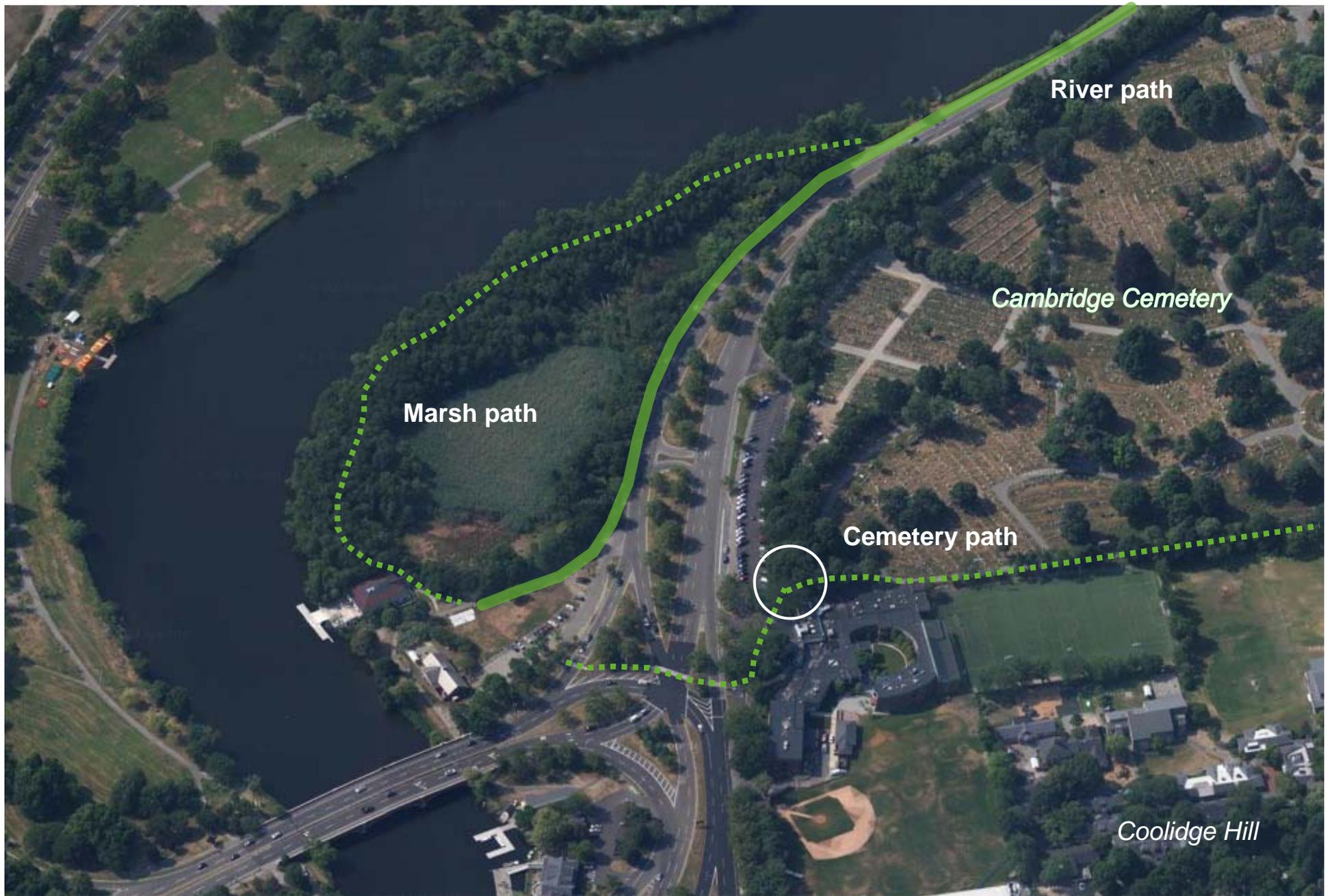


Greenough Boulevard: Before



Photo simulation

Greenough Boulevard: Proposed



New paths: In addition to the *River Path* a new *Marsh Path* and *Cemetery Path* are envisioned.

Potential positive impacts

- Increases parkland and improves visitor experience.
- Enhances public safety by calming traffic.
- Provides good transportation options for drivers, cyclists, and pedestrians.
- Creates of one of the best 5K running loops in Greater Boston.
- Improves river ecology by increasing green space along the river.
- Provides a framework for future improvements over time.

Potential negative impacts

- Creates somewhat longer queues and wait time for eastbound drivers during a portion of the morning rush hour.
- Increases area to mow for DCR park crew (off set by less road to maintain).

What we heard from stakeholders

- Broad support for restored parkland and environmental enhancements.
- Concern about excessive speeds on Greenough Boulevard.
- Concern about the potential traffic impacts at the Grove Street intersection.
- Request to consider a traffic “cone study” to simulate future conditions.
- Desire for adequate pathway widths and surfaces for multiple users.
- Desire for enhanced storm water management and improved water quality.

Traffic Analysis Updates

- Refined Analysis
 - Collected traffic counts along Greenough Boulevard and at the Greenough/Grove St intersection using vehicle counters and video cameras
 - Projected future volumes along Greenough after researching potential redevelopment plans in the surrounding areas. (13 projects were identified)
 - Performed analysis to assess impacts of reconfiguring the roadway
- Results
 - Potential for some increase in queuing for eastbound traffic during a portion of the morning peak hour
 - All other movements along Greenough and Grove remain largely unaffected
- Full report
 - Available online at <http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/>

Real Time “Cone Study”

- Real -Time Study (“Cone Study”) Requirements for Success
 - Needs to accurately model actual future conditions
 - Needs to provide an accurate simulation of future traffic patterns and driver behavior
 - Would require time for drivers to become acclimated
 - Cannot introduce unsafe conditions for any users
- Real -Time Study (“Cone Study”) Anticipated Results
 - Modifications proposed at the intersection of Greenough/Grove would not be simulated
 - Cones/barrels change driver behavior
 - Variable message signage would be required
 - Placement of traffic control devices on the roadway can produce confusion to the motorists, potentially resulting in an unsafe condition.
 - Based on MassDOT experience, such studies typically reduce speeds and capacity up to 20% providing inaccurate results
 - Creates maintenance challenges

Design Response to Traffic Study and Public Comments

- Proposed Intersection Modifications
 - Modifications proposed for the left-turn lane from Greenough to Grove
 - Latest plan more than doubles the length of the eastbound left-turn lane
 - Modification of the median allows storage for approximately 8-10+ vehicles in the left-turn lane



Existing conditions at Grove Street intersection

- Signalized intersection
- 2 lanes at each approach, one left turn lane to Grove Street with storage for 4-5 cars
- Narrow path with erosion at river's edge



Proposal

- Convert one lane to parkland and a wider, more user friendly recreational path
- Lengthen left turn storage lane



Section C-C

Proposed Intersection Modifications

- Eliminates one Eastbound lane
- All other approaches remain the same
- Left turn lane doubles in length, providing storage for 8 to 10 vehicles
- Design provides physical width for approximately 22 vehicle in two lanes for emergencies
- 8-foot buffer between roadway and 10-foot recreational path

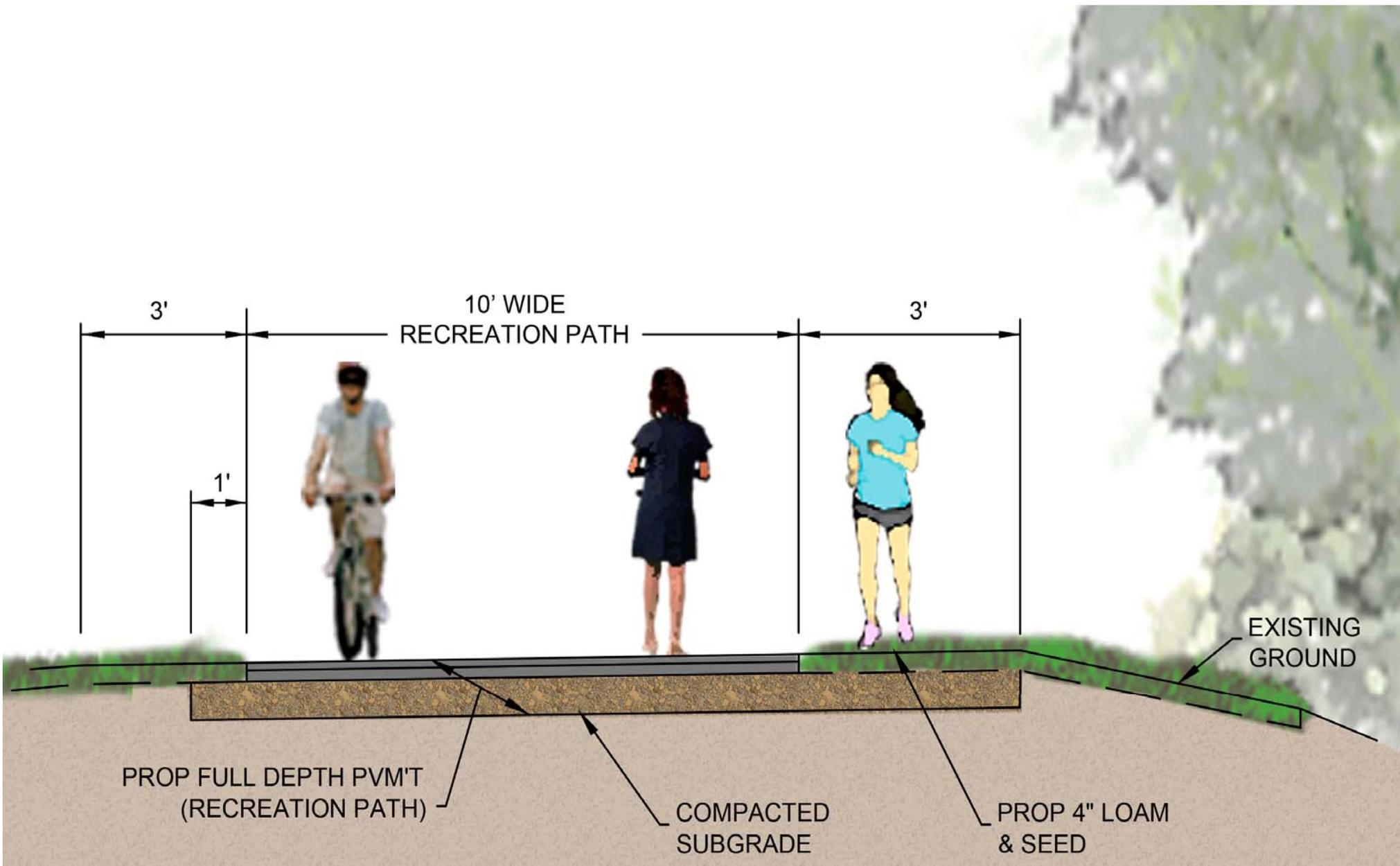
Proposed Path Width

Criteria:

- Meet current Design Standards for usable width and horizontal clearance
- Provide a context sensitive width for current and future usage
- Maximize buffer between pedestrians and roadway
- Maximize green space and environmental benefits

Recommendation:

Provide a 10' wide paved path with an off set 14' wide sub base of well drained gravel. If use continues to grow as expected the paved section can be efficiently expanded. Three feet of compacted sub base will extend out on the river side of the paved path and will be loamed and seeded for grass cover. Runners, Maintenance vehicles, etc. can use this broad shoulder without excessive erosion.



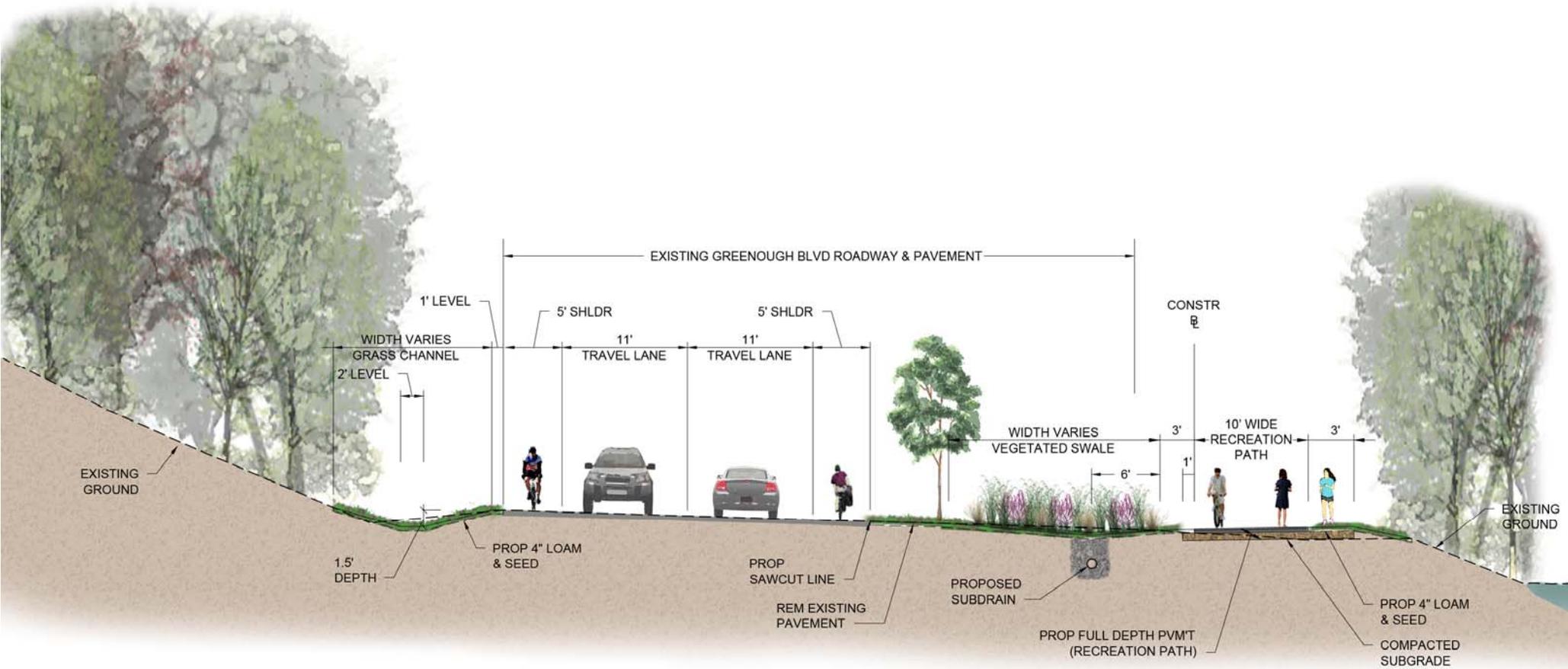
Typical Path Section

Stormwater Management

Rationale: This project is, in part, an effort to mitigate the impact of an overly wide roadway built close to fifty years ago. It will do this primarily by reducing 1.5 acres impervious surface and replacing the asphalt with parkland and updating the drainage system.

Recommendations:

- Re-grade drainage ditch on north side of roadway to eliminate current flooding
- Provide 8-foot minimum vegetated buffers on river side
- Provide deep sump catch basins with hoods at low points



Proposed Typical Roadway Section

Preliminary cost projections

River path – path and turf

\$776,000*

\$1,300,000

Enhancements - benches, trees, etc.

\$200,000+

Marsh path – path and clearing

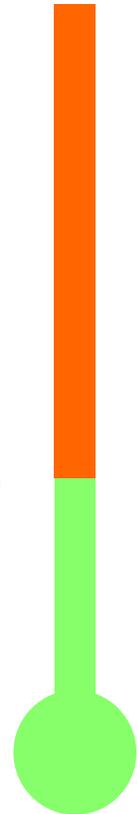
\$264,000*

Cemetery gate and ramp

\$60,000*

Raised - \$500,000

Total: \$1,300,000



*Costs based on 4/1/13 conceptual cost estimate by VHB.
Design service cost from VHB; DCR to provide construction phase services.

Timeframe

Fall - 2013

- Draft Memorandum of Agreement with the DCR - **Complete**
- Contract with design consultants - **Complete**
- Complete topographic survey - **Complete**
- Traffic counts and analysis - **Complete**

Spring / summer / fall – 2014

- Public meetings
- DCR review
- Design and permits
- Refined cost estimates
- Fund raising

Spring - 2015

- Bid and build project if funding can be identified

Additional Information

The presentation from this meeting can be viewed at either
<http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/> or

<http://www.solomonfoundation.org>

If you have questions or concerns:

Email: dcr.updates@state.ma.us, entering “Greenough” in the subject line.

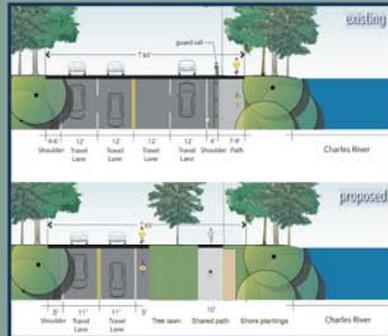
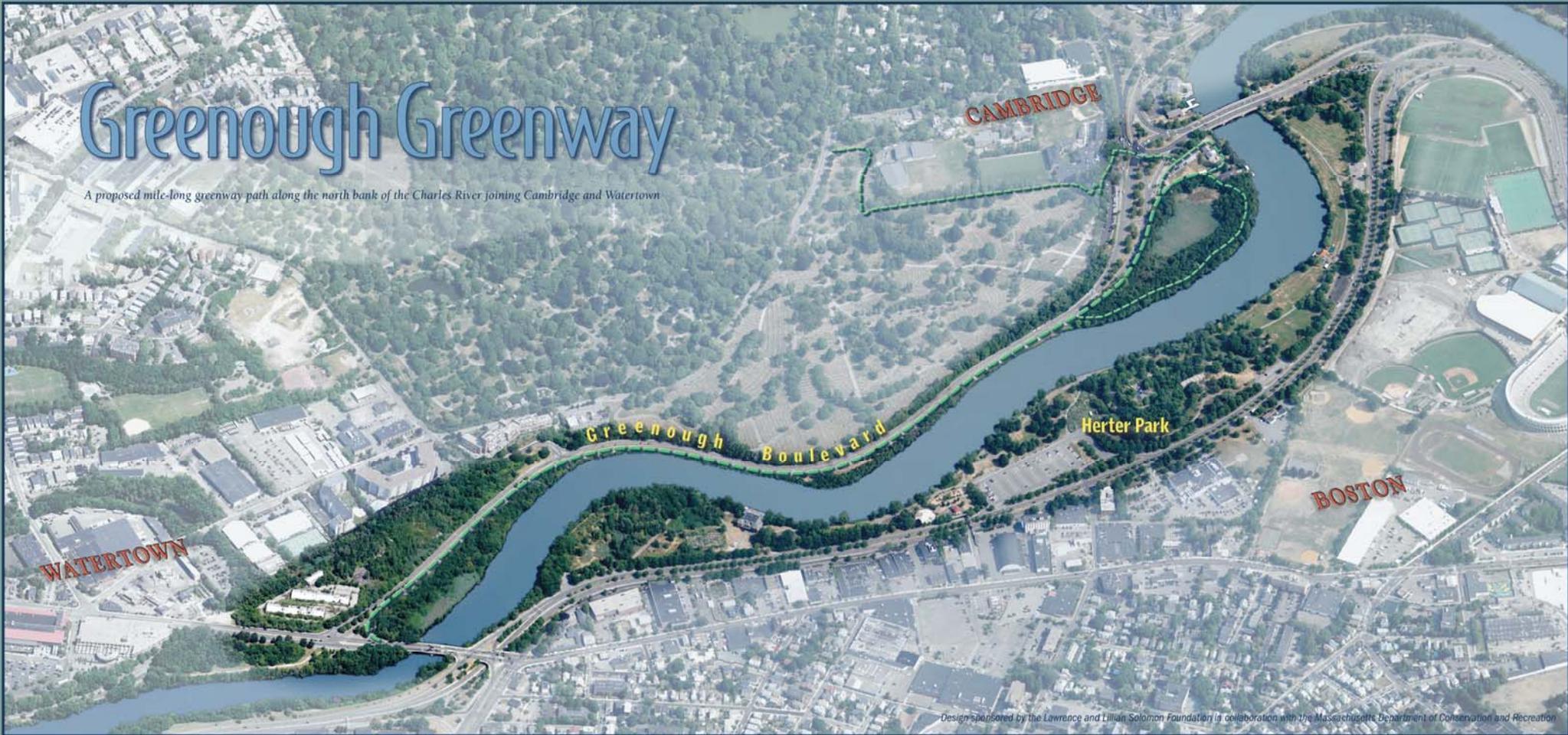
Write: Department of Conservation and Recreation, Office of Public Outreach, 251
Causeway Street, Suite 600, Boston, MA 02114

Comment period: July 10th to July 31st

Note: Public comments submitted to DCR by email or letter may be posted on the DCR website in their entirety, and no content, including personal information, will be redacted.

Greenough Greenway

A proposed mile-long greenway path along the north bank of the Charles River joining Cambridge and Watertown



Discussion