Making Pedestrian and Vehicular Improvements to the Landmark Center Rotary

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Locus Map of the Fenway Area

Provided By The Emerald Necklace Conservatory
Two Projects in the Same Area

- Muddy River Restoration and Flood Control (Army Corps of Engineers)
- Road, Pedestrian, and Signal Improvement Projects in the Economic Stimulus Bill
Muddy River Restoration and Flood Control

- Daylight the Muddy River in the Landmark Center Rotary (A, B)
- Bridges (C, D, E) will carry Riverway, Brookline Ave. and the Jugdale Bridge over the Muddy River.
Transportation Projects in the $55 M Economic Stimulus Bill

- $12.5 M Roadway Improvements
- $5.5 M Signal and Traffic Flow Improvements
  - $16 M Kenmore, Fenway, Longwood, Ruggles Stations
  - $12 M Yawkey Station
- $90,000 LMA Transit Tunnel Study
- $400,000 Transportation and Pedestrian Action Plan
Problems at the Sears Rotary

Muddy River Path Path Disconnect

![Map of Muddy River Path Disconnect](image)
Riverway Crossing

4 stage crossing
Pedestrian / Bicyclist Access

Brookline Ave. Crossing

No “Interior” Crossings
Other Pedestrian Movements

Diagonal path connecting MBTA station to Simmons, Beth Israel

Near Wheelock College
Riverway / Park Drive Merge

- Heavy weaving traffic movements
- Unsafe for Motorists and Pedestrians
Uncontrolled Weave Blocks Lanes, Reduces Road Capacity by 20%

- Park Drive Blocks Riverway Traffic

20% of road capacity is lost due to blockage
Brookline Ave Intersections are Bottlenecks
Origin – Destination Data

- A.m. and p.m. peak counts, Winter 2007
- 6 origins x 6 destinations
- New development traffic added, too
ISTEA Alternative, 1997

- Intermodal Surface Transportation Equity Act
- 1997 by Abbey Group for Landmark Center
Fenway Bus Contraflow Lane (Urban Ring)

- Vollmer Associates LLP to BRA, BTD
- November 2001
Riverway Improvements

- Two-Way Riverway Traffic
Removal of All-Ped Phase

Not Necessary For Effective Crossings:

1) Walk Concurrently with Brookline Green
2) Walk with Riverway Green
3) Walk with 10 second Lead on Brookline Green

Removing all-ped adds 23% to Brookline Ave. capacity
Level of Service Analysis

- Boylston/Park Drive Intersection (a.m. peak)
Pedestrian Underpass
- Safe, attractive route for cyclists and pedestrians
- Restores Emerald Necklace connectivity
- Benefits traffic flow
Proposed Cross Section:
Similar Bridges

Northern Ave Bridge, Fort Point Channel

Longwood Ave. Bridge

also ... Eliot Bridge Underpasses (Storrow Dr., Mem’l Dr.)
Underpass length

Current Underpass Length = 180 ft

Proposed Underpass length = 54 to 72 ft

• Lower cost
• Better for path users
• Benefits river ecology
Raising the Bridge 3 ft:

Minor effect on Riverway profile:

Elevations:
- C – 24.4 ft
- B – 22 ft
- A – 16.5 ft

Maximum grade = 4.4%
Comprehensive Path Network
Cross-River Paths

From Fenway T Stop to Simmons / Longwood Medical Area
Mid park bridge

CON/SPAN Bridge: 36 ft span, 12 ft wide

Edgerton, WI
Other Cross-River Paths

Fenway T stop to Wheelock College
Cost Estimate
Road Reconstruction

- Much less road to rebuild compared to current design
- Will have to reconstruct other sections of the Riverway

<table>
<thead>
<tr>
<th>Riverway Section</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>Excavation</td>
<td>$7,250</td>
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**Total** (With 20% added for engineering and contingency)

- A: $57,000
- B: $26,000
- C: $45,000

**Difference:** $38,000
Cost Estimate

Park Paths

8 & 12 ft paths
3” thick asphalt at $12 / sq yd
23,280 sq ft

$31,000
Riverway Bridge
Engineer’s Estimate = $228,000
plus foundation work
(less expensive than Army Corp Bridge)

Mid Park Ped Bridge
Engineer’s Estimate = $41,000
plus foundation work
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Conclusion

**Vehicular Improvements**
- Improved Safety
- Improved Capacity to accommodate development
- Direct Riverway to Park Drive connection

**Pedestrian & Bicyclist Improvements**
- Vastly improved access to and through the park
- Emerald Necklace greenway integrity restored
- Increased Park Area
- Improved Pedestrian Crossings
Don’t let this opportunity float away