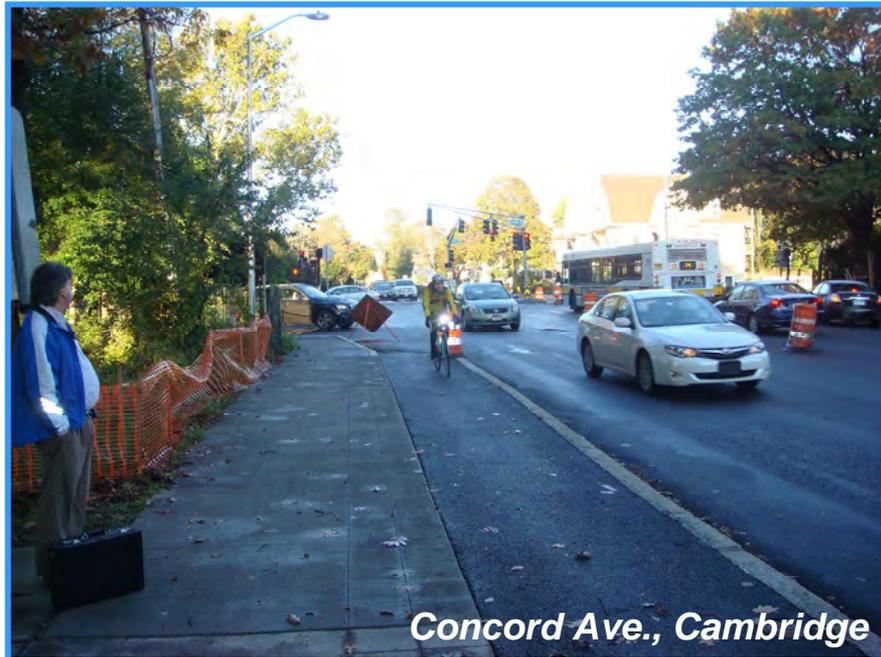


*Considerations for Evaluating
Concord Avenue Route
Options*

19 March 2013

Raised Cycle Track Concept

- **Bicycle facilities that are vertically separated from motor-vehicle traffic (NACTO Guide, 2012)**
- **Usually located between motor-vehicle lane and sidewalk**
- **Upgrade from on-street bicycle lanes**
- **Practical usage has to take into account safety challenges (driveways, intersections, adjacent parking)**

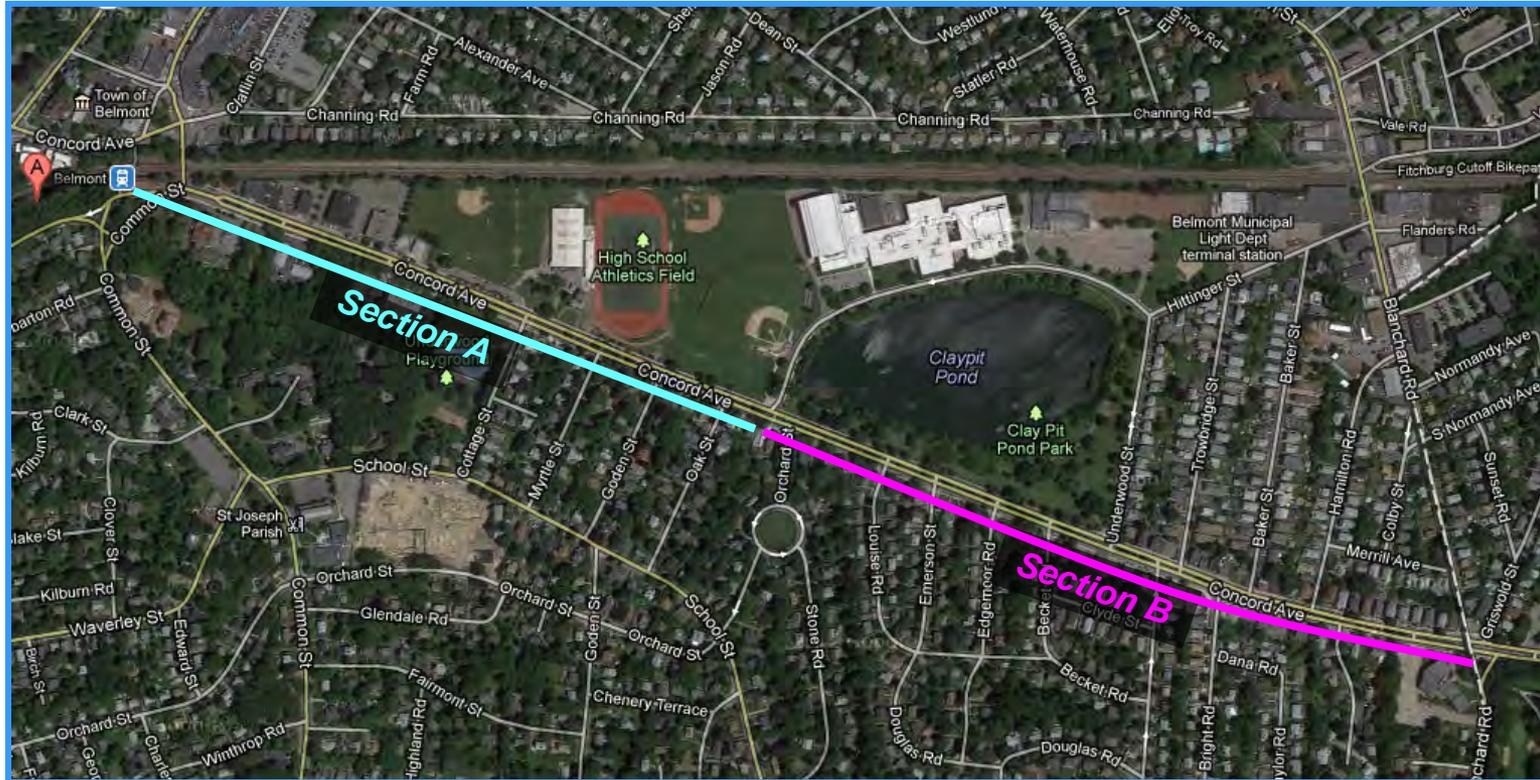


Concord Ave., Cambridge

Safety Considerations

- Storm drains should be realigned to motor-vehicle lane
- Use when number of driveways/cross streets is minimal
- Safety guidance from NACTO Guide for raised cycle tracks
 - Prohibit on-street parking within 30 feet on both sides of driveway and cross street
 - Sight lines for cross streets and driveways > 20 feet
- Noise issues if applied to busy roadways

Map of Concord Avenue Area



Concord Avenue Between Blanchard Road and Leonard Street

Major Intersections in Section A	Leonard/Common St, Cottage St, Orchard St
Major Intersections in Section B	Underwood St., Bright Road, Baker St., Blanchard Rd.
Driveways & Minor Street Crossings on North Side Section A	14
Driveways & Minor Street Crossings on South Side Section A	20
Driveways & Minor Street Crossings on North Side Section B	15
Driveways & Minor Street Crossings on South Side Section B	25

Concord Avenue Storm Drains



Concord Avenue Driveways/Intersections



Additional Photos

Concord Avenue: Bright Road Intersection



Frequent "right hooks" currently hazard for cyclists at Bright Road and other major intersections

Concord Avenue: Bus Traffic near Post Office



Noise environment and air quality something to consider

Concord Avenue: Typical Traffic Behavior Near Intersections



Use of bicycle lane as passing lane routine during rush hours both east-bound and west-bound

Summary

- **Relocation of storm drains required for safety reasons; could significantly impact cost**
- **Use of raised-cycle tracks generally limited to cases with minimal intersections (includes major intersections, minor street crossings, driveways, etc.)**
- **Satisfying safety design guidelines would impact on-street parking and possibly rush-hour volume**