

Extending Separated Bike/Pedestrian path on Grove St.

The goal of this memo is to optimize bike/pedestrian safety and encourage non-motorized use along the Grove Street corridor. There is currently a planned separated bike and pedestrian tracks in front of the Riverside Development and on the I-95 overpass. We request that serious consideration be given to extending this infrastructure to the Hamilton Recreation Center in Lower Falls and to the Williams School and ideally Auburndale Center – the Hamilton Williams Cycle Tract.

This evaluation needs to be done to better inform decisions about the infrastructure being proposed along Grove St. in front of the Riverside Station Development.

Two-way bike/separated pedestrian tracks

In this corridor, the preferred design is a protected, two-way bike lane with a separated pedestrian walkway as currently proposed from the roundabout at exit 22 to the railroad underpass at the north of Riverside. Protected two-way like lanes have these advantages:

- Dedicates and protects space for bicyclists by improving perceived comfort and safety. Eliminates risk and fear of collisions with over-taking vehicles.
- Reduces risk of ‘dooring’ compared to a bike lane and eliminates the risk of a doored bicyclist being run over by a motor vehicle.
- On one-way streets, reduces out of direction travel by providing [contra-flow](#) movement.
- Low implementation cost when making use of existing pavement and drainage and using parking lane or other barrier for protection from traffic.
- More attractive to a wide range of bicyclists at all levels and ages.

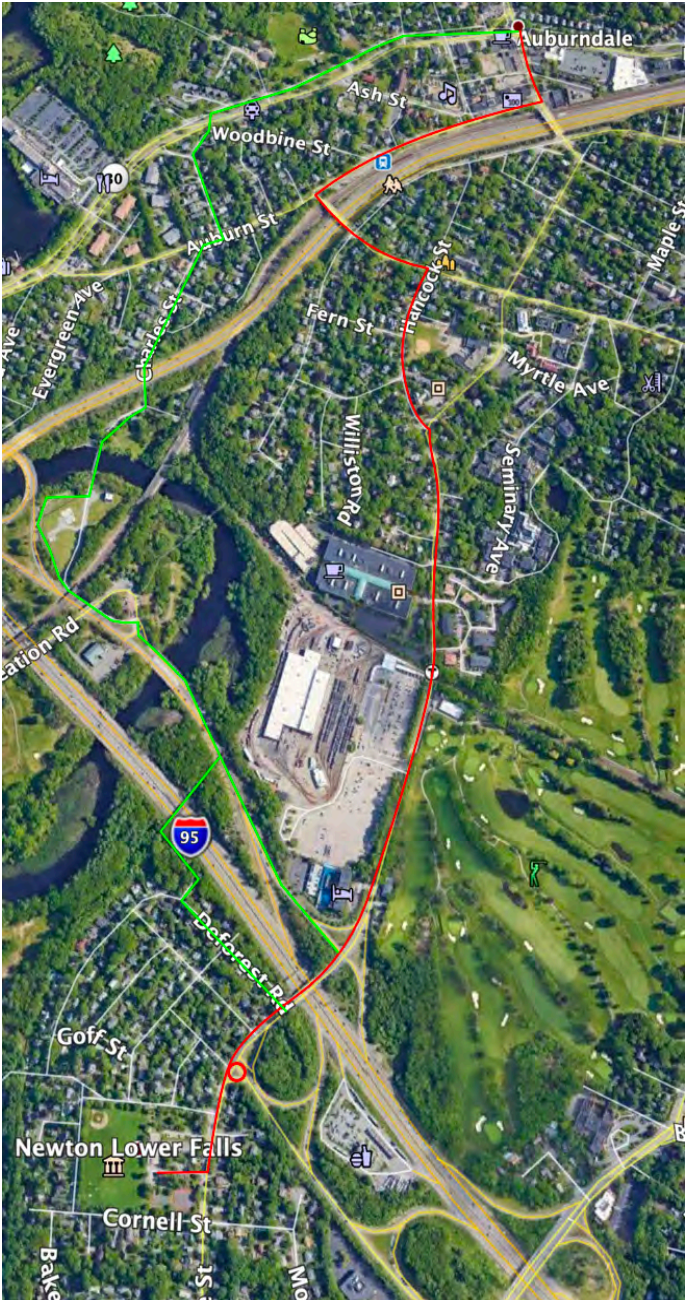


Figure 1. Proposed bike/ped infrastructure near Riverside.

The model of a separated bike and pedestrian tracks protected from auto traffic should be maintained wherever possible.

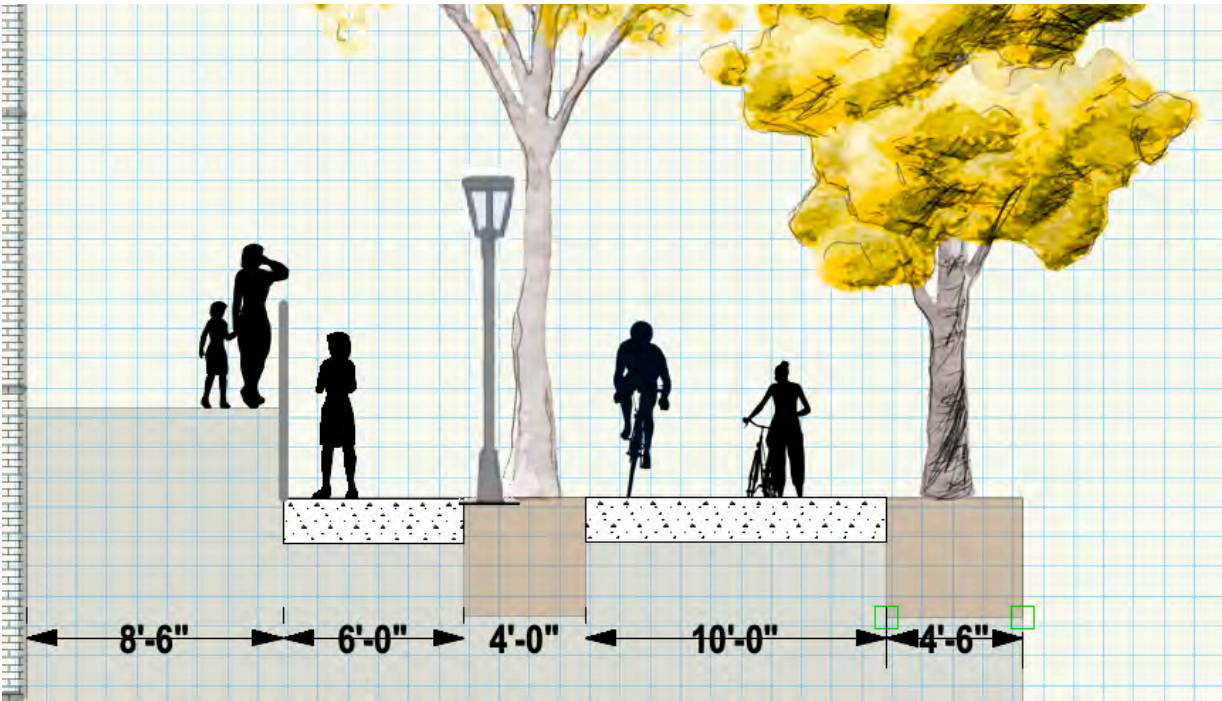


Figure 2. The proposed design in front of building 6 is illustrative. This image is modified to show an extra row of trees

Third northbound bike lane

In addition to the infrastructure above a single northbound bike lane is being proposed. There is debate over whether this additional grade-separated, one-way, raised bike lane on the east side of Grove St. is needed or required. The answer to this question may lie in viewing this feature in the context of related infrastructure and in what effect this feature would have on the overall bike/pedestrian infrastructure on Grove Street.

This bike lane as proposed would start before the I-95 overpass after the new roundabout. Riders would need to negotiate and exit the roundabout and a right-hand slip lane from Exit 22 from I-



Figure 3. Proposed bike/ped infrastructure.

95 to enter this bike lane on the north bound lane towards Auburndale. The lane would continue to the railroad overpass on the north side of the development.

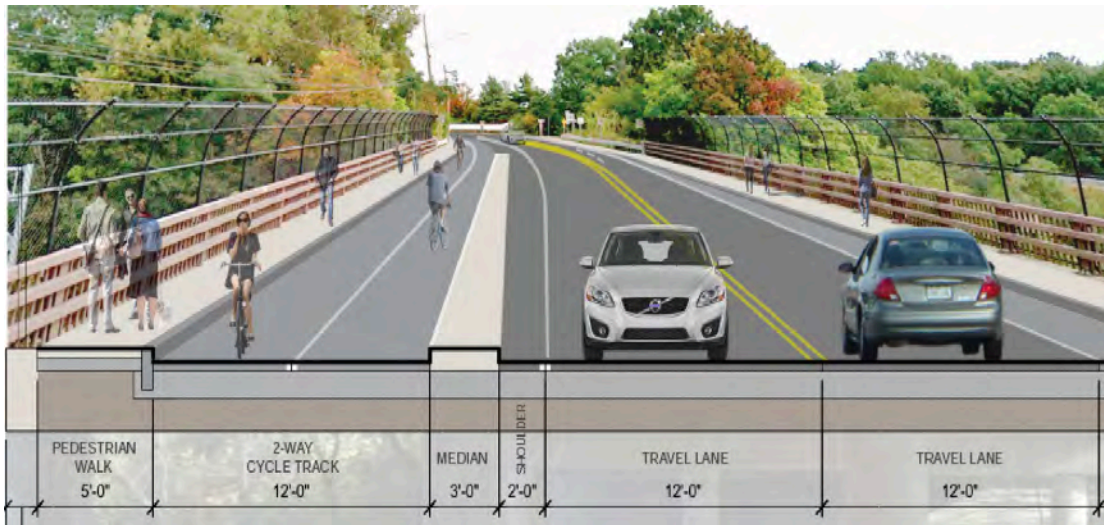


Figure 4. Grove St. I-95 overpass, northbound



Grove Street Section - Building 5

The complimentary routes to this added lane, which is primarily a viewed as a transportation corridor for skilled bicyclists include:

- a 2-way cycle track starting at the Hamilton Recreation Center, which circumvents the roundabout and continues to the railroad overpass north of the Riverside.
- The Riverside Greenway (green on figure 1)

Beyond the railroad overpass there is no bike infrastructure. Inclusion of this lane must be considered in context of what, if any bike pedestrian improvements are made north of the railroad overpass. Potential improvements will be address later.

What are the advantages and disadvantages of the added single northbound bike lane?

The points in favor include:

- A confident bicyclist coming from Lower Falls will want to stay on the right side of the road pass under the rail bridge and continue uphill to Auburndale on Grove Street without crossing the street.
- Without this lane these riders would be sharing the 2-way bike track with less confident riders, children etc.



Figure 5. Grove St. showing proposed sidewalk and railroad overpass.

The arguments against including this lane include

- Avoiding the conflict with building potential right-hand slip lane at Exit 22 and the roundabout.
- Reducing the setback on the development side by 3 feet.
- Redundancy
 - for bike commuters the Riverside Greenway may be a safer, more pleasant option to reach Auburndale.
 - for the average rider is better served by the protected bike lane to Auburndale
- A 5-foot-wide, 6 inch-raised, non-protected bike lane may be unsafe because
 - There is no adjacent sidewalk; if pedestrians will use this as a sidewalk it creates a dangerous conflict.
 - The proposed crossing before the railroad overpass is risky for pedestrians and bicyclists. It would be better placed near the south driveway to the Riverside Office Park.
- Cost of this added lane which could be put toward other bike-pedestrian infrastructure adjacent to Riverside.

Improving the bike/pedestrian infrastructure between Riverside and Auburndale Center

- The railroad overpass is the limit of any infrastructure proposals by Mark Development.
- The creation of this infrastructure to reach at least Williams School and better Auburndale Center would be a huge asset to local residents, the large increase of school children walking to Williams from Riverside, commuters, residents of Lasell Village, students at Lasell college.
- Existing conditions would appear to make the continuation of the condition in front of Building 6 possible from Riverside to Hancock Street.

- Wall to wall distance in the railroad underpass is 45 feet, with mean sidewalk widths of eight feet on both sides and a roadway width of 30 feet.
- The existing east side sidewalk does not connect to a sidewalk in front of the golf course and therefore serves no purpose.
- A pedestrian crossing is better placed in front of the Riverside Center, where traffic is already controlled, rather than on the other side of the underpass in front of Riverside.



Figure 6. Grove St south of railroad overpass.

- The space under the overpass has sufficient width to accommodate:
 - North and south 11-foot auto lanes
 - a 10-foot wide two-way cycle track
 - a 6-foot pedestrian walk
 - 3 feet for separation barriers/curb
 - 2-foot shoulder
- The landscape plan between the Riverside Center and Grove St. already accommodates an attractive pedestrian experience. Grading and moving curb would allow a two-way cycle track to be added to this space.
- The special permit for the Riverside Center includes the following provision which should provide incentive for creating this infrastructure:

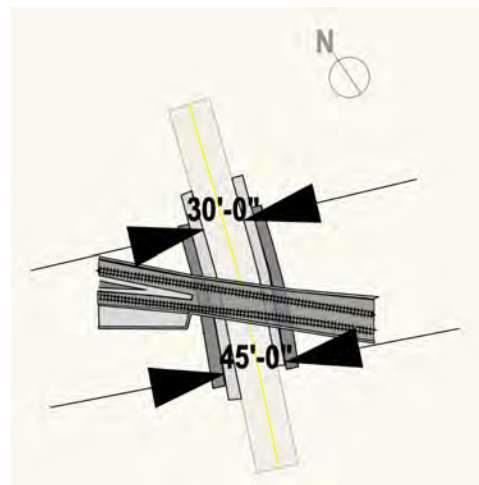


Figure 7. Detail of Grove St. at railroad

11. That if access from the site to the MBTA property is approved by the MBTA as shown on a plan entitled "C3 Site Layout and Materials Plan" and "L2 Tree Planting at Grove Street" cited in

Condition #1, the petitioner shall construct a pedestrian walkway to the MBTA Riverside Station which walkway and access to it shall be open to the users of the site and the general public.

- **Tunnel option**

- A second more expensive option to create a pedestrian path between the office park and station is tunnel under the tracks.



Figure 8. Location of tunnel under tracks.

- **Riverside Center to Hancock St.**

This section of Grove St beyond the north Drive of the Riverside Center to Hancock St is uphill and relatively straight, with clear sight lines and an average width of 33 feet, with a 3-foot berm and 5-foot sidewalks on both sides. Utility poles run the length of the west side berm would need to be relocated. This total width of 48 feet, with two 11-foot wide (22 feet total width) auto lanes, the balance of 26 feet should allow a reconfiguration of this section to accommodate a separated 2-way cycle track and pedestrian path (16 feet), curbs and east side sidewalk (10 feet)

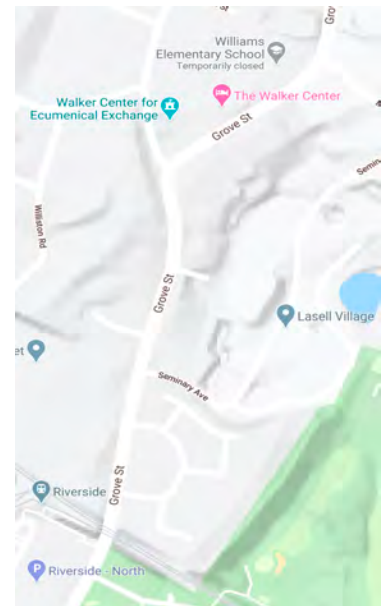


Figure 9. Grove St to Hancock St.

- **Hancock St. to Williams School and Auburndale Center**

Grove Street beyond the Hancock Street intersection is complex. It is curving with poor sight lines, with cross walks at Williams School; a separated drop off lane for Williams, a steep downhill to the Woodward St. ending in at a 4-way stop; a curved steep up hill to Auburn St and over the I-90 overpass; and a commercial district with on street parking. These features make the continuation of the proposed infrastructure on Grove St. challenging.

The alternative to Grove Street is to use Hancock Street, which is already one-way between Grove and Woodward during school hours. This quiet residential street could be converted to a neighborhood way providing access to the rear entrance of the Williams School, playground and ball field.

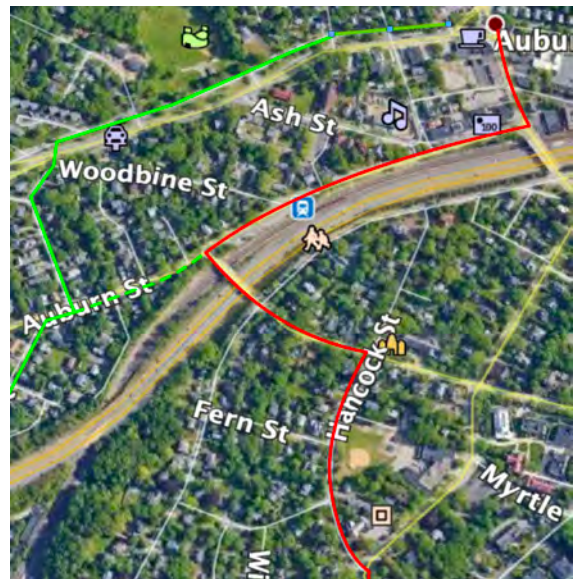


Figure 10. Hancock to Auburn St.

The infrastructure would be achieved by making Hancock Street in this segment one-way fulltime, using the existing sidewalk to create a grade separated pedestrian walkway. The bike lanes could be made using paint.

There are several options to get to Auburndale Center. A left turn on Woodward Road is the better option to reach Auburndale Center and avoid the Grove St I-90 overpass. Woodward Road crosses I-90 and joins Auburn Ave. where a right reaches Auburndale Center and a left connects to the Riverside Greenway.

Improving the bike/pedestrian infrastructure between the roundabout and the Hamilton Center

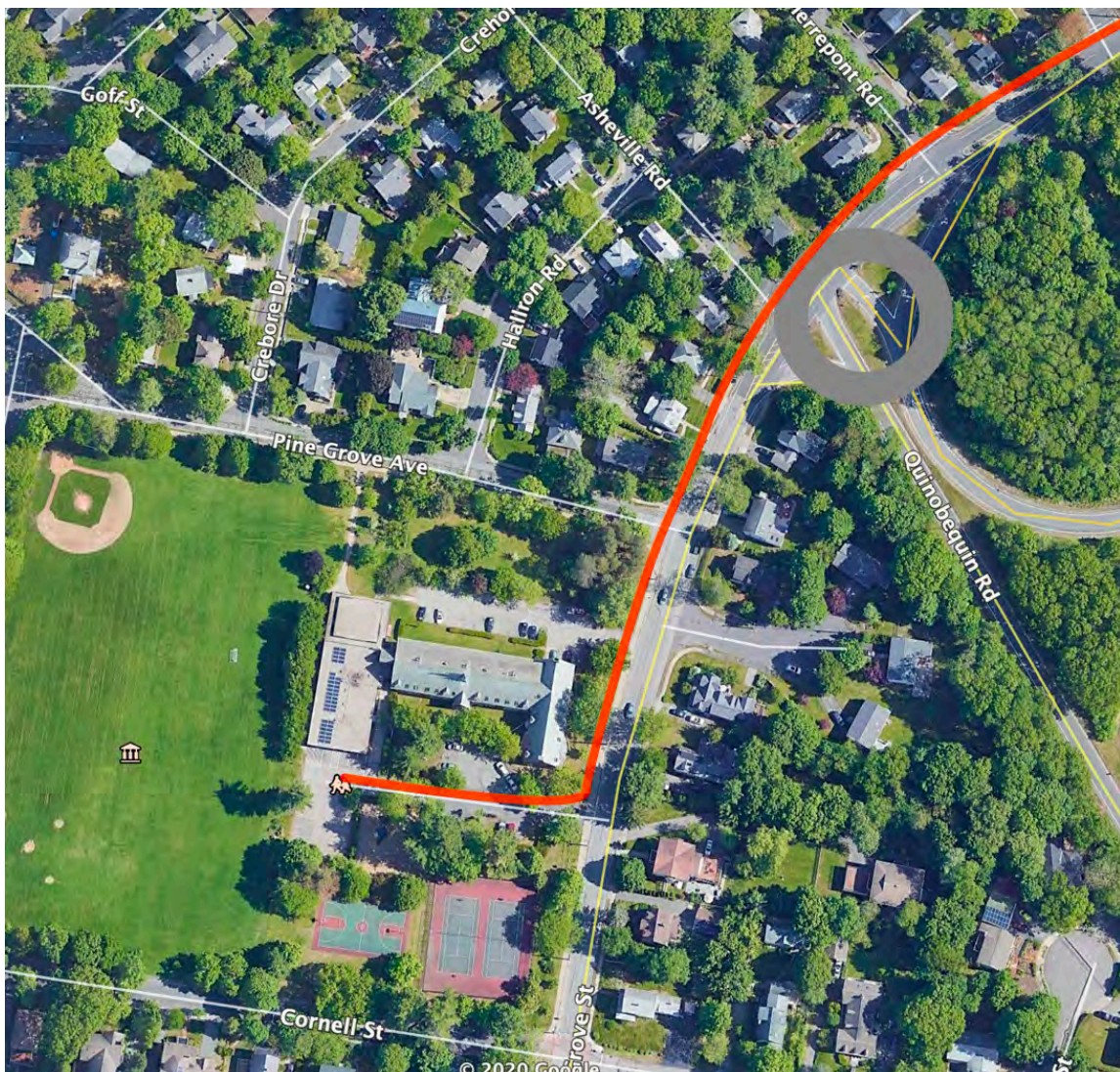


Figure 11. Extending infrastructure to the Hamilton Center will allow resident of Riverside to safely access the community center and recreational facilities. The grey circle is the approximate location of the proposed roundabout.

The proposed bike-pedestrian improvements on Grove St will end at the roundabout. Given the lack of community resources being proposed at Riverside, children and adults living at Riverside will undoubtedly use the Hamilton Grove Community Center for educational and recreational activities, including preschool and afterschool. Assuring safe access by foot or bicycle is an important step.

There is ample space to accommodate any modifications within the city owned property south of Pone Grove. The design of the roundabout and approaching streets should accommodate protected infrastructure. The 32-foot pavement width and 48-foot sidewalk to sidewalk distances are sufficient to allow this. At the same time the traffic slowing begun by the installation of the raised crosswalk at Cornell and Grove Streets and be completed.

Next steps

The final design of the Grove Street infrastructure is a pressing issue for the Land Use process and permitting of the Riverside Development. Understanding what is possible and the estimated costs of construction is an appropriate short-term goal. The Planning Department, Transportation Cluster, and Complete Streets Working Group should evaluate these proposals.

This section of Grove Street has many institutional stakeholders, all of who would benefit enormously from these improvements. These entities should be approached to share the costs of construction. These include the Mark Development, Lasell College, Lasell Village, Alexandria Real Estate-MA Regional No 76 LLC, the owner of the Riverside Office Park and leading life science campus developer, and Woodland Park Partner LLC, a subsidiary of The Hamilton Company, a Boston-based residential and commercial real estate company.

Thank you for your consideration,

Ted Chapman
In consultation with the LFIA-Riverside Committee