

January 6, 2010

Frank A. Tramontozzi, P.E., Chief Engineer
MassDOT, Highway Division
10 Park Plaza, Boston, MA 02116-3973
Attn: Project Management

Delivered via Adobe PDF to Frank.Tramontozzi@state.ma.us

**Subject: Route 5 Reconstruction and Minor Widening (West Springfield)
Project File No. 604210**

Dear Mr. Tramontozzi:

LivableStreets would like to take this opportunity to provide comments regarding the 25% Design for the Route 5 Reconstruction and Minor Widening Project in West Springfield. This stretch of Riverdale Street in West Springfield carries a significant amount of vehicular traffic and is currently very auto-oriented in its design and in the surrounding land uses. We therefore feel that every reasonable effort should be made to make walking, bicycling, and transit more appealing options, as well as to calm traffic and beautify the street as a whole.

Overall Design

We feel that the proposed changes overall will help make this stretch of Riverdale Street feel much more like a boulevard and less like a highway, particularly the replacement of the crash-barrier median with a green curbed median. It is not clear from the 25% plans, but we hope that trees will be planted in the median where possible as well as along edges of the roadway. Trees would help to beautify the corridor as well as calm traffic, which currently in many cases travels quite a bit faster than the posted 40 mph speed limit. The addition of sidewalks, crosswalks, and crossing signals where they do not exist will make this much more of a “complete street” than it is today. However, there are additional opportunities that we hope you will take advantage of to improve the access and mobility of all users on this street.

Pedestrians

We are quite excited to learn that a sidewalk will be constructed on the east side of Riverdale St where one does not currently exist. This is very important, particularly since most of the retail businesses in this area are clustered on the east side. We are also quite pleased to learn that crosswalks and crossing signals will be added across Riverdale St at the Table and Vine entrance, Daggett Drive, and Morgan Road. We are also pleased that crosswalks and appropriate signage will be added across the Route 91 entrance and exit ramps and minor side streets.

In general, as with most projects, we suggest that **pedestrian crossing signals include countdown timers, and that the pedestrian phases be built into the light cycles** as to provide maximum benefit to pedestrians and eliminate the need to press a button before crossing. Where possible from a safety perspective, we ask that the **pedestrian crossing phases be timed concurrently** with parallel traffic movements, **along with a 3-second or longer leading pedestrian interval** where appropriate. This provides a longer period of time for pedestrians to cross (less waiting), and can also help improve traffic flow by not requiring traffic to stop in all directions to allow pedestrians to cross.

From looking at the plans presented at the public meeting, it appears that the pedestrian signals at the **Table and Vine Entrance and at Daggett Drive** are planned to be concurrently phased with parallel traffic movements, as we would hope. It is not clear to us if the parallel vehicular phases are part of each cycle, or if they are only triggered by the presence of cars at the corresponding approaches. If the parallel vehicular phases are part of each cycle, we would ask that pedestrian pushbuttons not be included since the pedestrian phases will always appear, thereby setting an expectation for pedestrians that they do not need to do anything to trigger the walk phases. As stated above, we also suggest that 3-second leading pedestrian intervals be included for both of these intersections, particularly since there is a good deal of right-turning traffic that needs to yield to pedestrians.

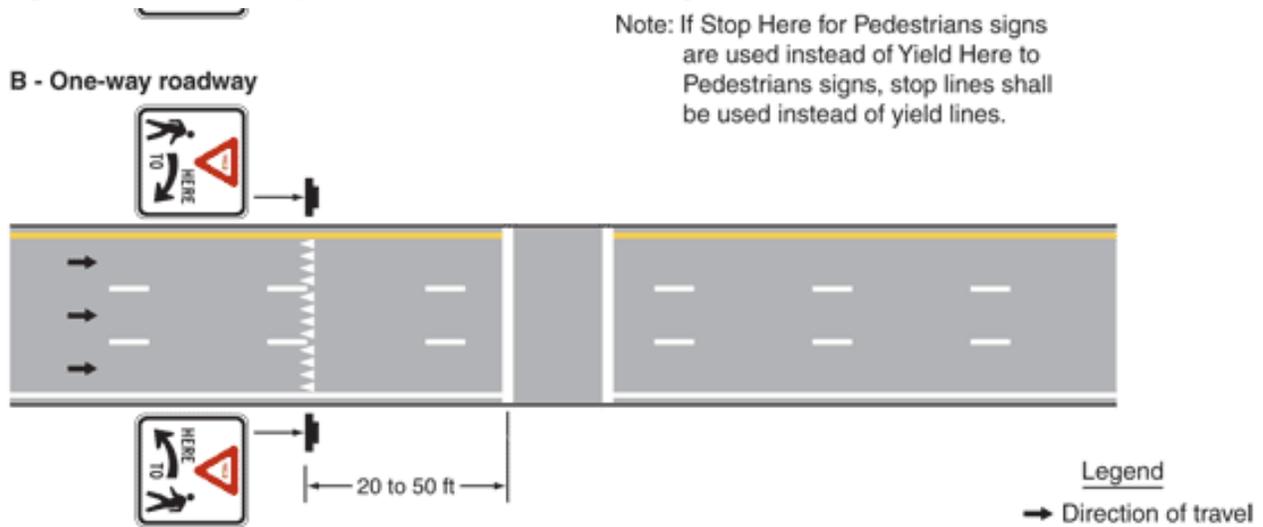
At **Morgan Road**, we can understand that concurrent pedestrian phases are not desirable due to the complex turning movements. If the exclusive pedestrian phase could be made to automatically occur (and pedestrian pushbuttons not be provided), this would be ideal. However, we understand that stopping vehicles in all directions is not always desirable when no pedestrians are present, since this can have an adverse effect on traffic throughput.

The **crossings of the Route 91 entrance and exit ramps** are of particular importance. The exit ramp on the southwest corner of the interchange is signal-controlled, and is the least challenging to make safest for pedestrians. Since the traffic signal at the end of the ramp stops all ramp traffic as part of the cycle, an automatic concurrent pedestrian phase can be easily incorporated. (It is not clear from the plans how this signal is currently or planned to be configured for pedestrians.)

However, the entrance ramps to the southeast and northwest and exit ramp to the northeast are all heavily used and traffic tends to go quite fast along them. We are glad to see clearly marked zebra-striped crosswalks and appropriate pedestrian crossing signage prior to and at the crosswalks themselves. To the extent possible, we ask that you try to improve the ramp geometry to slow traffic and increase the visibility of pedestrians crossing the ramps. We also suggest the addition of **triangular yield lines prior to the crosswalks and additional “Yield Here to Pedestrians” signage** to better alert motorists that they are expected to yield to pedestrians.

An example from the MUTCD:

Figure 3B-17. Examples of Yield Lines at Unsignalized Midblock Crosswalks



An additional possibility is to **add solar-powered pedestrian beacons** at the crosswalks themselves. These beacons have a flashing yellow light that is activated by a pedestrian pressing a button before crossing, alerting motorists that a pedestrian is crossing.

An example of a pedestrian crossing beacon:



Bicyclists

Riverdale Street currently has wide shoulders in most locations, which do make the street minimally acceptable for bicycling, however the presence of a number of right turn only lanes and the heavy volume and fast speed (45-50 mph) of traffic along the roadway makes it quite unattractive and intimidating for all but the most intrepid bicyclists.

Based on the plans presented at the public meeting, this project will retain similar lane and shoulder configurations as currently exist. We **strongly suggest that bicycle lanes be added** to the roadway as part of this project, with the intention to extend them further along other segments in the future. Bicycle lanes would help to guide cyclists through the intersections, particularly where there are right-turn-only lanes and highway on-ramps and will help to make motorists aware that bicyclists are allowed and should be expected to use the roadway. We believe that the addition of bike lanes to this project is well supported by the MassDOT Highway Design Guidebook, which states:

Bicycle lanes are generally considered the preferred treatment for bicycle accommodation. (Section 5.3.2.1)

and

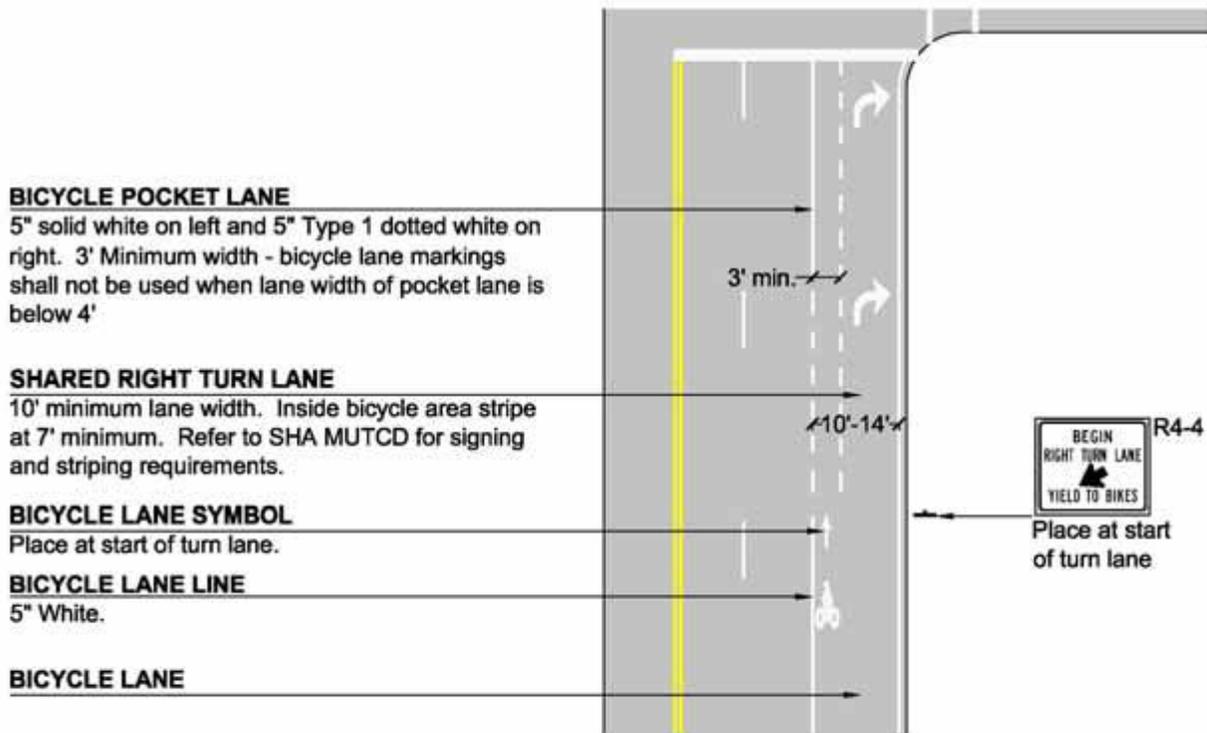
One difference between shoulders and bicycle lanes is that shoulders are usually used for bicycle accommodation in rural and suburban low density areas, where on-street parking, curbs, and sidewalks are rarely encountered. (Section 5.3.2.2) [We contend that this does certainly not describe Riverdale Street.]

The addition of bicycle lanes will not only enhance the roadway for bicyclists, but can also improve general safety for all users. The addition of bicycle lanes has been shown to bring overall traffic speeds down, increasing safety for motorists, bicyclists, and pedestrians. Particularly since many motorists travel 5-10 mph or more over the posted 40 mph speed limit through this area, bringing overall speeds down would greatly enhance the safety of this corridor.

Thankfully, the addition of bicycle lanes should be fairly easy to do, in our opinion. For the majority of this project, the shoulders on Riverdale Street are already wider than the 5' minimum for bicycle lanes. The space occupied by these shoulders could easily be used for bicycle lanes, by adding appropriate bicycle symbols on the roadway and by creating the necessary transitions at intersections. The biggest challenge will be where there are right-turn-only lanes (northbound approaching Morgan Road, Daggett Drive, and the Table and Vine entrance, and southbound approaching Morgan Road). The ideal configuration for bike lanes at right turn lanes is to have the bike lane continue between the through lanes and right-turn-only lane. However, if there is not enough curb-to-curb width to allow for this, a bicycle lane can also feed into a right-turn-only lane, along with the delineation of a bicycle pocket lane within the turn lane itself to help guide bicyclists. The bicycle lane then starts up again on the far side of the intersection.

An example of a bicycle lane feeding into a right-turn-only lane, where there is not enough room for a standard 5' bike lane between the through lane and right-turn-only lane:

(from Maryland SHA Bicycle and Pedestrian Design Guidelines)



Regardless of whether bicycle lanes are added to the project, we urge you to **install Share the Road signs** along the roadway to make all users aware that bicyclists are allowed to and will be traveling along it.

Transit Users

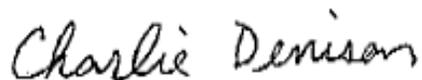
PVTA bus route P20 travels along Riverdale Street and serves the many businesses and residences along the corridor. Along with the pedestrian improvements to sidewalks, crosswalks, and signals, we ask that you work with the PVTA to **install bus shelters and benches at bus stops** along the roadway where they do not already exist, in conjunction with **enhanced signage about the bus route and schedule**.

We look forward to this project making Riverdale Street more accessible, accommodating, and inviting than it is today for a variety of users. It is well on its way to doing so, and we hope that you can incorporate at least some of our suggestions into the design as it moves forward so that it can live up to its true potential.

LivableStreets believes that transportation is a key element to making our cities more attractive, convenient, healthy places to live. By designing streets that are truly multi-modal, citizens have more choices about how to get around, reducing our need for travel by private automobile, and providing more opportunities to improve their health through active transportation such as walking and bicycling.

Thank you for considering our input as this project moves forward. If you have any questions on the above comments and suggestions, please contact Charlie Denison, Board Member & Advocacy Director, LivableStreets Alliance, who may be reached at 617.852.6125 and charlie@livablestreets.info.

Sincerely,

A handwritten signature in cursive script that reads "Charlie Denison".

Charlie Denison,
Board Member & Advocacy Director

CC: Martin Leelman, Project Manager, MassDOT Highway Division <Martin.Leelman@state.ma.us>
Douglas White, Assistant District Projects Engineer, MassDOT Highway Division
<Douglas.M.White@state.ma.us>