



Preliminary Assessment – Mass Central Rail Trail Belchertown Segment
from Springfield Road to Route 181

On August 13 & 14, 2019, Conservation Works LLC inspected the 3.2 miles of railroad right-of-way between Springfield Road and Route 181 in Belchertown as a potential addition to the Mass Central Rail Trail (MCRT). Following is our preliminary evaluation of the issues and potential of this route as a key part of the proposed Northampton-to-Boston route.

Current surface. At present the route has a roughly 4-foot wide gravel travel surface that is generally smooth and level enough to accommodate most bicycle and pedestrian use (see attached photographs). To meet current standards for an accessible, shared-use path, the trail would be greatly improved by the installation of 10-12 foot wide surface consisting of an underlying gravel base 8-12 inches thick with a 4-inch deep, 3/8"-minus compacted stone aggregate surface on top with 2-foot wide, grassed shoulders. Scattered protruding roots (photo 7) and rocks would need to be removed.

Drainage. The present route has few drainage problems, but there are some that need to be addressed to ensure accessibility and sustainability:

- At the northwest end of the route, stormwater flow from Springfield Road enters the trail and has caused erosion along the first part of the trail (photo 2). Re-directing this surface water to keep it from flowing onto the trail would prevent future trail erosion and deterioration.
- A short distance down the first section of the trail, intermittent stream flow crosses the trail and should be culverted beneath the trail.
- Two existing culverts beneath the trail approximately 10 feet long and 16 inches in diameter have filled with sediment and should be cleaned out to restore the function of the culverts.

Vegetation Management. The Town DPW should be asked to do the tree clearing, chipping, and stumping necessary to make the trail corridor ready for a local grading contractor to perform the rough and finish grading and compacting of the trail surface. The Town of Spencer recently handled a similar process in that way, and Belchertown might benefit from a discussion with the Spencer DPW Commissioner, Steve Tyler (styler@spencerma.gov), about Spencer's project. Ideally, to prepare for a new trail surface and avoid future maintenance problems the Town should consider cutting back the existing tree growth as far back as is acceptable to all from the future trail tread and 2-foot shoulders. Future vegetation manage-

ment of the finished trail should include regular shoulder mowing and frequent trimming back of natural bordering trees and shrubs whose limbs will tend to grow out over the trail.

Jabish Brook bridge. Photos 22-24 show the timber railroad bridge over Jabish Brook, over which the trail crosses. It appears to be sound but an assessment by a structural engineer is warranted before plans to use the structure as part of the MCRT are proposed.

Stone culvert. Photo 25 shows a substantial stone culvert beneath the rail trail in the southern section of the route. The culvert appears to be in good condition.

Springfield Road and Route 181 end points. The end point at Springfield Road connects with the next section of right-of-way to the north. At the beginning of that section there is room for one vehicle to park (photo 1), but little or no space to provide for additional future parking. Parking is available approximately 500 feet up Springfield Road for those willing to walk or bike along the paved road to the rail trail.

At the southern end point at Route 181 (Franklin Street), there is room for 2 or 3 vehicles to park next to an impromptu "trail head" sign (photo 29). This spot could potentially be provided with a more formal gravel parking area that could accommodate additional vehicles.

North Washington Street crossing. The trail crosses North Washington Street at a dangerous point with less than 100 feet visibility, tight curves in each direction, the active railroad bridge a few feet to the south, and steep drops to the street on both sides (photos 12-15, 30-32). Given the safety issues connected with an "at grade" crossing here, CW suggests an engineering study to evaluate the best and least expensive means to bridge this road at the railbed elevation. It is hard to imagine a safe way to cross the road here, and the drop in elevation would require the construction of costly switch-backs to comply with ADA accessibility standards.

Abutting uses and permitting issues. There is a generous buffer of woods along most of the 3.2-mile route. Private residences are barely visible through summer foliage in several locations, and they are typically set back from the right-of-way by at least few hundred feet. Small, informal side trails or cross trails (photos 6, 8, and 10) connect with the rail trail at a dozen points, each shown on the accompanying rail trail map. Wetlands abut the trail in two locations (photos 20, 28), but it appears that rail trail improvements can be made without impacting those wetlands. At the photo 26 point, a gate on the northeast side of the trail leads to an adjacent solar development, and a gate on the southwest side leads into other private property. At the photo 27 point, wire stock fence runs along each side of the right-of-way through a sandy clearing that is reverting to young white pine. Overall, it appears that there are no serious abutter or encroachment issues and that wetland permitting issues are minimal.

Signs. Currently, there is a handful of signs along the route. Photo 11 shows a sign warning users that they are nearing a stop sign, seen in the distance and shown again in photo 12 at the top of the steep grade down to North Washington Street. In photo 16 is a "no wheeled vehicles" sign. At photo 19 is a sign reading "snowmobile permits required" signed by the Belchertown Snowmobile Club. Photo 21 shows two directional

arrows at a cross trail. As the rail trail is developed, signage consistent with that installed on other sections of the MCRT will need to be put in on this section as well. Given the absence of street crossings here except for the North Washington Street crossing, the absence of elevation change and the relative absence of directional changes, minimal signage will be needed. However, informational, distance, and directional signage will be needed at each end of the trail section, at the North Washington Street crossing, and at some or all of the current side trails.

Regulations. Any planning for future trail development and improvement will need to address allowed and prohibited uses. Horseback riders currently use the trail, although on our inspection of the trail we saw no evidence of recent horse traffic. Future horse use would compromise the graded surface and should probably be prohibited. However, there may be room to install a parallel horse trail along the side of the rail trail surface, a possibility that should be studied before final plans are made. The rural nature of this section of the trail, the horse-owner community of Belchertown, and the value of including as many user groups as possible make it important not to come to a hasty conclusion about this issue. For safety concerns, motorized vehicles should be prohibited and suitable barriers put in place at each potential vehicle access point.

Role as part of the MRCT from Northampton to Boston. Ideally, this 3.2-mile section of trail will serve as an essential part of the future shared-use pathway that will run from Northampton to Boston. Except for the difficult crossing at North Washington Street, the present layout is level, not compromised by encroachments from adjacent property owners or lease agreements on the rail corridor, free of complicated permitting issues, and typified by a relatively clean corridor that can be converted to a rail trail in a straightforward manner.



Aerial Photograph
From MassGIS 2014

Belchertown Rail Trail



This map is for planning purposes, with specific points subject to verification on the ground.
It is not to be used by itself for boundary definition.

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Photo 1. On the northwest side of Springfield Road the old rail bed continues northwest. There is room for one car to park here next to the pavement. Additional parking is available approximately 500 feet up Springfield Road. The photo shows the next section of right-of-way, which continues to the northwest.



Photo 2. Looking southeast from Springfield Road at the beginning of the route. Road runoff has eroded some of the surface of the trail in this section. The right-of-way here would accommodate a 10-foot wide travel surface plus two 2-foot grassed berms at either side.

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Photo 3. Trees like the red oak at right that are close to the proposed travel surface will probably have to be removed to keep the roots from disturbing the level gravel surface. Ideally, to make the surface appropriately suitable for wheelchair and bicycle travel, 4 inches of graded base would be underlain by 6-12 inches of gravel.



Photo 4. This is the only fallen tree currently blocking the route.

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Photo 5. The drop-off on both sides of the trail in this section might make a 2-foot grassed shoulder impractical here and in a few other locations along the right-of-way.



Photo 6. This side trail on the northeast side of the trail passes a no-trespassing sign.

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Photo 7. Tree roots that are raised above the present travel surface would have to be removed to allow installation of a gravel base and provide a stable trail bed. This section is a short distance northwest of the North Washington Street crossing.



Photo 8. Another informal, unmarked side trail on the northeast side of the trail.

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Photo 9. This stone monument is on the northeast side of the trail about 700 feet northwest of the North Washington Street crossing.



Photo 10. This small side trail leads to a residential area.

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Photo 11. This warning sign is near the North Washington Street crossing. The trail turns left to drop down to the road. The original rail route continued straight from this point to a railroad bridge that no longer exists.



Photo 12. The trail drops steeply to North Washington Street from this point. Even if a switchback might allow a gradual, wheelchair-appropriate descent to the road, the crossing is in a dangerous location. If at all possible, a bridge over the road at the site of the original bridge would be preferable.

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Photo 13. Looking up the slope of the current trail from North Washington Street. The active railroad bridge over the road is downhill out of the photo to the left.



Photo 14. View of the active railroad bridge. Just beyond the narrow section of road beneath the bridge is a sharp left turn, making a pedestrian crossing here a risky proposition.

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Photo 15. Looking across North Washington Street at the current trail crossing. Curves in both directions make visibility for automobiles quite poor.



Photo 16. This sign not far from North Washington Street can be interpreted to prohibit bicycles or wheelchairs. Clear regulations will need to be part of any upgrading of the trail.

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Photo 17. Conservation Commission Vice Chair Jon Clements examines the trail on a recent walk-through. The right-of-way here would safely accommodate a 10-foot wide travel surface and a 2-foot grassy shoulder on each side. There might also be room for a parallel horse trail at one side.



Photo 18. Another view of this straight section of trail.

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Photo 19. This snowmobile club sign is just off the west end of the adjacent golf course.



Photo 20. South of the golf course is this significant wetland, which occupies both sides of the rail trail right-of-way.

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Photo 21. This cross-trail is midway along the section of right-of-way between North Washington Street and Route 181.



Photo 22. This old railroad bridge over Jabish Brook appears to be in good enough condition to accommodate pedestrian traffic and maintenance equipment.

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Photo 23. The support structure of the Jabish Brook bridge seen from beneath. An engineer's assessment should be undertaken to be certain of the bridge's condition.



Photo 24. Jabish Brook seen from the bridge.

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Photo 25. Not far from Route 181 is this stone culvert, which appears to be in good condition.



Photo 26. This gate leads to a solar farm located northeast of the trail. A similar gate on the southwest side of the trail leads into adjacent private property.

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Photo 27. Stock fence is on both sides of the trail surface in this sandy clearing, which is reverting to white pine.



Photo 28. Not far from Route 181 a wetland abuts the northeast side of the trail.

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Photo 29. This trailhead sign is located at Route 181. Limited parking is available here, and future parking improvements could probably accommodate as many as 4 cars. The truck in the photo belongs to a runner who frequently uses the trail.



Photo 30. View of the North Washington Street railroad bridge and its stone abutments from the south. This bridge has a 30-foot span, but because there are no existing abutments for an adjacent, future rail trail bridge, its span would need to be 50 to 80 feet in length. A fiberglass pedestrian bridge might be the best option here.

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Photo 31. View of the high point on the west side of North Washington Street. The paved road can be seen at left and the active railroad bridge is barely visible at the upper right.



Photo 32. View of the high point on the east side of North Washington Street. The road pavement is barely visible through the trees to the right and the active railroad bridge is at upper left.