November 19, 2016

Patricia A Leavenworth, P. E., Chief Engineer
MassDOT – Highway Division
10 Park Plaza, Boston, MA 02116-3973
Attn: Roadway Project Management

Dear Ms. Leavenworth,

Re: OARS comments on Bruce Freeman Rail Trail, Project File no. 606223

Thank you for the opportunity to comment on the Phase 2B 25% engineering plans for the Bruce Freeman Rail Trail, Project File no. 606223, presented at the Department of Transportation (MassDOT) hearing hosted in Concord on Thursday, November 17, 2016.

OARS is the watershed organization for the Concord basin, comprising the Sudbury, Assabet and Concord Rivers in a 400-square mile area west of Boston. A non-profit organization founded in 1986, OARS works primarily through science-based advocacy and education to develop a scientific understanding of the causes of river degradation and works with communities to seek effective solutions. OARS has conducted many stream continuity surveys, including of Nashoba Brook and Fort Pond Brook, to identify where road crossings (culverts and bridges) break the continuity of aquatic and riparian habitat (see: www.oars3rivers.org/our-work/monitoring/river-continuity).

The Bruce Freeman Rail Trail section that is the focus of this project will impact both Nashoba Brook and Fort Pond Brook, as well as cross over a major highway, Route 2. We are delighted to see that the Route 2 crossing has been carefully located to reduce the impact of the project on the wetlands that border the highway and the rail trail. We look forward to the increased bike and pedestrian use that connecting all the sections of the Bruce Freeman Rail Trail will afford, and we hope that the Route 2 crossing will be built in a timely fashion.

With respect to the Nashoba Brook crossing, OARS has some concerns about how the current design may unintentionally limit wildlife passage along Nashoba Brook, and how stone dust building materials, if used, could negatively impact water quality in the streams.

Specifically, OARS is concerned that the bridge design does not provide adequate ground-level passage for wildlife between the proposed rail trail and the west side of Nashoba Brook in the vicinity of the Route 2 crossing. Since the bridge is elevated and fenced at the point that it crosses Nashoba Brook and there are solid retaining walls proposed between the brook and Route 2, the design might actually funnel the wildlife along Route 2 where they will be forced to cross the highway.
We suggest that constructing a ground-level opening for wildlife passage through the solid retaining walls and widening the opening for Nashoba Brook under the rail trail are two possibilities for preserving ground-level passage near the brook.

The Massachusetts Stream Crossing Standards as published in “Design of Bridges and Culverts for Wildlife Passage at Freshwater Streams” (MassDOT, 2010) should be met, as required, for all crossings being redeveloped. This will not only ensure a healthier environment for aquatic and riparian wildlife, but also reduce the risk of flooding and potential damage to infrastructure as a result of flooding. It would also help to reduce the potential for hazardous wildlife road crossing incidents. We would like confirmation that the trail/Nashoba Brook crossing will meet the state stream crossing standards. We request that you consult with the Mass. Department of Fish and Game, Division of Ecological Restoration, if you have not done so already, to ensure that the project in its entirety meets the stream crossing standards and will not adversely affect aquatic or riparian wildlife.

Specifically, OARS suggests that, as part of this project, the culvert where Nashoba Brook crosses under Route 2 be renovated to improve wildlife passage and to encourage wildlife to avoid the roadway. An improved Nashoba Brook crossing would complement the wildlife tunnel in your current design, and provide passage on both sides of the rail trail overpass. While it does not directly apply to Nashoba Brook, OARS would also like to encourage the Massachusetts State Police to consider wildlife passage when they design their fence on the other side of Route 2, so that fencing and retaining walls do not inadvertently funnel animals into the roadway.

OARS would also like to comment on the rail trail paving materials. Stone dust can be a potential source of sediment and associated nutrients in stormwater runoff if it is not adequately stabilized. The waterways along the trail (Warner’s Pond, Nashoba Brook, and Fort Pond Brook) are already impacted by eutrophication from too much phosphorous. We request that stone dust be avoided for any part of the trail, but especially in immediate proximity to streams and wetlands. We expect that strong erosion control and sedimentation control measures will be employed and regularly inspected during the course of the project. OARS would like to encourage the consideration of porous asphalt for the surface of the rail trail and for any connecting trails, such as a connection along Fort Pond Brook to the Acton School Street soccer fields, as it would promote infiltration as well as reduce the potential for nutrient export and stream sedimentation.

Thank you for this opportunity to comment on the Phase 2B 25% engineering plans for the Bruce Freeman Rail Trail in Concord. We look forward to the quick completion of this project. Please don’t hesitate to contact me if you have any questions.

Yours sincerely,

Alison Field-Juma
Executive Director

cc:
Marcia Rasmussen, Planning Division, Town of Concord
Delia Kaye, Concord Natural Resources
Tom Michelman, President, FBFRT