



June 25, 2020

Ref: 12970.00/14424.00

Sudbury Conservation Commission  
275 Old Lancaster Road  
Sudbury, MA 01776

Re: BETA Peer Review Comment Letter--Applicants' Response to Comments--DEP File No. 301-1287  
Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project

Sudbury Conservation Commission Members,

The Applicants, the Massachusetts Department of Conservation and Recreation ("DCR") and NSTAR Electric Company d/b/a Eversource Energy ("Eversource"), are providing this response to comments from the peer review letter provided by BETA, dated May 11, 2020. The responses address specific comments from the letter numbered by BETA (e.g., G1, G2, etc.) as well as additional general comments from the narrative of the letter. Comments that were taken from the general commentary are identified under the appropriate section (e.g., General) and are numbered sequentially (i.e., C1, C2, C3, etc.). The Applicants are reviewing BETA's comments on stormwater management issues (SW1 through SW51) and responses will be provided in a separate submission as soon as possible.

Responses to BETA's comments are presented below. Each comment is presented in italicized text, and the Applicants' response is provided in plain text:

## General

*G1. The submitted plans and calculations do not easily provide for confirmation of compliance.*

*a. Provide additional contour labels to construction plans to better understand topography.*

Additional contour labels have been added to the construction plans and are included in the plans that are an attachment to this supplemental submission.

*b. Identify existing/proposed cover types on watershed plans.*

The stormwater report figures will be updated to include existing/proposed cover types.

*c. Provide station markers on Drain Area plans to clarify limit of watersheds compared to proposed improvements.*

The stormwater report figures will be updated to include station markers for clarity.

*d. Include Tc paths on watershed plans.*



The stormwater report figures will be updated to include Tc paths.

- e. *Use consistent units (i.e. square foot measurements are included in the existing condition model while acres are used in the proposed condition)*

The existing and proposed condition models will be updated to use acres.

- f. *Use consistent nomenclature for BMPs; plans indicate "swales" and "area of increased infiltration" where stormwater reports refer to water quality swales and infiltration basins.*

The stormwater report will be updated to provide nomenclature that is consistent with the plans (i.e., swales and area of increased infiltration). Areas of increased infiltration characteristics most closely match an infiltration basin Best Management Practice (BMP) because they detain, treat, and infiltrate stormwater.

- g. *Show and label all BMP swales and area of increased infiltration on cross sections.*

The BMP swales and areas of increased infiltration will be labelled on the cross sections.

- G2. *Provide plans for earthwork operation in regard to possible soil contamination issues. Railroads are known to commonly contain contaminated media in the form of both track components (rails, ties) and the underlying soil. BETA notes that rail and tie removal is proposed in the narrative, but there are no measures to inspect the subsoils.*

The subsurface investigation results are being provided in a memorandum that is being submitted to the Town of Sudbury as an attachment to this supplemental submission. In summary, the subsurface investigation conducted by the Applicants confirmed that the soils along the rail way contain certain constituents commonly found along railroad rights-of-way ("ROW"). Considering the low solubility of these constituents and the long period of time they have been present in the project work zone, the excavation and movement of these soils during the Project work will not increase their mobility or present an increase in risk to adjacent surficial soil or groundwater. Also, the excavation and removal of excess soils for off-site transportation to a disposal facility will result in a reduction of the overall volume of these constituents along the ROW.

Following the removal of the rails and ties, no additional testing will be conducted because the construction platform will be covered with either pavement or 12 inches of clean fill. Where the duct bank will be installed, the native soil will be below the duct bank, which will be covered with fluidized thermal backfill, and a final 4 inches of loam. The rail trail shoulders will have 8 inches of gravel and 4 inches of loam and the rail trail itself will be underlain with 8 inches of gravel and four inches of pavement. This will eliminate potential human and environmental exposure to the existing soils remaining in the Project Site. In each case where soil is graded or excavated, the BMPs in MassDEP's Rail Trail guidance will be followed to ensure that potential exposure is



eliminated or minimized. As outlined in Section 5.3 of the NOI, the Applicants will employ a highly qualified and independent Environmental Monitor (“EM”) that will frequently visually inspect soil conditions encountered during Project excavations. If conditions are encountered that suggest soil may require additional evaluation or special handling based on visual, olfactory, or field screening results, excavation activities in that area will immediately be stopped and Eversource and the Licensed Site Professional (“LSP”) will be contacted to evaluate the observations and recommend requirements for proper handling.

Prior to the start of construction, a Soil and Groundwater Management Plan (SGMP) will be prepared in conjunction with the selected contractor. The SGMP will utilize the soil and groundwater data collected to date within the Project limits, permit restrictions, and resource boundaries to develop means and methods to manage soils and groundwater encountered during project construction activities including soil excavation, groundwater dewatering, and railroad tie and track removal.

- G3. *Evaluate current condition and provide report and plan to restore, if necessary, the function on all culverts in the project area. Field visit by BETA identified that several culverts were in poor condition, blocked, buried or needed tree removal.*

Section 3.1.9.1 of the NOI discusses culverts and drain pipes. VHB structural engineers evaluated all of the culverts within the Project Site in 2017 and 2018. As identified in Table 4 of the NOI, drainage pipe #127A will be replaced and drainage pipe #125B will be extended. Debris will be cleared from culvert #127I and drainage pipe #126A, and vegetation that is causing damage at drainage structure #127H and culvert #126B will be cut. No rehabilitation work is proposed for the remaining culverts because Eversource engineers have determined that they will not affect the operation or maintenance of the transmission line.

### **Wetland Resource Area Impact Summary**

- C1. *With the exception of BLSF, the resource area boundaries depicted on the plans were confirmed through an Order of Resource Area Delineation dated August 27, 2018. The ORAD affirmed the FEMA 100-year base flood elevations (BLSF boundary) only. Meaning, the BLSF boundary locations on the ORAD plan were not confirmed because:*
- I. A significant amount of the Site’s topography is derived from aerial LiDAR data.*
  - II. During the ANRAD process it was documented that many of the contour elevations differ significantly (by several feet) from the LiDAR contours. Therefore, fill volumes below the 100-year floodplain boundary are still not understood or accurately quantified.*

The statement that the BLSF resource area boundaries depicted on the plans were not confirmed in the ORAD is incorrect. During the ANRAD process, Nover Armstrong recommended and the



Commission required that the BLSF elevations be ground surveyed in the field by a Professional Land Surveyor. Eversource and VHB submitted a response to comments from Nover Armstrong regarding the use of LiDAR, which is an industry accepted standard, in a letter dated May 16, 2018. This was confirmed by Nover-Armstrong at the August 16, 2018, public hearing and the ORAD was issued, which included approving the BLSF boundary.

- C2. *The Project may not fully comply with the conditions to qualify for the limited project provisions under 310 CMR 10.53(3)(d), therefore the Commission may require that the Project fully comply with the performance standards.*

The Project fully complies with the criteria for limited projects. As proposed, the surface contours and vegetation in the Project Site will be substantially restored. With respect to contours, the Project maximizes the use of the previously developed areas associated with the existing raised rail bed and has been designed to follow existing topography and to minimize the grading necessary to facilitate the installation of both project components. The grading proposed for the Project is similar to the kind of activity that is necessary for any linear utility or rail trail project that is subject to the limited project regulations.

The same is true for revegetation. The Project includes restoration of native vegetation in all temporarily disturbed areas outside of the proposed 10-foot-wide paved surface associated with the MCRT. The revegetation of the Project corridor outside of the proposed paved surface includes a variety of strategies, dependent upon proximity to the paved MCRT and the underground transmission line, proximity to perennial waterbodies, and proximity to Estimated/Priority Habitat for state-listed species.

Since submitting the NOI, the seed mix in the planting schedule on Sheet 131 of the Eversource NOI plans has been revised to include woody shrubs. The revised planting schedule is included within the revised plan set that is included as an attachment to this supplemental submission. The combined herbaceous/woody seed mix will be used in all areas of temporary disturbance except for the bike path shoulders. The bike path shoulders will be restored with the herbaceous seed mix shown under Schedule A on Sheet 131 of the Eversource NOI plans.

The entire ROW is previously developed and portions of the RFA are degraded. The restoration plan proposed near Bridge 128 includes the planting of 85 individual tree specimens that are 3 to 6 feet in height, and 60 woody shrub specimens that are 3 to 4 feet in height, combined with the application of a seed mix and aquatic plant plugs. The restoration plan proposed near Bridge 127 includes the planting of 78 individual tree specimens that are 3 to 6 feet in height and 135 woody shrub specimens that are 3 to 4 feet in height, combined with the application of a seed mix and aquatic plant plugs. In addition, the approximately 4,000 linear feet of the Project alignment within Estimated/Priority Habitat from the Sudbury/Hudson town line to approximately STA 401+40 will be restored with a combination of low-growing shrub species and an herbaceous and



woody seed mix. Finally, as previously mentioned, the remaining temporarily disturbed areas along the Project will be restored by planting a seed mix containing a variety of native herbaceous and woody species. All of these vegetation restoration treatments will provide wildlife habitat and once fully established they will substantially restore or improve existing conditions.

In addition to this proposed re-establishment of native vegetation, the Project design includes the creation of snags and brush piles along the alignment to supplement wildlife habitat value within these areas. Lastly, the removal of the railroad rails and ties will remove an existing barrier for wildlife movement along the entire length of the Project.

C3. *The Project must fully comply with the MA Stormwater Regulations and Standards regardless of the application of the Bikepath Redevelopment provision*

As stipulated in the Wetlands Protection Act regulations, 310 CMR 10.05(6)(m)6, the Stormwater Management Standards apply to the maximum extent practicable for bike paths. The reviewer's statement that the Project must fully comply with the MA Stormwater Regulations is inconsistent with the regulations.

As required by 310 CMR 10.05(6)(o), all reasonable efforts were made to meet Standards 2, 3, 4, 5, and 6. A complete evaluation was made of possible stormwater management measures including environmentally sensitive site design and low impact development techniques that minimize land disturbance and impervious surfaces, structural stormwater best management practices, pollution prevention, erosion and sedimentation control and proper operation and maintenance of stormwater best management practices; and the highest practicable level of stormwater management is being implemented.

The stormwater management system was designed for the final condition of the Project, which is a 10-foot-wide paved bike path and incorporates areas of increased infiltration and swales to promote recharge. Stormwater from the bike path discharging to critical areas is conveyed to areas of increased infiltration to the extent possible. The areas of increased infiltration characteristics most closely match an infiltration basin BMP because they detain, treat, and infiltrate stormwater. Areas of increased infiltration within WPA jurisdiction were incorporated into the stormwater design from stations 405+00 to 407+50, 515+00 to 516+10, 576+20 to 576+65, 579+25 to 579+90, 585+40 to 588+30, 730+00 to 732+00, and 735+00 to 738+30. In addition to areas of increased infiltration, swales were placed within WPA jurisdiction from stations 395+80 to 397+00, 515+00 to 516+00, and 576+20 to 576+75. In practice, these swales will provide stormwater detention, infiltration, and treatment.

In other areas, stormwater from the bike path will discharge to the abutting vegetation and forested area where stormwater will naturally infiltrate under the majority of storm events. In stormwater management planning, this approach is referred to as an "impervious area



disconnection," which is the redirection of stormwater from impervious cover (i.e., paved bike path) to an area of pervious cover (i.e., vegetated and forested area) to provide filtering and infiltration.

The stormwater management design selected for the Project allowed the Project to provide stormwater treatment and recharge throughout the Project area while reducing disturbance to existing vegetation, limiting impacts to buffer zones and resource areas, providing a manageable system for the long-term operator to maintain, and targeting additional treatment at critical areas. The stormwater management design also considered the key fact that stormwater runoff from bike paths is a very limited source of pollutants such as total suspended solids and phosphorus. The proposed measures also exceed what is typically incorporated into rail trail projects.

## Construction Impacts/Mitigation

### Vegetation Clearing

- W1. Include a special condition requiring the limit of work/erosion controls be staked in the field by survey. The staked boundary should be certified by a Mass. Registered Professional Land Surveyor and reviewed by the Conservation Commission and/or their Agent prior to beginning any clearing.*

As stated within Section 3.1.1 of the NOI, the proposed limits of work will be staked in the field using survey grade equipment. The Applicants can agree to a recommended special condition stating that the Commission or its Agent will review the staked limits prior to the beginning of any vegetation removal.

- W2. Include a special condition requiring appropriate vegetation chipping be conducted greater than 50 feet from any resource area subject to protection under the state and local Bylaw.*

Any vegetation that will be chipped onsite will be chipped directly into a truck and will be removed from the ROW. Due to this BMP, this special condition is not required.

- W3. Specify the height of limb removal required for construction.*

Trees within the limit of grading will be removed to provide access along the construction platform. With the exception of a few select locations, such removal is expected to provide sufficient vertical clearance for construction access with no need to remove limbs from trees that are located outside of, but overhang, the limit of work. At locations where a crane is needed to install manholes and perform bridge work, vertical clearance of up to sixty feet may be required and some additional trimming of overhanging limbs may be necessary in these locations.



*W4. Describe how trees that have grown over the railroad will be addressed during clearing.*

Trees within the limit of grading will be removed. Trees outside the limit of grading will remain, including those whose canopy extends over the construction platform provided they do not interfere with construction equipment operation (see response to W3 above).

*W5. Provide a protocol for invasive species vegetation management during the initial vegetation removal stage of planting. Details should be provided on how the contractor will avoid seed dispersion during vegetation removal.*

During the construction phase of the Project, invasive species control includes the following measures:

- Contractor is required to clean all equipment and timber mats prior to mobilizing to the Project Site. Equipment and timber mats will not be allowed to enter the Project Site unless they are free of plant matter and soil;
- Chipping or shredding of plants, including invasive species, will be directed into a truck or container for offsite disposal immediately after it is cut; and
- Only certified weed free clean fill/loam will be used.

#### **Sedimentation and Erosion Control**

*W6. Include a special condition requiring the Conservation Commission's review and approval of the SWPPP prior to construction. BETA recommends that any use of permanent infiltration BMPs for temporary construction-related stormwater management be specifically addressed in the SWPPP and protocols for removal of fine silt and sediment from these BMPs be conducted after completion of construction.*

The Applicants can agree to this recommended special condition requiring the Commission's review of the SWPPP prior to construction. Permanent infiltration BMPs shall not be used as temporary construction sedimentation basins without prior approval of the project engineer. See attached draft SWPPP manual.

*W7. Include a special condition requiring the Conservation Commission and/or its agent review the erosion control installation in the field prior to the start of work.*

The Applicants can agree to this recommended special condition.

*W8. Include a special condition requiring the Conservation Commission and/or their agent to inspect all permanent stormwater infiltration BMPs for acceptance prior to construction demobilization for any specific Project section.*

The Applicants can agree to this recommended special condition.



- W9. *Include a special condition requiring site stabilization and removal of all erosion controls within the Project corridor immediately upon site stabilization after work associated with the transmission line installation is complete along sections of the project corridor. Erosion controls may be removed in sections as appropriate.*

The Applicants disagree with this recommended special condition and suggest the following special condition:

The following special condition supplements General Condition #18:

Eversource shall be responsible for installing and maintaining erosion controls on the Project Site during the performance of all Phase 1 construction activities. After completion of the Phase 1 work, Eversource shall continue to maintain the erosion controls until DCR commences Phase 2, provided that Eversource may remove erosion controls from areas restored and revegetated as part of the Phase I work if the Commission's representative has inspected those areas and confirmed they are stabilized sufficiently.

DCR shall be responsible for installing and maintaining erosion controls on the Project Site during the performance of all Phase 2 construction activities, which may include utilizing erosion controls that were installed and maintained by Eversource if those erosion controls remain in proper condition and demarcate the limit of Phase 2 work. Otherwise, DCR shall install new erosion controls as required for Phase 2, including in any restored and revegetated areas where Eversource was authorized by the Commission's representative to remove erosion controls. DCR shall remove erosion controls when all Phase 2 work activities are complete, and the Commission's representative has confirmed that restored and revegetated areas are stabilized sufficiently.

- W10. *The erosion control barrier associated with the MCRT / Phase 2 should be located at the limit of that specific work. As recommended above, the erosion control barrier should be staked out and comply with W1. above.*

See response to Comment W9.

#### **Construction Staging, Access, and Grading**

- C4. *The NOI does not address how grading and other earthwork will be conducted within corridor prior to the completion of bridge construction, including any equipment turn-around locations that may be required.*

No equipment turnaround locations are planned. Bridges will be constructed as early as possible during Phase 1 to facilitate equipment movement. Until then, equipment will be expected to back out and/or turn around at manhole locations.





- W11. Include a special condition requiring the Conservation Commissions approval of contractor access and laydown areas prior to construction.*

The Applicants disagree with this recommended special condition. Construction crews will access the ROW from public ways. If alternate access points are to be used, Eversource will direct the contractor to only use access points that are located in previously disturbed areas that will not require additional clearing or result in additional impacts to wetlands or rare species habitat. In addition, as stated within Section 3.0 of the NOI, all laydown areas will be located outside of jurisdictional areas. The Applicants suggest and are amenable to a special condition requiring that all laydown areas be outside of areas subject to the Commission's jurisdiction.

- W12. Provide construction sequencing that addressed corridor access / egress throughout the construction process.*

See response to Comment W11.

- W13. Provide a description of when stumping and grubbing will occur during construction.*

As described in Section 3.1 of the NOI, during vegetation removal trunks will be cut as close to the ground as possible, leaving the stumps and roots in place. After installation of erosion and sediment controls, the contractor will begin removal of rails and ties and grading of the construction platform. If necessary, stumps and roots will be grubbed during this stage.

### **Dewatering**

- W14. Revise plan details to replace hay bales with straw bales in the dewatering details.*

The plan details will be revised as requested to replace hay bales with straw bales.

- W15. Provide plans depicting potential dewatering areas where dewatering will likely be required.*

As discussed in Section 3.1.2 of the NOI, dewatering is based on field conditions at the time of construction.

- W16. Remove the use of overland flow from the dewatering options, as fine silt and sediment pumped from excavation areas can impact native soils if allowed to runoff.*

Overland flow must be retained as an option given the decision to limit the work space to protect resource areas. However, it will be limited to use only where necessary and with implementation of full sedimentation/erosion controls.

- W17. Include a special condition requiring the Conservation Commission's approval of dewatering discharge locations if proposed within Bylaw resource areas.*



As discussed in response to Comment W15, dewatering is based on field conditions at the time of construction and can be influenced by a variety of factors (e.g., time of year, storm events, etc.). The Applicants can agree to a special condition prohibiting dewatering into BVW, IVW, LUWW, or the inner 100-foot RFA. However, if required, dewatering will occur within upland jurisdictional areas (i.e., AURA/BVW Buffer Zone, BLSF, and outer 100-foot RFA) by implementing the proposed dewatering control measures.

- W18. Include a special condition requiring the Conservation Commission's review and approval of the soil and groundwater management plan prior to construction.*

The Applicants can agree to this recommended special condition. See response to Comment G2 for details regarding the Soil and Groundwater Management Plan.

- W19. Provide construction details for installation of the transmission line at Sta. 704+56, including likely dewatering locations.*

Please refer to the construction detail showing "METHOD OF PIPE SUPPORT DURING CONSTRUCTION" on Sheet 127 of Eversource's NOI plans. The plans have been revised to directly reference this detail in the note for Station 704+56. As discussed in Section 3.1.2 of the NOI, dewatering is based on field conditions at the time of construction. As previously described, dewatering will not be discharged directly into any waterbodies, Bordering Vegetated Wetlands, inner 100 feet of Riverfront Area, or Isolated Vegetated Wetlands. All dewatering locations will be located within the limits of work as depicted on the plans and only within upland areas outside of the Commission's jurisdiction, Buffer Zone/AURA, BLSF, and outer 100 feet of RFA.

#### **Crane/Timber Mat Installation**

- W20. Include a special condition requiring the timber mats used on the Project site be cleaned prior to being placed within the Project corridor. Prior to installation, mats should be inspected by the Conservation Commission or their Agent to confirm compliance with this condition.*

As discussed in Section 3.1.2 of the NOI, the mats will be thoroughly cleaned and will be free of vegetation before and after use on the Project. See also response to Comment W5.

- W21. Provide the construction mat dimensions and stacked height required to provide the required construction platform.*

As described in Note 2 on Sheets 47 and 65, the contractor will be limited to maximum construction mat dimensions of 40 feet by 40 feet at any given time, and as noted in the conceptual crane mat sections on Sheet 125, the actual configuration of the crane mats will be determined by the contractor. Based on the maximum crane mat width of 20 feet from the



centerline of construction to the outermost limit on each side, the stacked height at Bridge 128 may be up to 7 feet and the stacked height at Bridge 128 may be up to 4 feet.

### **Contaminated Materials**

- W22. *Provide plans depicting known areas of soil and groundwater contamination along the Project corridor groundwater which would have an impact on dewatering and potentially stormwater runoff recharge.*

There are no known areas of soil or groundwater contamination along the corridor in Sudbury that would have any impact on dewatering or stormwater runoff. The information about the testing that was completed is being provided to the Commission. Also see response to comment W23.

- W23. *Provide a contaminated soil and groundwater management plan for review and approval by the Conservation Commission, including a statement that addresses dewatering of potential contaminated groundwater. This plan should include locations for temporary soil stockpiles.*

See response to Comment G2. Additionally, Eversource's contractor will be responsible for selecting and securing the specific stockpile and storage locations. Eversource will specify that these be located in previously disturbed areas that will not require additional clearing or impacts to vegetated wetlands, waterways, inner 100-foot RFA, or rare species habitat. If stockpiling/storage must take place within AURA/BVW Buffer Zone, BLSF, or outer 100-foot RFA, appropriate best management practices (e.g., additional erosion controls) will be implemented. In general, stockpiles, if present, will be covered with plastic sheets or tarps to minimize potential for dust as outlined in Section 3.13 of the Eversource BMP manual.

### **Time of Year Restrictions**

- W24. *Extend the TOY restriction for work within 450 feet of a Vernal Pool to protect the species during late winter and post-breeding season migration.*

The NOI included a Time of Year Restriction of March 1 – May 15, which is a recommended management practice from the document developed by the Massachusetts Natural Heritage and Endangered Species Program in collaboration with the Division of Water Supply Protection and Bureau of Forestry and the Department of Conservation and Recreation entitled, "Massachusetts Forestry Conservation Management Practices for MESA-Listed Mole Salamanders" (Version 2007.1, revised December 2016). In addition, this TOY restriction was included in the MESA Checklist that was submitted to Natural Heritage for their review and comment. However, the Applicants are willing to extend the Vernal Pool TOY restriction for the Project to June 1 to provide additional assurance that vernal pool species are not adversely affected by construction of the Project. Typically, vernal pool species migrate to and from



vernal pool areas during the evening and night time hours, when active construction or construction vehicle traffic along the corridor will not be occurring. Therefore, the TOY restriction prohibits the contractors from conducting any clearing/grading/excavating activities within 450 feet of these vernal pools but allows construction vehicles to traverse these areas.

- W25. *Include a special condition requiring removal and re-installation of erosion controls within the Vernal Pool critical areas to outside the TOY restrictions.*

Please see response to W9. In summary, erosion control barriers within 450 feet of vernal pools will consist of syncopated silt fence to serve as an effective erosion control barrier while allowing vernal pool species to migrate to and from the vernal pools. Syncopated silt fence is installed in a staggered configuration with a two-foot gap between lengths of 50 feet in the row of silt fence closest to the vernal pool and a second row of 20 foot sections of silt fence installed one foot in front of each of these gaps on the side of the barrier closer to the work zone. Details for the syncopated silt fence were provided in Section 1.5 of Attachment I of the NOI and on Sheet 124 of the Eversource plans. A special condition requiring removal and re-installation of erosion controls within the Vernal Pool Buffers to outside the TOY restrictions would result in additional unnecessary disturbance from the Project with the potential to impact vernal pool species.

- W26. *Include a special condition restricting all construction activities within 450 feet of Vernal Pools (including vehicular / equipment movement and lighting) during the TOY restriction.*

Vernal pool species will be adequately protected through the implementation of a TOY restriction, the use of syncopated silt fence, and through oversight by an environmental monitor during construction. The Project has been designed to incorporate measures recommended by MNHESP to protect vernal pool species. It should be noted that construction within the Project Site will occur during daytime hours and no lighting will be necessary. Given all of these considerations, it is our opinion that this condition is not necessary.

- W27. *Provide an exhibit, to be used in contractor bid documents, showing the TOY restrictions and locations on a plan. This exhibit should also show locations of construction equipment and soil management along with access / egress to the ROW, if proposed.*

See attached figure for TOY restrictions. Access and egress to the ROW (i.e., Project Site) will occur from public roadway crossings. To the extent practical/feasible, vehicles and equipment will be stored outside of the inner Riverfront Area and Bordering Land Subject to Flooding. There may be situations where storing vehicles and equipment within these areas is necessary to minimize impacts to those areas from frequent vehicle/equipment movement (e.g., moving large cranes over long distances each day vs. remaining stationary). The requirements contained within the SWPPP and the Construction Spill Prevention and Countermeasures Plan will be followed in these instances.



Eversource's Contractor will be responsible for selecting and securing the specific stockpile and storage locations. Eversource will specify that these be located in previously disturbed areas that will not require additional clearing or impacts to wetlands, waterways, inner 100-foot RFA, or rare species habitat. If stockpiling/storage must take place within AURA/BVW Buffer Zone, BLSF, or outer 100-foot RFA, appropriate best management practices (e.g., additional erosion controls) will be implemented.

- W28. *Provide construction schedule showing, tentatively, how the work will be scheduled to adhere to the TOY restrictions. This schedule should include an approximate duration for each construction component*

The actual work to be performed in each area and the dates(s) for when such work will be performed will be established once a Contractor has been engaged to perform the work; however, the Project will be constructed in a two-phased approach as described in detail in Section 3 of the NOI application. Eversource has conducted internal scheduling review to confirm that a contractor will be able to adhere to the TOY restrictions while maintaining the anticipated construction timeframe.

#### **Corridor Restoration and Invasive Species Management**

- W29. *Provide a revised planting list on the DCR plans that includes only true species native to Massachusetts.*

The shrub ink berry (*Ilex glabra* "compacta") and ninebark (*Physocarpus opulifolius*) have been replaced with alternate-leaved dogwood (*Swida alternifolia*) and American hazelnut (*Corylus americana*).

- W30. *Include a special condition requiring the Conservation Commission approve species substitutions and require reasoning behind why the substitution is proposed.*

The Applicants can agree to this recommended special condition.

- W31. *Include a special condition requiring the Environmental Monitor inspect and approve all materials prior to being planted. Photo documentation of plant stock prior to planting should be submitted to the Conservation Commission within 10 days of planting.*

The Applicants can agree to this recommended special condition.

- W32. *Provide landscaping plans showing the locations and numbers of plants to be installed in rare species habitat and near the bridges. Also indicate proposed depth of loam amendments.*

The species and number of plantings within Estimated/Priority Habitat and near the bridges is included on sheet 131 of the plans provided as Attachment B in the NOI. As stated within Section 3.1.10, Eversource's qualified environmental monitor or qualified biologist will dictate



the locations of the woody plantings to the contractor in the field. All plantings will be planted in a naturalized and random configuration to provide wildlife habitat and will not be planted in a linear manner. The depth of the loam amendments varies depending on location but will be a minimum of four inches.

- W33. *Provide a separate restoration plan for the areas in mapped habitat where loam and seed are not appropriate for restoration.*

Although the area that this comment is referring to is not a resource area within the jurisdiction of the Massachusetts Wetlands Protection Act or the Sudbury Wetlands Administration Bylaw or Wetlands Bylaw Regulations, the Applicants understand the importance of preserving the stability of this area. It is important to note that the vast majority of the sandy barren area is located on Sudbury Valley Trustees property and is outside the project work site, so it will remain in its current condition.

The joint Applicants met with SVT on Friday, June 5, 2020, to discuss proposed plantings within the Desert Natural Area. Based on that meeting, the Applicants are currently evaluating whether scrub oak and/or *Baptisia tinctoria* can be planted within the existing limit of work and are also researching a sandy soil spec to replace the currently proposed loam and seed.

- W34. *Include a special condition requiring the loam borrow brought to the site to stabilize the work area after completing Phase 1 be sourced appropriately. Use of impacted soils (from contamination or invasive seed) should be prohibited.*

Project specifications will note that loam will be required to be sourced from a location that has not been identified as the site of a release of oil or hazardous materials.

- W35. *Include a special condition prohibiting the use of fertilizers within jurisdictional areas.*

As described in Section 5.2.2 of the NOI narrative, no fertilizers will be used for the seeding and planting proposed post-construction, and DCR's maintenance of the corridor will not include use of fertilizers.

- W36. *Provide a detailed, species-specific Invasive Species Control Plan for the corridor. Control methods should begin immediately following site stabilization and should be phased as stabilization occurs.*

Section 3.3 of the NOI discusses long-term vegetation management along the Project corridor, including the monitoring and control of invasive species. DCR retains the option to use herbicides as a last measure to control an area of a difficult invasive species that is creating a direct risk to stability of the bike path or where public welfare would be at risk. For example, Japanese knotweed (*Polygonum cuspidatum*) is a particularly difficult species to control and herbicides



maybe be used where it would be the only effective way to control this herbaceous species in the immediate vicinity of the bike path.

- W37. *Include a special condition prohibiting the use of chemical control methods within jurisdictional areas to protect water quality in vernal pools, wetlands, and waterways.*

The applicants can accept a recommended special condition prohibiting the use of herbicides within any vernal pools, vegetated wetlands or waterways. However, DCR reserves the right to use herbicides in Buffer Zones/AURA, Riverfront Area and Bordering Land Subject to Flooding. In accordance with the requirements of the Wetlands Protection Act, any use of herbicides within buffer zone or resource areas will require the filing of a Notice of Intent to allow the Sudbury Conservation Commission the opportunity to review the plan for herbicide use in jurisdictional areas.

## **Massachusetts Wetlands Protect Act Compliance**

### **Limited Project Provisions**

310 CMR 10.53(3)(d)(1-4)

- WPA1. *The Commission should consider whether the Project qualifies as a limited Project under the provision cited above and whether the Applicant has overcome the burden to demonstrate compliance with the conditions of this provision*

See the response to Comment C2.

- WPA2. *Permanent clearing and grading and clearing associated with the transmission line extends outside the footprint of the MCRT bikepath and results in greater impacts.*

This Project has been designed as a joint transmission line/rail trail project and the impacts presented in the NOI are for both components of the Project. If it was only for the rail trail, the impacts would be very similar to the combined footprint. As with this Project, building a rail trail requires clearing, rail and tie removal, grading, installation of stormwater management controls, slope work to meet existing grade, and a gravel sub-base, with a working width of at least 19 feet. In addition, the rail trail component of the Project requires reconstruction of Bridge 127 and rehabilitation of Bridge 128 in Sudbury to support rail trail users and emergency vehicles (e.g., ambulances).

310 CMR 10.53(6)

- C5. *Much of the bikepath portion of the Project meets the requirements of this limited project provision, except where the work extends into BVW, BLSF, and LUW.*





The comment is correct. The limited project provision at 310 CMR 10.53(6) provides relief from the RFA regulations where the RFA does not overlap BVW, BLSF or LUW.

*WPA3. Provide separate permanent impacts associated with the bike trail limited project within Riverfront Area from the permanent impacts to the corridor resulting from the transmission line.*

As discussed in Table 1 of the NOI, the only permanent impacts in Riverfront Area are from the MCRT. Please refer to Table 1 for MWPA RFA and Sudbury Bylaw RFA permanent impacts. Also, see response to Comment WPA2 and WPA37.

*WPA4. Quantify the temporary and permanent impacts to resource areas where the bikepath does not qualify as a limited project. This is necessary to confirm whether the Project meets the performance standards for all resource areas.*

When concurrently within Riverfront Area and Bordering Land Subject to Flooding, the MCRT will have 4,767 square feet of temporary impact and 2,986 square feet of permanent impact.

*WPA5. Provide evaluation of the replacement stream crossing's potential for downstream flooding, stream stability, impacts to wetlands by replacing the crossing, and the potential to affect property and infrastructure. A "no-rise" determination would be required to demonstrate the Project's compliance with this provision.*

The replacement stream crossing complies with the National Flood Insurance Program regulations for work within a floodway and results in a "no-rise". A "no-rise" certificate stamped by a professional engineer will be provided to the Town of Sudbury's Floodplain Administrator prior to construction.

#### **Inland Bank**

*WPA6. Provide crane mat cross sections using existing topography.*

Conceptual crane mat sections are provided on Sheet 125 of the Eversource NOI plans. The contractor will be required to install the mats within the footprint that is shown on the plans. The actual cross section for the crane mats will be based on the contractor's means and methods and the exact layout will be determined in the field.

*WPA7. Provide additional details describing how vegetation removal, excavation of the Bank, and installation of timber mats on the Bank will not impair the physical stability of the Bank in accordance with 310 CMR 10.54(4)(a)(1).*

As described in Section 5.1.4 of the NOI, the only location where Bank impacts will occur is at Bridge 127 due to temporary placement of crane mats. The Bank here is located outside of the limits of grading and as such the bank will not be excavated in any manner. The installation and





removal of timber mats on the bank will be completed in a manner to ensure that maintains the physical stability of the Bank. Prior to the placement of timber mats on the Bank, existing vegetation will be cut by hand or using mechanical methods, but the existing root systems will not be removed or disturbed. Timber mats will then be placed on the bank. Construction of bridge abutments will take place behind the existing abutments and will not result in Bank impacts. Crane mats will be in place for the minimum duration necessary and will be removed immediately upon completion of activities (or outside of TOYR, as applicable) where the use of a crane is required, and once the mats are removed the Bank will be restored to existing elevations (if necessary) then stabilized with jute mesh and coconut fiber erosion control blankets and seeded with a woody seed mix. The root systems of the vegetation that was in the Bank and which was trimmed prior to the placement of timber mats will provide natural recruitment for revegetation. In addition, the area will be planted with woody shrubs and trees (see sheets 130 and 131 in Attachment B of the NOI). All of these measures will ensure the physical stability of the bank is maintained throughout the Project.

*WPA8. Provide additional details for restoring the Bank topography to ensure final topography is consistent with existing grades to confirm compliance with 310 CMR 10.54(4)(a)(2).*

The regulations at 310 CMR 10.54(4)(a)(2) state that proposed work on a Bank shall not impair the water carrying capacity of the existing channel within the Bank. As described in Section 5.1.4 of the NOI, the placement of crane mats will not impair the water carrying capacity of the existing channel because the mats will be placed in low gradient flow areas that are characteristic of marshes, adjacent to the main stream channel that is located under the bridge. Also refer to response to WPA7.

*WPA9. Provide plans depicting the locations of the restoration plantings, and number and locations of "standing dead tree" re-installation to confirm compliance with 310 CMR 10.54(4)(a)(4 and 5), and 10.60.*

The planting schedule, which includes a combined herbaceous and woody seed mix as well as woody plantings, is located on Sheet 131 of the Eversource NOI plans. As stated within the response to Comment W32 and as stated within Section 3.1.10 of the NOI, Eversource's qualified environmental monitor or qualified biologist will dictate the locations of the woody plantings to the contractor in the field. All woody plantings will be planting in a naturalized and random configuration to provide wildlife habitat and will not be planted in a linear manner. Similarly, the location of standing dead tree reinstallations will be directed in the field by a qualified biologist and will be within the vicinity of the wildlife habitat evaluation wetland impact area.



*WPA10. Provide reasoning behind the use of one seed mix for restoration of Bank and Buffer Zone.*

The seed mix specifically includes both upland and wetland species to promote stabilization in either wetland or upland areas and is appropriate for use on the Bank and Buffer Zone in the Project Locus. The herbaceous/woody seed mix was chosen to for all areas of temporary disturbance except for the DCR shoulders to support efficient construction and restoration. The bike path shoulders will be restored with the herbaceous seed mix shown under Schedule A on Sheet 131 of the Eversource NOI plans.

*WPA11. Provide clarification on the vegetation removal process along the Bank. Meaning, will vegetation removal require stump removal for dead trees? Or will dead trees be removed in accordance with the vegetation removal description provided in the NOI?*

See the responses to Comments W13 and WPA7. Stump removal for dead trees will only be done as needed to ensure that crane mats are stable.

*WPA12. Describe how the "standing dead trees" will be re-installed. BETA assumes the trees will not contain their roots based on the proposed method of clearing so they will need to be driven into the ground to some depth to maintain stability. We also assume these dead trees will easily be uprooted due to instability of soil at grade and therefore will result in downed trees, safety issues, and potential soil instability. Also, if the trees are installed by auger drilling, describe the methodology for such activity including auger's outside diameter measurements, equipment access to advance the augers, etc. If work is to be completed by hand, provide a description of that methodology including depth of the hole, etc.*

Standing dead trees to be retained for reinstallation will be identified ahead of vegetation removal, and roots will be retained. If the existing dead tree is too weak to be reinstalled, another tree of similar size that is already being removed for construction will be used to create the snag. In both cases, the upper branches will be removed and the tree will be installed at least 6 feet deep to ensure stability. The hole will be dug out and backfilled using an excavator.

*WPA13. Provide evidence that reinstalling dead trees has resulted in successful habitat restoration and the number of standing dead trees that will need to be replaced to avoid an adverse effect on Wildlife Habitat.*

By reinstalling the same dead trees that are currently providing habitat functions at a 1:1 ratio, those same functions will be put back once the trees are reinstalled and there will be no net loss in this type of wildlife habitat.



*WPA14. Provide crane mat cross sections for the approaches to Bridge 128 using existing topography to accurately depict the work proposed in proximity to the Bank and confirm the work will not impact the Bank or be located in Land Under Water or FEMA Floodway.*

See the response to Comment WPA6. Refer to Sheet 47 of the Eversource NOI plans that shows the location of the wetland resource area boundaries and the location of the crane pad footprint, which shows that the crane pad is upgradient and not within those areas.

*WPA15. Provide resource area boundaries on the Bridge plans (Plan Sheets 155 – 167).*

Resource area boundaries have been added to Sheets 155-167 and are included in the revised plan set that is an attachment to this supplemental submission.

#### **Bordering Vegetated Wetlands**

*WPA16. Provide soil restoration details for all temporarily impacted BVWs and provide BVW restoration notes on construction plans.*

See response to SWB13. All soil restoration for temporarily impacted BVWs will be completed in accordance with Eversource's Best Management Practices Manual, which requires the following:

- Excavated soils shall be segregated by topsoil vs subsoil and replaced in the same order (i.e., subsoil beneath topsoil).
- Any rutting shall be regraded while taking care not to compact soils.

*WPA17. Provide planting plan for BVW restoration areas depicting species, locations and number of plants to be installed*

Please refer to Sheet 131 of Eversource's NOI plans for tables describing the species, locations, and number of plants to be installed in BVW restoration areas. As described in Section 3.1.10 of the NOI narrative, an environmental monitor will be onsite to properly space the proposed plantings based on field conditions.

*WPA18. Specify the wetland seed mix to be used for BVW restoration.*

See sheet 131 of Eversource's NOI plans for the seed mix to be used for BVW restoration. Also see the response to Comment WPA10.

*WPA19. See WPA6. Provide crane mat sections using existing topography to show how the timber mats placed at the wetland edge can be installed and removed without any impacts to the adjacent BVW.*

See the responses to Comments WPA6 and WPA14.



*WPA20. Provide replication of the permanent BVW impacts proposed at Station 713+65 in compliance with the standards at 310 CMR 10.55(4)(b)(1-7).*

The Project currently proposes replication for all permanent BVW impacts, including the 4 square feet of BVW loss at approximately STA 713+65, in a single contiguous area at the proposed replication area adjacent to Wetland 4. Replication is not currently proposed at approximately STA 713+65 because separately replicating an area of only 4 square feet in that location would disrupt AURA while providing negligible benefits.

The proposed replication area is approximately 819 square feet and constitutes replication at a ratio of 2:1 for all areas of permanent BVW and IVW loss. As discussed within the Wetland Replication Report included as Attachment D of the NOI, the replication area has been designed to provide greater species diversity and wildlife habitat and will result in an overall improvement to the BVW.

*WPA21. Provide reasoning behind changing the wetland elevation and plant selection based on site conditions.*

As discussed within Section 5.1.5 of the NOI and the Wetland Replication Report included as Attachment D of the NOI, the proposed elevation in the replication area was determined based on two wells that were installed within the proposed replication area. Furthermore, as discussed in Section 1.2.3 of the Wetland Replication Report, the plant species that were selected are suitable to the proposed hydrologic and soils conditions and were selected for their wildlife value as potential nesting sites, protective cover, and food sources.

*WPA22. Provide an intensive invasive species management plan for the area surrounding the wetland replication area.*

As described in the Wetland Replication Report provided as Attachment D of the NOI, the wetland replication area will be monitored for invasive species during the first two growing seasons following planting. In addition to the wetland replication area itself, this monitoring will include any adjacent areas that were disturbed to create the replication area as part of the Project (i.e., if any invasive species are found, they will be uprooted and removed from the area).

*WPA23. Include a special condition requiring invasive species management within and adjacent to the replication area for a minimum of 5 years following completion of the replication effort.*

The Applicants disagree with this suggested special condition. Section 1.3 of the Wetland Replication Report discusses monitoring of the replication area, including invasive species, which complies with the requirements in the WPA regulations. The Applicants suggest and are



amenable to a special condition requiring a minimum of annual monitoring within the replication area until 75% cover is met.

#### **Land Under Water**

*WPA24. Provide details on how timber mats will be placed on LUW (in water) that avoids permanent impacts to the riverbed. If the mats will be placed in dry conditions, then provide details for dewatering.*

Although these areas have been identified as LUW based on the ANRAD peer review process, the mats will not be placed in the riverbed but in low gradient flow areas that are characteristic of marshes, adjacent to the main stream channel that is located under the bridge. As described in Section 5.1.6 of the NOI, crane mats will be in place for the minimum duration necessary and will be removed immediately upon completion of activities where use of a crane is required. During reconstruction of Bridge 127 filter fabric will be laid under and wrapped around the timber crane mats to prevent sediment from entering the waterbody, and erosion and sediment control measures including turbidity controls will ensure that sediment does not enter the stream channel. Once Bridge 127 is reconstructed, the crane mats will be removed, and the area will be restored (see crane mat restoration detail on sheet 130 in the Eversource NOI plans).

*WPA25. Provide details on how timber mats will be placed and maintained on LUW (in water) that avoids turbidity of the adjacent surface waters.*

See response to Comment WPA24 regarding placement of timber mats in LUW and the use of erosion controls that will avoid turbidity within Hop Brook. At the time of construction, a silt curtain or another measure that is appropriate based on field conditions will be used.

*WPA26. Provide a description of how the jute mesh erosion control blankets will be secured in LUW to avoid impacts to ground and surface water quality.*

Erosion control blankets will not be installed within LUW at Bridge 128. As described in the "Notes for Jute Mesh Erosion Control Fabric" and the Typical Crane Mat Restoration Cross Section – Bridge 127 on Sheet 130 of the Eversource NOI plans, each blanket will be installed by hand and secured with a minimum of four notched wood stakes that will be installed at each corner. Perimeter erosion controls will remain in place during installation of the blankets and the blankets will stabilize the slope, which will protect ground and surface water quality.

*WPA27. Describe how the wetland seed mix will be retained onsite so it is not washed away during the establishment period.*

As stated within the Notes for Jute Mesh Erosion Control Fabric on Sheet 130 of the Eversource NOI plans, the seed mix at Bridge 127 will be applied to the soil and will be covered with the jute



mesh erosion control fabric. By placing the seed mix beneath the erosion control fabric, it will be protected from runoff during storm events. In other areas of temporary BVW impact, the seed mix will be covered with straw to protect it from erosion as necessary.

*WPA28. Provide plug plantings of native species within the LUW restoration area to restore the wildlife habitat function of this resource area.*

The restoration plan includes plugs of aquatic plants within LUW. Refer to Sheet 131 of the Eversource NOI plans for details.

*WPA29. Provide a description of how work associated with the removal of the existing Bridge 127 timber piers of Bridge 127 will be completed in accordance with 310 CMR 10.56(4)(a).*

As described in Section 3.1.9.1 of the NOI, the timber piles will be cut at the mud line by hand to minimize impacts to Land Under Water Bodies and Waterways and no permanent or temporary impacts are anticipated. Please refer to Section 5.1.6 of the NOI for a discussion of compliance with 310 CMR 10.56(4)(a). Removal of the existing timber piers will not impair the water carrying capacity within the defined channel; the ground and surface water quality; the capacity of LUWW to provide breeding habitat, escape cover and food for fisheries; or the capacity of LUWW to provide important wildlife habitat functions. Removal of the piers will have no effect on the Project's compliance with the Stream Crossing Standards.

### **Bordering Land Subject to Flooding**

*WPA30. Provide confirmation that all topography shown on the Project plans (in areas where BLSF and FEMA Floodway is present) is a result of an on-the-ground survey.*

See the response to Comment C1.

*WPA31. Provide a cut/fill analysis for the project by stream reach and elevations to confirm adequate compensatory storage is provided in accordance with 310 CMR 10.57(4)(a)(1).*

The cut/fill analysis by station and elevation was provided in Table 11 of the NOI. *WPA32. Provide planting plans for compensatory storage areas.*

The planting schedule on Sheet 131 details all proposed restoration by station, including a combined herbaceous/woody seed mix, shrub plantings, and tree plantings.

*WPA33. Provide accurate permanent and temporary BLSF impacts associated with the Project. Areas that will be converted from forested land to maintained grass area and areas where the topography is changing permanently should be quantified at permanent impacts.*

Section 5.1.7 of the NOI provides an accurate account of the permanent and temporary BLSF impacts associated with the Project and provides a detailed and complete discussion of how the



Project complies with all applicable performance standards in 310 CMR 10.57(4) for proposed activities within BLSF. The information provided in Section 5.17 related to proposed impacts is presented in two ways; (1) as it relates to the performance standards for flood storage, volume, and connectivity to the adjacent waterbody, and (2) as it relates to wildlife habitat functions. Table 11 presents the summary of changes to flood storage volume proposed in BLSF as it relates to the performance standards associated with this function, while Table 10 presents the accurate account of the permanent and temporary disturbance to BLSF as it relates to wildlife habitat functions. As demonstrated in Section 5.17, the Project will result in a net gain of compensatory flood storage. In addition, all disturbed areas outside the proposed paved portion of the MCRT will be revegetated with native vegetation. The proposed revegetation consists of a combination of supplemental woody plantings and/or the planting of a native seed mix that contains both woody and herbaceous species that will provide adequate wildlife value once established (see Sheet 131 of the Eversource plans for the planting schedule).

*WPA34. Provide an updated wildlife habitat evaluation that accurately describes the project's effect on the Wildlife Habitat provided by BLSF and the Project's effect on the site's ability to provide this function following construction.*

An updated WHE is not required. The WHE that was submitted as Attachment J to the NOI accurately assesses potential impacts to important wildlife habitat features for BLSF which is associated with Wetland Impact Areas ("WIA") S4, S5, S15, and S16 through S19. Section 3 of the NOI evaluates each individual WIA, including an adverse effects analysis and proposed restoration. Also, it is important to reiterate that the DEP regulation at 310 CMR 10.60(1) states that the alteration of a resource area's characteristics (e.g., topography, vegetation, hydrology) will not have an adverse effect on wildlife habitat if within *two growing seasons* (or, if a project would eliminate trees, *upon maturity of the replanted saplings*) the capacity of the area to provide important wildlife habitat functions listed in 310 CMR 10.60(2) (e.g., food, shelter, breeding areas, nesting sites, and migratory areas) is not substantially reduced. In addition, the MassDEP "*Wildlife Habitat Protection Guidance for Inland Wetlands*" (the "Guidance") states, "it is not adequate to conclude that a project will result in an adverse effect only because alterations to wildlife habitat are proposed. The alterations become 'adverse' when they *substantially* [emphasis added] reduce the site's capacity to provide important wildlife habitat functions (e.g., shelter, food, breeding areas) and consequently reduce the site's capacity to support wildlife." The Guidance also states, "simply put, no adverse effect does not mean no alteration." The proposed restoration as part of the Phase 1 portion of the Project was designed to be well established within two growing seasons to maintain the capacity of the area to provide important wildlife habitat functions.





*WPA35. Provide planting plans for the BLSF restoration areas.*

Table 10 in the NOI contains the proposed temporary BLSF impacts, which will be restored. The planting schedule on Sheet 131 details all proposed restoration by station, including a combined herbaceous/woody seed mix, shrub plantings, and tree plantings.

*WPA36. The Applicant cites 310 CMR 10.57(1)(a)(3) in their description of the Project's compliance with the BLSF wildlife habitat performance standard and in their NOI narrative description of compliance with 310 CMR 10.60. However, this section is not applicable to the Site since the railroad has been abandoned for approximately 50 years. This section of the regulations appears to be inappropriately cited. Any decisions or evaluations that employed this statement should be re-evaluated. Otherwise, the Applicant should provide legal decisions that address this provision interpretation.*

This regulation is appropriately cited and applicable. The fact that the railroad has not been operated recently does not change the fact that rail tracks, ballast and embankment are listed among the types of areas that have been so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated. However, as stated within Section 1.1.1.2 of the WHE, a Detailed Appendix B WHE was completed for each impact area, including BLSF.

**Riverfront Area**

*C8. The NOI narrative on page 59 states that all work is proposed entirely within previously degraded RA, however, on page 57 that Applicant states that, in accordance with 310 CMR 10.58(5) there is a 11-foot-wide degraded area.*

The referenced narrative actually states that all work associated with the Project, including both the transmission line and MCRT components, is proposed entirely within the previously developed and degraded area.

*WPA37. Re-evaluate permanent and temporary RA impacts associated with the Project. Impacts within previously degraded RA should be quantified separately from impacts outside the 11-foot wide rail ballasts. The areas to be cleared and maintained grass area, and areas where the topography is changing permanently should be quantified at permanent impacts.*

This does not require reevaluation. Please refer to the discussion in Section 5.1.8 of the NOI. Note that the Project specifications do not call for the creation of a maintained grass area in any location. The proposed revegetation consists of a combination of supplemental woody plantings and/or the planting of a native seed mix that contains both woody and herbaceous species that will be applied in all areas of temporary disturbance except for the bike path shoulders. The bike path shoulders will be restored with the herbaceous seed mix shown under Schedule A on Sheet 131 of the Eversource NOI plans. This revegetation plan will provide





adequate wildlife value once established in all areas of temporary disturbance outside of the proposed permanent impact areas associated with the 10-foot paved surface for the MCRT.

*WPA38. Provide a description of how the impacts outside the existing previously degraded RA meet the performance standards at 310 CMR 10.58(4)(c and d).*

Please refer to the discussion in Section 5.1.8 (page 56 and 57) of the NOI.

*WPA39. Provide planting plans showing RA restoration.*

The planting schedule on Sheet 131 of the Eversource NOI plan details all proposed restoration, including RA.

*WPA40. Provide a revised description of the Project's compliance with 310 CMR 10.58(5)(f) that fully describes the areas that will be restored RA in-kind and areas that will be converted to different habitat.*

This does not require a revised description. Please refer to the discussion in Section 5.1.8 of the NOI.

#### **Estimated Habitat of Rare Wildlife**

*WPA41. Provide the Conservation Commission with a copy of the 5/31/2018 Corridor Management Plan for review and approval.*

The Corridor Management Plan is included as an attachment to this submission.

*WPA42. Provide the Project's NHESP Approved Turtle Protection Plan.*

The Turtle Protection Plan is included as an attachment to this submission.

#### **Wildlife Habitat Evaluation**

*WPA43. Provide an adequate analysis on the Project's potential for wildlife habitat fragmentation.*

An adequate analysis on the Project's potential for wildlife habitat fragmentation has been presented in the Wildlife Habitat Evaluation (Attachment J) submitted with the NOI. As required at 310 CMR 10.60, a Detailed Wildlife Habitat Evaluation ("Appendix B") was completed by a qualified individual for all state and local wetland resource impact areas associated with the Project. As outlined in the MassDEP guidance document, "Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (2006), the potential for fragmentation is evaluated by completing an analysis of Landscape Context and Habitat Connectivity (refer to Part IV of the Appendix B: Detailed Wildlife Habitat Evaluation Form). Section 2.3 of the WHE outlines the methodology utilized to assess Landscape Context and Habitat Connectivity, Section 3.16 of the WHE provides a conclusion regarding Landscape Context and Habitat Connectivity, and each Appendix B form submitted for each proposed wetland impact area contains a completed Section IV for Landscape Context and Habitat Connectivity. *WPA44. Conduct an evaluation of the*



*entire Project locus in accordance with 310 CMR 10.60 and the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (DEP – March 2006), describing the quantity of habitat features onsite to remain undisturbed in comparison to the quantity of the features to be altered by project construction. This is required to confirm there will be no-adverse effect on wildlife habitat.*

A Wildlife Habitat Evaluation (WHE) was conducted for the proposed Project in accordance with 310 CMR 10.60 and the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (DEP-March 2006). The characterization of important habitat features within the undisturbed portions of the entire Project Locus was completed by qualified wildlife biologists. Observations and conclusions made by these qualified individuals that the important wildlife habitat features found within the proposed limits of work are also common and found in abundance in the undisturbed portions of the Project Locus are important, but do not serve as the sole basis for the “no adverse effect” conclusion for the Project. As outlined in detail in Sections 3 and 4 of the WHE, important habitat features identified within the proposed limits of work will be restored and replicated to achieve the “no adverse effect” standard. Please refer to pages 57 and 58 (Section 4) of the WHE for the restoration and mitigation measures proposed for important wildlife habitat features within the construction footprint.

*WPA45. Describe the wildlife habitat provided by resource areas proposed to be impacted by the Project and the capacity for the Site to maintain this function after construction completion.*

This information has already been provided in Section 5 of the NOI and the WHE report in Attachment J. In addition, see any responses provided herein related to wildlife habitat for additional details.

*WPA46. Provide the “Notes Below” as referenced in sections “VI. Quantification Table for Important Habitat Characteristics” included in the Wildlife Habitat Evaluation.*

The “Notes Below” section on the forms were moved to the WHE narrative; all information is included in the WHE narrative.

## **Sudbury Wetlands Protection Administration Bylaw**

### **Isolated Vegetated Wetland**

*SWB1. Provide a wildlife habitat evaluation for the IVW to be filled, in accordance with section 7.4 of the Bylaw Regulations.*

A WHE was completed for the IVW and is included within the discussion for Wetland Impact Area WIA 19 in the WHE included as Attachment J of the NOI.



*SWB2. Relocate erosion controls to a distance where impacts to the IVW are not likely, otherwise, impacts to the IVW should be quantified and the area should be restored following construction completion.*

All wetland resource area boundaries will be flagged in the field prior to the start of any construction, including the IVW, and an environmental monitor will be onsite during installation of the erosion controls. As currently designed, the erosion controls will not impact the IVW located near STA 577+30; therefore, there are no impacts to quantify.

### **Coldwater Fisheries Resources**

*SWB3. Quantify the area of proposed clearing within 80 feet of CFRs.*

The area of proposed clearing within 80 feet of both MA and Sudbury Bylaw CFRs is provided below. It is important to note that the calculations were based on the existing overhanging canopy, and trees whose trunks are located outside of the limit of work will not be removed and will continue to provide shade to these waterbodies.

- Hop Brook at Station 400+30 (Bridge 128) – 14,319 square feet
- Intermittent stream at Station 527+30 – 3,966 square feet
- Dudley Brook at station 539+40 – 16,424 square feet
- Intermittent stream at station 561+82 – 4,992 square feet
- Intermittent stream at station 593+18 – 18,816 square feet
- Hop Brook at station 725+35 (Bridge 127) – 73,397
- Tributary to Wash Brook at station 747+39 – 4,704 square feet

*SWB4. Provide restoration details for areas to be cleared within 80 feet of CFRs that do not already have restoration proposed, for example at Sta. 540, 587, 603, 706+50, etc.*

All areas except for the 10-foot-wide paved MCRT and the bike path shoulders will be restored with the native seed mix shown on Sheet 131 of the Eversource plans, which includes both woody shrubs and herbaceous species. The bike path shoulders will be restored with the herbaceous seed mix shown under Schedule A on Sheet 131 of the Eversource NOI plans.

*SWB5. Evaluate the impacts of clearing on the Bylaw-protected CFRs.*

As stated within Section 5.2.2 of the NOI, there are six crossings throughout the Project in Sudbury that are considered CFRs under the Sudbury Bylaw only. All of these crossings are culverted beneath the railroad embankment and are therefore currently impacted. In addition, all of the crossings except for Dudley Brook are intermittent streams with dry stream beds during



parts of the year, which do not provide fisheries habitat. Each crossing for the Bylaw-only CFRs was evaluated for potential impacts regarding removal of vegetation that could impact shading. All of the culverts extend beyond the proposed limit of work, and the limit of work within 80 feet of the crossings is primarily limited to the construction platform so vegetation on the side slopes will not be removed. Therefore, vegetation that is currently providing shading outside of the limit of work will be retained and no shading impacts to the Bylaw-only CFRs are anticipated. In addition, all areas except for the 10-foot-wide paved MCRT and bike path shoulders will be restored with the native seed mix shown on Sheet 131 of the Eversource plans, which includes both woody shrubs and herbaceous species. The bike path shoulders will be restored with the herbaceous seed mix shown under Schedule A on Sheet 131 of the Eversource NOI plans.

*SWB6. Provide correspondence from DFW describing their findings on the Project's impacts to the onsite CFRs.*

The correspondence with Caleb Slater from DFW is included as an attachment to this submission.

#### **Adjacent Upland Resource Area**

*SWB7. Quantify the permanent impacts to AURA from the Project including areas that will not be restored to the existing conditions.*

Section 5.2.3 of the NOI quantifies and discusses permanent and temporary impacts to AURA. As discussed in the response to Comment C2, all temporarily disturbed areas will be restored with native vegetation. The revegetation of the Project corridor outside of the proposed paved surface includes a variety of strategies, dependent upon proximity to the paved MCRT and the underground transmission line, proximity to perennial waterbodies, and proximity to Estimated/Priority Habitat for state-listed species. In addition, as discussed in the wildlife habitat evaluation, the Project also incorporates restoration of important wildlife habitat features such as standing dead trees, brush piles, and food plants. This proposed restoration will maintain or improve the functions of values that the AURA is currently providing, including wildlife habitat functions.

#### **Vernal Pools and AURA to Vernal Pools**

*SWB8. Demonstrate that the proposed TOY restriction is appropriate for the Vernal Pool Buffer Zone.*

See response to Comments W24 and W26. Vernal pool migration is adequately protected through the implementation of a TOY restriction, the use of syncopated erosion control barriers, and through oversight by an environmental monitor during construction.



*SWB9. The Commission can consider requiring a No Disturbance Zone in proximity to the Vernal Pools located along the corridor.*

Please refer to Section 5.2.3 of the NOI for a detailed discussion on the proposed No Disturbance Zones in proximity to Vernal Pools along the corridor. In summary, the Project has been designed to avoid and minimize impacts to the area within 100 feet of vernal pools. The majority (68%) of the total Vernal Pool Buffer will be a No Disturbance Area, with no activities proposed. *SWB10. Quantify the permanent impacts to Vernal Pool Buffer Zone that includes areas that will not be restored to the existing conditions under this Project proposal.*

Table 1 on page 4 and Table 15 on page 73 of the NOI provides this information.

*SWB11. Update the Wildlife Habitat Evaluation to fully analyze the Project's effects on the Vernal Pool envelope and Critical Terrestrial Habitat area.*

The Notice of Intent application has been filed under the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40), its implementing Regulations (310 CMR 10.00) and the Sudbury Wetlands Administration Bylaw and Regulations. As dictated by the MWPA Regulations and the Sudbury Wetlands Regulations, a Wildlife Habitat Evaluation (WHE) was conducted for the proposed Project in accordance with 310 CMR 10.60 and the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (DEP-March 2006). The WHE was submitted as Attachment J of the NOI.

Footnotes 3 and 4 on Page 5 of 27 of the BETA review letter dated May 11, 2020, refer to a USACE document for Vernal Pool Best Management Practices (January 2015). This document was a guidance document previously utilized by the USACE under the previous Massachusetts General Permit and which included the terminology for Vernal Pool Envelope (0-100 feet from depression) and the Critical Terrestrial Habitat area (100-750 feet from depression). The current Massachusetts General Permit issued by the USACE in April 2018 revised the compliance guidance for Vernal Pools (General Condition 23) to exclude the use of the Vernal Pool Best Management Practices document (January 2015). The terms Vernal Pool envelope and Critical Terrestrial Habitat are not regulatory terms found in either the MWPA, its implementing Regulations, or the Sudbury Wetland Bylaw/Regulations.

The WHE completed for the Project and submitted as Attachment J includes a full analysis of the proposed impacts from the Project within all Vernal Pool Buffers as defined under the MWPA and the local bylaw. In addition, Section 5.2.3 of the NOI provides a detailed narrative outlining regulatory compliance within the Vernal Pool Buffers in the Project Locus.



## Resource Replications

*SWB12. Provide clarification on why the Project requires a Waiver from the requirement that the replication area be constructed before construction of structures.*

As stated within Section 5.2.5 of the NOI, the waiver is being requested from the Sudbury Bylaw requirements to allow the construction of the replication area during construction of Phase 1 of the Project.

*SWB13. Provide details for replicating the soil lamination and density profile within the replication area. Placement of 12 inches of compost is not adequate to replicate the soil profile.*

As discussed within the Wetland Replication Report that was included as Attachment D, to avoid spreading invasive species via translocated soils, the Project proposes using a manmade soil mixture consisting of equal volumes of organic (compost) and mineral material such as rich loamy sand with a loose to friable consistency. For specific details on soil specifications, see Note 5 on Sheet 135 of the Eversource plans.

## Wildlife Habitat

*C9. The abundance of wildlife habitat features located outside the ROW should not be substantially relied upon in the determination of whether the Project will have an adverse effect of the ability for the Project to provide wildlife habitat.*

See the response to Comment WPA44.

*SWB14. Provide an analysis of the Project's impacts on Town-defined CFRs.*

See the response to Comment SWB5.

*SWB15. Provide an analysis of the Project's impacts on Vernal Pools, the Vernal Pool Envelope and the CTH of Vernal Pools.*

See the response to Comment SWB11.

*SWB16. Provide an analysis of the Project's impacts on BLSF, RA, Bank, LUW and AURA.*

See the responses to Comments WPA44 and WPA34. Section 5 of the NOI and the WHE report provided in Attachment J provides detailed summaries of the Project's impacts on all of these state and local resource areas.

## Stormwater Management

The Applicants are reviewing BETA's comments on stormwater management issues (SW1 through SW51) and responses will be provided in a separate submission as soon as possible.



## Bridge Construction Impacts

*B1. Confirm that there will not be any additional disturbance or impacts to resource areas outside the crane mat footprint.*

See the response to Comment WPA6.

*B2. Recommend that a condition be included that requires a detailed plan for the construction of the mat.*

See the response to Comment WPA6.

*B3. Include temporary impacts associated with cutting timber piles. Recommend removing timber piles 2 feet below mud line.*

The timber piles are being cut at the mud line by divers to minimize impacts to Land Under Water Bodies and Waterways and no permanent or temporary impacts are anticipated. Requiring the piles to be cut 2 feet below the mud line would require excavating the riverbed to get access to the piles. This would increase the impact area and would have the potential to cause turbidity in the flowing water from the excavation and backfilling.

*B4. Recommend utilizing both erosion control type C options at bridgework areas.*

See the response to Comment WPA25.

Should you have any questions concerning this submittal or require additional information, please contact Katie Kinsella at 617.607.2157 or [kkinsella@vhb.com](mailto:kkinsella@vhb.com), or Gene Crouch at 617.607.2783 or [gcrouch@vhb.com](mailto:gcrouch@vhb.com).

Sincerely,

Two handwritten signatures in blue ink. The first signature is on the left and the second is on the right.

Katie Kinsella, PWS / Gene Crouch

CC: Denise Bartone, Eversource  
Paul Jahnige, DCR  
MassDEP Northeast Regional Office



Attachments:

- July 7, 2017 MassDEP CERO Comment Letter
- Eastern Box Turtle Protection Plan
- Corridor Management Plan
- Correspondence with Dr. Caleb Slater
- Soil and Groundwater Analytical Memo
- DCR Operations and Maintenance Plan and Long-term Pollution Prevention Plan
- Time of Year Restrictions Figures
- Draft Stormwater Pollution Prevention Plans (DCR and Eversource)
- Revised plans showing:
  - › Additional labeled contours;
  - › Revised planting schedule;
  - › Revised construction plan to reference detail on sheet 127 for culvert at STA 704+56
  - › Revised bridge key plans with resource area boundaries
  - › Revised crane mat restoration detail sheet with reference to fertilizers removed