January 8, 2021

Ref: 12970.00/14424.00

Sudbury Conservation Commission
275 Old Lancaster Road
Sudbury, MA 01776

Re: Supplemental Submission
Sudbury-Hudson Transmission Reliability and Mass Central Rail Trail Project
DEP File No. 301-1287

Dear Members of the Conservation Commission,

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 the additional comments provided by BETA in a letter dated December 7, 2020. In order to provide complete context in one document, the entire comment history is presented here, including:

- BETA's comments (designated "BETA") from May 11, 2020;
- VHB's responses (designated "VHB") from June 25, 2020;
- BETA's comments (designated "BETA2") from August 7 (revised Aug. 11), 2020;
- BETA's comments (designated "BETA3") from September 18, 2020;[1]
- VHB's responses (designated "VHB2") from October 15, 2020;
- BETA's comments (designated "BETA4") from December 7, 2020; and
- VHB's responses (designated "VHB3") addressing the BETA3 and BETA4 comments.

BETA's initial comments are presented in **bold** text with letter and number indicators, the Applicants' prior responses VHB" and "VHB2" are presented in *italicized* text, BETA's additional comments "BETA2," "BETA3," and "BETA4," are presented in **bold** text, and the Applicants' final "VHB3" responses are presented in plain text. The Conservation Commission has delegated review of stormwater management to the Sudbury Planning Board. Therefore, BETA's stormwater comments are not included in this response

[1] **NOTE**: BETA's comments from September 18, 2020 (BETA3) were not provided to the Applicants until *after* the BETA comments from December 7, 2020 (BETA4) were provided. Therefore, the VHB2 responses from October 15, 2020, addressed the BETA2 comments that were received in August 2020. However, because the BETA3 comments apparently were prepared before the VHB2 responses were submitted, each of the BETA3 comments is presented before each of the VHB2 responses in the summary below.

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letter, and, as indicated in BETA's December 7, 2020 comment letter, their comments exclude review of revised stormwater management materials or comments.

This supplemental submission also provides a full updated set of plans for both Phases of the Project, including the planting revisions discussed during the last hearing on December 14, 2020 and revisions made to areas in Watersheds 9.1 and 10.14 based on requests from the Planning Board during stormwater permit review. It should be noted that the changes to Watershed 10.14 are not within the Conservation Commission's jurisdiction. As discussed within the VHB3 response to C2 (formerly C1-1), an additional 286 shrub plantings were added within Riverfront Area ("RFA"). This is in addition to the proposal for 1,336 shrub plantings that was submitted to the Commission on October 15, 2020 and the 266 plantings within the Estimated/Priority Habitat that are within the RFA of Hop Brook.

General

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

BETA3: These comments (G1a-G1g) are being addressed separately under the stormwater review due to the timing of supplemental submittals from VHB.

BETA4: Stormwater Management Design is being further peer reviewed by the Sudbury Planning Board's consultant. The Commission should incorporate any recommended conditions provided through that review process.

VHB3: No response required.

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.

VHB: 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.

BETA2: The memorandum lacks sufficient information to determine the vertical and horizontal extent of contamination at the Site and is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Provide soil boring logs, groundwater monitoring data, and analytical reports.

As discussed during the July 8, 2020 public hearing, earthwork will occur at several locations of the ROW at the same time. Include a Special Condition requiring a qualified EM be present onsite during all impacted soils management activities.

BETA3: Although the Soil Boring Logs and Analytical Reports were provided to the Commission in Eversource's August 7, 2020 submittal, the documents were not organized in a manner that would facilitate review and there are inconsistencies and inaccuracies with the reporting.

Applicant did not provide Groundwater Monitoring data (measured depth to groundwater) from the sampling event at each well.

VHB2: Soil boring logs, groundwater monitoring data, and analytical reports were provided. There is no need to determine vertical or horizontal extent of potential contamination. The ROW is not a Chapter 21E site, and as described in the VHB response above, the Project can be conducted without any increased risk to human health or the environment, including any of the interests under the WPA and the Bylaw. In addition, a member of the environmental monitoring team will be present during construction and appropriate measures will be in place per the SGMP to respond to any unanticipated soil or groundwater conditions.

BETA4: Recommendations:

- **Include Special Condition requiring the SGMP be submitted to the Commission for review and approval prior to commencement of work.**
- **Include Special Condition requiring a qualified EM be present onsite during impacted soil and groundwater management activities.**
- **Include Special Condition requiring notification to the Conservation Commission within 48 hours of encountering documented or suspected impacted soil or groundwater.**

VHB3: The Applicants can agree to a special condition requiring that the SGMP be submitted to the Commission for review and comment, but not approval, prior to commencement of work, and requiring that the Conservation Commission be notified within 48 hours of encountering documented or suspected impacted soil or groundwater.

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.

VHB: Section 3.1.9.1 of the NOI discusses culverts and drainpipes. 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.

BETA2: BETA's engineers inspected each culvert depicted on the NOI plans during their initial site visit. This comment, relative to the function of the culverts for stormwater conveyance, will be addressed in BETA's letter responding to the Stormwater Management materials and associated comments.

The culverts, however, also function as connections for wildlife migration that may allow species to avoid travel over the railbed / through proposed limit of work. Evaluate culverts for their wildlife migration function. The commission could consider improvements to existing culvert openness or culvert maintenance / repair as part of the mitigation plan for impacts to wildlife connectivity.

BETA3: The Applicant has not yet evaluated the culverts for structural integrity or their wildlife migration function.

VHB2: Proposed work associated with any of the culverts and drainage pipes along the Project was presented in Table 4 of the NOI filing. In summary, none of the culverts (existing conveyances for jurisdictional streams) require replacement to facilitate construction of the Project. As indicated in BETA2, the existing culverts and drainage pipes provide some opportunity for smaller species of

wildlife to move through the area. All of the culverts and drain pipes that function as connections for wildlife migration now will continue to provide this same function during and following construction of the Project as they will remain intact or be replaced with a pipe of the same or slightly larger size. Many of these culverts and drainage pipes contribute to the existing hydrology in the Project area and features such as vernal pools have formed around some of them. The Applicants considered improvements to existing culvert openness and drainage pipe enlargement as one potential option for mitigation under the local bylaw but dismissed this mitigation approach as it would involve additional impacts to wetland resource areas and could adversely affect the existing hydrology of vernal pool areas. The Applicants have selected other mitigation options for the Project that result in an improvement to existing wetland resources areas, rather than additional impacts to wetlands.

BETA4: Applicant indicated that they have evaluated culverts for their wildlife functions and determined that replacement of the culverts onsite would result in additional wetland impacts and may impacts they hydrology of Vernal Pools (if there are any). No report has been provided that analyzes the structural integrity of the culverts.

Recommendations:

- **Include a Special Condition requiring a structural engineer inspect all culverts prior to beginning construction to confirm their hydraulic function and structural integrity to withstand construction activities. Any culverts found not to meet these requirements will be replaced with a culvert that meets the MA Stream Crossing Standards to the Maximum Extent Practicable.**
- **Include a Special Condition requiring the Applicant file a new Notice of Intent if replacement of any culverted stream is required.**

VHB3: The Applicants can agree to this special condition.

G4. [This was a new comment in BETA2]

BETA2: Given the Phased construction of the Project, include a Special Condition requiring the request of a Partial Certificate of Compliance (COC) at the completion of Phase 1 (Transmission Line construction) or after three years, whichever comes first.

BETA3: BETA maintains the recommendation.

VHB2: Eversource would not object to a Special Condition requiring that a Partial Certificate of Compliance ("COC") should be requested at completion of Phase 1 (Transmission Line construction).

BETA4: Applicant has agreed to recommended condition. ADDRESSED.

VHB3: The VHB2 response indicated that Eversource would not object to a special condition *requiring* a Partial COC be requested at completion of Phase 1. However, as the Commission is aware, any request for a COC requires as-built plans. Therefore, Eversource clarifies that it does not object to a special condition stating the following: "*If DCR has not commenced Phase II prior*

to Eversource finalizing the as-built plans for Phase I, a request for a Partial Certificate of Compliance shall be submitted."

Wetlands and Resource Area Impact Summary

C1. 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.

VHB: 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.

BETA2: After a review of the ANRAD issued by the Conservation Commission, it appears that the boundary of BLSF as shown on the plan was approved. The ANRAD review process found significant differences in the LIDAR contour elevations and on-the-ground survey elevations in targeted locations. Therefore, it is important that all BLSF fill be quantified and compensated for on an incremental basis for this Project. Further, the Commission could require greater than a 1:1 incremental BLSF compensation per their Bylaw Performance Standards.

BETA3: The BLSF boundary was approved during the ORAD process because the location of the Base Flood Elevation was surveyed in the field. The topography up and downgradient of the BFE, however, is based on LiDAR. As stated in C1 – BETA2, there were significant differences in the LiDAR contour elevations and on-the-ground survey elevations. In the areas where the elevations on-the-ground do not agree with the LiDAR contours, the cut/fill volumes calculated will not be accurate.

Recommendation: Conservation Commission could require greater than 1:1 BLSF compensation to account for the potential topographic inaccuracies.

VHB2: 310 CMR 10.57(4)(a) states, "Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation (emphasis added), up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream, or creek (emphasis added)."

As demonstrated in Table 11 of the NOI, BLSF cut and fill amounts were quantified and compensated for on an incremental basis within the same stream reach and elevation. The Hop Brook tributary from STA 703+00 to 710+75 is a stream reach and was calculated separately, and the section of Hop Brook from STA 722+50 to 730+00 is a stream reach that was calculated separately. In addition, as shown in Table 11 and as discussed in Section 5.1.7 of the NOI, the Project results in a total **net gain** *of 78.36 cubic yards of flood storage in Sudbury, which is greater than a 2:1 ratio of compensatory flood storage for the overall Project. The table below slightly reconfigures the information in Table 11 for further clarity. The first stream reach (tributary to Hop Brook) results in a net gain of 6.11 cubic yards of compensatory flood storage and the second stream reach (Hop Brook from STA 722+50 to 730+00) results in a net gain of 72.25 cubic yards of compensatory flood storage. In addition to the table below, the cross sections that were provided in the Eversource NOI plans include all BLSF cut (green) and fill (red) locations with the BLSF elevations.*

Hop Brook Tributary along Station Road (Sta 703+00 to 710+75)

Elevation	Fill Volume (CY)	Cut Volume (CY)	Net Change (CY)
133'-134'	17.30	-20.81	-3.51
132' - 133'	7.80	-9.37	-1.57
131'-132'	0.04	-1.07	-1.03
Totals	25.14	-31.25	-6.11

Hop Brook Crossing (Sta 722+50 to 730+00)

Elevation	Fill Volume (CY)	Cut Volume (CY)	Net Change (CY)
126'-127'	10.89	-21.02	-10.13
125'-126'	15.70	-75.41	-59.71
124'-125'	2.70	-5.11	-2.41
123'-124'	0.00	-0.09	-0.09
Totals	29.29	-101.63	-72.36
Project Totals	**54.43**	**-132.89**	**-78.48**

Source: VHB

- Indicates a cut (net gain) of compensatory flood storage

BETA4: VHBs responses and revised plans present cut and fill volumes more clearly. Per the topography and elevations shown on the plans, it appears the cut to fill volumes meet the 1:1 incremental compensation requirements under the WPA, and the cut to fill volumes for Sta. 722 – 730 meet the 2:1 incremental compensation requirements under the Bylaw.

At this time, the cut to fill volume for the Sta. 703-710 reach does not meet the 2:1 incremental compensation requirement under the Bylaw.

VHB3: The BLSF cut from STA 703+00 to 710+75 was increased by 3.99 cubic yards at elevation 133'-134' from the crowning of the bike path at the Planning Board's request. This resulted in a ***net increase*** of compensatory flood storage and increased the ratio to approximately 1.5:1. Any

additional cut would require additional impacts to AURA and the inner 100-foot RFA. As outlined in more detail in VHB's response to SWB18, there is no requirement under the Bylaw to provide a 2:1 incremental compensation for BLSF.

[Continuation of BETA1] Portions of the Project qualify as a Limited Project under 310 CMR 10.53(6 - bike path in Riverfront Area only) and (8 – stream crossing replacement). The Project may not fully meet the limited project provisions at 310 CMR 10.53(3)(d)2 due to the permanent alteration of topography and vegetation. Although MassDEP Central Regional Office stated in their 12/8/2017 comment letter that the Project "qualifies as a limited project", no specific analysis on the Project's compliance with conditions in the Wetlands Protection Regulations was provided. The applicability and use of this provision are subject to the Conservation Commission discretion under 310 CMR 10.53(3)3.

The project proposes permanent and/or temporary impacts to Inland Bank, Bordering and Isolated Vegetated Wetlands, Land Under Water, Bordering Land Subject to Flooding, and Riverfront Area. The Applicant has included only the proposed impervious surfaces related to the bikepath as the "permanent" impacts associated with the Project and has considered the impacts associated with installation of the duct bank, permanent contour changes, and habitat conversion as "temporary" impacts even though these areas will be maintained in perpetuity. The design includes wetland replication in one location, LUW and Bank restoration, and partial BLSF and Riverfront Area restoration.

The combined NOI filing for the bikepath and transmission line is inconsistent with previous permits and applications, including with MEPA and under MESA. In addition, according to the project construction sequence, restoration of the corridor will not be conducted until after the bikepath is complete to avoid impacts to the installed plants, however, the duration of time from transmission line construction to bikepath construction is unknown due to the uncertainty of the funding for the MCRT construction. The construction schedule for the transmission line is also unknown. Restoration of the corridor after Phase 1 clearing and grading activities could be a significant amount of time if the Project under the current proposal.

The western portion of the Project is located within Natural Heritage and Endangered Species Program (NHESP) mapped habitat for the Eastern Box-turtle (Terrapene carolina), Eastern Whip-poor-will (Caprimulgus vociferous), Gerhard's Underwing Moth (Catocala Herodias gerhardi), and Coastal Swamp Metarranthis Moth (Metarranthis pilosaria). This mapped habitat area extends from just east of Bridge 128 to the Sudbury/Hudson town line. The Project has been reviewed under the Massachusetts Endangered Act and must be conditioned to avoid a prohibited "Take" of rare species.

Time of Year (TOY) restrictions are required in several locations throughout the Project corridor to avoid adverse effects to wildlife habitat. These restrictions will limit construction windows, increase the construction duration, and impact wildlife migration due to the presence of erosion controls along the corridor. The NOI has not addressed how the TOY restrictions will impact construction duration, and how an increase in construction duration will impact the species along the corridor.

As proposed, the Project does not fully meet the Wetland Protection Acts performance standards for BVW, BLSF, and RA and additional information is required to determine whether the Project meets the

standards for Bank and LUW. First, this letter provides an overview of construction mitigation methods proposed to be used with recommendations for special conditions to avoid additional impacts to protected resource areas, then the Project is evaluated based on its compliance with the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw.

C2. [NOTE: In their December 7, 2020 letter, BETA changed the labels for the subparts of comment C1, by renaming subpart 1 of comment C1 as "C2," and renaming subparts 2, 3 and 4 of C1 as subparts 1, 2 and 3 of C2. The new labels have been carried forward here.]

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

VHB: 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.

BETA2: The applicability of Limited Project provisions for a given project may only be determined by the issuing authority, as cited above. There is no requirement for Conservation Commissions to issue an OOC for a Project under these provisions even if it fully meets the Limited Project Provisions and conditions. The Commission should consider whether the use of an herbaceous and shrub seed mix to restore the side slopes is adequate to restore resource area functions and values, and if the Project will "substantially restore" the vegetation, as required by the Limited Project provision. The seed mix proposed to be used on the may not be successful due to the planting medium, slope topography, and weather conditions. The graded slopes will also provide conditions conducive to invasive species establishment. The Applicant should provide the Commission with an anticipated timeframe for successful establishment of woody vegetation that would produce the functions of that lost.

Additionally, the shoulders (4-feet) and duct bank (5-feet where not under the trail) will be maintained annually. These 9 feet-wide areas result in the conversion of approximately 4.69 acres of forested area to a different vegetative habitat, namely maintained grassy vegetation. These impacts are not temporary and do not meet the conditions of the Limited Project provision.

BETA3: In their August 7, 2020 submission, the Applicant submitted revised planting plans. These plans were not incorporated into the overall plan set and are not dated such that they can be referenced in decisions. In addition, the revised planting plan only includes four shrub species, no canopy/tree species, and incorrect sheet references. The planting quantities and planting density are adequate.

Regardless of the additional plantings, the Applicant still considers areas that will remain permanently free of shrubs and canopy species due to consistent (yearly) mowing and maintenance temporary alteration. These areas do not meet the conditions of the Limited Project provisions.

Recommendations:

- **Increase shrub species diversity and confirm species consistency with surrounding areas**
- **Add canopy species to each planting area.**

- **Incorporate revised plans into completed plan set**
- **Update/confirm plans reference correct sheets**

VHB2: The Applicant has repeatedly provided sufficient information to the Commission to demonstrate that the proposed Project qualifies for review under the Limited Project provisions at 310 CMR 10.53(3)(d), 310 CMR 10.53(6), and 310 CMR 10.53(8). Section 5.1.1 of the Notice of Intent filed in March 2020 provided a detailed compliance discussion related to Limited Project status, with additional information submitted in supplemental submissions filed on June 25 and August 7, 2020.

With respect to contours, the Project 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.

Based upon input received from the Commission, the Applicants completed a detailed evaluation to determine whether additional supplemental woody plantings could be installed along the Project alignment to enhance the revegetation of temporarily disturbed areas within Conservation Commission jurisdiction. The available space for supplemental plantings is limited by the narrow Project footprint, within which: 1) the area over the duct bank is not suitable for planting, 2) areas within 4 feet of the bike path pavement must be maintained for safe clearance from branch hazards for trail users, and 3) long, narrow areas would result in linear plantings that are generally not consistent with the Commission's request for a natural landscape.

As a result of this evaluation, the Applicants updated the proposed restoration plan to include an additional 1,336 plantings at 23 locations along the Project. Details regarding these plantings were provided in Response to Comment #33 in the August 7, 2020 letter submitted by VHB.

BETA4: VHBs responses and revised plans include planting along portions of the corridor, however, the applicant is still considering areas that will remain permanently free of shrubs and canopy species (due to annual maintenance) as temporary impacts.

According to VHB's 11/13/2020 Response Letter, the Project will stabilize 78% of the RA onsite with native vegetation, however, this 78% includes the area that will only be seeded (and then maintained).

The Commission should consider whether areas that will be seeded and mowed is "substantially restored" site conditions.

VHB3: In addition to the plantings submitted to the Commission on August 7, 2020 and in the October 15, 2020 response letter to BETA, 286 additional shrub plantings have been added within Riverfront Area. There are also five sweet fern (*Comptonia peregrina*), 42 black huckleberry (*Gaylussacia baccata*), 84 lowbush blueberry (*Vaccinium angustifolium*), and 135 Pennsylvania sedge (*Carex pensylvanica*) (total of 266 plantings) within the Estimated/Priority Habitat area within RFA to the west of Bridge 128. These plantings, combined with the 1,336 shrub plantings that were previously proposed, bring the total plantings within the Commission's jurisdiction to

1,888. These plantings are in addition to the woody and herbaceous seed mixes that will be used in all areas of temporary disturbance. These measures further enhance the substantial restoration of vegetation already proposed.

1. **The resource areas, including BLSF and RA, present within the Project Corridor / Railroad ROW provide important wildlife habitat, including upland habitat for Vernal Pool species, cover for reptiles, nesting habitat for birds, and food and cover for mammals, among other habitat.**

   BETA2: VHB provided no response.

   VHB2: Acknowledged. The Applicants have presented sufficient information in the NOI filing and in supplemental submissions, including this submission, to demonstrate how important wildlife habitat features were evaluated and how the Project will be constructed to have no adverse effect on the ability of wetland resource areas to continue to provide wildlife habitat function following construction of the Project.

   BETA4: Our comments on this subject matter are discussed later in this letter.

   VHB3: No response required.

2. **Impacts to Vernal Pools, and the surrounding "Vernal Pool Envelope" and "critical terrestrial habitat (CTH)" have not been adequately evaluated in the Wildlife Habitat Evaluation. The Project's greater than three-year construction period, clearing within 5 feet of several pools, grading within 5 feet of these pools erosion control installation, security lighting, and access through these areas to get to other work zones have not been addressed adequately to confirm the Project will not adversely impact the Vernal Pools along the Project corridor.**

   BETA2: VHB provided no response.

   VHB2: The Applicants responded to these concerns in response to other comments throughout this letter.

   BETA4: Our comments on this subject matter are discussed later in this letter.

   VHB3: No response required.

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

   VHB: 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.

BETA2: During the Conservation Commission meeting there was discussion about requiring full compliance with the Massachusetts Stormwater Standards for these combined projects. To determine what that may look like, BETA took a closer look at the design. For long linear projects the Standards "allows MassHighway to recharge additional runoff at certain locations along a portion of the highway within a subwatershed to compensate for sections of the roadway in the same subwatershed where it may be difficult to recharge the entire required recharge volume". BETA also notes that the project predominately utilizes country drainage. The Standards allow for credit for "disconnection of non-rooftop runoff".

BETA reviewed each watershed that did not currently include BMPs for recharge and treatment of runoff and developed the attached Watershed Worksheets. Based on where the watershed is located and where runoff would be directed, BETA developed a priority list for

recommended inclusion of additional BMPs. Areas where the work is located within a stormwater critical area (Zone 2, vernal pool and cold-water fishery) were classified as high priority. Medium priority was assigned to work areas that would drain to non-critical wetland resource areas. Low priority was assigned to areas that did not include new impervious area and/or where country drainage "credit" is sufficient.

The general restriction of BMPs within buffer zones of vernal pools is predominately so that organisms will not relocate from the vernal pool to the BMP. An infiltration trench is a simple BMP that could be installed that will not attract vernal pool organisms while providing recharge and treatment of runoff in this critical area.

BETA3: This Comment (4) is being addressed separately under the stormwater review due to the timing of supplemental submittals from VHB.

VHB2: The Applicants have no additional response beyond what has been stated. The post-construction condition of this Project is the rail trail, which is identified in the regulations as a project that needs to comply to the maximum extent practicable and which DEP acknowledged in their comment on Eversource's Final Environmental Impact Report ("FEIR") dated September 7, 2018 ("As the MCRT path will be paved, it will be required to meet stormwater management standards under 310 CMR 10.05(6)(k) of the Wetlands Protection Act Regulations. Bike paths, footpaths, bikepaths and other paths for pedestrian and/or non-motorized vehicle access are required to meet the stormwater management standards to the maximum extent practicable (MEP)."). Please also see the response to SW8.

BETA4: No additional comments.

VHB3: No response required.

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.

VHB: 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.

BETA2: BETA recommends a Special Condition that the survey grade equipment produce sub-foot accuracy.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

VHB2: The Applicants can agree to this recommended special condition.

BETA4: BETA maintains recommendations presented in W1-BETA3 above.

VHB3: As stated within VHB2, the Applicants can agree to this special condition.

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.

VHB: 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.

BETA2: Chipping onsite directly into a truck will be adequate to protect the resource areas from construction related impacts. Revise the NOI narrative to include this description. Confirm ROW conditions are currently adequate to support the equipment needed for this work.

BETA3: Information not provided.

Recommendations:

- **Confirm that no grading/slope work is required for clearing and chipping activities.**
- **Provide revised NOI that describes chipping requirements in construction sequence.**

VHB2: The NOI narrative does not need to be revised. The ROW conditions provide adequate space to support the equipment needed to perform this work. If necessary, based on site conditions, vegetation will be moved to a location on the ROW where chipping will occur. A special condition can be included in the OOC to require that all vegetation will be chipped directly into a truck and removed from the Project Site.

BETA4: VHB response states that the ROW conditions are adequate to perform clearing/chipping work. No revised NOI/construction sequence has been provided that describes chipping work.

Recommendations:

- **Include a Special Condition requiring all vegetation be chipped directly into a truck and removed from the Project Site.**
- **Include a Special Condition stating that no grading, earthwork, or stumping shall be conducted during the clearing and chipping process.**

VHB3: The Applicants can agree to the special condition requiring that all vegetation be chipped directly into a truck and removed from the Project Site.

With regard to the other recommended special condition, the BETA3 comment suggests that BETA was concerned that grading, earthwork, and grubbing would be completed prior to the

installation of erosion controls. While some vegetation will have to be removed and chipped before erosion controls can be installed, there will be no earth disturbing activities before erosion controls are installed. As indicated in Section 3 of the NOI, the location of the erosion and sediment controls will be identified in the field with survey grade equipment and will be installed following vegetation removal activities and prior to grubbing, stumping, and grading. Also see response VHB3 to W13-BETA4.

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

Specify the areas where clearing up to 60 feet will be required. A variety of equipment is required along the length of the project corridor to prepare the site and to install the UG utility including excavators and grading equipment, bucket trucks and wood chip storage trucks/vans, equipment and large bridge structure component transport trucks, crane body, etc. If there are other areas where tree limb removal is proposed to differing heights, then these should be shown on the plans to sufficiently describe the work and the effects of the work on the resource areas.

BETA3: Information not provided.

Recommendations:

- **Specify areas where clearing up to 60 feet will be required.**
- **Identify areas where limb removal may be required for limbs that overhang the limit of work.**

VHB2: Please refer to original response. In addition, it is important to note that the Applicants assumed that vertical clearing of up to 60 feet would be required along the entire length of the Project within the limits of work and as such the impact of the vertical clearing is conservatively represented and evaluated in the NOI filing. The vegetation clearing that was calculated for the Project was conservative and assumed that all canopy within the limits of work, regardless of location and height, will be removed. Since canopy will only be removed in select locations on as needed basis, the actual impacts will be lower than those contained in the filing.

BETA4: VHB response states that the impact calculations assume vertical clearing/limb removal to 60 feet will occur throughout the entire limit of work, resulting in conservative

impact areas.

Recommendations:

- **Include a Special Condition stating no limb trimming will occur beyond the horizontal Limit of Work as shown on the plans.**
- **Include a Special Condition stating that no limb removal will occur at heights greater than 60 feet above the Limit of Work.**

VHB3: The Applicants can agree to the recommended special condition limiting clearing height to 60 feet. The Applicants do not agree with the recommended special condition in the first bullet. However, the Applicants can agree to a special condition requiring that any limb removal extending beyond the horizontal limit of work be approved by the Conservation Commission's designated representative.

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

VHB: 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).

BETA2: Response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. BETA observed trees with roots outside the limit of work and trunks that have grown above the railbed, like the one in the photograph to the right. The applicant has not sufficiently described the work and the effects of the work on the resource areas.

BETA3: Information not provided. Recommendations: Describe how trees that have grown into the Project corridor will be managed during the clearing phase of the Project.

VHB2: Trees that have trunks and root systems outside of the proposed limits of work but have limbs and canopies that extend over the proposed limits of work will be assessed on an individual basis to determine the appropriate course of action to facilitate safe construction of the Project. Emphasis will be on retaining the tree if possible and only trimming those portions that overhang the work area and which impede safe operation of construction equipment. In some instances, it may be necessary to cut the entire tree down at the base and leave the root systems intact. However, the vegetation clearing that was calculated for the Project was conservative and assumed that all canopy within the limits of work will be removed, regardless of location and height and even if the trunk was located outside of the proposed limits of work.

BETA4: VHB response states that trees with roots outside the Limit of Work that have grown into the Limit of Work will be assessed on an individual basis and that some trees may be cut at the base leaving the roots intact. This work will be outside the approved limit of clearing. Recommendations: Include a Special Condition requiring that any tree removal proposed

outside the limit of clearing must be approved by the Conservation Commission and / or their designated Representative.

VHB3: The Applicants can agree to this recommended special condition.

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.

VHB: 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.*

BETA2: The response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

BETA3: Information not provided. Recommendations: Provide a location and plant specific Invasive Species Management Plan that Describes how the contractor will control spread of invasive seed during clearing (ie. timing of clearing, isolating seeds before vegetation removal).

VHB2: Sufficient information has been provided to detail how invasive species will be managed during the initial vegetation clearing, including how the contractor will avoid seed dispersion. Also, a Project-specific Compliance Manual will be prepared for the Project and will include information on invasive species management. This manual can be provided to the Commission prior to the start of construction.

In addition to the control measures stated in the initial response, the environmental monitor will monitor for invasive species during each phase of construction and will remove by hand any invasive species that are germinating. Once construction is complete, DCR is responsible for long-term invasive species management, as described in their Corridor Management Plan.

BETA4: VHB response states that a Project Specific Compliance Manual will be prepared and will include information on Construction-Period Invasive Species Management. In addition, the Applicant's Environmental Monitor will monitor for invasive species and remove them by hand during construction. BETA recommends this manual include the information described in W5-BETA3.

Recommendations:

- **Include a Special Condition requiring the Project-Specific Compliance Manual be reviewed and approved by the Conservation Commission prior to the start of work.**
- **Include a Special Condition requiring the Applicant's Environmental Monitor be responsible for removal of invasive species germinating within the Site during construction.**

VHB3: The Applicants do not agree with the recommendation in BETA3 regarding a location and plant specific invasive species management plan. The Applicants have demonstrated how invasive species will be controlled both during construction and post-construction in the VBH and VHB2 responses to W5 and the VHB, VHB2, and VHB3 responses to W36. The Applicants can agree to a special condition requiring that the Project Specific Compliance Manual be submitted for review and comment (but not approval) by the Conservation Commission prior to the start of work. The Applicants can also agree to a special condition requiring that germinating invasive species be removed within the Project Site during construction.

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.

VHB: 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.

BETA2: The recommendation includes both the Commission's review and approval of the final SWPPPs prior to beginning construction. The draft SWPPPs are lacking information required by the NPDES Construction General Permit Conditions.

Given the Site constraints (narrow width and length of corridor), the Erosion and Sediment Control Plan (required under 310 CMR 10.05(6)(k)(8)) should be provided to confirm compliance with the Stormwater Standards.

Include Special Condition requiring that the Applicant notify the Conservation Commission when changes are made to the SWPPP plans (adding BMPs, changing BMPs) prior installation of BMPs.

BETA3: Information not provided.

Recommendations:

- **Include the recommended Special Conditions described above in the Order of Conditions.**

- **Provide Erosion and Sediment Control Plans, as required, for the construction staging areas.**

VHB2: The final SWPPP will address all required NPDES Construction General Permit Conditions. The Applicants can agree to a special condition requiring the review but not approval of the SWPPP prior to construction. The Applicants can also agree to a special condition requiring that they notify the Conservation Commission when changes are made to the SWPPP.

In accordance with 310 CMR 10.05(6)(k)(8), the type and location of the erosion controls are shown on the Eversource and DCR NOI plans. As stated within the responses to SWB2, the Applicants can agree to a special condition stating that the Commission or its Agent will review the staked limits of work prior to the installation of erosion controls.

BETA4: VHB response states that they do not agree to the recommendation that the Commission approve the SWPPP. The Applicant has not provided Erosion and Sedimentation Control Plans for the construction staging areas.

Recommendations:

- **Include Special Conditions as described in W6-BETA2.**
- **Include a Special Condition stating that the Applicant shall submit Erosion and Sediment Control Plans for the construction staging areas to the Conservation Commission for review and approval.**

VHB3: The Applicants can agree to a special condition requiring the review and comment (but not approval) by the Commission of the SWPPP prior to construction. The Applicants can also agree to a special condition requiring the submission of erosion control plans for review and approval for any staging area located outside of the currently proposed Project work limits and in an area subject to the Commission's jurisdiction.

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.

VHB: The Applicants can agree to this recommended special condition.

BETA2: No further comment. ADDRESSED

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

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.

VHB: The Applicants can agree to this recommended special condition.

BETA2: No further comment. ADDRESSED

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

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.

VHB: 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.

BETA2: This response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Although BETA agrees that the erosion controls should not be removed until Site stabilization is confirmed by the Conservation Commission (or their representative), the duration of the construction of Phase 1 and Phase 2, as well at the time-frame between these Phases, is not known at this time. It is

BETA's understanding that construction funding for Phase 2 has not yet been secured. See response to W10 related to the relocation of the erosion control barrier.

BETA3: Recommendations: Include a Special Condition requiring site stabilization and removal of all erosion controls within the Project corridor immediately upon confirmation of site stabilization by the Conservation Commission (or their Representative) 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.

VHB2: Removing and reinstalling the erosion controls between Phases 1 and 2 is unwarranted and could potentially result in detrimental impact to an adjacent wetland resource area. Our suggested condition allows for removal of erosion controls after Phase 1 is completed if the area fully stabilizes before Phase 2 is started. In addition, the Commission or their Agent would get the opportunity to review these areas prior to removal of erosion controls. To properly function, erosion controls should be installed and left in place and maintained until disturbed areas upgradient of wetland resource areas have fully stabilized. Mandatory removal and reinstallation of these erosion controls will result in the destabilization of areas that have been restored and are trending towards successful revegetation, since the silt fence has to be trenched into the ground. Again, it is standard practice to install erosion control barriers once to establish limits of work and, to provide effective protection of adjacent resource areas, to maintain it throughout the entire construction phase. Eversource will be responsible for maintaining the erosion control barriers and performing weekly inspections along the Project following the completion of Phase 1 and up until the commencement of Phase 2.

As an alternative, if erosion controls need to be replaced once Phase 2 starts, and the Phase 1 disturbed areas are fully stabilized with vegetation, the erosion controls will be replaced at the grading limit of work for the Phase 2 Project. If the existing erosion controls are not in need of replacement they will be left in their current location.

BETA4: Recommendations: Include Special Condition described in W9-BETA3

VHB3: See the responses and suggested language for a special condition in VHB and VHB2.

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.

VHB: See response to Comment W9.

BETA2: This response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Since all grading, slope stabilization, stormwater installation, and restoration work will be completed as part of the transmission line construction, earth disturbance work required for construction of the MCRT will be minimal.

Revise the MCRT plans to show the location of the limit of work associated with the trail work only. Installation of erosion controls upgradient of the stabilized areas will protect the newly planted areas (in the process of establishment) from impacts associated with construction of the trail. This will also allow for removal of the downslope erosion controls that are barriers to wildlife migration sooner and will make erosion control maintenance easier for DCR.

BETA3: Information not provided. Recommendations: Provide revised MCRT plans depicting the erosion controls at them limit of work associated with Phase 2 only.

VHB2: The Applicants disagree with removing and reinstalling the erosion controls for Phase 2 work. See VHB2 response to Comment W9.

In addition, the statement that erosion controls are a barrier to wildlife migration is inaccurate. Erosion controls will not be established along the entire length of the Project (see plans for locations of controls) and wildlife will be able to migrate over or around the controls. Also, syncopated silt fence will be installed within 450 feet of vernal pools to allow those species to migrate to and from vernal pools during their active season.

BETA4: Recommendations: Include a Special Condition requiring that erosion controls be installed upgradient of the proposed restoration areas once complete to protect the plantings from construction during Phase 2.

VHB3: The Applicants disagree with the recommended special condition. See VHB responses to W9 for the recommended language for a special condition requiring the removal and reinstallation of erosion controls.

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. This information is necessary to confirm that additional work within jurisdiction is not required for Project construction.

VHB: 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.

BETA2: This response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. It is stated that equipment/vehicle turnaround locations are not planned. The Applicant should provide a written statement that turnaround locations will not be necessary and if it is determined that turnarounds are needed, then they will submit a Request for Amended Order of Conditions if the work results in alteration of an area Subject to Jurisdiction under the M.G.L. c. 131 sec 40 and the local Bylaw outside the permitted limit of work.

Explain why permanent grading is required beyond the limit of the manholes to be installed, as it appears grades in these areas could be restored to existing conditions.

BETA3: Information not provided. Applicant should explain the permanent grade changes in the location of the manholes. If not necessary, the topography in these areas should be restored to existing conditions.

Recommendations:

- **Include a Special Condition prohibiting vehicle turnarounds in areas outside the proposed manhole locations.**
- **Provide reasoning behind proposed topography changes in manhole locations.**

VHB2: The limits of work shown on the Project Plans submitted for the Project are sufficient to provide any turnaround locations for equipment within the limits of work. As for any project, if the proposed limits of work require revision after an Order of Conditions is issued by the Commission, the Applicants will work with the Commission and their representative to determine if changes are minor in nature or if they are more substantial and require the submission of a Request for an Amended Order of Conditions. The permanent grading beyond the limits of manholes is required to provide both adequate installation and maintenance of the manholes. The Applicant has presented revised plans (August 7, 2020 submission) that include supplemental woody plantings in areas of permanent grading around the proposed manholes.

BETA4: VHB response states that permanent grading is required around the manholes for maintenance of the infrastructure. Recommendations: Include Special Condition indicated in C4-BETA3.

VHB3: The Applicants do not agree to the recommended special condition in BETA3. All construction activity, including vehicle turnaround, needs to be allowed to occur within the Project Site (i.e., the limit of work). A prohibition on turnaround areas except at manhole locations is unreasonable because all potential impacts to wetland resource areas have already been identified and presented to the Commission and addressed in accordance with applicable standards.

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

VHB: 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.

BETA2: BETA's recommendation stands. Since the NOI does not include the location of the contractor access points or construction laydown areas, then it is not sufficient in describing the work and the effects of the work on the resource areas, including AURA. See W27- BETA2.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

VHB2: The NOI and supplemental submissions do in fact include the location of the contractor access points and laydown areas. As previously stated, construction crews will access and exit the Project Site at public ways (i.e., road crossings) and all laydown areas will be outside of the Commission's jurisdiction (see VHB2 response to W12 below).

BETA4: VHB 10/15 response to W12 describes the access points to the proposed work areas, however, no description of the proposed laydown areas is provided.

Recommendations:

- **Include a Special Condition requiring the contractor access the Site only by the access points described in VHB's W12-VHB2 response unless specifically allowed by the Commission and / or their Representative.**
- **Include a Special Condition requiring that all construction laydown areas and access to all construction laydown areas be outside the Conservation Commission Jurisdiction unless specifically allowed by the Commission and/or their Representative through a Field Change, Amended Order of Conditions or new Order of Conditions**

VHB3: The Applicants can agree to the recommended special condition in the first bullet of BETA4. As stated within VHB3 response to Comment W6, the Applicants can also agree to a special condition requiring the submission of erosion control plans for review and approval for any laydown area located outside of the currently proposed Project work limits and in an area subject to Commission's jurisdiction.

W12. Provide construction sequencing that addresses corridor access / egress throughout the construction process.

VHB: See response to Comment W11.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Since the NOI does not include a description of the Site access and egress throughout the construction process, then it is not sufficient in describing the work and the effects of the work on the resource areas including AURA.

BETA3: Information not provided. Recommendations: Provide construction sequencing that addresses corridor access/egress throughout the construction process.

VHB2: The general construction sequence is provided in Section 3 of the NOI. The Project will be constructed in segments (e.g., from road crossing to road crossing) using multiple crews working multiple segments concurrently and, in some segments, there could be multiple crews working from each road crossing as well. The Project's schedule and construction sequence will also adhere to all applicable time of year restrictions (TOYRs).

The following bullets outline the sequencing to be employed during Phase 1 of the Project:

- *Limits of work established via land survey with clear visible markings or fencing placed in the field;*
- *Vegetation will then be removed with no grubbing of any root systems at this time;*
- *Next, all erosion controls will be installed and inspected as appropriate, and then rails and ties will be removed;*
- *Then all grading and grubbing/stumping will be completed including installation of stormwater features and establishment of the 14-foot wide gravel base. If the segment includes bridge replacement or rehabilitation, the work at the bridges will take place during this step of Phase 1;*
- *Immediately following, the underground transmission line will be installed with manholes installed first and then the duct bank between manholes; and*
- *Immediately following installation of the transmission line, disturbed areas will be loamed and seeded and/or planted.*

It is anticipated that once work starts in a segment it will continue until the gravel base is installed and disturbed areas are loamed, seeded, and planted.

A detailed construction schedule by segment will be developed once a contractor is brought onto the Project. The Applicants can agree to a special condition in the Order of Conditions requiring them to provide the construction schedule prior to construction. In addition, both Applicants will have full-time community outreach personnel who will be in constant communication with local officials with regard to specific scheduling details and progress. There will be various forms of communication with the public notifying them of the construction schedule, progress, and details.

Access to each section of the ROW will be via public ways as follows:

- *Areas west of Dutton Road will be accessed via White Pond Road (Hudson) and/or Dutton Road*
- *Areas between Dutton Road and Peakham Road will be accessed via Dutton Road and/or Peakham Road*
- *Access to areas between Peakham Road and Horse Pond Road will be accessed via Peakham Road and/or Horse Pond Road*
- *Areas between Horse Pond Road and Union Avenue will be accessed via Horse Pond Road and Union Avenue*
- *Areas between Union Avenue and Boston Post Road will be accessed via Union Avenue and Boston Post Road*

› *Areas between Boston Post Road and the Sudbury Substation will be accessed via Boston Post Road and/or the substation access driveway*

BETA4: The access points to the proposed work areas have been described. See W11-BETA4 for recommended Special Conditions.

VHB3: See response VHB3 to W11-BETA4.

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

VHB: 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.

BETA2: Provide a revised construction sequence that includes stumping for adequate referencing in future permit documents and revise the description of the Proposed Phase 1 activities (section 3.1 of the NOI) to include this work. This activity should also be included in the SWPPP construction sequence.

Specify whether all root removal (not just stumping) is proposed within the limit of work.

Specify whether all stumps within the limit of grading will be removed. If not, provide a figure showing where stump removal will be allowed and where it will be prohibited to determine the effects of the work on the Site's resource areas.

Include a Special Condition requiring that all stumping and grubbing shall not adversely effect woody vegetation, or disturb soils, outside the permitted erosion control barriers.

BETA3: Information not provided. Recommendations:

- **Specify whether all root removal is proposed within the Limit of Work.**
- **Provide a revised construction sequence that includes stumping.**
- **Clarify the locations of the proposed stump removal.**
- **Include the recommended Special Condition described above in the Order of Conditions.**

VHB2: What was described in the Applicants' prior response reflects what was stated in the NOI and SWPPP; these descriptions do not need to be revised. Any stumping or grubbing that is required will be completed within the limit of work. The Applicants can agree to a special condition that stumping and grubbing will not adversely affect woody vegetation or soils outside erosion control barriers.

BETA4: It is still unclear whether stumping/grubbing will be conducted for the entire Limit of Work. Applicant has agreed to the Special Condition described in W13-BETA2. Recommendations: Include a Special Condition requiring that all root and stump grubbing be conducted after all erosion controls are installed.

VHB3: The Applicants can agree to this recommended special condition.

W38. The BMP manual attached to the NOI (Attachment H) specifies the use of either straw or hay bales in several BMP descriptions. Provide a Project-specific BMP Manual.

BETA3: Information not provided. Recommendations: Provide a Project-specific BMP Manual to avoid contractor confusion.

VHB2: [This is a new comment added by BETA.] The Best Management Practices Manual submitted with the NOI is Eversource's standard BMP guidance for all projects. However, project-specific plans dictate what components are to be used during construction, and the plans for this Project state that straw will be used. Hay will not be used on the Project Site. In addition, a Project-specific Compliance Manual will be developed that will include the erosion controls to be used, and it will state that straw, not hay, will be used.

BETA4: See recommended Special Condition in W5-BETA4.

VHB3: See VHB3 response to W5-BETA4.

Dewatering

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

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

BETA2: The dewatering details on the revised plans have been updated to specify straw bales. ADDRESSED.

BETA3: No further comment.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

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

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

BETA2: This response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Because of the subsurface borings conducted as part of the design process, the Applicant should be able to anticipate where dewatering will be necessary and therefore, can provide sufficient detail to describe the proposed activities and discharge locations.

BETA3: Information not provided. Recommendations: Provide plans depicting potential dewatering locations.

VHB2: It is not possible to predict where dewatering will be necessary or to identify specific discharge locations because it is based on field and weather conditions at the time of construction.

However, the Applicants have described the standard methodologies that are available and the general dewatering methodology that will be implemented during construction to prevent adverse impacts to resource areas. In summary, there will be a prohibition on dewatering locations in proximity to vegetated wetlands and all dewatering will include appropriate physical measures to filter sediment from water pumped from excavations, slow down velocity of discharge to eliminate potential for erosion, and promote infiltration back to the local groundwater table. Also refer to response to W17 below.

BETA4: Recommendations:

- **Include a Special Condition requiring that the Conservation Commission, or their representative, be notified in advance if dewatering will occur within an State and/or Local jurisdictional Area. The Commission, or their representative, shall inspect the dewatering Site within 24-48 business hours of notification.**
- **Include a Special Condition prohibiting dewatering directly into BVW, IVW, surface water body or waterway, or the inner 100-foot RFA.**

VHB3: The Applicants disagree with this recommended special condition but are amenable to the special condition suggested in VHB2 for Comment W17.

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.

VHB: 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.

BETA2: BETA recommends a Special Condition requiring that all ground water be treated prior to discharge and that all treatment procedures be approved by the Commission and/or their representative.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

VHB2: There is no need to treat groundwater for chemical constituents prior to discharge. The Applicants' due diligence indicated that there is no basis to anticipate that contamination in groundwater within the ROW will be encountered at levels that would be preclude immediate recharge in the same vicinity. All groundwater to be discharged will receive some sort of "treatment" for the removal of sediment.

BETA4: BETA's recommended Special Condition was referencing treatment of groundwater discharge for silt/sediment removal. Recommendations: Include a Special Condition requiring that all groundwater be treated to remove sediment and fine silt prior to discharge and that all treatment procedures and locations be approved by the Commission and/or their representative.

VHB3: As stated within VHB and VHB2, all dewatering locations will implement erosion and sediment controls to treat the discharged water for removal of sediment. Therefore, the Applicants can agree to a special condition requiring that all discharged water from dewatering activities require implementation of erosion and sediment controls to remove sediment and fine silt. The Applicants can also agree to the suggested special condition in VHB2 for Comment W17.

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

VHB: 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.

BETA2: BETA's recommendation stands. Since the NOI plans do not include the locations of anticipated groundwater dewatering discharge, the NOI does not sufficiently describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

BETA3: Recommendations:

- **Include the recommended Special Condition described above in the Order of Conditions.**
- **Or depict the dewatering locations on the Project Plans for approval during the NOI process.**

VHB2: If dewatering is necessary, water will not be discharged directly into any waterbodies, BVW, Isolated Vegetated Wetlands, or inner 100' of RFA. The Applicants would not object to a special condition requiring that the Commission be notified in advance if dewatering is required within jurisdictional areas and that they may inspect the work site before dewatering commences if such inspection can occur within 24 hours of notification.

BETA4: See W15-BETA4.

VHB3: See VHB2 response to this comment for the special condition the Applicants can accept.

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

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The construction detail shows the stabilization method for the culvert but does not specify the approximate groundwater elevation. Given the limited work area at this location, BETA recommends the Applicant show the potential dewatering location on the plan, as it does not appear there is adequate space for the proposed activities within the limit of work.

BETA3: Information not provided. Recommendations: Provide a dewatering location for this work on the construction plans for this area, as this work is located within the 100-foot inner Riverfront Area.

VHB2: If dewatering is required at this location, it will be completed using one of the methodologies previously discussed. As previously stated, all dewatering will occur within the limit of work, and this location is no different than any other.

BETA4: See W15-BETA4.

VHB3: See VHB3 response to Comment W17.

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.

VHB: 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.

BETA2: BETA's recommendation stands. However, based on the Applicant's response, we further recommend including a Special Condition requiring the contractor be provided the certification to the Commission that the crane mats are free of invasive species prior to placement and removal off-site.

BETA3: Recommendations: Include the two recommended Special Conditions described above in the Order of Conditions.

VHB2: The Applicants can agree to the recommended special condition that the Applicants' contractors certify that the crane mats were cleaned and are free of invasive species prior to placement and removal off-site. A certification form to be used for this purpose will be provided in the Project Compliance Manual.

BETA4: Include Special Conditions recommended in W20 and W20-BETA2.

VHB3: See VHB2 response. The Applicants can agree to a special condition requiring that the Applicants' contractors certify that the crane mats were cleaned and are free of invasive species

prior to placement and removal off-site. A certification form will be used for this purpose and will be provided in the Project Compliance Manual.

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

VHB: 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.

BETA2: This comment will be addressed in BETA's letter responding to the Stormwater Management materials and associated comments.

BETA3: Information not provided. Recommendations: Provide crane mat sections using accurate existing topography, including typical crane mat dimensions, for each Bridge location.

BETA4: The revised plans include Crane Mat Cross Sections using existing topography on Sheet 155 and Slope Restoration Cross Sections showing final grades on Sheet 160. Recommendations: Include a Special Condition requiring all work and impacts associated with installation, removal, and stabilization of the crane areas shall be conducted in strict compliance with the Project Plans and Details unless strictly allowed by the Commission and/or their representative.

VHB3: The Applicants can agree to this recommended special condition.

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.

VHB: 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.

BETA2: The Applicant has not provided sufficient information to describe the site. See G2 – BETA2. Additionally, the Commission needs to understand where impacted soil management (removal, grading, stockpiling for re-use on site) will occur. Rail trail construction typically does not require substantial soil management and therefore, the "Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails" (MassDEP) would be an applicable guidance document. However, site work associated with the installation of the UG electric is much more intrusive and will require substantial trenching and excavation activities.

BETA3: Although the Soil Boring Logs and Analytical Reports were provided to the Commission in Eversource's August 7, 2020 submittal, the documents were not organized in a manner that would facilitate review and there are inconsistencies and inaccuracies with the reporting.

The "Summary of Soil and Groundwater Analytical Results and Subsurface Media Management" memorandum, Soil Boring Logs, and Analytical Reports do not present reasonings behind sampling depth or location related to known releases.

Recommendations:

- **Provide plans depicting areas where soils and/or groundwater contained elevated levels of contaminants.**
- **Provide plans depicting the locations of all MassDEP-Disposal Sites present along or within 500 feet of the Project corridor, including the RTN, approximate disposal site boundary in relation to the Project Site, and MCP status.**

VHB2: As indicated previously, MassDEP confirmed that the Rail Trail Guidance is applicable to the entire Project, including transmission line installation within the MBTA ROW, in their comment on Eversource's FEIR. Full erosion controls and sedimentation prevention techniques will be implemented during excavation, grading, and soil management.

BETA4: See G2-BETA4.

VHB3: See VHB3 response to G2-BETA4.

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.

VHB: 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.

BETA2: The NOI and supplemental information / response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Specific stockpile locations for impacted soils should be proposed and shown outside any Area Subject to Jurisdiction under the WPA or local Bylaw. Given that construction activities will be on- going for several years, it is not realistic for the Commission to monitor the locations used for stockpiling impacted soils to confirm they are outside the Commission's jurisdiction nor is it always realistic to be able to visually identify clean vs impacted soil stockpiles.

BETA3: Information not provided. Recommendations: 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.

VHB2: Specific stockpile locations cannot be identified at this time, but they will be located in specified areas as described above in the initial VHB response and all stockpiles will be managed with appropriate controls to prevent erosion and sedimentation. The weekly reports prepared by the Environmental Monitors throughout construction will identify the locations of active stockpiles and will confirm that the appropriate erosion control measures are being implemented. The Commission and its agent will have authority under the Order of Conditions to conduct inspections of stockpiles at any time throughout construction.

BETA4: See G2-BETA4.

VHB3: See VHB3 response to G2-BETA4.

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.

VHB: 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.

BETA2: BETA's recommendation stands. The Bylaw protects all vernal pool species, therefore the TOY restriction should be selected with this in mind. The document referenced in the response is specific to MESA-listed moles salamanders, while the Bylaw protects the habitat of all vernal pool species.

BETA3: The TOY restriction has not been extended as recommended. BETA's recommendation stands and the TOY restriction should be extended from February 15 to June 15.

VHB2: The TOY restriction period agreed to by the Applicants (March 1 through June 1) is applicable to other amphibian species that may breed in vernal pool habitat. The earliest moving amphibian in New England is the wood frog (Lithobates sylvatica) and documented movement prior to March 1 is extremely rare. DeGraaf and Yamasaki (2001) identify immigration to breeding sites beginning in March and lasting 4 to 6 days. In a study by Paton and Crouch (2002) on breeding phenology of pool-breeding amphibians in southern Rhode Island, approximately 1-2% of the total adult wood frogs immigrating to the breeding pools occurred during the last week in February and all immigration was completed by mid-March with immigration peaking in early March. Other work conducted in southern Rhode Island by Paton et. al. (2000) found that amphibians immigrated to the pond primarily from early March through May. Klemens (1990) also observed wood frog activity in Connecticut on two occasions in February, but most activity was in March with the earliest breeding choruses and/or wood frogs observed in breeding pools documented on March 2. In addition, a TOY restriction for vernal pool amphibians beginning in March is widely accepted for this region as sufficiently protecting migrating adults. The March 1 through June 1 TOY restriction, in combination with the syncopated silt fence and oversight by an environmental monitor, will sufficiently protect the migration period for adult amphibians and will ensure the continued viability of vernal pools to function.

References

Paton, P., S. Stevens and L. Longo. 2000. Seasonal Phenology of Amphibian Breeding and Recruitment at a Pond in Rhode Island. Northeastern Naturalist Vol. 7, No. 3 (2000), pp. 255-269

Paton, P. and W.B. Crouch. 2002. Using the Phenology of Pond-Breeding Amphibians to Develop Conservation Strategies. Conservation Biology Vol. 16, No. 1. Pp. 194-204.

DeGraff, R.M. and M. Yamasaki. 2001. New England wildlife: habitat, natural history, and distribution. University Press of new England, Hanover, NH.

Klemens, M.W. 1993. Amphibians and reptiles of Connecticut and adjacent regions. State Geological and Natural History Survey of Connecticut, Bulletin No. 112.

BETA4: Based on VHBs response, 1% of migrating vernal pool species are active as early as the last week in February. References have been provided that support the proposed TOY restriction, however, all reference referenced is approximately 20 years old and does not considering climate change. The Commission can consider whether the references provided are adequate to demonstrate the Applicant's proposed TOY restriction is sufficient to protect all vernal pool species.

VHB3: No response required.

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

VHB: 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.

BETA2: BETA's recommendation stands. Removal and subsequent replacement of erosion controls will not result in a significant additional disturbance or result in impacts to the vernal pools.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

VHB2: The Applicants could remove and reinstall erosion controls within the vernal pool critical areas to outside the TOY restrictions; however, we are concerned that this special condition could result in the removal of the effective erosion control barrier adjacent to these areas before disturbed areas can completely revegetate and stabilize to the 90% cover of native vegetation suggested in another comment. This approach has the potential to result in a release of sediment from these disturbed but not yet stabilized slopes that could adversely affect the vernal pool during a rain event. In addition, the silt fence must be trenched into the ground and installation, removal, and reinstallation would result in disturbance within areas that have already begun to stabilize. It is standard practice to install erosion control barriers once to establish limits of work and, to provide effective protection of adjacent resource areas, to maintain them throughout the construction phase, and then remove them once disturbed areas have fully stabilized. The syncopated silt fence is proposed to allow for effective wildlife movement through the area for the duration of the construction phase, while simultaneously providing the erosion control function adjacent to the vernal pools.

The Applicant is committed to completing the Project in a manner that ensures these vernal pools maintain their viability and productivity both during construction and operation of the Project. We suggest and would accept a special condition that requires areas adjacent to vernal pools to be revegetated immediately following the completion of grading in these areas, these areas to be monitored, and erosion controls removed as soon as field conditions allow.

BETA4: BETA suggests inclusion of VHB's recommended Special Condition that "Requires areas adjacent to vernal pool to be revegetated immediately following the completion of grading, monitored closely, and erosion controls removed as soon a field conditions allow."

VHB3: The Applicants would accept the special condition in VHB2 requiring areas adjacent to vernal pools to be revegetated immediately following the completion of grading in these areas,

requiring these areas to be monitored, and requiring erosion controls to be removed as soon as field conditions allow.

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.

VHB: 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.

BETA2: BETA's recommendation stands. Given there is no description of project location access/egress or turnaround, the Commission has not be provided sufficient information to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw, their function or the interests they are protecting.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

VHB2: The Applicants cannot agree to a special condition restricting vehicle/equipment movement during the vernal pool TOY restrictions. The issue of access/egress and turnaround locations is provided in response to Comment W12, which sufficiently describes the work on the interests identified in M.G.L. c 131 Section 40 and the Bylaw.

BETA4: The Applicant will not agree to this Special Condition.

VHB3: No response required.

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.

VHB: 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.

BETA2: The figures do not sufficiently describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. They do not show equipment storage locations, soil management areas, or any site access / egress locations from public ways. In addition, the figures do not clearly show when work is prohibited/allowed within each TOY restriction area.

The TOY restriction figures are inconsistent with the discussion in the NOI and with the MESA conditional "No Take" documents:

- **From Sta. 361+50 to 363+50, the work is within both 100 feet of a Black Racer hibernaculum, but also within the Eastern Whip-poor-will protection area and Eastern Box Turtle protection area. According to the TOY restrictions, vegetation clearing and earth moving will never be permitted in this location.**
- **Page 65 of the NOI says "No Construction" in the TOY restriction areas for Eastern Whip-poor-will, Black Racer, Vernal Pools, and in-stream work in Hop Brook, while the figures say "Avoid" construction. Avoid implies more leniency. Revise figures to state "No construction".**

BETA3: Information not provided. Recommendations:

- **Revise TOY figures to accurately reflect the TOY requirements.**
- **Provide the time frame during which vegetation clearing and earth moving will be allowed from Sta. 361+50 to 363+50.**

VHB2: The intent of the figures is to show each TOY restriction area within the Project Site. Any on-site equipment storage locations and soil management areas, if needed, will be within the identified limit of work and all impacts have been quantified. Accordingly, the Project sufficiently describes the effect of the work on the interests identified in M.G.L. c 131 Section 40 and the Sudbury Bylaw. As has been previously stated, access/egress from the site will be from public roads; see the VHB2 response to Comment W12 for additional information. The notes on each individual figure clearly state the TOY restriction or guideline, which provides the information to determine when work is allowed.

The eastern box turtle timeframes are guidelines, not restrictions, and the Eastern Box Turtle Protection Plan, which was reviewed and approved by NHESP in their no-take determination, does not limit construction from November 1 and March 31. The Eastern Box Turtle Protection Plan states, "Prior to daily work activities within rare turtle habitat between April 1 and November 1, a VHB qualified environmental monitor(s) will visibly search (sweep) access roads, work areas, and areas adjacent to these areas for rare turtles." The notes in the TOYR figures were updated to accurately reflect the language in the Eastern Box Turtle Protection Plan and are included as an attachment to this supplemental submission (Attachment D). The figures were also revised to state "no construction" where appropriate.

BETA4: The revised TOY restriction maps more clearly identify what work is allowed in each location, and better describes the monitoring required to protect the Species. These figures state that use of existing access roads are allowed during the Eastern Whip-poor-will and Vernal Pool Protections TOY restrictions. The MESA Conditional No-Take letter does not specifically approve the use of roads within the Eastern Whip-poor-will Protection Zone.

VHB3: The MESA checklist that was reviewed by NHESP prior to issuance of the MESA Conditional No-Take letter specifically states the following about the use of roads within the Eastern Whip-poor-will Protection Zone during the breeding season TOY restriction from May 1 through August 1: "Passage of construction vehicles through these areas will be allowed during this time frame."

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.

VHB: 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.

BETA2: Submit the tentative construction schedule review with anticipated dates for each construction component to confirm that the work can adhere to the TOY restrictions.

BETA3: Information not provided. Recommendations: Provide tentative construction schedule.

VHB2: A tentative construction schedule has not been developed because the start of construction is contingent upon receiving the permits and selecting a contractor. The construction schedule will be established once a contractor has been selected, a contract has been awarded, and a construction commencement date can be established. The schedule will adhere to the TOY restrictions. Eversource will provide the Conservation Agent with a copy of the schedule prior to the start of construction along with updates to the schedule, if any, during the performance of the work. However, the Project is committed to adhering to all TOY restrictions during construction and when the approximate 20-month construction duration for Phase 1 construction was developed, it considered all TOY restrictions.

BETA4: Schedule not provided. VHB has indicated that they considered the TOY restrictions when estimating a 20-month construction.

Recommendations:

- **Include a Special Condition requiring the submittal of a construction schedule to the Conservation Commission prior to beginning work.**

- **Include a Special Condition requiring the Conservation Commission receive updated construction schedules.**

VHB3: The Applicants can agree to this recommended special condition.

Corridor Restoration and Invasive Species Management

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

VHB: 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).

BETA2: The plant lists included on the MCRT plans have been adequately revised with appropriate species native to Middlesex County. The revised plans, however, are dated the same as the plans submitted with the original NOI filing. Provide a revision date on the MCRT plans so they can be properly cited in future decisions.

BETA3: Information provided. The revised MCRT plans submitted with the July 31, 2020 are properly dated and can be properly cited. No further comment. Should any further revisions be made to the plan set, a full plan set with an accurate revision date should be submitted to the Commission.

VHB2: This will be provided. A final DCR plan set incorporating all revisions will be prepared once the Commission is ready to issue an Order. That plan set will include the revisions to the planting list and will be stamped and dated for reference in the Order.

BETA4: ADDRESSED.

VHB3: No response required.

W30. Include a Special Condition requiring the Conservation Commission approve species substitutions and require reasoning behind why the substitution is proposed.

VHB: The Applicants can agree to this recommended special condition.

BETA2: No further comment. ADDRESSED.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

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.

VHB: The Applicants can agree to this recommended special condition.

BETA2: No further comment. ADDRESSED.

BETA3: Recommendations: Include the recommended Special Condition described above in the Order of Conditions.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

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.

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The plant number for the species proposed within mapped NHESP habitat is not shown on Sheet 131. The minimum depth of loam amendments should be included on the Plan Set. Landscaping plans are necessary to determine the plan is suitable to restore the area to pre-construction conditions where impacts are quantified as temporary and as required by the Limited Project performance standards. The planting plans are also necessary to confirm adequate plant density and appropriateness of the species proposed for the specific habitat.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission that depict plantings at the bridge locations and do note the minimum depth of loam amendments. No landscaping plans or plant numbers have been provided for the rare species habitat planting. Recommendations: Provide Landscaping Plans that depict the area to be planted and species to be planted in rare species habitat.

VHB2: The locations of plantings proposed within Priority and Estimated Habitat is shown on the revised sheets 102-106 in the Eversource NOI plans attached to this submission (Attachment C). In addition to these plantings, this area will also be loamed and seeded with the woody and herbaceous seed mixes and will be substantially restored as required by the Limited Project performance standards. As shown throughout the Eversource and DCR plan sets, all areas outside of the 10-foot-paved bike path will receive 4 inches of loam and seed.

BETA4: Revised planting plans have been submitted that address our original comments. ADDRESSED.

VHB3: No response required.

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. BETA's initial Comment W33 was not only referencing the sand deposits within the mapped habitat. Areas within the Commission's jurisdiction and mapped habitat west of Bridge 128 have native soil textures that are not consistent with loam. The Applicant should provide supporting documentation on whether the application of loam is appropriate for Site stabilization in throughout NHESP mapped habitat.

BETA3: Information not provided. Recommendations:

- **Provide supporting documentation on whether the application of loam is appropriate in areas within NHESP mapped habitat.**
- **Provide borrow material bid specifications for each type of borrow to be used within the Site.**

VHB2: Based upon a field review (July 24, 2020) of the Project area west of Bridge 128, it has been confirmed that use of loam and seed is appropriate within the RFA/AURA in this area. The cover type adjacent to the Project Site is forested with a vegetated understory. Although the native soil may have a high sand content, use of loam and seed for the shoulders to develop vegetated grass shoulders in this area will be consistent with the adjacent vegetated community.

BETA4: VHB has indicated that loam and seed is appropriate for Site stabilization within the NHESP mapped habitat area and is consistent with the material that supports the vegetation community onsite, however, no supporting documentation has been provided.

Recommendations: Include a Special Condition requiring documentation supporting the use of loam and seed within the NHESP mapped habitat prior to starting work.

VHB3: The proposed planting, including loam and seed, was reviewed and approved by NHESP. This documentation was provided in the NHESP Conditional No-Take Letter presented in Attachment G of the NOI.

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.

VHB: 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.

BETA2: BETA's recommendation stands. Further, we recommend that the Special Condition state that all soil amendments be certified that they are free of oil and/or hazardous materials and invasive species prior to use on the site.

Include a Special Condition requiring that any soil reuse on site shall not result in the degradation of soil or groundwater in any area.

BETA3: Recommendations: Include the recommended Special Conditions described above in the Order of Conditions.

VHB2: The Applicants can agree to this recommended special condition.

BETA4: Applicant has agreed to the recommended Special Conditions presented in W34 and W34-BETA2. ADDRESSED.

VHB3: No response required.

W35. Include a Special Condition prohibiting the use of fertilizers within jurisdictional areas.

VHB: 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.

BETA2: BETA's recommendation stands. The revised plans have removed the reference to the use of fertilizers on plan sheet 130 of the Eversource plan set. The Applicant should also provide an updated BMP manual removing references to the use of fertilizers.

BETA3: Information not provided. It is understood that the BMP manual is not Site-specific, however, if the BMP manual is provided to the contractor, they may employ BMPs that have not been approved by the Conservation Commission. Recommendations: Include the recommended Special Condition in the Order of Conditions.

VHB2: As previously stated, fertilizers will not be used, and the Applicants can agree to a special condition prohibiting the use of fertilizers within jurisdictional areas. A Project-specific Compliance

Manual will be developed, which will include a statement that fertilizers will not be used. The manual can be provided to the Commission prior to the start of construction.

BETA4: Applicant has agreed to the recommended Special Condition presented in W35. Also, see W5-BETA4. ADDRESSED.

VHB3: No response required.

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.

VHB: 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.

BETA2: The NOI and response are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Invasive species control by DCR following the trail construction does not address invasive species control/eradication during construction or following stabilization of Phase 1 prior to Phase 2 construction. Provide an adequate Invasive Species Control Plan that addresses invasive species monitoring, control, and eradication throughout the construction phase and following Phase 1 construction.

In areas where invasive species are present along the limit of work (as described in VHB's WHE), aggressive species-specific vegetation control will be required, as invasive species are better suited to disturbed areas and will out-compete the native seed mix.

BETA3: The provided details on invasive species are not adequate to protect the Project area from invasive species establishment. Recommendations:

- **Provide a Site and Species-specific Invasive Species Control Plan should be provided that describes the methodology, controls, and timing of chemical application, timing of monitoring and management event, and reporting to the Conservation Commission.**
- **Include a Special Condition requiring Eversource to conduct regular invasive species control and provide reports to the Conservation Commission during and following Phase 1 of the Project.**
- **Include a Special Condition requiring DCR to conduct invasive species control and provide reports to the Conservation Commission during and following Phase 2 of the Project.**

VHB2: See the initial VHB response and VHB2 response to Comment W5, which addresses invasive species management during construction.

BETA4: VHB states invasive species control will be addressed in the Project-Specific Compliance Manual. Recommendations:

- **See W5-BETA4.**
- **Include Special Conditions described in W36-BETA3.**

VHB3: See VHB3 response to Comment W5-BETA4. The Applicants cannot agree to the recommended special condition in the first bullet of BETA3. However, they can agree to the suggested condition in VHB2 and VHB3 in Comment W37. The recommended special condition in the second bullet of BETA3 is unnecessary because invasive species control will be an inherent element of meeting the requirement to achieve 90% cover by native species in vegetation restoration areas. With regard to the recommended special condition in the third bullet in BETA3, the invasive species control program by DCR is addressed in the O&M plan that was provided.

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.

VHB: 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.

BETA2: The response does not adequately address the comment. In order for the Commission to consider permitting the use of chemical control methods, a Site and Species-specific Invasive Species Control Plan should be provided that describes the methodology, controls, and timing of chemical application.

BETA3: The provided details on invasive species are not adequate to protect the Project area from invasive species establishment.

Recommendations:

- **Provide a Site and Species-specific Invasive Species Control Plan should be provided that describes the methodology, controls, and timing of chemical application, timing of monitoring and management event, and reporting to the Conservation Commission.**
- **Or include the recommended Special Condition.**

VHB2: The Applicants are not seeking approval of chemical control methods at this time. The Applicants can accept the following special condition that was included in Hudson's OOC:

> *DCR shall notify the Commission in advance if herbicides are to be used for vegetation control within wetland jurisdictional areas, indicating the target*

control species, the type(s) of herbicide to be used, and the on-going maintenance plan for the targeted area. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance.

BETA4: VHB has suggested the following Special Condition:

"DCR shall notify the Commission in advance if herbicides are to be used for vegetation control within wetland jurisdictional areas, indicating the target control species, the type(s) of herbicide to be used, and the on-going maintenance plan for the targeted area. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance."

BETA instead recommends the following Special Conditions:

- **DCR shall notify the Commission in advance if herbicides are to be used for vegetation control within jurisdictional areas, indicating the target control species, the type(s) of herbicide to be used, the proposed application rate, and the on-going maintenance plan for the targeted area for review and approval. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance of a Certificate of Compliance.**
- **The use of herbicides is prohibited unless written approval has been provided by the Conservation Commission or its Representative.**

VHB3: DCR disagrees with the recommended special condition in BETA4 but will accept the special condition suggested in VHB2,with the additional element of providing the proposed application rate as suggested in the first bullet of BETA4.

Massachusetts Wetlands Protect Act Compliance

Limited Project Provisions

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

VHB: See response to Comment C2.

BETA2: As stated in our response to C2, the determination of a Project's compliance with any Limited Project Provisions and issuance of an OOC permitting a Project that does not meet the Performance Standards is at the discretion of the Conservation Commission. The burden of proof that the project can adhere to the Performance Standard lies with the Applicant.

BETA3: In their August 7, 2020 submission, the Applicant submitted revised planting plans. These plans were not incorporated into the overall plan set and are not dated such that they

can be referenced in decisions. In addition, the revised planting plan only includes four shrub species, no canopy/tree species, and incorrect sheet references. The planting quantities and planting density are adequate.

Regardless of the additional plantings, the Applicant still does not consider areas that will remain permanently free of shrubs and canopy species due to consistent (yearly) mowing and maintenance permanent alteration. These areas do not meet the conditions of the Limited Project provisions.

VHB2: See the VHB2 response to the BETA2 comment under Comment C2 above.

BETA4: See C2-BETA4.

VHB3: See VHB3 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.

VHB: 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).

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The full extent of clearing, mowing, grading associated with the proposed width of the constructed level surface, and excavation associated with the manhole and duct bank installation are not required for construction of the rail trail.

BETA3: The Applicant has mis-represented the Project's impacts to the corridor. The impacts must be re-quantified. Areas that will be mowed at least once per year are permanent impacts and should be quantified as such. See WPA3-BETA3.

VHB2: The NOI and supplemental information, including this submission, sufficiently describe the work. The NOI discusses all wetland resource area impacts and compliance with performance standards for both phases of the Project.

BETA4: See C2-BETA4.

VHB3: See VHB3 response to Comment C2.

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.

VHB: 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.

BETA3: This comment has not been addressed. Information not provided. The Applicant has mis-represented the Project's permanent RA impacts. The impacts must be re-quantified. Areas that will be mowed at least once per year are permanent impacts and should be quantified as such.

Recommendations:

- **Provide impact calculations that accurately represent the transmission line's and bike trail's permanent effect on RA.**

VHB2: The comment was addressed. DCR and Eversource completed the Project design in a joint effort, using the same engineering firm (VHB) to ensure that the Project could be designed within the smallest limits of work possible while meeting all applicable standards for both the transmission line and the bike path. Eversource will complete all major grading for the Project, including for stormwater features for DCR's MCRT, and will develop a 14-foot gravel base for DCR to install a 10-foot-wide paved pathway with 2-foot vegetated shoulders. Permanent impacts in RFA are associated only with the 10-foot paved pathway, as all other areas will be revegetated.

BETA4: See C2-BETA4.

VHB3: See VHB3 response to C2-BETA4

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.

VHB: 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.

BETA2: The Applicant has quantified the impacts associated with construction of the MCRT that do not qualify as a Limited Project, however, the Applicant does not describe what proposed activities result in the quantified temporary impacts vs what activities result in the quantified permanent impacts.

Based on how VHB has quantified temporary and permanent impacts to RA and BLSF throughout the Project corridor (see WPA33 and WPA37), it is likely that the impacts presented in WPA4-VHB are not accurately quantified and that the Project will result in greater permanent impacts than quantified.

Specify what work results in temporary vs. permanent impacts as quantified in VHB's response to WPA4.

BETA3: The Applicant has mis-represented the Project's impacts related to the non-limited project portions of the bike trail. The impacts must be re-quantified. Areas that will be mowed at least once per year are permanent impacts and should be quantified as such. Recommendations: Provide impact calculations that accurately represent the Project.

VHB2: The MCRT does not qualify as a limited project where it passes through Riverfront Area that also is Bordering Land Subject to Flooding. The initial VHB response provided this information. Permanent impacts associated with the MCRT have been presented and are associated with the paved portion of the MCRT only. All other areas will be revegetated with native vegetation.

BETA4: See C2-BETA4.

VHB3: See VHB2 response and VHB3 response to C2-BETA4.

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.

VHB: 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.

BETA2: Based on the Applicant's response, it is presumed that the evaluation of the potential for downstream flooding, stream stability, impacts to wetlands and the potential to affect property and infrastructure has not been performed. Therefore, the NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

Impacts associated with placement of the timber crane mats in FEMA Floodway should also be evaluated.

BETA3: BETA acknowledges VHB's response. Recommendations: At a minimum, the Commission should include a Special Condition requiring the hydraulic analysis be submitted to the Conservation Commission prior to start of work.

VHB2: The evaluation of potential for downstream flooding, stream stability, impacts to wetlands, and the potential to effect property and infrastructure has been performed. All wetland impacts were quantified and provided in the NOI. In accordance with standard practice, the no-rise certification would be provided prior to construction. However, to address the comment, a no-rise certificate has been prepared and is attached to this supplemental submission (Attachment E).

BETA4: A "No-Rise" certificate stamped by a PE has been provided. Recommendations: Include a Special Condition requiring the Applicant provide confirmation that the Project complies with all FEMA requirements for fill within regulated Floodway prior to construction.

VHB3: By submitting the "No-Rise" certificate, the Applicants have provided confirmation that the Project meets the FEMA requirements for fill within regulated floodways.

Inland Bank

WPA6. Provide crane mat cross sections using existing topography.

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The Commission has the regulatory authority to require construction detail plans that fully describe the proposed work.

BETA3: Information not provided. Recommendations: Provide crane mat sections using accurate existing topography.

VHB2: Revised crane mat cross-sections for each bridge that show existing topography are attached to this supplemental submission (Attachment C).

BETA4: See W21-BETA4.

VHB3: See VHB3 response to Comment W21.

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).

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The conceptual sections on sheet 125 of the plan set depict the edge of the crane mats placed toward the railbed below the existing ground elevation. This requires excavation of the existing surface soils, which will not be possible without root removal. Since the crane mats will be placed below the Bank boundary, impacts to the Bank are likely. Provide requested information.

BETA3: Information not provided. Recommendations: Provide crane mat sections using accurate existing topography.

VHB2: Revised crane mat cross-sections for Bridge 127 are attached to this supplemental submission (Attachment C). As shown in the sections, the mats will be set into the existing slope (including the Bank), which will support the slope and ensure that it remains stable during bridge work. Once the mats are no longer needed, the slope will be restored to pre-construction elevations and stabilized with jute mesh erosion control blankets. Within the wetland, a wetland seed mix will be used and aquatic plugs will be planted within LUWW as shown on Sheet 125. Upslope of the wetland, the disturbed area will be seeded with the mix specified in Planting Schedule A on Sheet 161 and planted with additional trees and shrubs as shown on Sheet 125. These measures will ensure the proposed work will not impair the physical stability of the Bank in accordance with 310 CMR 10.54(4)(a)(1).

BETA4: See W21-BETA4.

VHB3: See VHB3 response to W21-BETA4.

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).

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Regardless of whether the mats are within low flow areas or within the primary channel, the mats are still proposed within LUW and will temporarily impact the streams carrying capacity during construction.

Provide plans with the necessary level of existing conditions and restoration details at the Bank impact locations to ensure the topography will be restored to existing conditions following construction for compliance with the General Performance Standards for Bank.

Provide Bank restoration notes on Construction Plans.

BETA3: Information not provided. Recommendations: Add Bank restoration notes to the Construction Plans and landscaping plan, including grading/topography restoration details.

VHB2: Existing conditions, temporary conditions, and restoration details at the Bank impact locations are shown on sheets 155 and 160.

BETA4: See W21-BETA4.

VHB3: See VHB3 response to W21-BETA4.

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.

VHB: 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.

BETA2: The response does not adequately address the comment. Provide requested materials to confirm compliance with the General Performance Standards for Bank for restoration of the Bank's function.

BETA3: Information not provided. Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission that depict plantings within the temporary Bank impact areas in the location of the Bridge 127 crane mats. These plans, however, do not specify the number or locations of the dead tree reinstallation. Recommendations: Provide revised restoration / landscaping plans that depict the proposed restoration efforts.

VHB2: While the area of temporary placement of crane mats will cumulatively be more than 50 feet, the work will not materially diminish the overall capacity of the Bank to provide important wildlife habitat functions (e.g., breeding habitat, escape cover and food for fisheries). The Project is no longer proposing to reinstall "standing dead trees."

BETA4: The project is no longer proposing to re-install "Standing Dead Trees".

VHB3: No response required.

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

VHB: 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.

BETA2: BETA recommends that a more location specific seed mix application be proposed by the Applicant to increase diversity and the likelihood of seed germination and success. As discussed in other comments, BETA is recommending that the Commission require the planting of woody vegetation along with the application of an appropriate seed mix to promote successful habitat restoration in a shorter period of time.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission that depict plantings within the temporary Bank impact areas in the location of the Bridge 127 crane mats. These plans, however, have not been integrated into the full Project plan set. Recommendations: Incorporate planting/landscaping plans into overall plan set.

VHB2: The seed mix is appropriate. The seed mix proposed includes both upland and wetland species, and all species are on Sudbury's Native Plant List. As provided in the supplemental submission dated August 7, 2020, additional planting of woody vegetation is proposed where feasible within Bank and Buffer Zone.

BETA4: See W32-BETA4.

VHB3: No response required.

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?

VHB: 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.

BETA2: The response does not address the comment. Specify where stumps will be removed on the Bank to ensure crane mat stability. Response is inconsistent with response to WPA12.

BETA3: The Applicant has not resolved the discrepancies between the dead tree removal, vegetation clearing, and stump removal sequencing described throughout the NOI and comment responses.

Recommendations:

- **Resolve construction sequencing discrepancies related to dead tree removal, vegetation clearing, and stumping.**

- **Quantify impacts associated with dead tree removal and reinstallation.**

VHB2: Trees will be removed in accordance with the vegetation removal description provided in the NOI. Stumps will only be removed as necessary to ensure crane mats are stable. Please refer to the updated crane mat cross sections attached to this submission (Attachment C).

BETA4: See WPA9-BETA4 and W21-BETA4. As shown on the Crane Mat Detail Section, the Crane Mats will be secured into the slope by excavating into the Bank.

VHB3: See VHB2 response to Comment WPA12 for standing dead trees. See VHB3 response to Comment W21.

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.

VHB: 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.

BETA2: The VHB response and the NOI are not sufficient to describe the work associated with the removal and in-kind replacement of dead trees. There are too many inconsistencies with statements and responses associated with stump removal procedures. Additionally, a dead tree has dead roots. Removal of the dead tree with its root system intact or even partially intact for placement to a depth of at least six feet deep would require a substantial excavation depending on the type of tree root systems.

The use of additional machinery, significant soil disturbance and bracing to stabilize reinstalled dead trees are considerations in determining whether this mitigation component is appropriate for the Site.

BETA3: Adequate information has not been provided to confirm re-installation of dead trees is an appropriate method of habitat restoration for the Site, and the Applicant has not resolved the discrepancies between the dead tree removal, vegetation clearing, and stump removal sequencing described throughout the NOI and comment responses.

Recommendations:

- **Resolve construction sequencing discrepancies.**

- **Quantify impacts associated with dead tree removal and reinstallation**

VHB2: Installing snags would require use of construction machinery and would require excavation. The Applicants have performed additional field surveys for existing snags to supplement the Wildlife Habitat Evaluation completed for the Project. While completing the WHE, the field wildlife biologist counted all snags within the jurisdictional areas within the proposed limits of work and made observations about the relative abundance of snags outside of limits of work and within wetland jurisdictional areas on the remainder of the Project Site. To supplement these observations and to demonstrate that there is an abundance of snags remaining on the Project Site outside the proposed limits of work, the Applicants have counted and located all snags within both the proposed limits of work and on the remainder of the Project Site in jurisdictional areas. There are at total of 227 snags within the Project Site (i.e., both within limits of work and outside of limits of work) within wetland resource areas in Sudbury. Of this total, 78 are located within the proposed limits of work, while the remaining 149 are outside of these limits. Therefore, 66% of the existing snags in wetland resource areas within the Project Site in Sudbury will remain. This information demonstrates that the proposed Project will not substantially reduce the capacity of the site to provide the important wildlife habitat functions that dead standing snags offer. Given this information and considering the concerns raised about the potential difficulties associated with reinstalling removed snags, and to avoid creating a hazard in the proximity of the rail trail, the Applicants no longer propose to reinstall removed snags as part of this Project.

BETA4: See WPA9-BETA4

VHB3: No response required.

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.

VHB: 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.

BETA2: The NOI and response are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Provide documentation that reinstalling standing dead trees has been successful in restoring this type of habitat for a similar period of time. Destabilizing the dead tree will likely lead to a quicker tree fall.

BETA3: Information not provided. Recommendations: Provide documentation that reinstallation of standing dead trees has been successful in restoring snag habitat.

VHB2: Please refer to response to WPA 12.

BETA4: See WPA9-BETA4. VHB states that 66% of the snags on the Project Site will remain upon Project completion.

VHB3: See VHB2 response to Comment WPA12.

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

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. As described in BETA's response to comment WPA6, there is no level surface above the Bank boundary at both approaches to Bridge 128 for placement of the crane mat. The plan view is not adequate to confirm that no impacts to the Bank will result from crane mat placement. Provide requested cross sections.

BETA3: Information not provided. Recommendations: Provide crane mat sections using accurate existing topography.

VHB2: Revised crane mat cross sections are attached to this supplemental response (Attachment C). As shown therein, the crane mats do not require a "level surface" at the bottom of the slope for placement of the outermost set of cribbing. The cribbing will begin above the Bank boundary at both approaches to Bridge 128 and will not result in Bank impacts.

BETA4: See W21-BETA4

VHB3: See VHB3 response to Comment W21.

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

VHB: 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.

BETA2: The NOI is not sufficient to describe the site or the effects of the work on the interests identified in the M.G.L. c 131 sec 40 and the Bylaw. The bridge plan sheets (Plan Sheets 156-168) have been revised to add the resource areas. However, all activities associated with work at Bridge 128 should be shown on the Bridge Key Plan to confirm no additional impacts to Bank will occur.

BETA3: Information not provided. Erosion controls to be installed along the limit of work are not depicted on Plan Sheet 156. Recommendations: Revise plans to depict all activities associated with work at Bridge 128.

VHB2: As shown on the Bridge 128 Key Plan as well as on Sheet 47 of the construction plans, all proposed work is located above the delineated Bank. In addition, the revised crane mat cross sections attached to this supplemental response (Attachment C) also show that the limit of the crane mats is located upslope from the BVW and Bank elevations. There will be no additional impacts to Bank.

BETA4: Erosion controls are still not shown on the Bridge 128 plans (now Sheets 187-191), while they are shown on the Bridge 127 plans (Sheets 192-199). Recommendations: Include a Special Condition requiring submittal of a final set of plans be submitted to the Conservation Commission which depicts erosion controls on the Bridge 128 plans prior to the issuance of the Order of Conditions.

VHB3: Erosion controls have been added to the Bridge 128 plans and are included in the attached final plan set.

Bordering Vegetated Wetlands

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

VHB: 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.*

BETA2: The NOI is not sufficient to describe the site or the effects of the work on the interests identified in the M.G.L. c 131 sec 40 and the Bylaw. BETA's SWB13 comment and VHB's response are specific to construction of the wetland replication area. Eversource's BMP manual states that the BMPs for restoration of Wetlands/Watercourses (Page 5-2 of Attachment H) are for Projects where no permit is required. Explain applicability of this BMP to the Project.

Describe measures that contractors use to "not to compact soil".

Provide BVW restoration notes on construction plans.

Describe the wetland soil management (including stockpiling locations) and, if appropriate, measures used to ensure soil will not be impacted by exposure to aerobic condition.

BETA3: Information not provided.

Recommendations:

- **Revise plans to include BVW restoration notes in areas of temporary BVW impacts.**
- **Describe measures used to prevent soil compaction.**
- **Describe the wetland soil management, including stockpiling locations.**

VHB2: The measures described in Eversource's BMP Manual are standard practices and would apply for all temporary BVW impact areas. The Order of Conditions for the Project would supplement or supersede these practices.

To avoid compaction, heavy mechanical equipment (exerting a ground pressure of 3 psi or

greater) will not be allowed in restored areas. No soil will be stockpiled. If the topsoil needs to be supplemented for restoration, 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 will be used to avoid reintroducing any invasive species that may be present in the native soil.

Once any additional soil (if needed) is placed, plantings will be installed in accordance with the plans. Following woody plantings, the area will be seeded with a native wetland seed mix as specified in the planting schedule.

The Applicants can agree to a Special Condition requiring that the areas of temporary BVW impact be monitored for two full growing seasons after planting, with inspections twice a year to assess whether the areas have achieved 90% cover by native species. Any invasive species that appear within the restoration areas will be removed by hand for two growing seasons after restoration planting. If necessary, these areas will be reseeded with a native wetland seed mix.

BETA4: VHB's response describes measures used to prevent soil compaction and states that no wetland soil will be stockpiled onsite.

There are no notes on the construction plans that cite the Bridge 127 planting plan and no plantings or restoration notes are provided on the landscaping plans or construction plans for the temporary BVW impact area at Sta. 713+65.

Recommendations:

- **Include a Special Condition requiring submittal of a final set of plans be submitted to the Conservation Commission which include:**
  - **Notes on the construction plans where BVW will be restored and,**
  - **Restoration seed mix requirements be specified on the landscaping plans for the impacts at Sta. 713+65.**
- **Include a Special Condition requiring heavy mechanical equipment (exerting a ground pressure of 3 psi or greater) will not be allowed in restored areas.**
- **Include a Special Condition requiring that the areas of temporary BVW impact be monitored for two full growing seasons after planting, with inspections twice a year to assess whether the areas have achieved 90% cover by native species. Any invasive species that appear within the restoration areas will be removed by hand for two growing seasons after restoration planting.**
- **Include a Special Condition requiring that all areas of temporary BVW be seeded with the wetland seed mix specified on Sheet 167 of the Plan Set.**

VHB3: A note has been added to sheet 64 of the Eversource NOI plans attached to this submission stating that the temporarily disturbed wetlands will be restored with the wetland seed mix specific on sheet 167 of the plan set.

The Applicants can agree to a special condition requiring heavy mechanical equipment (exerting a

ground pressure of 3 psi or greater) will not be allowed in restored areas.

The Applicants can also agree to a special condition requiring that the areas of temporary BVW impact be monitored for two full growing seasons after planting, with inspections twice a year to assess whether the areas have achieved 90% cover by native species. Any invasive species that appear within the restoration areas will be removed by hand for two growing seasons after restoration planting.

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

VHB: 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.

BETA2: The NOI is not sufficient to describe the site or the effects of the work on the interests identified in the M.G.L. c 131 sec 40 and the Bylaw. Provide a planting plan for all temporary BVW impact areas. The Plants on Sheet 131 are specific to plantings associated with only one of the areas. Sheet 131 does not provide enough information to confirm adequate restoration is proposed, since the table includes species used for restoration of BVW, Bank, LUW, BLSF, and RA. It is unknown what plants will be planted where.

Provide notes on plans where BVW restoration is required citing restoration requirements.

The BVW restoration plan should restore all temporarily impacts BVWs to the same wetland class. Provide restoration plan for each temporary BVW impact area.

BETA3: Information not provided. Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission that depict plantings within the temporary BVW impact areas in the location of the Bridge 127 crane mats. These plans, however, have not been integrated into the full Project plan set and do not provide restoration details for the remaining temporary BVW impact areas.

Recommendations:

- **Revise plans to include BVW restoration notes in areas of temporary BVW impacts.**
- **Provide planting plans for all BVW restoration areas.**

VHB2: The MWPA does not require that BVWs be restored to the same wetland class. There are three areas of temporary BVW impact in Sudbury; below is a summary of the amount of temporary impact at each location and the proposed vegetative restoration, which are discussed below:

- *Station 713+57 to 713+69 (headwall installation):*
  - *27 square feet of temporary impact*

- *Proposed vegetative restoration: Native wetland seed mix (see sheet 167 for seed mix details)*

- *Station 724+33 to 726+36 (crane mats at Bridge 127):*
  - *296 square feet of temporary impact*
  - *Proposed vegetative restoration: Native seed mix (see Planting Schedule A on sheet 161) and supplemental tree and shrub plantings (see sheet 125 for details)*
- *Station 764+57 to 764+65 (extension of existing drainage pipe and creation of wetland replication area):*
  - *201 square feet of temporary impact*
  - *Proposed vegetative restoration: Native wetland seed mix and supplemental shrub and herbaceous plantings (see sheet 167)*

BETA4: See W16-BETA4. In addition, VHB states of the three temporary BVW impact areas, two will be planted with woody species, while the smaller area (27 Square feet) will only be seeded.

VHB3: Regarding W16-BETA4 see VHB3 response to Comment W16. Otherwise, BETA has accurately restated the proposed restoration methods stated within VHB2; no further response required.

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

VHB: 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.

BETA2: The seed mix specified on Sheet 131 is not appropriate for BVW restoration, as species within the mix are not suitable for wetland conditions. The seed mix to be used to BVW restoration should be specified on the plans.

BETA3: The plans should be revised to specify the use of a wetland species seed mix for BVW restoration throughout the corridor. Recommendations: Provide revised plan set specify the use of a wetland seed mix to restore BVW.

VHB2: The seed mix originally proposed was specifically chosen to contain both upland and wetland-appropriate species. However, as described in WPA17, the seed mix for temporary BVW restoration has been revised to use the same seed mix as the wetland replication area.

BETA4: See WPA16-BETA4.

VHB3: See VHB response to WPA16; the seed mix for the temporarily disturbed BVW was revised to use the same seed mix as the wetland replication area.

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.

VHB: See the responses to Comments WPA6 and WPA14.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Additional information is necessary to describe the effect of the work on resource areas that are within one foot of the limit of work.

BETA3: Information not provided. Recommendations: Provide crane mat sections with accurate existing topography.

VHB2: Revised crane mat cross sections showing existing topography are attached to this supplemental submission (Attachment C).

BETA4: See W21-BETA4.

VHB3: See VHB3 response to Comment W21-BETA4.

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).

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The replication area is not in compliance with the BVW Performance Standards. The Project is already proposing to disturb 34,181 sf of AURA in this area. In addition, restoration of 23 sf of temporary impacts is proposed at Station 713+65. Replication in compliance with the Performance Standards is feasible and should be provided.

BETA3: Information not provided. Recommendations:

- **Revise plan set to meet BVW Performance Standards.**
- **Revise plans to specify BVW restoration details.**

VHB2: Please see the initial VHB response.

BETA4: The BVW replication plan still does not meet the Performance Standards for the permanent BVW impacts at Sta. 713+65. Recommendations: Include a Special Condition requiring the submittal of plans showing replication at Sta.713+65 that meets the BVW

replication Performance Standards prior to issuance of the Order of Conditions.

VHB3: See the initial VHB response.

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

VHB: 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.

BETA2: The Wetland Replication Report does describe the depth to groundwater and plant species selection, however, greater shrub species diversity is recommended. The proposed topography within the existing wetland (as shown on plan sheet 135) will be lowered by more than 2 feet, changing the wetland type and functions. Provide a summary of the BVW functions impacted by the Project and describe how the replication area will replicate those functions.

Construction of the replication area will require excavation, grading, and soil placement at least 38 inches below the groundwater elevation. Provide construction details (including dewatering locations) for construction of the replication area.

The hydraulic connection to be extended between Wetlands 3 and 4 to maintain the hydraulic connection is a good example of a structure that, if replaced, could increase openness, improve habitat connectivity, and promote migration beneath the railbed (as opposed to than over the railbed).

BETA3: Information not provided. Recommendations:

- **Provide construction details, including dewatering locations, for the construction of the replication area.**
- **Provide summary of the existing BVW functions impacted and describe how the replication area will replicate the functions.**

*VHB2: As noted in the wetland replication report, the existing wetland is an excavated channel/drainage ditch with abrupt and clearly defined slopes that currently holds approximately 12 inches of standing water with no wetland vegetation in the center of the channel and a small fringe of vegetation at the south end of the channel. Vegetation in the wetland currently includes silky dogwood (*Swida amomum*) and sensitive fern (*Onoclea sensibilis*), and in the surrounding disturbed upland there are a few mature trees and several vines and shrubs including red maple (*Acer rubrum*), silky dogwood, glossy buckthorn (*Frangula alnus*), Oriental bittersweet (*Celastrus orbiculatus*), fox grape (*Vitis labrusca*), and multiflora rose (*Rosa multiflora*). The ditch does not*

*currently provide much function other than groundwater recharge/discharge and floodflow alteration. The proposed replication area will similarly include standing water with a vegetated edge and will have greater storage capacity. The replication area will include the same species that are currently present (red maple and silky dogwood) and will improve wildlife habitat by adding four more species of herbaceous and shrub plantings: buttonbush (Cephalanthus occidentalis), arrow arum (*Peltandra virginica*), giant bur-reed (Sparganium eurycarpum), and sweet pepperbush (*Clethra alnifolia*). The Project will also remove the invasive species that are currently in the proposed replication area.*

The Project proposes to excavate the existing wetland in order to extend the existing pipe and maintain the current hydrology while expanding the wetland area. The wetland replication plan has been updated to make this clear. Any dewatering that is required will be conducted in the area on the plan marked as "TEMPORARY WORKSPACE."

The Project does not propose to replace and expand the existing pipe because the existing vernal pool to the north has developed based on the existing conditions, and replacing the pipe to increase the openness would require excavation within the vernal pool (the northern end is currently buried under the vernal pool) and would likely change the vernal pool hydrology.

BETA4: VHB's response describes the existing BVW functions and how the Project will replicate the existing functions and that dewatering will be conducted in the area labeled "Temporary Workspace," which is on Sheet 166. This area is ~15 feet from the boundary of the wetland replication area.

See W15-BETA4 for recommendations related to Special Conditions for dewatering.

VHB3: See VHB3 response to W15-BETA4.

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

VHB: 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).

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The invasive species monitoring described in the Wetland Replication Plan is not adequate. See W36-BETA2.

BETA3: The provided details on invasive species management within the replication area are not adequate to protect the Project area from invasive species establishment.

Recommendations: Provide a species-specific invasive species management plan for the area surrounding the wetland replication area.

VHB2: The NOI sufficiently describes the work and the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Additional information for invasive species management has been provided in the VHB2 responses to Comments W5 and W36.

BETA4: No Invasive-Species Management Plan has been provided. See W5-BETA4.

VHB3: See VHB3 response to W5-BETA4.

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.

VHB: 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.

BETA2: The invasive species management described in the Wetland Replication Plan is not adequate for control of invasive plants. A Special Condition could be included requiring monitoring and invasive species management within and adjacent to the replication area until 90% native cover is achieved, and a full Certificate of Compliance is issued.

BETA3: BETA maintains their WPA23-BETA2 recommended Special Condition.

VHB2: The Applicants can agree to monitoring the replication area for invasive species until 90% native cover is achieved and a Certificate of Compliance is issued. The Applicants will not agree to a special condition requiring them to monitor areas outside of the replication area and/or limit of work for invasive species or for a period of up to five years if 90% native cover is achieved before that time.

BETA4: Include recommended Special Condition described in WPA23-BETA2.

VHB3: See VHB2 response.

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.

VHB: 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).

BETA2: The NOI and supplemental information / response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The crane mats will be placed below the river bank within LUW. The Commission should consider that this is a Cold Water Fishery Resource and therefore has presumed important fish habitat. The low gradient flow areas of this critical resource has unique fish habitat conditions that require full restoration.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission that depict plantings within the temporary LUW impact areas and now include an adequate number of aquatic species plugs for the quantified impact areas. These plans, however, have not been integrated into the full Project plan set. Recommendations: Provide a revised plan set with a revision date.

VHB2: Please refer to the response to WPA16 for details. As described in that response the low gradient flow areas of this wetland resource area will be fully restored.

BETA4: VHB has provided a new set of landscaping plans dated November 2020, which were not submitted as part of a complete plan set. Recommendations: Include a Special Condition requiring submittal of a complete signed and stamped final set of plans be submitted to the Conservation Commission prior to issuance of the Order of Conditions. This final plan set should be referenced in the OOC.

VHB3: The final plan set is attached to this submission.

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

VHB: 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.

BETA2: The NOI and supplemental information / response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Placement and removal of the mats should be described sufficiently to demonstrate that LUW will not be impacted and that water quality of the Cold Water Fisheries Resource is strictly maintained.

The mats may become embedded in the sediment when loaded with machinery. Provide details on how the mats will be removed without impacting water quality.

BETA3: Information not provided. Recommendations: Provide details on the mats will be

removed without impacting water quality.

VHB2: Please refer to the VHB responses in WPA24 and WPA16 for details.

BETA4: Information on how the mats will be removed has not been provided. Recommendations: Include a Special Condition requiring the Conservation Commission and their representative be notified at least 3 business days in advance of the removal of the crane mats at Bridge 127.

VHB3: The Applicants can agree to the recommended special condition in BETA4.

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.

VHB: 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.

BETA2: The NOI and supplemental information / response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The erosion blanket detail and installation notes describe the use of wire staples for securing the erosion control blankets and do not depict the locations of the proposed "notched wood stakes".

BETA recommends securing the blankets with only biodegradable materials. Specify the type of wood to be used to secure the blankets.

BETA3: Information not provided. Recommendations: Provide a revised plan set that specifies only biodegradable materials for use to secure the erosion control blanket. The plan should also specify the type of wood.

VHB2: The material to be used to secure the blankets must be consistent with the manufacturer's specifications to ensure a secure installation and may include staples, stakes, or pins.

BETA4: VHB's response contradicts their first response and indicates the use of staples, stakes or pins to secure the erosion control blanket.

Recommendations:

- **Include a Special Condition prohibiting the use of chemically treated wooden stakes within Land Under Water to protect water quality.**
- **Include a Special Condition requiring the removal of non-biodegradable fasteners after the Land Under Water restoration area is fully stabilized and the Conservation Commission or its representative has confirmed stabilization to protect the long-term water quality of the adjacent wetland waterways.**

VHB3: The Applicants can agree to both recommended special conditions in BETA4.

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

VHB: 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.

BETA2: The jute mesh fabric specified appears like it will provide structure and protection of seed during the establishment period. The use of hay and/or straw for the BVW restoration is detailed in the Eversource BMP Manual (Page 5-3) but is not described in Section 5.1.5 of the NOI and is not noted on the construction plans. Revise the NOI and plans to note BVW restoration procedure for all temporarily impacted BVW and revise BMP Manual to remove references of the use of hay.

BETA3: Revised information not provided. Plans and narrative should describe LUW and BVW restoration as described above. Recommendations: Provide a revised plan set and NOI narrative with a revision date.

VHB2: The Best Management Practices Manual submitted with the NOI is Eversource's standard BMP guidance for all projects. However, project-specific plans dictate what is used during construction, and the plans for this Project state that straw will be used. Hay will not be used on the Project Site. In addition, a Project-specific Compliance Manual will be developed which will include the erosion controls that will be used, and it will state that straw, not hay, will be used. The Project Compliance Manual will also include the BVW restoration procedure for all temporarily impacted BVW. This Compliance Manual can be provided to the Commission prior to the start of construction.

BETA4: A Project-Specific Compliance Manual will be prepared for this Project. See W5-BETA4.

VHB3: See VHB3 response to W5-BETA4.

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

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

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Aquatic plants are proposed to be installed at both Bridge 127 and 128 locations. Provide planting plans showing the location of the proposed species to document restored vegetation density. In addition, the seed mix on sheet 131 is not appropriate for LUW restoration given the number of upland species. A seed mix with native wetland seed appropriate for flooded conditions is recommended.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission (Sheets 134 and 135) for Bridges 127 and 128. These plans depict plantings within the temporary LUW impact areas and now include an adequate number of aquatic species plugs for the quantified impact areas. These plans, however, have not been integrated into the full Project plan set. Recommendations: Provide a revised plan set with a revision date.

VHB2: The proposed revegetation within LUW is 136 aquatic plugs, which is the appropriate restoration technique. The species and number of aquatic plugs were included on sheet 135 of the Eversource NOI plans that were submitted to BETA and the Commission on August 7, 2020 (sheet 125 of the latest set attached to this submission). If conditions are appropriate, the area will be seeded with the wetland replication seed mix shown on sheet 167 of this submission.

BETA4: See WA24-BETA4. Recommendations: Include a Special Condition requiring the Land Under Water restoration area at Bridge 127 be seeded with the wetland replication seed mix specified on Sheet 167 of the Plan Set.

VHB3: The Applicants disagree with this recommended special condition. As stated within the VHB2 response, the proposed restoration includes planting aquatic plugs within LUWW. Where conditions are appropriate in certain areas within LUWW (i.e., exposed sediment/soil), those areas will also be seeded with the wetland replication seed mix. However, placing seed mix in areas of open water is not an effective restoration method because seed will be washed away and/or will not germinate.

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).

VHB: 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.

BETA2: The NOI and supplemental information / response is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Provide more detail on how this work will be conducted (i.e. access to piers, type of equipment, use of divers). Describe how sediment suspension will be avoided and how the work will not increase turbidity in the stream. Also, the Applicant should address potential impacts to small boat navigability if timber piers are cut only to the mud line and not below.

BETA3: Information not provided. It appears that the methodology to conduct work within LUW associated with pile removal will be determined by the contractor's means and methods.

Recommendations: Include a Special Condition requiring the contractor provide the methodology to be used to avoid turbidity increases during pile removal prior to construction.

VHB2: Certified divers will cut the existing timber piles at the mud line by hand to avoid sediment suspension. The use of divers to cut the existing piles at the mud line is the most effective way to ensure that there is no prolonged increase in turbidity in the waterbody. Work will be scheduled and completed during low flow conditions.

By cutting the existing timbers at the mud line and maintaining a uniform water column, the Project will not alter the public's access to or free passage over and through this waterbody, including the ability to float on, swim in, or otherwise move freely within the water column.

BETA4: VHB's response states that divers will cut the timber piles at the mud-line to avoid sediment suspension.

VHB3: No response required.

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.

VHB: See the response to Comment C1.

BETA2: The response to C1 indicates that the topography shown on the Project plans is not a result of an on-the-ground survey, however, the BLSF boundary was approved as shown on the Plans.

BETA3: Information not confirmed/provided. As indicted by VHB at the 8/13/2020 hearing, the topography in the areas of BLSF impact was developed by LiDAR. This topography may not be accurate to determine the accurate cut/fill volumes. recommendations: Require compensatory storage at a greater than 1:1 ratio to account for the potential discrepancies in topography.

BETA4: VHB did not provide a response to this comment. See C1-BETA4.

VHB3: See VHB 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) [10].

VHB: The cut/fill analysis by station and elevation was provided in Table 11 of the NOI.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The cut/fill volumes provided in Table 11 are not calculated by reach, and therefore compliance with the cited standard cannot be evaluated. Provide requested information.

BETA3: During the 8/13/2020 hearing on this Project, VHB indicated they would provide a detailed cut/fill analysis. This information has not yet been provided. Recommendations: Provide detailed cut/fill analysis that document compliance with the Performance Standards.

VHB2: The cut/fill volumes provided in Table 11 were calculated by reach. The Hop Brook tributary from STA 703+00 to 710+75 is a stream reach and was calculated separately, and the section of Hop Brook from STA 722+50 to 730+00 is a different stream reach that was calculated separately. For additional information, see the VHB2 response to Comment C1.

BETA4: See C1-BETA4.

VHB3: See VHB3 response to Comment C1.

WPA32. Provide planting plans for compensatory storage areas.

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

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Plantings are only proposed at the bridge crossing areas (397+70 to 401+60; 723+70 to 726+30) and within the BLSF area east of Bridge 127 (726+30 to 729+00). Other areas of BLSF grading and stabilization will only be seeded. Seeding within BLSF impact areas is not adequate to restore the resource area functions and values in a foreseeable timeframe.

Provide plans depicting plantings within areas that provide compensatory storage for the proposed fill within the floodplain.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission (Sheets 134 and 135) for Bridges 127 and 128. These plans depict plantings only within the limits of the crane mats, and removes plantings from other portions of the temporary BLSF impact areas (ie. Sta. 726+30 to 729+00). The revised plans now include canopy/shrub plantings within the temporary BLSF impacts areas at Sta. 399+50, 401+00, 724+50, and 726+00. Shrubs plantings are also now proposed within temporary BLSF impact areas at 706+50 and 722+50.

Although planting plans for some (not all) of the temporary BLSF impact areas have been provided, the Applicant has still not identified the compensatory storage areas on the plans and no landscaping plans for these areas have been provided. Recommendations: Identify the compensatory storage areas and provide Restoration/Landscaping plans for all compensatory storage areas.

VHB2: As described in the response to Comment W33 in the response letter dated August 7, 2020, additional areas were evaluated for supplemental plantings and updated planting plans were provided to the Commission and BETA. The available space for supplemental plantings is limited by the narrow Project footprint, within which: 1) the area over the duct bank is not suitable for

planting, 2) areas within 4 feet of the bike path pavement generally must be avoided to maintain safe clearance from branch hazards for trail users, and 3) long narrow areas would result in linear plantings that are not consistent with the Commission's goal of a natural landscape. The updated plans identify the supplemental planting locations, including details prescribing the species, spacing, and number of plantings of each species proposed for each area. In addition to the plantings within BLSF at Bridge 128 and Bridge 127, two additional areas of planting within BLSF were identified. Planting area S9 is located at approximately Station 706+50 and has approximately 283 square feet of supplemental shrub plantings within BLSF. Planting area S14 is located at approximately 722+50 and has approximately 68 square feet of supplemental shrub plantings in BLSF. No other areas within BLSF were identified as suitable for supplemental shrub plantings.

BETA4: See C1-BETA4.

VHB3: See VHB3 response to Comment C1.

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.

VHB: 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).

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The Project will result in greater permanent impacts to BLSF than quantified.

BETA3: Information not provided. The Applicant has mis-represented the Project's impacts to BLSF. Areas that will be mowed at least once per year are permanent impacts and should be quantified as such. Recommendations: Provide BLSF impact calculations that accurately represent the Project's effect on the BLSF.

VHB2: Section 5.17 of the NOI provides an accurate account of the permanent and temporary BLSF impacts 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. Supplemental and detailed information specifically related to wildlife habitat related performance standards is included in this submission.

BETA4: See C1-BETA4 and C2-BETA4. The Project may result in greater permanent impacts to BLSF, depending on whether the Commission considers the area that will be only seeded, then maintained annually, as permanent impacts.

VHB3: See VHB3 response to Comment C1 and Comment C2. In addition, the Applicants do not agree with the comment, which has been addressed in several VHB responses throughout this document.

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

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE combines the resource areas and does not discuss the impacts to habitat features by resource area. Therefore, determining the Project's impact on habitat functions of BLSF cannot be evaluated based on the WHE conducted.

The project does not meet the Performance Standards at 310 CMR 10.57(4)(a)(3). Areas that will only be seeded with a woody / herbaceous species seed mix will not maintain its capacity to provide important wildlife functions as the existing habitat within two years.

The WHE fails to quantify the important wildlife habitat characteristics present beyond the impact area within the Site (the ROW). Quantify the important wildlife habitat characteristics on the entire site, as required to determine the Project's effect on the wildlife habitat function of the Site for each resource area.

BETA3: Information was not provided. The WHE does not evaluate the Project's impacts to wildlife habitat specifically for BLSF (or other individual resource areas) and was therefore not completed in accordance with MassDEP's guidance. In addition, the WHE fails to quantify important wildlife habitat characteristics on the entire site, which is required to demonstrate the impacts of the Project on important wildlife habitat features. Recommendations: Provide WHE conducted in accordance with the Performance Standards and WHE Guidance.

VHB2: Section IVB of the Wildlife Habitat Evaluation Guidance states, "Appendix B comprises a detailed wildlife habitat evaluation that includes a summary sheet for the identification of resource areas present within the impact area" (emphasis added), not evaluation of the impact area on a resource area by resource area basis. The Guidance and Appendix B Detailed WHE Form also only require quantification of certain important wildlife habitat features including snags, tree cavities, and trees larger than 30-inch DBH, while requiring a qualitative evaluation (i.e., absent, present, abundant) for any other features. The features that were required to be quantified were evaluated in that manner, and the other features were evaluated qualitatively. The WHE submitted for the Project followed this guidance and evaluated all WIAs for the presence of important wildlife habitat features, including those within BLSF. Based on the results of the WHE, appropriate restoration and mitigation were identified, which includes restoration plantings. For details on the restoration plantings, see the VHB2 response to Comment WPA32 and the Eversource plans submitted to the Commission on August 7, 2020.

It was determined that the Project would not result in an adverse effect to any WIAs, and therefore there will not be an adverse effect to important wildlife habitat features within BLSF or any other wetland resource area. For additional information, refer to the detailed summary tables attached to this supplemental submission (Attachment B).

BETA4: VHB's response says the Summary Sheet (Part 1 of Appendix B – Detailed WHE) only requires identification of resource areas present within the impact area, and not evaluation of the impact area on a resource area by resource area basis.

Although the summary sheets for each impact area are correct, Part 2 of the Appendix B form (Field Data Form – which starts on page 2 of the form) is required "for each wetland or non-wetland resource area". This information has not been provided.

Impacts to BLSF occur within WIAs S4, S5, S15, and S16 through S19. As described in Tables 5, 6,

16-20 provided in the updated WHE information, many important habitat characteristic present within each WIA will be removed without replication or adequate presence of these features "within wetland resource area on the Project Locus outside the Wetland Impact Area", including:

- **S4 – 25 overhanging trees will be removed, while 12 will be planted; large woody debris will be removed and replaced, however, the document provides no indication of how many brush piles will be removed and/or constructed.**
- **S5 – 10 standing dead trees will be removed, while only 1 will remain in the WIA vicinity according to their table; 1 tree with a cavity will be removed while no trees with cavities will remain in the vicinity according to their table; 45 overhanging trees will be removed, while 14 will be planted.**
- **S16 – 10 standing dead trees removed, 5 remaining outside impact area; 16 tree cavities removed, 1 remaining outside impact area.**
- **S17 – 6 standing dead trees removed, 0 remaining outside impact area; 8 tree cavities removed, 0 remaining outside impact area; 25 overhanging trees removed, 7 trees planted.**
- **S18 – 1 standing dead tree removed, 0 remaining outside impact area; 8 overhanging trees removed, 5 planted.**
- **S19 – 29 overhanging trees removed, an unquantified number remaining.**

Based on the provided analysis, in several WIAs that include impacts to BLSF, important wildlife habitat features will be removed without documented presence of these features outside the Limit of Work. Accordingly, in the areas described above, the Project will reduce the Site's capacity to provide wildlife habitat functions currently present at the Site.

BETA recommends that additional mitigation be provided to compensate for the loss of wildlife habitat functions.

VHB3: BETA's description of how the Wildlife Habitat Evaluation forms are to be completed is inaccurate. For additional information, see also the VHB2 response to this comment, the initial VHB response to Comment WPA34, and the VHB2 response to Comment 44.

Regarding standing dead trees, see VHB2 response to Comment WPA12. Regarding overhanging trees generally, this is not identified as an important wildlife habitat feature under the MassDEP's wildlife habitat evaluation methodology. However, "trees overhanging or providing a view of open water" is an important wildlife habitat feature and that is addressed by the tree and shrub plantings that are occurring within WIAs near both Hop Brook crossings.

WPA35. Provide planting plans for the BLSF restoration areas.

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Plantings are only proposed at the bridge crossing areas (397+70 to 401+60; 723+70 to 726+30) and within the BLSF area east of Bridge 127 (726+30 to 729+00). Seeding with a mix that includes a limited number of woody species throughout the site without the necessary watering, monitoring for invasive species and monitoring for germination does not have a likelihood for successful in-kind restoration in a foreseeable future.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission (Sheets 134 and 135) for Bridges 127 and 128. These plans depict plantings only within the limits of the crane mats, and removes plantings from other portions of the temporary BLSF impact areas (ie. Sta. 726+30 to 729+00). The revised plans now include canopy/shrub plantings within the temporary BLSF impacts areas at Sta. 399+50, 401+00, 724+50, and 726+00. Shrubs plantings are also now proposed within temporary BLSF impact areas at 706+50 and 722+50, however, no landscaping plans were provided for these areas.

See WPA39 – BETA3 for Plant Number and Type Comments. Recommendations: Provide Restoration/Landscaping plans for all temporary BLSF impact areas.

VHB2: As stated within the VHB2 response to Comment WPA32, two additional areas of plantings are proposed within BLSF; no other suitable areas within BLSF were identified. See the response to WPA32 for additional information. As indicated in the Plant Maintenance Notes on the planting plans, the contractor will be responsible for watering during the growing season whenever natural rainfall is below one inch per week for one year following planting. Watering will be applied thoroughly enough to saturate the soil in seeded areas and in the root zone of each planted tree and shrub. The Applicants have also presented details regarding the monitoring and removal of invasive plant species within all restored areas through construction and into the operation and maintenance phase of the Project. Regarding the concern expressed that this restoration plan does not have a likelihood for success, the Applicants will accept a Special Condition that 90% of the restored areas within the Commission's jurisdiction will revegetate with 90% native species within two growing seasons and the areas have to be revegetated and stabilized to comply with SWPPP requirements.

BETA4: The Applicant is not proposing to replant temporary BLSF impact areas except in the locations described in WPA35-BETA3. Recommendations: Include a Special Condition requiring that the restored areas within the Commission's jurisdiction be revegetated with a minimum of 90% native species within two growing seasons and all disturbed areas must be revegetated and stabilized to comply with SWPPP requirements.

VHB3: All temporarily disturbed areas will be replanted with the herbaceous and woody seed mixes and, where applicable, shrubs will be planted as indicated on the attached landscape plans. The Applicants can agree to a special condition requiring that restored areas be revegetated with

a minimum of 90% native species within two growing seasons. The Applicants will also comply with all SWPPP requirements.

WPA36. 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.

VHB: 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.

BETA2: The cited section of the regulations states that altered BLSF must be maintained for the function it was altered for to be considered so extensively altered that their wildlife function has been eliminated.

See response to WPA34 regarding the WHE.

BETA3: No further comment.

VHB2: As stated within the initial response and within Section 1.1.1.2 of the WHE, all BLSF impact areas were evaluated and this citation had no bearing on the WHE, including the no adverse effect determination.

[NO BETA4 COMMENT PROVIDED]

VHB3: No response required.

Riverfront Area

C8. The NOI describes much of the corridor as being "previously degraded", stating that the 11-foot area occupied by the rail ties, steel rails, and stone ballast meet the definition. The NOI narrative on pages 59 states that all work is proposed entirely within previously degraded RA, however, on page 57 the Applicant states that, in accordance with 310 CMR 10.58(5)[13] there is a 11-foot-wide degraded area.

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. As stated in the regulations, "A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or

abandoned dumping grounds."

VHB states the entire Limit of Work is within "previously developed and degraded" areas. The Project plans, however, appear to depict work within RA beyond the limits of the constructed railbed at the manholes locations and where the railbed is lower in elevation than the surrounding topography. Work beyond the constructed railbed is not within degraded RA and is, therefore, not considered redevelopment.

Provide plans depicting the limit of previously degraded RA meeting the definition under 310 CMR 10.58(5) and quantify RA impacts that do not qualify as redevelopment.

BETA3: Information not provided. Plans depicting the limits of previously degraded RA within the limit of work are required to confirm the areas are designated appropriately. Impacts to RA beyond the limit of degraded area must be quantified separately to confirm compliance with the RA Performance Standards.

Recommendations:

- **Provide plans depicting the areas the Applicant is considering "degraded/previously development".**
- **Provide separate RA calculations for areas outside and within the limits of the previously degraded area.**

VHB2: The Wetland Regulations at 310 CMR 10.00 do not contain the term "previously degraded." As noted in the BETA2 comment and as stated at 310 CMR 10.58(5), "A previously developed riverfront area contains areas degraded prior to August 7, 1996, by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds." As per this definition, all areas within the proposed limits of work qualify as previously developed Riverfront Area.

BETA4: As stated in C8-BETA2, RA exists within the Limit of Work that does not meet the definition of "previously developed" or "degraded". These areas have not been quantified separately, therefore BETA cannot confirm whether the Project complies with the RA Performance Standards.

Plantings are now proposed to restore areas that will be impacted from installation of manholes, which will help decrease the permanent impact to RA in these locations.

VHB3: See VHB2 response.

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.

VHB: 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.

BETA2: The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The corridor management plan calls for mowing of the shoulders every other week. This frequency will not allow the seed mix to go to flower or produce seed, effectively creating a maintained grass area. The area over the duct bank will also be mowed annually preventing the growth of shrubs and trees. Neither of these treatments will restore the RA's existing habitat value.

Propose canopy and shrub plantings in all temporary RA impact areas to restore the habitat function of the Site.

BETA3: Information not provided. The Applicant has mis-represented the Project's impacts on RA. Recommendations:

- **Provide appropriate RA impact calculations that accurately represent the Project's effect on the RA.**
- **Provide canopy and shrub species plantings in all temporary RA impact areas.**

VHB2: Based upon input received from the Commission, the Applicants completed a detailed evaluation to determine whether additional supplemental woody plantings could be installed along the Project alignment to enhance the revegetation of temporarily disturbed areas. The available space for supplemental plantings is limited by the narrow Project footprint, within which: 1) the area over the duct bank is not suitable for planting, 2) areas within 4 feet of the bike path pavement must be maintained for safe clearance from branch hazards for trail users, and 3) long narrow areas would result in linear plantings that are generally not consistent with the Commission's goal of a natural landscape.

As a result of this evaluation, the Applicants updated the proposed restoration plan to include an additional 1,336 plantings at 23 locations along the Project alignment. Details regarding these plantings were provided in Response to Comment #33 in the August 7, 2020, letter submitted by VHB.

BETA4: The Applicant is not proposing to replant all temporary RA impact areas, as some of these areas need to be maintained (areas above the duct bank and areas within 4 feet of the bike path) or consist of steep slopes that are not suitable for planting. The steep slopes may

revegetate over time, however, the areas to be maintained will likely not return to existing conditions, therefore these impacts would be considered permanent. See C2-BETA4.

VHB3: See VBH2 response to this comment and VHB3 response to Comment C2.

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)[14].

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

BETA2: See Comment C8-BETA2. The NOI is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The burden is on the Applicant to document compliance with the RA Performance Standards at 310 CMR 10.58(4) where work is not within degraded RA.

The redevelopment standards allow Projects to be constructed in previously degraded areas to not fully comply with the standards at 310 CMR 10.58(4)(c and d).

BETA3: Information not provided. Recommendations: Provide an analysis of how RA impacts outside the limit of the previously degraded ROW meet the Performance Standards. The burden is on the applicant to document compliance.

VHB2: The Wetland Regulations at 310 CMR 10.00 do not contain the term "previously degraded." The redevelopment standard at 310 CMR 10.58(5) allows projects to be constructed in previously developed riverfront area, provided the proposed work improves existing conditions. The NOI and supplemental submissions have demonstrated compliance with the applicable performance standards at 310 CMR 10.58(5) to show that the project will improve existing conditions within previously developed RFA associated with the existing rail bed.

BETA4: See WPA37-BETA4.

VHB3: See VHB and VHB2 responses and see VHB response to C2.

WPA39. Provide planting plans showing RA restoration.

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

BETA2: The NOI and supplemental information / response are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Plantings within RA are only proposed in RA adjacent to Bridge 127 and 128. The remaining RA onsite will be stabilized with only a seed mix. Provide planting/landscaping plans depicting the approximate locations of the proposed plantings.

BETA3: Planting/Landscaping plans were submitted on 8/7/2020 to the Conservation Commission (Sheets 134 and 135) for Bridges 127 and 128. These plans depict plantings only within the limits of the crane mats, and removes plantings from other portions of the RA as

indicated in the previous plan set. This means plantings are now proposed over a smaller area than originally described. The number and types of plants originally indicated have been substantially changed:

Bridge 128 Plant List Changes: Trees decreased 85 to 16; Shrubs increased 70 to 197; Aquatics decreased 16 to 0

Bridge 127 Plant List Changes: Trees decreased 46 to 10; Shrubs decreased 75 to 72; Aquatics increased 16 to 136

In addition, the planting/landscaping plans do not include vegetative restoration of the impacted RA to Dudley Brook.

Recommendations:

- **Provide restoration planting/landscaping plans for the remaining RA restoration previously indicated on Sheet 131 of the plans submitted June 25, 2020.**
- **Provide restoration for the temporary RA impacts associated with Dudley Brook.**

VHB2: Revised planting/landscaping plans were provided to the Commission and BETA on August 7, 2020, which included additional shrub plantings within RFA. See the VHB2 response to Comment W33 for additional information.

BETA4: Additional plants have been included where the Applicant has found it "feasible". Several additional planting areas have been added to the landscaping plans. See WPA35-BETA4.

VHB3: In addition to the revised planting plans submitted on October 15, 2020, 286 additional plantings have been proposed within RFA. Revised landscaping plans are included within the final full set of plans that is attached to this submission.

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.

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

BETA2: See WPA32 and WPA37. Provide requested information.

BETA3: Information was not provided. The Applicant has not demonstrated that the restoration proposed complies with 310 CMR 10.58(f).

VHB2: 310 CMR 10.58(5)(f) does not require that areas should be restored in-kind. This performance standard identifies that restoration shall include seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site. The discussion presented in Section 5.1.8 completely describes how the

Project will comply with 310 CMR 10.58(5)(f). In addition, the VHB2 response to Comment W33 provides additional information regarding proposed supplemental plantings.

BETA4: VHB notes that this Performance Standard states restoration shall include seeding and planting, while many temporary impact areas within the Project limits will not be planted (including the temporary impact area adjacent to Dudley Brook).

VHB3: See VHB2 response.

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.

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

BETA2: The DRAFT Corridor Management Plan submitted is dated 3/13/2020, while the plan reviewed and approved by NHESP was dated 5/31/2018. Has NHESP received and reviewed the current Corridor Management Plan, as required by their Conditional "No-Take" letter?

The submitted Corridor Management Plan does not discuss mowing restrictions within mapped Whip-poor-will habitat. The DRAFT Corridor Management Plan should include protections for this species.

BETA3: Information was not provided. Additional information is required to confirm the Project design and specifications comply with the conditional "No-Take" letter.

Recommendations:

- **Provide correspondence with NHESP regarding the current version of the Corridor Management Plan.**
- **Provide revised Corridor Management Plan that addresses any mowing restrictions within mapped Whip-poor-will habitat.**

VHB2: In accordance with DCR's Conditional No-Take letter dated May 17, 2019, a final Corridor Management Plan will be submitted to NHESP for review and approval prior to the start of construction. NHESP does not require restrictions on mowing within the whip-poor-will TOY restriction.

BETA4: VHB has noted that the final Corridor Management Plan will be submitted to NHESP for review and approval prior to construction and that NHESP does not require restrictions on mowing within the whip-poor-will TOY restriction. Recommendations: Include a Special Condition requiring that the final Corridor Management Plan be submitted to the Conservation Commission prior to the start of work.

VHB3: The Applicants can accept a special condition requiring that the Corridor Management Plan be submitted to the Commission prior to the start of work.

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

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

BETA2: The DRAFT Eastern Box Turtle Protection Plan submitted is not dated, while the plan reviewed and approved by NHESP for the transmission line in 2018 was dated 5/31/2018. Has NHESP received and reviewed the current version of the plan?

Provide the Conservation Commission with an update on the status and/or changes to items 1-3 of NHESP's conditional "No-Take" letter from 10/19/2018 for the transmission line and items 1-4 of NHESP's conditional "No-Take" letter from 5/17/2019 for the rail trail.

BETA3: Information was not provided. Date discrepancies and status of the Turtle Protection Plan is unknown. Additional information is required to confirm the Project design and specifications comply with the conditional "No-Take" letter.

Recommendations:

- **Provide an update on the status and/or changes to update items 1-3 of NHESP's conditional "No-Take" letter from 10/19/2018 for the transmission line and items 1-4 of NHESP's conditional "No-Take" letter from 5/17/2019 for the rail trail.**
- **Provide correspondence with NHESP regarding the current version of the Eastern Box Turtle Protection Plan**

VHB2: Eastern box turtle surveys and communication with NHESP are ongoing. A final Eastern Box Turtle Protection Plan will be submitted to NHESP for review and approval prior to the start of construction.

Updates on October 19, 2018, NHESP Conditional No-Take Letter:

1. *A final Eastern Box Turtle Protection Plan will be submitted to NHESP for review and approval prior to the start of construction.*
2. *A final Corridor Management Plan will be submitted to NHESP for review and approval prior to the start of construction.*
3. *The whip-poor-will TOY restriction will be implemented.*

Updates on May 17, 2019, NHESP Conditional No-Take Letter:

1. *A final Corridor Management Plan will be submitted to NHESP for review and approval prior to the start of construction.*
2. *A signage plan for the shoulder and duct bank mowing areas, which will include sensitive dates for eastern box turtle, will be submitted to NHESP for review and approval prior to the start of construction.*
3. *A final Eastern Box Turtle Protection Plan will be submitted to NHESP for review and approval*

prior to the start of construction.

4. *NHESP has reviewed and approved the proposed native seed mix.*

BETA4: VHB has provided an update on the status and/or changes to NHESP's conditional "No-Take" letter. Recommendations: Include a Special Condition requiring that the final approved Easter Box Turtle Protection Plan be submitted to the Conservation Commission prior to the start of work.

VHB3: The Applicants can accept a special condition requiring that the Eastern Box Turtle Protection Plan be submitted to the Commission prior to the start of work.

Wildlife Habitat Evaluation

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

VHB: 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.

BETA2: The NOI and supplemental information are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE narrative for each impact area fails to provide a description of the area's landscape context and impacts to connectivity. The only indication of the landscape context and habitat connectivity review is on the field data form.

BETA disagrees with VHB's assessment of the Project's impacts to habitat connectivity in WIA S7, S12, S14, S15, and S16 (see BETA – Table 1 Attached). Provide the requested analysis.

BETA3: Information was not provided. The WHE does not quantify the Project's impacts to habitat connectivity and does not describe landscape context for each WIA. Accordingly, it was therefore not completed in accordance with MassDEP's guidance

Recommendations:

- **Provide WHE conducted in accordance with the Performance Standards and WHE Guidance.**

- **Provide responses to BETA's Table 1 Findings.**

VHB2: VHB has completed a more detailed analysis of landscape context and habitat connectivity for each WIA. See the attached tables (Attachment B) this additional information.

BETA4: Although VHB has qualitatively described the landscape connectivity in the supplemental Wildlife Habitat Evaluation, BETA disagrees with VHB's findings, especially related to their findings for S14 and S15. The updated information indicates that there are other, more suitable, connections between the habitat present at WIA S16/S17 and S14, however, these "more suitable connections" were not specified.

VHB3: As shown during the Conservation Commission hearing on December 14, 2020, large expanses of undeveloped, forested areas exist east of Boston Post and Raymond Roads, west of Landham Road, and to the south of the ROW near Bridge 127. Wildlife typically would select these corridors over the heavily developed and constrained strip between Station Road, Boston Post Road, Union Avenue, and Sudbury Lumber.

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.

VHB: 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.

BETA2: The NOI and supplemental information are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE has not been completed in accordance with CMR 10.60 and the Massachusetts Wildlife

Habitat Protection Guidance for Inland Wetlands (DEP WH Guidance – March 2006). Specifically,

- **The WHE does not quantify the existing important wildlife habitat characteristics on the entire Site and no plan is provided identifying important wildlife features, as required by Section V.B.1.a. of the DEP WH Guidance.**
- **Mitigation, such as wildlife-crossing tunnels where a site is shown to be a migration corridor for wildlife between vernal pools or other wetlands, should be considered in accordance with Section V.B.2.b.ii. of DEPs WH Guidance.**
- **The WHE does not demonstrate that the Project's impacts on important habitat features will only occur on features that are very common on the Site, as required by Section V.B.2.b.iii.**

The No Adverse Effect determination of WHE relies on the fact that important habitat features will be restored and/or replicated, however, adequate details describing the replication in accordance with Section V.C. 1 through 7 of the DEP WH Guidance are not provided. BETA disagrees with several findings presented in the WHE related to important habitat characteristics and the Project's impacts on those characteristics, such as the presence of dense small trees and woody shrubs in WIA S11, which provide safe nesting sites and roosting locations for small song birds. The dense habitat restricts movement of larger predators. This habitat will not be replicated. See BETA - Table 1 attached for additional findings.

The WHE also fails to address the long-term effects of increased human activity on the trail and the potential for increasing human/wildlife interaction. Replicating habitat features along the trail, such as brush piles, will increase habitat used by raccoons, skunks, possums, and snakes. Provide the requested information.

BETA3: Information was not provided. The WHE does not quantify the Project's impacts important habitat characteristics, does not evaluate mitigation (such as wildlife-crossing tunnels), and does not include a plan showing identified habitat features. Accordingly, it was therefore not completed in accordance with MassDEP's guidance

Recommendations:

- **Provide WHE conducted in accordance with the Performance Standards and WHE Guidance.**
- **Provide responses to BETA's Table 1 Findings.**

VHB2: See the VHB2 response to WPA34 for quantification of important wildlife habitat features.

The Applicants evaluated whether culvert and/or drainage pipe improvements were appropriate for wildlife migration mitigation. It was determined that it was not suitable because the Project will not impact migration to and from vernal pools and increasing pipe sizes could disrupt established hydrology and adversely impact vernal pools.

It is important to note that 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 Project has proposed restoration and mitigation throughout the Project Site and the WHE has demonstrated that the Project will not result in an adverse effect to important wildlife habitat features.

See the attached WHE summary table and individual WIA tables for the additional information (Attachment B).

BETA4: See WPA34-BETA4.

Recommendations:

- **Include a Special Condition requiring that the Environmental Monitor document the removal of important habitat features (such as brush piles, snags, overhanging trees, logs within or near the water, and large woody debris etc) to quantify the number of features removed. Reports should be provided to the Conservation Commission every six months documenting the removal of important habitat features.**
- **Include a Special Condition requiring the replacement of brush piles, large woody debris, and logs within or near the water generally in the location of where they were removed.**

VHB3: The Applicants disagree with the recommendations in BETA3, and the Applicants believe the proposed special conditions in BETA4 are not necessary. A detailed WHE completed in accordance with the performance standards and the MassDEP guidance was submitted with the NOI. Additional information explaining the WHE's documentation of important wildlife habitat features was submitted during the hearing process (see VHB responses to WPA34 and the detailed WHE tables provided in the October 15, 2020 supplemental submission). The characterization and quantification (as required) of important habitat features within each wetland impact area, as well as within the undisturbed portions of the Project Locus outside of the Project's limits of work, was completed by qualified wildlife biologists. The October 12, 2020 supplemental submission provides a complete summary of each important wildlife habitat feature identified in each wetland impact area. As documented in that submission, all important wildlife habitat features identified in the wetland impact areas are abundant throughout the remainder of the Project Locus. All of this information supports the conclusion that the Project meets the No Adverse Effect Standard and will not impair the capacity of any wetland resource area to provide wildlife habitat.

However, to provide wildlife habitat mitigation benefits, the Applicants have proposed native herbaceous and woody plantings, restoration of brush piles in proximity to wetland impact areas, and replacement of logs within one meter of the water's surface within the immediate vicinity of their original location. The proposed plantings are specified on the Landscape Plans, and there

are Planting Notes in the Construction Details that state: "ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT OR ENVIRONMENTAL MONITOR PRIOR TO INSTALLATION." The brush piles are noted on the Construction Plans in callouts that state: "STA XXX+XX TO XXX+XX - [X] BRUSH PILE(S) TO BE PLACED AT DIRECTION OF ENVIRONMENTAL MONITOR." The log replacements are noted on the plans in callouts that state: "STA XXX+XX TO XXX+XX - [X] FALLEN LOGS TO BE REPLACED AT DIRECTION OF ENVIRONMENTAL MONITOR."

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.

VHB: 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.

BETA2: The NOI and supplemental information are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE does not evaluate the resource areas individually and impacts to important wildlife habitat characteristics are not adequately quantified, therefore, the WHE submitted should not be used to confirm the Project will maintain the capacity for the Site to perform this function after construction completion.

BETA3: Information was not provided. The WHE does not evaluate the Project's impacts to wildlife habitat for the individual resource area, and was therefore not completed in accordance with MassDEP's guidance. Recommendations: Provide WHE conducted in accordance with the Performance Standards and WHE Guidance.

VHB2: See the VHB2 response to WPA34 regarding evaluating resource areas separately.

BETA4: See WPA34-BETA4 and WPA45-BETA4. Similar impacts to wildlife habitat function for resource areas other than BLSF exist.

VHB3: See VHB2 response to Comment WPA34.

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

VHB: The "Notes Below" section on the forms were moved to the WHE narrative; all information is included in the WHE narrative.

BETA2: Understood. The WHE narrative does not quantify the existing important wildlife habitat characteristics on the entire Site or provide the change in important wildlife habitat characteristics following the construction of the Project, as required by a WHE to determine its effects on wildlife habitat. Accordingly, the NOI and supplemental information are not

sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

BETA3: Information was not provided. The WHE was not completed in accordance with MassDEP's guidance. Recommendations: Provide WHE conducted in accordance with the Performance Standards and WHE Guidance.

VHB2: See the VHB2 response to WPA34 regarding quantification of important wildlife habitat features.

BETA4: See WPA34-BETA4 and WPA45-BETA4.

VHB3: See VHB2 response to WPA34.

Sudbury Wetlands Protection Administration Bylaw

SWB17. The Sudbury Wetlands Protection Bylaw and Regulations do not provide relief from meeting the local performance standards. Provide a detailed analysis of how the Project fully meets all performance standards under the local Bylaw and Regulations.

BETA3: At this time, the Project does not fully comply with the local Regulations Performance Standards.

VHB2: [This is a new comment from BETA.] The NOI and supplemental information fully address how the Project meets the performance standards in the local Bylaw and Regulations.

BETA4: This comment stands. Based on the calculations provided in the NOI, the total permanent impacts to AURA are 94,645 sf (which approximately encompasses all other permanent impact areas – total permanent impacts to resource areas may be higher). The proposed invasive species mitigation plan totals ~43,560 square feet. The square footage of plantings and debris removal is not specified, however, it does not appear that the total mitigation area will equal 189,290 sf (as required by the 2:1 mitigation to permanent impact requirement).

VHB3: Regarding the performance standards for AURA in Section 7.2 of the local regulations, see the VHB3 response to SWB7 and SWB18.

Regarding the performance standard in Section 7.8 of the local regulations, see the VHB3 response to SWB18.

In addition, a comprehensive mitigation package has been developed and proposed by Eversource that includes the following:

- Removing approximately 41,382 square feet (0.95 acres) of common reed (*Phragmites australis*) from the upstream side of Hop Brook at the Bridge 128 crossing;
- Removing approximately 2,178 square feet of Japanese knotweed (*Polygonum cuspidatum*) within RFA, BLSF, and AURA between STA 712+00 and 713+00;

- Planting supplemental vegetation along vernal pool margins where appropriate; and
- Removing refuse within the ROW and outside of the limit of work where such refuse can be removed without machinery and without impacts to wetland resource areas.

To implement the invasives removal work, Eversource has committed to removing *Phragmites* and Japanese knotweed on the Project Locus and SVT's property. The *Phragmites* stands are directly adjacent to the Project Locus and are within the same sub-basin as Hop Brook at Bridge 128. The Japanese knotweed stand is partially on the Project Locus and partially on SVT's property. This stand is also within the same sub-basin as Hop Brook closer to Bridge 127. Removing these invasive species within and immediately adjacent to the Project Locus and within the same sub-basins of Hop Brook will result in a direct improvement to both the sub-basins and the larger watersheds associated with Hop Brook.

During the public hearing on December 14, 2020, a representative from SVT (Laura Mattei) indicated that SVT would be willing to work with the Applicants to complete the invasive species removal work outlined above. Therefore, the Applicants can accept a special condition requiring the removal of invasive species that will expend up to $300,000 for invasive species removal on the SVT property.

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.

VHB: 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.

BETA2: The NOI and supplemental information are not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE for WIA S19 only mentions the impacts to the IVW but does not address if important habitat characteristics are provided by the IVW. A photograph of the IVW is not included in the photographs for WIA S19 in the WHE. Provide requested materials.

BETA3: Information was not provided. The WHE did not evaluate the Project's impacts on the wildlife habitat function of IVW that will be filled as a result of construction. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: There were no important wildlife habitat features identified within the IVW. It is a small area that was likely excavated during construction of the rail line. A picture of the IVW is provided below.

BETA4: See WPA34-BETA4 related to the WHE for individual resources.

VHB3: See VHB2 response to WPA34.

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.

VHB: 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.

BETA2: Recommend a Special Condition that requires staking the erosion control boundary by on- the ground survey methodology for inspection by the Commission and/or their representative prior to installation of the erosion controls.

BETA3: BETA's recommended Special Condition still stands.

VHB2: As stated within the initial VHB response to W1 and reiterated again in the VHB2 response to W1, erosion controls will be staked using survey-grade equipment (i.e., conventional ground survey). The Applicants can agree to a special condition that the Commission and/or their representative inspect the (staked locations for) erosion controls prior to the installation of erosion controls. In addition, as stated within the original response to W1, the Applicants also agree to a special condition for inspection of erosion controls by the Commission and/or their representative prior to any vegetation removal.

BETA4: Recommendations: Include the Special Condition described in SWB2-BETA2.

VHB3: The Applicants can accept the recommended special condition.

Coldwater Fisheries Resources

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

VHB: 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 560+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*

BETA2: Areas quantified, except for impacts to the intermittent tributary to Hop Brook that runs parallel to the Project near Station Road. Quantify impacts to all eight bylaw CFRs.

The quantified clearing totals 136,618 square feet (3.1 acres) of clearing within 80 feet of CFR.

BETA3: The Applicant did not quantify the Proposed clearing within 80 feet of the tributary to Hop Brook that runs parallel to the Project near Station Road. Recommendations: Quantify impacts.

VHB2: The area of proposed clearing for the intermittent tributary to Hop Brook that parallels Station Road (STA 602+50 to 710+50) is 24,578 square feet. All other impacts to CFRs were previously quantified and are addressed in the initial VHB response.

BETA4: The Applicant has quantified the proposed clearing within 80 feet of the tributary to Hop Brook that runs parallel to the Project near Station Road, increasing the total area within 80 feet of CFRs to 3.7 acres.

VHB3: No response required.

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.

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Use of a seed mix for restoration of greater than 3.1 acres of clearing within 80 feet of CFRs is not adequate to mitigate the impacts.

BETA3: The 8/7/2020 plan set now depicts additional plantings in areas where grading is proposed beyond the 22-foot wide construction platform. This planting list only includes four shrub species and no canopy species.

Recommendations:

- **Increase shrub species diversity and confirm species consistency with surrounding areas**
- **Add canopy species to each planting area.**
- **Incorporate revised plans into completed plan set**
- **Update/confirm plans reference correct sheets**

VHB2: See the VHB2 response to Comment WPA37 for additional shrub plantings that were provided to the Commission with the August 7, 2020, supplemental submission. The revised plans include 84 shrub plantings within 80 feet of the Bylaw-only-CFR intermittent tributary that is parallel to the ROW/Station Road and 840 shrub plantings within 80 feet of the portion of Hop Brook that is east of Boston Post Road. In addition to the shrub plantings, all temporarily disturbed areas will be restored with herbaceous and woody seed mixes.

BETA4: The Applicant is proposing additional plantings; however, no canopy species are proposed within the planting areas adjacent to the CFRs except at Bridges 127 and 128. Canopy species will provide more shade to CFRs in the long-term as well as provide perch habitat for birds of prey.

VHB3: See VHB2 above and response VHB2 to SWB5.

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

VHB: (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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The effects of canopy loss on water temperature for all CFRs (not just the "bylaw only" CFRs) must be evaluated, and compliance with section 2.6 of the local Regulations should be demonstrated for work at each stream individually. Currently, the project does not meet the Bylaw Regulations performance standards for CFRs.

BETA3: As currently proposed, this Project does not meet the Bylaw Regulations performance standards. The Applicant should specify what CFR performance standards the Project does not meet and adequately evaluate the impacts.

VHB2: This response provides a supplement to the regulatory compliance summary presented in 5.2.2 of the NOI. The following bullets present a summary of the performance standards associated with Cold Water Fisheries Resources, listed in the Sudbury Wetland Regulations at Section 2.6, and also provide an individual evaluation for each CFR within the Project Site, listed west to east from the Sudbury/Hudson town boundary.

Performance Standard Summary

- *Maintain or Restore Streamside Forests/Vegetation: This performance standard requires an Applicant to maintain and/or restore an undisturbed, vegetated (forested) state within the riverfront area. Eighty feet is assumed adequate but emphasis is on maintaining or restoring natural vegetation to filter out excess sediments, nutrients, and other pollutants before they reach the water, as well as maintain adequate groundwater recharge. In summary, the Project has been designed to maintain vegetation within 80 feet of all CFRs. Where maintenance is not possible, restoration has been proposed.*
- *Retain canopy: The emphasis of this performance standard is on retaining tree canopy along the waterbody for cover over the waterbody. The Project has been designed to avoid removal of trees along the banks of CFRs. Only the two Hop Brook crossings include removal of tree canopy along the waterbody. The restoration proposed at these two locations includes planting of trees (10-12 feet in height).*
- *Overhanging woody debris: The emphasis of this performance standard is on retaining or restoring logs, stumps, and other large woody debris in and/or overhanging the water. In summary, the Project has been designed to avoid the removal of overhanging woody debris along the banks of CFRs. Only the Hop Brook crossing at Bridge 127 includes removal of overhanging woody debris along the banks. The restoration proposed at this location includes planting of shrubs and installation of logs and stumps in disturbed areas.*

- *Floodplain connection: The emphasis of this performance standard is on maintaining connection between the waterbody and its adjacent floodplain. This is also a performance standard for BLSF and as presented in the NOI and supplemental information the Project has been designed to maintain all connections between each waterbody and its adjacent floodplain.*
- *Phosphates/Nitrates: The emphasis of this performance standard is on avoidance of the introduction of these nutrients from certain land uses into these waterbodies. The end use of the Project will be the MCRT, which will not result in any use of phosphates/nitrates and will not generate any such nutrients that could enter any of the CFRs.*
- *Blockages/Dams: The emphasis of this performance standard is on not installing any structures that could block fish movement in these waterbodies. None are proposed as part of the Project.*
- *Temperature: The emphasis of this performance standard is on avoiding activities that would result in an increase in the stream's temperature. As described in the NOI and supplemental materials, the project will not increase temperature in CFRs.*

Individual CFR Compliance Evaluation

Hop Brook (Bridge 128) – Station 400+30 (14,319 square feet of disturbance from Project)

Hop Brook is a perennial stream that is both a state and Bylaw CFR. This is one of the locations that Dr. Caleb Slater commented on. The Project includes a detailed planting plan for vegetation removal within the crane mat areas at the Hop Brook bridge, which extend farther back than 80 feet from the waterbody. The planting plan includes the installation of 26 trees (10- to 12-foot-high specimens) along the waterbody to restore/improve shading to the waterbody at this location. In addition, the restoration of disturbed areas outside of the proposed 10-foot-wide paved MCRT path includes the installation of 72 shrubs with supplemental seeding. There is no work proposed on the bank of this waterbody and all vegetation that is there will remain undisturbed.

In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Unnamed Intermittent Stream – Station 527+30 (3,966 square feet of disturbance from Project)

This unnamed stream is a culverted intermittent stream and is characterized as a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. Given its intermittent nature, the potential for this waterbody to actually function as a CFR is questionable and limited. However, as can be seen in the plan view and on the cross sections for this area, the culvert extends beyond the limit of work and the Project's limit of work is entirely over the existing culvert that conveys this waterbody under the railbed. As such the proposed project will not result in the removal of any vegetation from the banks or from areas that currently provide shade to this waterbody. In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Dudley Brook – Station 539+40 (16,424 square feet of disturbance from Project)

Dudley Brook is a culverted perennial stream and is characterized as a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. As can be seen in the plan view and on the cross

sections for this area, the culvert extends beyond the limit of work and the Project's limit of work is entirely over the existing culvert that conveys this waterbody under the railbed. As such the proposed project will not result in the removal of any vegetation from the banks or from areas that currently provide shade to this waterbody. In conclusion, the proposed Project will not have any adverse effect on this waterbody with regard to its potential to function as a CFR.

Unnamed Intermittent Stream - Station 560+82 (4,992 square feet of disturbance from Project)

This unnamed stream is a culverted intermittent stream and is characterized as a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. Given its intermittent nature, the potential for this waterbody to actually function as a CFR is questionable and limited. However, as can be seen in the plan view and on the cross sections for this area, the culvert extends beyond the limit of work and the Project's limit of work is entirely over the existing culvert that conveys this waterbody under the railbed. As such the proposed project will not result in the removal of any vegetation from the banks or from areas that currently provide shade to this waterbody. In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Unnamed Intermittent Stream - Station 593+18 (18,816 square feet of disturbance from the Project)

This unnamed stream is a culverted intermittent stream that is a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. In addition, once this waterbody flows under the existing railbed through the existing culvert it parallels a large industrial building where most of its banks are currently cleared and then enters another culvert where it goes underground for an undetermined distance through a heavily developed area. Given its intermittent nature, the amount of development, and the length that is culverted, the potential for this waterbody to actually function as a CFR is questionable and very limited. However, as can be seen in the plan view and on the cross sections for this area, the culvert extends beyond the limit of work and the Project's limit of work is entirely over the existing culvert that conveys this waterbody under the railbed. As such the proposed project will not result in the removal of any vegetation from the banks or from areas that currently provide shade to this waterbody. In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Intermittent Tributary to Hop Brook – Station 602+50 to 710+50 (24,578 square feet of disturbance from the Project)

This intermittent tributary to Hop Brook is a stream that is a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. This stream is best characterized as a man-made drainage ditch that is located adjacent to Station Road. This stream flows out of a concrete culvert near across from Union Avenue and parallels Station Road until its intersection with Boston Post Road where it reenters a culvert and then is conveyed under Boston Post Road to Hop Brook. The land area immediately adjacent to this section of stream is industrial/commercial in nature and several stormwater outfalls that pick-up runoff from adjacent parking lots and other paved surfaces discharge directly to this intermittent stream. Given its intermittent nature, the amount of development, and the length that is culverted, the potential for this waterbody to actually function

as a CFR is questionable and very limited. Trees are sparse along this portion of this waterbody and the majority of the 80-foot offset is developed. As can be seen in the plan view and on the cross sections for this area, except at Station 603+00, the Project is not disturbing vegetation all the way down the slope. Therefore, vegetation (low-growing or trees) that is currently providing shading outside of the limit of work will be retained and there will be no loss of shading to this Bylaw only CFR.

As part of the proposed restoration of disturbed vegetation, the planting plan includes the installation of approximately 85 shrub specimens at two locations along this waterbody to restore/improve shading to the waterbody. In addition, the restoration of disturbed areas outside of the proposed 10-foot wide paved MCRT path includes supplemental seeding. In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Hop Brook (Bridge 127) - Station 725+35 (73,397 square feet of disturbance from the Project)

Hop Brook is a perennial stream that is both a state and Bylaw CFR. This is one of the locations that Dr. Caleb Slater commented on. The Project includes a detailed planting plan for vegetation removal within the crane mat areas at the Hop Brook bridge, which extend farther back than 80 feet from the waterbody. The planting plan includes the installation of 12 trees (10- to 12-foot-high specimens) along the waterbody to restore/improve shading to the waterbody at this location. In addition, the restoration of disturbed areas outside of the proposed 10-foot-wide paved MCRT path includes the installation of 840 shrubs at various locations with supplemental seeding.

In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

Intermittent Tributary to Wash Brook -Station 747+39

This unnamed stream is a culverted intermittent stream and is characterized as a Bylaw-CFR only because it is a tributary to a scientifically documented CFR. Given its intermittent nature, the potential for this waterbody to actually function as a CFR is questionable and limited. However, as can be seen in the plan view and on the cross sections for this area, the culvert extends beyond the limit of work and the Project's limit of work is entirely over the existing culvert that conveys this waterbody under the railbed. As such the proposed project will not result in the removal of any vegetation from the banks or from areas that currently provide shade to this waterbody. In conclusion, the proposed Project will not degrade this riparian area's fisheries protection function.

BETA4: VHB provided a more detailed description of how the Project related to the local CFR Performance Standards. In this description, they state "The project has been designed to maintain vegetation within 80 feet of all CFRs. Where maintenance is not possible, restoration has been proposed." These two sentences contradict each other.

Permanent clearing (and a paved pathway) is proposed within 80 feet of CFRs, therefore restoration is not proposed for all impacts within the 80-foot area.

No mitigation, with the exception of restoring temporary impact areas within 80 feet of CFRs,

is proposed.

VHB3: To clarify the response in VHB2, it was intended to indicate that the project has been designed to maintain as much vegetation as possible in areas within 80 feet of all CFRs. Where existing vegetation cannot be maintained, restoration will be provided where possible. Where existing vegetation cannot be maintained and restoration cannot be provided (i.e., where the paved bike trail is located), mitigation is proposed by providing woody plantings where feasible, as indicated on the landscaping plans.

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

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

BETA2: Correspondence with DFW is provided. In the correspondence, Mr. Vieira (VHB) states that netting will be placed below the bridges to prevent debris from falling into the brook. Provide a specification for the netting to be used under the bridges and include an installation detail for the netting. Also provide a note on the construction and bridge plans stating this requirement.

In the correspondence Dr. Slater (DFW) notes that areas along the brook should be replanted after construction completion and that the "removal of a few trees in the immediate area of the bridge" should not result in loss of shade for the stream. Dr. Slater's evaluations only pertained to the state-designated CFRs, so his evaluation on impacts should also only be used in evaluating those streams.

The proposed clearing within 80 feet of the state-designated CFRs totals 106,532 sf (2.4 acres). The loss of this much vegetation constitutes more than the removal of a few trees.

BETA3: Information was not provided.

Recommendations:

- **Provide specification for netting to be used under the bridge and add installation detail for netting on the plans.**
- **Revise the bridge and construction plans to note the netting requirement during bridge work.**
- **Include a Special Condition requiring netting be installed under the bridges during bridgework to prevent debris from entering the stream.**
- **Include a Special Condition requiring notification to the Commission when netting is installed.**

VHB2: See the VHB2 response to Comment SWB5.

BETA4: Recommendations: Include the Special Condition described in SWB6-BETA3.

VHB3: A specification for netting and installation detail has been added to the plan set for Bridge 128. The existing note regarding shielding on the plan for Bridge 128 has been revised. The Applicants are willing to accept the special condition requiring netting for Bridge 128 and notifying the Commission's representative when it is installed.

Adjacent Upland Resource Areas – Regulations - Section 7.2:

The Bylaw protects Adjacent Upland Resource Areas (AURA) to protected wetlands. According to the NOI, 853,305 square feet of the ROW is within 100 feet of protected resource areas and 71% of this adjacent upland will remain unaltered by the Project, with 94,645 square feet being permanently altered (11% of the AURA onsite) and 153,519 square feet being temporarily altered. The application quantifies only the proposed paved areas within the AURA as permanent impacts, while areas that will be impacted from grading, duct bank installation, and continued maintenance are considered temporary.

Under Section 7.2 of the Bylaw, Commission can designate no-disturbance, temporary disturbance, and limited disturbance areas within the AURA to protect the functions the AURA is providing. Along the Project corridor, the AURA provides important wildlife habitat, habitat for rare species, upland habitat for vernal pool species, and water pollution prevention functions.

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Quantify the area of impacts to the AURA that will be stabilized with seed only.

Provide mitigation for the permanent impacts to the AURA as required by section 7.2 of the Sudbury Wetland Regulations. Restoration of the temporarily impacted area does not qualify

as mitigation for the permanent impacts, as these measures are required to mitigate for the temporary impacts.

Provide plans depicting the habitat restoration elements (dead trees, brush piles, food plants) proposed within the AURA on the Site.

BETA3: Information was not provided. Mitigation for the permanent impacts to AURA are not provided in accordance with the local regulations. This mitigation would be in addition to the plantings required for impacts to be considered temporary.

Recommendations:

- **Provide mitigation plan (replication or restoration) for permanent impacts to AURA in accordance with the Sudbury Bylaw.**
- **Provide habitat restoration plans**

VHB2: In addition to restoring all temporarily disturbed areas with the herbaceous and woody seed mixes, 1,336 additional shrub plantings within AURA are proposed; this information and revised planting plants was submitted to the Commission on August 7, 2020.

The Applicants have also prepared a comprehensive mitigation proposal that includes the following:

- *Removing approximately 41,382 square feet (0.95 acres) of common reed (*Phragmites australis*) from the upstream side of Hop Brook at the Bridge 128 crossing;*
- *Removing approximately 2,178 square feet of Japanese knotweed (*Polygonum cuspidatum*) within RFA, BLSF, and AURA between STA 712+00 and 713+00;*
- *Planting supplemental vegetation along vernal pool margins where appropriate; and*
- *Removing refuse within the ROW and outside of the limit of work where such refuse can be removed without machinery and without impacts to wetland resource areas.*

BETA4: The Applicant is proposing to plant supplemental vegetations along the vernal pool margins, remove a ~1 acre stand of Phragmites australis, remove a ~2000 square foot area of Polygonum cuspidatum, and remove refuse within the ROW and outside the Limit of Work where no machinery is needed.

Recommendations:

- **Include a Special Condition requiring the Applicant submit a written Mitigation Proposal for the invasive species control to the Conservation Commission for review.**
- **Include a Special Condition requiring the Applicant submit annual reports documenting the progress of the proposed mitigation programs.**

VHB3: With regard to the BETA3 comment, additional mitigation is not required by the local regulations for the permanent impacts to AURA associated with the paved surface of the MCRT. Section 7.2.1 of the local regulations states the following: "In all cases, the Conservation Commission

shall require mitigation measures *to offset impacts to protected resource area functions*." This standard does not require mitigation where the work in AURA will not diminish the functions of the protected resource areas (e.g., BVW, LUW) adjacent to the AURA. To do this, the Applicants have demonstrated that the proposed work in AURA is being performed in compliance with Section 7.2.2 of the local regulations by establishing the limits of no disturbance, temporary disturbance, limited disturbance, and permanent disturbance. The Applicants also have accepted and implemented suggestions from the Commission in accordance with the standard at Section 7.2.2.4, which states: "Within the context of permanent disturbance the Conservation Commission may set specific conditions prohibiting or restricting those forms of work and activities in the adjacent upland resource deemed potentially harmful to the resource area values."

See also the VHB3 responses to Comments SWB17 and SWB18.

Vernal Pools and AURA to Vernal Pools

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Provide evidence that the proposed TOY restriction is adequate for protection for all Vernal Pool Species (not just mole salamanders).

BETA3: See Comment W24-BETA3.

VHB2: See the VHB2 response to Comment W24.

BETA4: See W24-BETA4.

VHB3: See VHB2 response to Comment W24.

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

VHB: 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.

BETA2: Regardless of whether 68% of the VP AURA will be protected, the Commission can still impose a No Disturbance Zone for the work. Work is proposed within 5 feet of the boundary of some Vernal Pools. The commission should consider requiring a greater separation between the limit of work and the VPs and require plantings to restore the AURA to VPs.

BETA3: This comment has not yet been discussed by the Conservation Commission. Recommendations: This Commission can discuss this comment and determine whether a greater separation between the limit of work and the mean annual boundary of the VP is required for protection of the resource area.

VHB2: The Project was designed to minimize its overall footprint and maximize its distance to vernal pools to the greatest extent practicable. The current design includes a significant amount of vernal pool buffers that will not be disturbed as presented in the attached vernal pool figures (Attachment A). These areas represent the proposed No Disturbance Zone for the Project for the Commission's approval. Note that the figures demonstrate that the Project will not have any adverse effect on the ability of existing vernal pools to continue to function as such. With the exception of Vernal Pool 7 (just west of Peakham Road), 85-95% of the existing suitable habitat around vernal pools will remain following completion of the Project. Approximately 82% of the existing suitable habitat will remain at Vernal Pool 7 following construction of the Project.

*VHB also conducted a field visit to determine whether it is appropriate to install supplemental shrub plantings immediately adjacent to vernal pools. The majority of the vernal pool margins currently contain trees, shrubs, and herbaceous vegetation (e.g., ferns) that will not be removed by the Project. However, it has been determined that supplemental plantings of red maple (*Acer rubrum*) highbush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), and cinnamon fern (*Osmunda cinnamomea*) can be made along the edges of Vernal Pools 2, 3, 4, 6, 7, 8, 9, 11, and 12 and these are detailed below.*

- *Vernal Pool 2 – 6 highbush blueberries, 4 sweet pepperbushes, and 32 cinnamon ferns*
- *Vernal Pool 3 – 1 red maple, 4 highbush blueberries, 3 sweet pepperbushes, and 12 cinnamon ferns*
- *Vernal Pool 4 – 4 highbush blueberries and 1 sweet pepperbush*
- *Vernal Pool 6 – 3 highbush blueberries*
- *Vernal Pool 7 – 8 highbush blueberries, 3 sweet pepperbushes, and 17 cinnamon ferns*
- *Vernal Pool 8 – 9 highbush blueberries and 8 cinnamon ferns*
- *Vernal Pool 9 – 3 highbush blueberries*
- *Vernal Pool 11 – 3 highbush blueberries*
- *Vernal Pool 12 – 4 highbush blueberries and 8 cinnamon ferns*

These plantings are shown on sheets 106-110, 113, and 120 of Attachment C of this supplemental submission.

BETA4: See SWB7-BETA4. Additional plantings are proposed around the margins of 9 of the 13 onsite Vernal Pools as mitigation for the proposed activities within the AURA of Vernal Pools.

The Commission should consider whether the proposed planting is adequate to mitigate for the proposed impacts.

VHB3: No response required.

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.

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

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Quantify the area of impacts to the VP AURA that will be stabilized with seed only. These measures are not adequate to restore the resource area functions and values in a foreseeable timeframe

Provide mitigation for the permanent impacts to the VP AURA as required by the local regulations.

BETA3: Information was not provided. Table 1 and Table 14 do not accurately quantify the impacts to the VP Buffer Zone / VP AURA, as areas that will be maintained (mowed annually) are quantified as temporary impacts. Mitigation for the permanent impacts to the VP AURA are also not provided in accordance with the local regulations. This mitigation would be in addition to the plantings required for impacts to be considered temporary.

Recommendations:

- **Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.**
- **Provide mitigation plan (replication or restoration) for permanent impacts to VP AURA in accordance with the Sudbury Bylaw.**

VHB2: An additional 55 shrubs, one tree, and 77 ferns along vernal pool margins within the ROW outside of the limit of work. Refer to response to SWB9 for more detail.

BETA4: See SWB7-BETA4 and SWB9-BETA4. Recommendations: Include a Special Condition requiring that the mitigation plantings proposed around the Vernal Pool margins be monitored for successful establishment for a minimum of two growing seasons. Annual reports documenting establishment are required.

VHB3: The Applicants can agree to this recommended special condition. With regard to the BETA3 comment about AURA replication, see the VHB3 responses to SWB17 and SWB18.

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw.

Regardless of whether the cited document is currently referenced in the USACE Mass. GP, the referenced document is still provided as guidance for avoiding and minimizing impacts to Vernal Pools. The guidance is based on scientific literature on habitat protection for vernal pool species and is appliable for use with respect to the Project.

The WHE does not evaluate the Project's impact on VP species' upland habitat and migration, which is critical to their lifecycle. For example, in WIA S19 there are three vernal pools in proximity to Station 745, however, in the evaluation of this WIA, there is no mention of vernal pools being present along the Project even though their boundaries are within 4 feet of the limit of work. Another example is in WIA S7, where the Site passes by four substantial VPs from Sta 407 to 416. The WHE for this area also fails to discuss the presence of the VPs or the Project's impact on the VP species upland habitat, migration pathways, and habitat connectivity.

Update the WHE to address the Project's indirect effects on the adjacent Vernal Pools, as required by Section 7.3 of the Bylaw regulations.

BETA3: Information was not provided. The WHE did not identify areas where the Impact Area was within the AURA of a Vernal Pool and does not address impacts to VP species upland

habitat. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: The WHE has been supplemented to consider the Project's impact on VP species' upland habitat and migration (Attachment B). In addition, please refer to the responses to SWB9, SWB10, SWB11, G3, WPA44, and WPA21.

BETA4: See WPA34-BETA4 for comments related to the WHE for each resource area. The updated WHE table now documents where the Project is within the AURA to Vernal Pools.

VHB3: See VHB2 response to WPA34.

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.

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The NOI did not provide enough evidence to demonstrate that granting a waiver from this local provision is necessary, especially given the proposed construction sequence included in the NOI. Provide additional information.

BETA3: Requested information was not provided. The construction sequence described in Section 5.2.5 states the replication area will be constructed during vegetation removal, which will occur prior to any construction of structures. If the Project is constructed in accordance with the presented materials, this waiver does not appear to be needed.

Recommendations:

- **Unless additional reasoning is provided, BETA recommends the Commission deny the request for this waiver.**
- **Include a Special Condition specifying this requirement in the OOC.**

VHB2: The Applicants request that the Commission determine whether they will grant the request to construct the replication area during Phase 1 construction.

BETA4: It is still unclear why the Project cannot be constructed in compliance with the Bylaw Replication Performance Standards.

Recommendations:

- **Unless additional reasoning is provided, BETA recommends the Commission deny the request for this waiver.**
- **Include a Special Condition requiring that replication area be constructed prior to the construction of structures.**

VHB3: As noted in BETA3, the construction sequence discussed within Section 5.2.5 of the NOI states that the replication area will be constructed during vegetation removal, which will occur prior to any construction of structures. Therefore, a waiver does not appear to be necessary.

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.

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The proposed soil replication strategy will only replicate the organic layer and does not address how the replication will replicate the density profile.

Provide existing soil lamination and density details for BVW and IVW that will be permanently altered.

BETA3: Information not provided. Additional soil details are required to confirm adequate replication of the soil profile. Recommendations: Provide soil details

VHB2: The Sudbury Bylaw Regulations specifically state that the intent of transplanting the "top 12" of soil from the original wetland" with the lamination and density profile intact is to "preserve plant, invertebrate, and planktonic communities of the wetland and inhibit the blossoming of invasive species." As previously noted, the existing soils contain invasive species and therefore cannot be used to achieve this goal. Standard practice in cases where the existing soil cannot be transplanted is to use at least 12 inches of manmade topsoil consisting of equal volumes of organic and mineral materials, as the Project proposes. The existing soil information for each wetland was provided in the data forms accompanying the ANRAD application. For specific details on soil specifications, see Note 5 on sheet 167 of the Eversource plans attached to this submission.

BETA4: VHB has provided reasoning behind the proposed soil specifications. ADDRESSED.

VHB3: No response required.

SWB18. [*These are new comments from BETA that were received after the VHB2 responses were filed***.]**

As confirmed through correspondence with the Conservation Commission, the "Resource Replication" provision of the Bylaw Regulations (Section 7.8) is intended to specify the performance standards for replicating all resource areas, including BLSF, RA and AURA. Provide replication of all permanent impacts to these resource areas accordance with the Section 7.8 performance standards.

At a minimum, the ratio of replication and restoration of resource areas to the permanent impact area must be 2:1, with the goal of restoring or replicating the functions of the permanently altered resource area. Any restoration area must restore, but ideally improve, a resource area. This work should complement the vegetation work required to meet the limited project provisions.

Include a Special Condition requiring that restored temporary impact areas be established with at least 90% native species.

BETA3: Information not provided. Replication and/or restoration is not provided to mitigate for the permanent impacts to BLSF, RA, and AURA. This mitigation would be in addition to the plantings required to comply with the Limited Project Provisions. Recommendations: Provide mitigation plan (replication) for permanent impacts to BLSF, RA, and AURA in accordance with the Sudbury Bylaw, in accordance with the Bylaw.

BETA4: Recommendations: Include the Special Condition included in SWB18.

VHB3: As stated elsewhere in these responses, the Applicants can agree to a special condition requiring that restored temporary impact areas are established with at least 90% native species.

The Applicants strongly disagree with all of BETA's statements under SWB18 regarding 2:1 replication.

First, the requirement for wetland "replication" is stated only in Section 7.8 of the local Bylaw Regulations, and not in the Bylaw. The language of Section 7.8 indicates it is intended to address BVW replication. For example, the first paragraph of Section 7.8 addresses the uncertainty of the science of "wetland replication," including the "difficulties of replicating proper hydrological conditions," which is a factor in the success of BVW replication. In addition, Section 7.8.6 states the following:

> "The top 12" of soil from the original wetland must be transplanted with soil structure - especially lamination and density profile - intact to the replication. This is intended to preserve plant, invertebrate, and planktonic communities of the wetland and inhibit the blossoming of invasive species."

This also is specific to BVW replication and would not apply to BLSF, RA, or AURA. Finally, there is no basis for the suggestion that Section 7.8 is applicable to AURA mitigation. Section 7.8.5 states that if wetland replication results in loss of AURA, then "replication of new AURA shall follow 7.5.2 and 7.5.3." However, the Bylaw regulations do not have any provisions at 7.5.2 and 7.5.3.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's to provide wildlife habitat.

VHB: See the response to comment WPA44.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE does not provide an adequate quantification of important habitat characteristics within and outside the impact area to provide a determination of the Project's effect on wildlife habitat. As previously described, additional existing conditions information describing the existing wildlife habitat features within the Site locus are required to adequately quantify the Project's impact on wildlife habitat.

BETA3: Information was not provided. As indicated in WPA44-BETA2 and C9-BETA2, the WHE was not completed in accordance with the Act, WHE Guidance, and Bylaw. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: See the VHB2 response to WPA34 for quantification of important wildlife habitat features and the tables attached to this supplemental submission (Attachment B).

BETA4: See WPA34-BETA4.

VHB3: See VHB2 response to WPA34.

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

VHB: See the response to comment SWB5.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE does not address impacts to CFRs. For example, the Project proposes 18,816 square feet of clearing within 80 feet of Sta. 593+18, which falls within WIA S13. The narrative WHE for this area, however, does not mention the presence of the CFR or the effect the Project will have on the CFR.

Update the WHE to address the Project's indirect effects on the adjacent CFRs, as required by Section 7.3 of the Bylaw regulations.

BETA3: Information was not provided. The WHE does not include the presence of CFRs near the impact areas evaluated and does not discuss the Project's effect on this habitat element. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: CFRs are not required to be evaluated as part of the WHE. See the responses to Comments SWB3 and SWB5 for Project related impacts to both MWPA and Bylaw CFRs.

BETA4: VHB's response indicates the CFR are not required to be evaluated as part of the WHE. See SWB5-BETA4.

VHB3: All Sudbury Bylaw buffers to CFRs were included and evaluated in the WHE because they contained wetland resource areas (e.g., RA, BLSF). For details regarding potential impacts on CFRs, see the VHB and VHB2 responses to SWB5.

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

VHB: See the response to comment SWB11.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE has not adequately evaluated the Project's impacts on Vernal Pools and their upland habitat. See SWB11 – BETA2.

BETA3: Information was not provided. The WHE did not identify areas where Impact Area were within the AURA of a Vernal Pool. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: The NOI and supplemental information have adequately described the work, its potential effect on Vernal Pools and their upland buffers, and the Project has presented supplemental mitigation within these areas to ensure that there is no adverse effect to vernal pools from the Project. Please refer to the responses to SWB9, SWB10, SWB11, G3, WPA44, and WPA21, and Attachment A.

[NO BETA4 COMMENT PROVIDED]

VHB3: Information was provided in the VHB2 response and in Attachment A of the October 15, 2020 submission; no additional response required.

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

VHB: 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.

BETA2: The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. The WHE provided combines the important habitat characteristics for the resource areas and does not discuss the impacts to habitat characteristics by individual resource area. Therefore, determining the Project's impact on the habitat characteristics of the individual resource areas (BLSF, RA, Bank, LUW, and AURA – as well as IVW and BVW) cannot be evaluated based on the WHE conducted.

BETA3: Information was not provided. The WHE was not completed in a way that demonstrates the Project's impact on the wildlife habitat functions of the individual resource areas as required by the Act, WHE Guidance, and Bylaw. Recommendations: Provide WHE conducted in accordance with the WHE Guidance and the Sudbury Bylaw.

VHB2: See the VHB2 response to WPA34 regarding evaluation of individual wetland resource areas.

BETA4: See WPA34-BETA4 for comments related to the WHE by resource area. This remains outstanding.

VHB3: See VHB2 response to WPA34.

Riverfront Area Protection

The Bylaw protects Riverfront Area of perennial and intermittent streams. According to the NOI, 252,729 square feet (5.8 acres) of the ROW has Riverfront Area as defined under the Bylaw. Of the total Bylaw RA on the site, 69% will remain unaltered by the Project, with 31,789 square feet (0.73 acres) being permanently altered (13% of the Bylaw RA onsite) and 46,707 square feet (1.07 acres) being temporarily altered. The application quantifies only the proposed paved areas within the bylaw as permanent impacts, while areas that will be impacted from grading, duct bank installation, and continued maintenance are considered temporary.

Under Section 7.10 of the Bylaw, the Commission protects Bylaw RAs with the same performance standards as AURAs, however, the protection extends 200 feet from the MAHW boundary. Along the Project corridor, the RA provides important wildlife habitat, habitat for rare species, upland habitat for vernal pool species, and water pollution prevention functions. The burden is on the Applicant to demonstrate that the Project meets the Bylaw Performance Standards.

SWB19. The NOI and supplemental information is not sufficient to describe the work or the effect of the work on the interests identified in the M.G.L. c 131 section 40 and the Bylaw. Quantify the permanent impacts to Bylaw RA from the Project, including areas that will be stabilized with seed only.

Provide mitigation for the permanent impacts to Bylaw RA as required by Section 7.2 and 7.10 of the Sudbury Wetland Regulations. Stabilization of temporarily impacted Bylaw RA does not qualify as mitigation for the permanent impacts, as these measures are required to mitigate for the temporary impacts.

Provide plans depicting the habitat restoration elements (dead trees, brush piles, forage) proposed within the Bylaw RA on the Site.

BETA3: Requested information was not provided. Recommendations:

- **Provide mitigation for permanent impacts to RA associated with the trail, duct bank installation, and shoulders as required under the Bylaw. Note plantings currently proposed are not mitigation for permanent impacts, as they are required for mitigate for the temporary impacts.**

- **Provide habitat restoration plans**
- **Revise permanent Bylaw RA impacts to include areas that will be maintained (mowed), as these areas will not ever fully restore to existing conditions.**

VHB2: [This is a new comment provided by BETA.] The Project is proposing supplemental shrub plantings in RFA as shown on the plans and as described in the August 7, 2020, supplemental submission. In addition, the plans have been revised to include information on mitigation for large woody debris and fallen logs within one meter of the water's surface. The Project also has an overall comprehensive mitigation package as described in the VHB2 response to SWB7.

BETA4: Additional mitigation is now proposed within RA (see WPA39-BETA4 and SWB7-BETA4), however, areas that will be maintained are still quantified as temporary impacts (see C2-BETA4). Applicant has not demonstrated how the proposed mitigation will meet the 2:1 Bylaw mitigation requirement.

VHB3: The Applicants have demonstrated that the substantial restoration requirement has been met. See the VHB3 response to Comment SWB17 regarding the "mitigation requirement" of the local regulations.

Bridge Construction Impacts

BETA3: The second round of comments (BETA2) for comments the Bridge Comments below (B1-4) were addressed separately under the stormwater review due to the timing of supplemental submittals from VHB. However, BETA recommends providing crane mat cross sections using existing topography.

BETA4: See W21-BETA4.

VHB3: See VHB3 response to Comment W21.

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

VHB: See the response to Comment WPA6: [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].

BETA2: BETA recommends a condition requiring the contractor to provide detailed plans to verify impacts prior to pre-construction meeting.

VHB2: The Applicants will agree to a condition requiring the submission of crane mat plans to the Commission prior to commencement of placement of the mats.

VHB3: No additional BETA comments were provided; no response required.

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

VHB: See the response to Comment WPA6.

VHB3: No additional BETA comments were provided; no response required.

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

VHB: 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.

BETA2: BETA defers to the Commission on this issue.

VHB2: Certified divers will cut the existing timber piles at the mud line by hand to avoid sediment suspension. The use of divers to cut the existing piles at the mud line is the most effective way to ensure that there is no prolonged increase in turbidity in the waterbody. Work will be scheduled and completed during low flow conditions.

By cutting the existing timbers at the mud line and maintaining a uniform water column, the Project will not alter the public's access to or free passage over and through this waterbody, including the ability to float on, swim in, or otherwise move freely within the water column.

VHB3: No additional BETA comments were provided; no response required.

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

VHB: See the response to Comment WPA25.

VHB3: No additional BETA comments were provided; no response required.

Summary

C10. Based on our technical review of the supplemental information submitted, the Applicant has not provided sufficient information to describe the site, the work and the effect of the work on the interests identified in the Act and Bylaw. Therefore, the Conservation Commission can not issue an Order of Conditions approving the work. BETA Group, Inc. will be at the August 13, 2020 public hearing of the Sudbury Conservation Commission to answer any questions regarding our comments

VHB2: The Applicants have provided sufficient information to describe the site, the work and the effect of the work on the interests identified in the Act and Bylaw. Therefore, the Conservation Commission can issue an Order of Conditions approving the work.

VHB3: No additional BETA comments were provided; no response required.

Sincerely,

Katie Kinsella and Gene Crouch

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