



January 19, 2021

Ref: 52711.00

Mr. Mark Avery  
Madbury Planning Board Chair  
Town Offices  
13 Town Hall Road  
Madbury, NH 03823

Re: Town of Madbury Conditional Use Permit Application  
L175 Transmission Line Pole Replacements, Madbury, NH

Dear Mr. Avery:

On behalf of Public Service Company of New Hampshire d/b/a Eversource Energy (PSNH), VHB is submitting this Conditional Use Permit Application to the Town of Madbury Planning Board for proposed utility maintenance on the existing L175 transmission line in Madbury, NH. This Conditional Use Permit is being submitted in accordance with *Article IX, Section 4(C)* of the Town's Zoning Ordinance. A Conditional Use Permit is required for the proposed maintenance work to allow temporary impacts to wetlands and streams and wetland buffers protected under the Wet Areas Conservation Overlay District.

**Project Description**

PSNH intends to replace nine (9) poles along the L175 Transmission Line in the Town of Madbury. The proposed work will occur within the existing, cleared transmission rights-of-way (ROW) and no additional widening of the ROW is proposed. Construction is anticipated to start in early 2021. The poles to be replaced consist of laminated wood poles that will be replaced with weathered steel to meet current industry standards. The poles will be installed within 10 feet of the original pole location except for Structure 143 that will be replaced in its existing location. Generally, adjustments are made to pole locations to account for existing conditions in the ROW and for access during construction. Pole height increases are necessary to maintain minimum clearance safety standards and balance line sag. The proposed height changes are detailed in **Table 1** below.

**Table 1: Existing and Proposed L175 Line Utility Pole Heights**

| Utility Pole Number | Existing Height | Proposed Height |
|---------------------|-----------------|-----------------|
| 137                 | 95              | 90              |
| 138                 | 95              | 100             |
| 139                 | 90              | 95              |
| 140                 | 90              | 95              |
| 141                 | 90              | 95              |
| 142                 | 95              | 100             |
| 143                 | 80              | 85              |
| 144                 | 80              | 85              |
| 145                 | 80              | 85              |

2 Bedford Farms Drive  
Suite 200  
Bedford, New Hampshire 03110  
P 603.391.3900  
F 603.518.7495

Engineers | Scientists | Planners | Designers



### **Project Need**

The existing poles have been identified for asset condition replacement (ACR) during Eversource annual maintenance inspections. The existing L175 poles are laminated wood poles that are showing signs of distress, requiring replacement. The proposed replacement work is part of PSNH's on-going maintenance program conducted to ensure reliable electric service for their customers.

### **Project Execution**

Prior to construction, Eversource contractors will install erosion control and sediment control barriers in accordance with permitting plans, the New Hampshire Department of Environmental Services (NHDES) conditions, and the *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* ('Utility BMP Manual,' March 2019), published by the New Hampshire Department of Natural and Cultural Resources (NHDNCR). Selected BMPs may include silt sock, silt fence, or wood chip/compost berms/tubes. Wetland and stream resources, previously delineated by environmental consultants working for Eversource, will be verified by VHB and reflagged to assist crews prior to the start of construction. Construction crews will utilize existing established access (where present) within the limits of the ROW corridor off Madbury Road to reach the poles targeted for replacement.

Construction crews will utilize timber matting to gain access across several wetlands and a stream within the vicinity of the proposed replacement work. Timber mats will also be set up around the base of the poles if the work pad around the pole intersects wetlands, as with Structures 138, 141, 142, 143, 144, and 145. The timber mats provide a stable work area to stage crews and equipment. The use of timber mats is a routine practice that reduces the impact of heavy equipment on saturated wetland soils by dispersing the equipment weight, preventing the formation of ruts, and minimizing soil erosion. Stream crossings will be bridged by timber mats (from bank to bank) in order to avoid direct stream impacts and to not obstruct stream flow. Furthermore, timber mats will be used in upland areas throughout the ROW to eliminate the need to construct access roads to the poles. This effort to minimize impacts was negotiated with the underlying landowners.

Traditional augering and installation procedures will be used. All excavated spoils will be spread within an upland area of the project ROW (outside of NHDES jurisdiction) or will be trucked off-site and properly disposed of. Construction laydown areas used to store materials and equipment along the project ROW will be in upland areas or matted areas. A laydown area has been designated along Madbury Road and will be matted to protect wetlands in this area. Contingent upon permit approval, work is proposed to commence in early 2021.

Erosion controls will be inspected daily by the crews and weekly by an environmental monitor to ensure that the BMPs are maintained throughout the duration of the project. Matting and other construction debris will be removed upon completion of the proposed work. Erosion controls will not be removed until project work is complete, and the project area is stabilized in accordance with NHDES guidance. Due to the use of timber mats, it is anticipated that minimal restoration within the ROW will be needed and that natural vegetative re-colonization of impacted areas will occur during summer vegetative growth periods. VHB will revisit the ROW during this time period to confirm vegetative regrowth. If necessary, an approved upland and/or wetland seed mix outlined in NHDES guidance manuals, will be applied to any areas where cover is slow to develop. Additionally, straw or weed-free hay will be applied in conjunction with seed.



### **NH Department of Environmental Services Notification**

In accordance with NH RSA 482-A:3, XV, routine utility maintenance work is exempt from the standard wetland permitting process at the state level. However, Eversource is required to submit a Utility Maintenance Statutory Permit-by-Notification (SPN) to NHDES to cover the temporary wetland impacts associated with use of timber matting within wetlands required to complete the replacement work on the L175 line. VHB is currently assisting Eversource with this filing. As part of the NHDES SPN process, The Town of Madbury will receive a copy of this filing.

### **Conditional Use Permit Procedures and Requirements**

Madbury Zoning Ordinances provide that Conditional Use Permit (CUP) applications can be approved for limited and regulated uses by the Planning Board if it is found that the use is consistent with the ordinances and do not have an adverse impact on the wet areas. A CUP may be issued in accordance with the approval criteria within Article IV, Section 9(D).

#### ***1. The site is suitable for the proposed use.***

The site is an existing maintained utility corridor suitable for power transmission. PSNH holds an easement for overhead transmission line on the affected properties. The easement area currently contains three transmission lines. The project proposes maintenance activities on one of the existing transmission lines in the corridor within the Town of Madbury. The proposed work will not change the spatial orientation of the lines within the ROW or the use of the site. Access roads will be built to temporarily access the work sites. The use does not require public services.

#### ***2. The impacts of the proposed use on abutting properties and the neighborhood shall be no greater than the impacts of adjacent existing uses or other uses permitted in the zone.***

The impacts of the proposed use on abutting properties and the neighborhood will not exceed the impacts of adjacent existing uses because there is no change in use. The proposed project includes the replacement of nine existing laminated wood poles with nine weathered steel poles. The replacements will not result in a post-construction increase in noise, odor, vibrations, or lighting. The poles will be slightly taller, as described above, and will have a darker brown appearance than the existing wood poles. Crews will operate during daytime hours (7am – 7 pm during the week).

#### ***3. Character of the site development shall be compatible with the established character of the neighborhood and shall mitigate any external impacts of the use on the neighborhood.***

As discussed above, the proposed use is limited to the maintenance of existing transmission poles that are compatible with the established character of the neighborhood. The proposed project will not change the nature of the existing site as a transmission line corridor. Transmission poles will be constructed in proximity to the existing poles with moderate differences in visual appearance and height of the poles.

#### ***4. Preservation of natural, cultural, historic, and scenic resources.***

The proposed pole replacement requires temporary impact to wetlands and a stream for access to the poles and for the establishment of work pads to stage construction equipment and work crews. No permanent wetland or stream impacts are proposed. The project has been carefully designed following a site visit to avoid and minimize impacts to jurisdictional resource areas to the maximum extent practicable.



Within the Town of Madbury, approximately **55,119 sq. ft.** of temporary wetland impacts is required for the placement of timber matting. Access will also result in approximately **34,821 sq. ft.** of temporary wetland buffer impact. All work will be completed in accordance with the Best Management Practices for Utility Maintenance in New Hampshire (Utility BMPs).

### **Wetland Verification**

Portions of the proposed project will take place within the Town of Madbury Wet Areas Conservation Overlay District. The District includes all areas identified as wetland, as defined by the State, poorly drained and very poorly drained soils, and vernal pools as identified in *Article IX, Section 2*. Under *Section 3*, the provisions of *Article IX* apply to all wet areas and adjacent buffers except isolated, non-tidal wet areas with a contiguous surface area of less than 3,000 square feet and wetlands associated with currently functioning and maintained, non-abandoned, man-made swales, basins, etc. Wetland setbacks and buffers are defined in *Section 5*. Building and septic setbacks do not apply to this project, but a 25-foot wetland buffer does apply to jurisdictional wetlands within the proposed project area.

Wetlands within the L175 line ROW were previously delineated in support of past Eversource maintenance work. Previously delineated wetlands will be field verified and reflagged by VHB Environmental Scientists to assist crews prior to the start of construction. Wetland verification will be performed in accordance with the procedures and standards outlined in the *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (January 2012). Wetland delineation will also rely upon the *Field Indicators for Identifying Hydric Soils in New England, Version 4.0*, published by the New England Interstate Water Pollution Control Commission, and the *Field Indicators for Identifying Hydric Soils in the United States, Version 8.2* (published by the Natural Resources Conservation Service). Dominant wetland vegetation will be assessed using the *2018 National Wetland Plant List* published by the U.S. Army Corps of Engineers. Wetlands will be classified using the USFWS methodology *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979, revised 1985). Wetland functions and values will also be assessed using the *U.S. Army Corps of Engineers Highway Methodology Workbook Supplement* (September 1999).

The proposed project will not negatively impact the existing wetlands. Some temporal loss of wetland function as wildlife habitat is expected during construction. However, use of timber mats reduces the timeframe of impact by minimizing impact to the root structure of the plants so that revegetation happens faster.

### **Property Ownership and Abutters**

All proposed work will occur within the limits of an existing electric utility ROW that is held as easement by the Public Service Company of NH. All owners of parcels where impacts to the Wet Areas Conservation Overlay District are to occur, as well as owners of parcels who abut or are located across the street from these properties will be notified of the proposed project in accordance with the Town of Madbury's Conditional Use Permit application process. The list of owners and abutters and the associated tax maps are attached.

Town of Madbury  
Ref: 52711.00  
Page 5



Please do not hesitate to contact me if you have any questions at (603) 391-3951 or [strefry@vhb.com](mailto:strefry@vhb.com).

Sincerely,

A handwritten signature in black ink that reads "Sherrie Trefry".

Sherrie Trefry, CSS  
Director of Energy and Environmental Services

cc: Jeni Menendez, Eversource

Attachments:

Town of Madbury Conditional Use Permit Application Form  
Abutters List & Tax Map  
Project Plans