

56 Prospect Street P.O. Box 270 Hartford, CT 06141-0270

**Kathleen M. Shanley** Manager – Transmission Siting Tel: 860-728-4527

May 17, 2022

Ms. Melanie Bachman, Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

Re: Petition 1486 - The Connecticut Light and Power Company d/b/a Eversource Energy petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed 400/500 Lines Rebuild Project consisting of the upgrade of the existing No. 400 69-kilovolt (kV) electric transmission line to 115-kV and the replacement and reconductoring of electric transmission line structures along 8.6 miles of the existing No. 400 electric transmission line within existing Eversource electric transmission line right-of-way between Ledyard Junction in Ledyard and Tunnel Substation in Preston; and the replacement and reconductoring of electric transmission line structures along approximately 4.9 miles of the existing No. 500 69-kV electric transmission line within existing Eversource electric transmission line right-of-way between Hallville Junction in Ledyard and Tunnel Substation in Preston Connecticut, and related electric transmission line and substation improvements.

#### Dear Ms. Bachman:

In accordance with Condition 2 of the Connecticut Siting Council's ("Council") approval of the above-referenced petition, dated May 13, 2022 (the "Approval"), please see the attached copy of the results of the Visual Impact Assessment that was provided to the Connecticut State Historic Preservation Office ("SHPO") on February 3, 2022. Eversouce is currently in communication with the SHPO on potential mitigation options, as may be required as a result of the Project.

Regarding Condition 3 of the Approval, in accordance with your letter to Kathleen Shanley, dated May 17, 2022, Eversource understands that construction may commence in areas outside of the jurisdictional wetland that is the subject of the pending Section 401 Water Quality Certificate ('WQC") prior to its issuance. Eversource will provide the Council with a copy of the WQC when it is issued and will not commence construction activities in the jurisdictional wetland until such time as the work is approved.

In accordance with Condition 5 of the approval and based on the foregoing, Eversource hereby provides notice to the Council that construction of the project is scheduled to commence on May 31, 2022.

Should you have any questions, please do not hesitate to contact me via e-mail at <a href="mailto:kathleen.shanley@eversource.com">kathleen.shanley@eversource.com</a> or telephone at (860) 728-4527.

Sincerely,

Kathleen M. Shanley



February 3, 2022

Ms. Marena Wisniewski Environmental Review Connecticut State Historic Preservation Office 450 Columbus Boulevard, Suite 5, Hartford, Connecticut 06103

RE: Above-Ground Cultural Resources Review of the Proposed Eversource Energy Line 400/500 Project in Ledyard and Preston, Connecticut

Ms. Wisniewski,

During the fall of 2021 and the winter of 2022, Heritage Consultants, LLC (Heritage) worked in coordination with Eversource Energy (Eversource) and BSC Group (BSC) to complete cultural resources investigations of project items associated with the Line 400/500 Rebuild Project (the Project) in Ledyard and Preston, Connecticut. This project requires authorization under the USACE CT General Permit, currently eligible for Self-Verification, as well as Connecticut Siting Council (CSC) permitting requirements. This undertaking has included studies of both potential archaeological impacts to the Project items (structure locations, pull pads, and access roads) and potential viewshed alterations to nearby National Register of Historic Places (NHRP) listed properties.

Due to the Project's need to meet current engineering and National Electrical Safety Code (NESC) clearance requirements, Eversource plans to replace the existing H-frame wooden structures along the Project corridor with taller monopole structures. This will allow acceptable vertical separation of the electrical circuits within the Project corridor. The heights of the existing structures range from 38 to 80 feet above ground level and many of the replacement structures will be taller due to the change in design from a horizontal to a vertical configuration. The replacement structures will range in height from 85 feet to 125 feet above ground level. Replacement structures for the 400/500 Lines will be taller than the corresponding existing structures by between approximately 15 and 68 feet. The average height increase of the replacement structures will be approximately 45 feet. The Project team recognizes the potential for the monopoles to extend above the tree lines on the eastern and western southern edge of the Project corridor. This prompted the Project team to consider that the monopoles may be visible from nearby historical resources either listed on or eligible for listing on the NRHP.

At the request of Eversource and BSC, Heritage researched and identified all previously recorded NRHP listed and eligible properties/districts within one-half mile of the Line 400/500 corridor. This resulted in the identification of four NRHP properties and their contributing elements. They include the David Chapman Farmstead, the Long Society Meetinghouse, the Poquetanuck Village Historic District, and the Hallville Mill Historic District. Each of these resources is reviewed briefly below.

# **David Chapman Farmstead**

The David Chapman Farmstead, which was listed on the NRHP in 1992, contains a historic house located at 128 Stoddards Wharf Road in Ledyard, Connecticut. The residence was built in ca., 1744 and it is a well-preserved example of a vernacular rural farmhouse that was constructed by a descendant of one of Ledyard's early settlers. The farmstead also contains a historical barn, shed, and privy, all of which are

Ms. Wisniewski February 2, 2021 Page 2

set back from the main house and away from Stoddards Wharf Road. The David Chapman Farmstead is considered significant under Criteria A and C of the NRHP criteria for evaluations (36 CFR 60.4 [a-d]) and according to the nomination form is an important part of the agricultural heritage of Ledyard from the eighteenth century.

#### Long Society Meetinghouse

Listed on the NRHP in 1976, the Long Society Meetinghouse is located at 45 Long Society Road in Preston, Connecticut. This building is a historical church that was built in the colonial broad side style. It is one of few surviving meeting houses built in this style and it last example of its type in Connecticut that has not been altered from its configuration. The Long Society Meetinghouse was built between 1817 to 1819 on the site of an earlier meetinghouse and it retains some elements of the earlier building. This building is considered significant for its architecture and religious function for the period of 1800 to 1899. The nomination form does not specify under which criteria for evaluation (36 CFR 60.4 [a-d]) the building was listed on the NRHP.

# Poquetanuck Village Historic District

Poquetanuck Village Historic District was listed on the NRHP in 1996. According to the NRHP nomination form it includes eighteenth and nineteenth century residences and buildings along Main Street in Preston, Connecticut. The district also stretches along Schoolhouse Road and Cider Mill Road. The buildings in the district conform to the Victorian, Greek Revival, and Gothic Revival styles. They include examples of residences, cottages, a church, stores, social clubhouses, two stone mill dams, and portions of the Lucas Mill. According to the NRHP nomination form, the Poquetanuck Village Historic District is represented by primarily by village residences that convey the development of a small scale New England coastal trading and manufacturing center. The resources remaining within the district retain integrity and as of 1996 possessed the identity of location, feeling, and association of a center of colonial and nineteenth century daily life for the period of 1720 to 1920. Thus, the district was considered significant under Criteria A and C of the (36 CFR 60.4 [a-d]) for its association with Architectural, Commercial, and Industrial elements.

#### Hallville Mill Historic District

The Hallville Mill Historic District was listed on the NRHP in 1996 and is located in f Preston, Connecticut. It includes a dam that forms Hallville Pond, historical manufacturing buildings and worker housing, and the Hallville Mill Bridge. The latter is a lenticular pony truss bridge that as erected in ca., 1890 by the Berlin Iron Bridge Company. The Hallville portion of Preston is a historical textile mill village that developed around the local production of woolen cloth during the late eighteenth century. The area was industrialized during the early and mid-nineteenth century when Joseph Hall built the existing woolen mill there. The 1996 NRHP nomination form indicates that the Hallville Mill Historic District is significant as an "intact representative small-scale 19th-century mill village containing a high concentration of contributing buildings and structures built as components of a company-owned town based initially on so-called Rhode Island manufacturing system." As such, the district was listed on the NRHP under Criteria A and C of the (36 CFR 60.4 [a-d]) for its association with Architectural, Engineering, Industrial, and Social History between 1850 and 1950.

### <u>Analytical and Field Methods</u>

Due to the nearby location of the above-referenced NRHP properties, Heritage and BSC worked collaboratively with Eversource to determine if any of the proposed monopoles associated with Line

Ms. Wisniewski February 2, 2021 Page 3

400/500 would be visible from these locations and if increased visibility might affect the integrity of setting of the NRHP properties. This was achieved by completing a viewshed analysis, which was prepared by BSC. The viewshed analysis is a predictive computer model that is developed using ESRI's ArcMap GIS software and available GIS data. It incorporates various data, including the locations, ground elevations, and height of the proposed monopoles, as well as the surrounding topography, existing vegetation type and height, and existing structures (i.e., the primary features that can block direct lines of sight).

A digital surface model ("DSM"), which captured both the natural and built features on the Earth's surface, also was generated using State of Connecticut LiDAR LAS data points. LiDAR is a remote-sensing technology that develops elevation data by measuring the time it takes for laser light to return from the surface to the instrument's sensors. The varying reflectivity of objects also means that the "returns" can be classified based on the characteristics of the reflected light, normally into categories such as "bare earth," "vegetation," "road," "surface water" or "building." Derived from the 2016 LiDAR data, the LAS datasets contain the corresponding elevation point data and return classification values. The DSM incorporates the first return LAS dataset values that are associated with the highest feature in the landscape, typically a treetop, top of a building, and/or the highest point of other tall structures, in this case electrical transmission structures.

Once the DSM was generated, ESRI's Viewshed Tool was utilized to identify locations of the NHRP properties from which the proposed monopoles may be visible. ESRI's Viewshed Tool predicts visibility by identifying those cells within the DSM that can be seen from an observer location, in this case a historical property. Cells where visibility was indicated were extracted and converted from a raster dataset to a polygon feature that was then overlaid onto aerial photograph base maps. In addition, for the purposes of this analysis, the Viewshed Tool was utilized to calculate the approximate amount of the proposed monopole structures that may be visible above the surrounding tree canopy by assigning a range of height values to the proposed structures.

# Results of the Viewshed Analysis and Pedestrian Survey

The viewshed analysis considered potential effects of the increase in height of Structures 7039 to 7049 on the David Chapman Farmstead, Structures 7098 through 7106 on the Long Society Meetinghouse, and Structures 7063 through 7083 on the Poquetanuck Village Historic District and the Hallville Mill District.

The viewshed analysis suggested that Structures 7039 through 7041 and 7043 through 6049 would not be visible from the David Chapman Farmstead. It did suggest, however, that Structure 7042 might have visibility from the farmstead. Heritage staff conducted a pedestrian survey of the area to examine potential viewshed issues associated with Structure 7042. It was determined that even though the upper limits of the proposed structure may be visible from the David Chapman Farmstead, it would only be seen for a few months of the year when the leaves were off the trees. Thus, it was determined that the viewshed alteration was minimal and did not constitute an adverse effect on the David Chapman Farmstead.

In addition, the results of the viewshed analysis indicated that the construction of Structures 7098 through 7106 would not have any effect on the Long Society Meetinghouse. This area also was subject to pedestrian survey by Heritage staff to determine the characteristics of its local surroundings. It was

Ms. Wisniewski February 2, 2021 Page 4

clear that the proposed structures along Line 400/500 would not be visible due to distance from the Project corridor, as well as intervening vegetation and significant topographic relief between the two areas.

The viewshed analysis also was completed for an area that encompasses both the Poquetanuck Village Historic District and the Hallville Mill District, the boundaries of which overlap along Hallville-Poquetanuck Road. The viewshed analysis considered potential visual impacts from Structures 7063 through 7083 in these areas. It was determined that the proposed structures in the eastern portion of the Poquetanuck Village Historic District and the southern and central portions of the Hallville Mill District may be visible from nearby historical resources within the Poquetanuck Village Historic District, especially in the vicinity of the intersection of Lincoln Park Road and Poquetanuck Road (Route 117). This also was confirmed during the subsequent pedestrian survey, which revealed that much of this area is open and level.

Portions of the Poquetanuck Village Historic District further to the west near Schoolhouse Road, Cider Mill Road, and Shingle Point Road have significantly lower levels of potential impact by the construction of Structures 7063 through 7083 due to distance, intervening vegetation, and a long sweeping curve in Poquetanuck Road. In addition, portions of the Poquetanuck Village Historic District that are located in the immediate vicinity of Line 400/500 have been infilled to include Preston Community Park, ball parks in the Milton Memorial Field, a large number of new buildings associated with Hart's Greenhouse and Florist, as well as new commercial and residential constructions. The latter include the new Poquetanuck Fire Department building and a nearby warehouse that is owned and operated by the Overhead Door Company of Norwich. These recent constructions have had some impact on the historical integrity of the Poquetanuck Village Historic District since it was listed on the NRHP in 1996.

The viewshed analysis also suggested that the historical resources located within the Hallville Mill District may be susceptible to increased levels of visibility due to height increases to Structures 7063 through 7083 including those built resources along the northeastern side of Hallville-Poquetanuck Road, as well as those situated near Lincoln Park Road Extension. These include worker's houses associated with the Hallville Mill, as well as the mill and the associated historical constructions around it. Visual inspection of these areas indicates that although some have been updated over time, the bulk of the historical building stock in this area retains integrity. The pedestrian survey also suggested that the viewshed impacts to most of the resources within the Hallville Mill District will be limited since most of them are within areas that contain tall trees and limited views towards the Project corridor.

Eversource recognizes the importance of the Poquetanuck Village Historic District and the Hallville Mill Historic District and seeks consultation from the CT-SHPO to determine potential ways to offset potential impacts to these two NRHP listed properties. If you have any questions regarding this letter, please do not hesitate to contact me at (860) 299-6328. Alternatively, you may contact me via email at dgeorge@heritage-consultants.com. We are at your service.

Sincerely,

David R. George, M.A., R.P.A.

Heritage Consultants, LLC

Deul R. Hurye