

# STATE OF NEW HAMPSHIRE

## Intra-Department Communication

**DATE:** March 28, 2022

**AT (OFFICE):** NH Dept. of Energy

**FROM:** Michael Soucy *MRS*  
Utility Analyst IV – Division of Enforcement

**SUBJECT:** CRE 2022-009 Eversource Energy  
Petition for License and License Amendments to Construct and Maintain Electric Lines Over and Across State Owned Land and Public Waters in Bow, Concord and Pembroke, New Hampshire.

Division of Enforcement, **Safety Bureau Recommendation**

**TO:** Jared Chicoine, Commissioner, Department of Energy  
Christopher Ellms, Jr., Deputy Commissioner, Department of Energy

**CC:** Thomas Frantz, Director of Regulatory Support Division  
Paul Kasper, Director, Enforcement Division  
Elizabeth Nixon, Director-Electric Regulatory Support Division

The Division of Enforcement's review of the above petition consisted of the following elements:

- Petition contents, replacement petition contents, and history.
- Applicable State statute.
- Review of the existing crossing(s) previously licensed by the PUC, if any.
- Review of land ownership of existing pole structures.
- Review of NESC code requirements as described in Puc 300.
- Review of public need and public impact, including applicability of other State regulations; and
- Conclusions and Recommendations.

### 1. Petition contents and history

On March 23, 2022, Public Service New Hampshire d/b/a Eversource Energy (Eversource, or ES) filed a petition for a license pursuant to RSA 371:17 to construct and maintain the Eversource M108 Line, which is an existing 115kV transmission line that crosses public land and public waters in Bow, Concord and Pembroke New Hampshire.

In order to meet the requirements for reasonable service to the public, Eversource has previously constructed and currently operates and maintains an overhead 115 kV electrical transmission line, designated as the Eversource M108 Line, originally constructed in 1951 as the V-182 and rebuilt in 2007, and later redesignated the M108, over and across public waters and State-owned land in Concord, Bow, and Pembroke, New Hampshire. The public water crossing at the Merrimack River that is included in this petition was previously

licensed in 2007 under DE 08-064 (Order No. 24,859). The State-owned land that is also included in this petition was not previously licensed, either owing to an oversight or because the land at issue was not State-owned at the time of the line's construction.

As part of its ongoing asset condition inspection program, Eversource determined that certain existing wood structures at the Merrimack River crossing and State-owned land crossing spans that are the subject of the petition, Structures 3, 25, 26 and 28, need to be replaced promptly to continue to function safely and reliably. Those structures will be replaced with weathering steel equivalents that will be located within 10 feet of the original structure location. The State-owned land includes structures spanning from Structure 25 to 32, but this petition only seeks to license work on the State-owned land within a subset of those structures from Structure 25 to 29, to accommodate the need for prompt replacement of Structures 25, 26 and 28 owing to asset condition. The entirety of the M108 Line will be rebuilt in 2023 and the State-owned land span will be licensed at that time. The replacement of Structures 25, 26 and 28 petitioned for herein will be incorporated into the rebuild design. The M108's existing conductor specifications identified on Exhibit 2 and 3 submitted by ES, will be unchanged in the course of relocation to the replacement steel structures.

The location of the public water crossings and State-owned land crossing which are the subject of this petition were depicted on the Overview Map as Exhibit 1 and a more detailed location description is as follows:

Exhibit 2 submitted by ES shows that, The M108 Line crosses the Merrimack River in Bow and Concord between Structures 2 and 3, which span commences near the end of Garvins Falls Road in the Town of Bow, approximately 265 feet south of where Garvins Falls Road crosses the existing Pan Am railroad and extending east approximately 532 feet to the east bank of the Merrimack River, to Structure 3. That easterly end of the span is approximately 1,500 feet west from where the M108 Line crosses Garvins Falls Road, which is approximately 1.65 miles southeast from the intersection of Garvins Falls Road and Manchester Street (State Route 3).

Exhibits 3 and 4 submitted by ES show that, the M108 Line crosses a State-owned land parcel associated with NH National Guard Facility in the Town of Pembroke between new Structures 25 and 29, which span starts approximately 3,500 feet northeast from where the M108 Line crosses Pembroke Road (State Route 3), which is approximately 1,300 feet northwest from the intersection of Pembroke Street (State Route 3) and Sheep Davis Road (State Route 106). The portion of that State-owned land parcel encompassing the structure replacements petitioned for herein, between Structure 25 to Structure 29, extends approximately 1,920 feet north to the interior of the State-owned parcel. The balance of the State-owned land span from Structure 29 to Structure 32 extends north approximately 1341.5 feet to the State-owned land boundary, which coincides with the southern bank of the Soucook River, which is approximately 2,100 feet south from where the M108 Line crosses Chenell Drive, which is approximately 750 feet west from the intersection of Chenell Drive and Sheep Davis Road (State Route 106).

The location of structures 2 to 3 creates a total span of 818.2 feet, with a span of 532.7 feet over and across public water. The locations of structures 25 to 29 creates a total span of 2184.7 feet, with a span of 1920.6 feet over and across State-owned land.

The following table provides the summary of this petition with all crossings to include structure numbers, types, spans, ES design criteria, and NESC compliance:

**Department of Energy Safety Bureau Summary Table**

<b>Eversource M108 Line Rebuild - State Land and Public Water Crossing Details</b>						
<b>Structure</b>	<b>Type</b>	<b>Span (Pole to Pole)</b>	<b>Distance (feet)</b>	<b>Minimum NESC Table 232-1 Clearance (ft.)</b>	<b>ES Vertical Design Clearance (ft.)</b>	<b>Complies with NESC Table 232-1 (Y/N)</b>
2	Type DA Weathering Steel, CL1	2-3	818.2	18.6	43.3	Y
3	Type ADS-1 Weathering Steel, CL-H1					
25	Type ADS-1 Weathering Steel, CL-H1	25-26	585.9	20.1	36.8	Y
26	Type ST-1 Weathering Steel, CL-H9	26-27	585.5	20.1	22	Y
27	Type WT-1 Weathering Steel, CL-H3	27-28	511.8	20.1	21.4	Y
28	Type ST-1 Weathering Steel, CL-H9	28-29	501.5	20.1	24.5	Y
29	Type WT-1 Weathering Steel, CL-H3					

## **2. New Hampshire statute referenced in petition**

**371:17 Licenses for New Poles.** – Whenever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a pipeline, cable, or conduit, or a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of this state, or over, under or across any of the land owned by this state, it shall petition the department of energy for a license to construct and maintain the same. For the purposes of this section, "public waters" are defined to be all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the department of energy may prescribe. Every corporation and individual desiring to cross any public water or land for any purpose herein defined shall petition the department of energy for a license in the same manner prescribed for a public utility.

371:17 Licenses for New Poles (2021, 91:260, eff. July 1, 2021)

## **3. Review of existing license(s) and permissions previously granted by the PUC for these locations of the State-owned water in Manchester.**

The public water crossing at the Merrimack River that is included in this petition was previously licensed in 2007 under DE 08-064 (Order No. 24,859) as the V182 Line. The State-owned land that is also included in this petition was not previously licensed, either owing to an oversight or because the land at issue was not State-owned at the time of the line's construction.

In Bow and Concord, the Merrimack River is listed under the category "Public Rivers and Streams" in the Official List of Public Waters (OLPW). The entire list of public waters can be accessed through the following web link:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/olpw.pdf>

Eversource asserts that A New Hampshire Department of Environmental Services (NHDES) wetland Statutory Permit by Notification (SPN) and Shoreland Permit by Notification (PBN) will be required for temporary impacts associated with the structure replacement of the M108 Line and will be obtained prior to commencement of construction.

The U.S. Army Corps of Engineers (ACOE) does regulate the subject portion of the Merrimack River as navigable waters and scope of work discussed in this petition at that crossing location is covered through Self-Verification process under the ACOE New Hampshire Programmatic General Permit #4, provided that there will be no decrease in existing clearances, which is the case for the scope petitioned herein.

## **4. Review of land ownership of proposed pole structures**

In its petition, Eversource specifies that the licensed and unlicensed structures to be replaced and existing conductors pursuant to this petition, cross public land and public waters in Bow, Concord and Pembroke, New Hampshire.

## **5. Review of NESC code requirements as described in Puc 300**

The Safety Bureau reviewed the specifications related to the design and re-construction of this crossing project as described in the petition, attachments, and all supplemental support documents and corrections filed by Eversource and found them to be in conformance with N.H. Admin. Rule Puc 306 and applicable sections of NESC C2-2012.

## **6. Review of public need and public impact**

The M108 Line is an integral part of Eversource's existing electric transmission system in New Hampshire. The crossing locations identified in the petition are in the Towns of Bow, Concord and Pembroke, New Hampshire. The Company asserts in its petition that the existing crossings will be exercised without substantially affecting public rights in the identified State land and public waters in New Hampshire.

The Safety Bureau verified that minimum safe line clearances above the public waters will be maintained at all times and determined that public use and enjoyment of the State-owned land and public water will not be diminished in any material respect as a result of the proposed overhead line crossings.

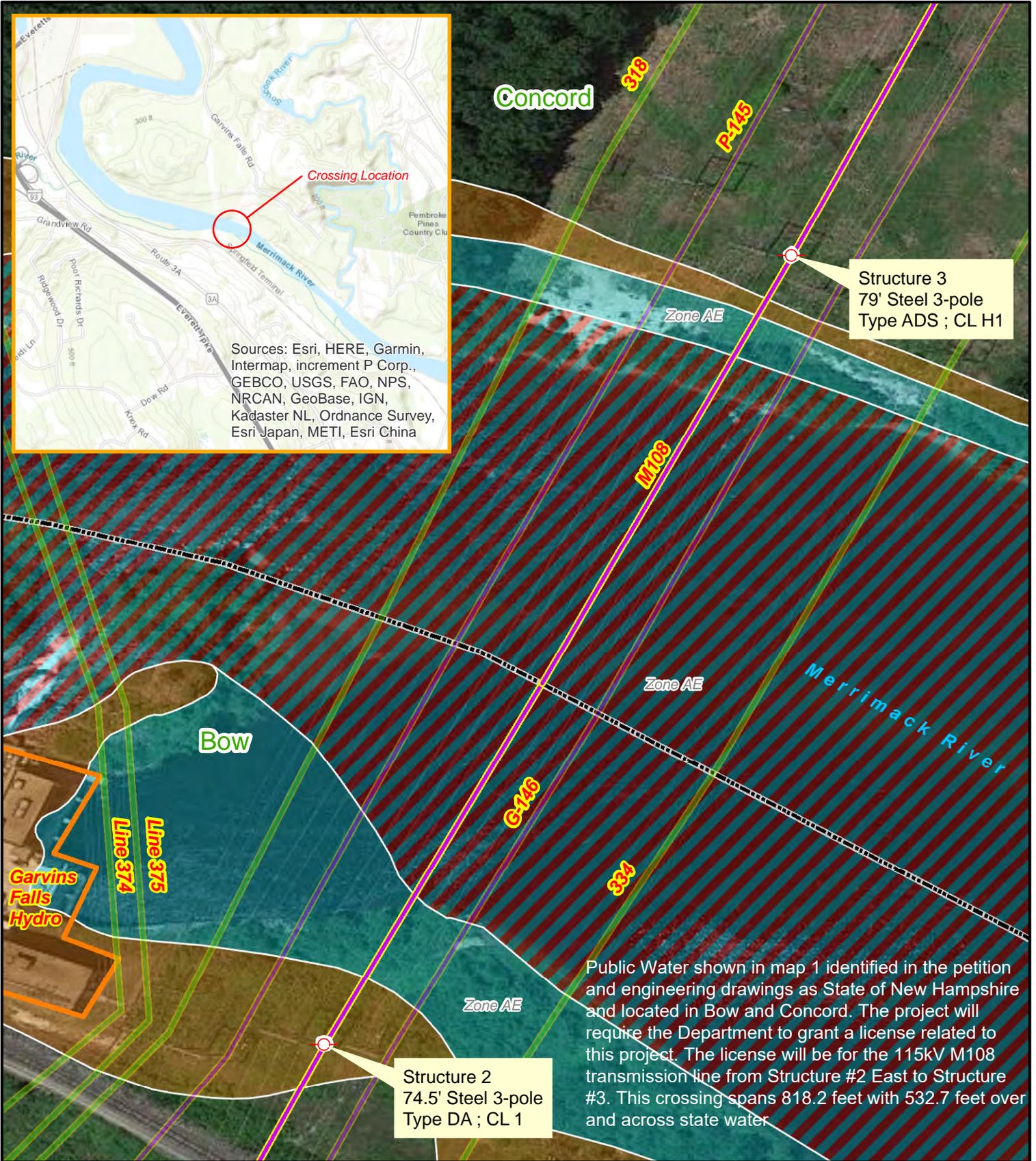
## **7. Safety Bureau Recommendation:**

Based on the results of its review of the petition, attachments, and all other supporting documents, the Safety Bureau recommends that the Department:

- 1) Find that the license Eversource requests in this docket may be exercised without substantially affecting the public rights in State owned land and over and across public waters; and
- 2) Grant Eversource a license to construct, install, operate, and maintain electric lines and communication cables pursuant to RSA 371:17 and Puc 306.01, over and across State owned land and public water in the Towns of Bow, Concord and Pembroke, New Hampshire as specified in the petition.

Attachments

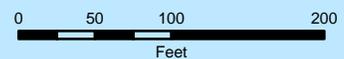
# Merrimack River - CRE 2022-009 Eversource Crossing - Map 1



	Utility Structure	<b>Flood Hazard Zones</b>
	115 kV Line	Regulatory Floodway
	34.5 kV Lines	1% Annual Chance Flood Hazard
		0.2% Annual Chance Flood Hazard

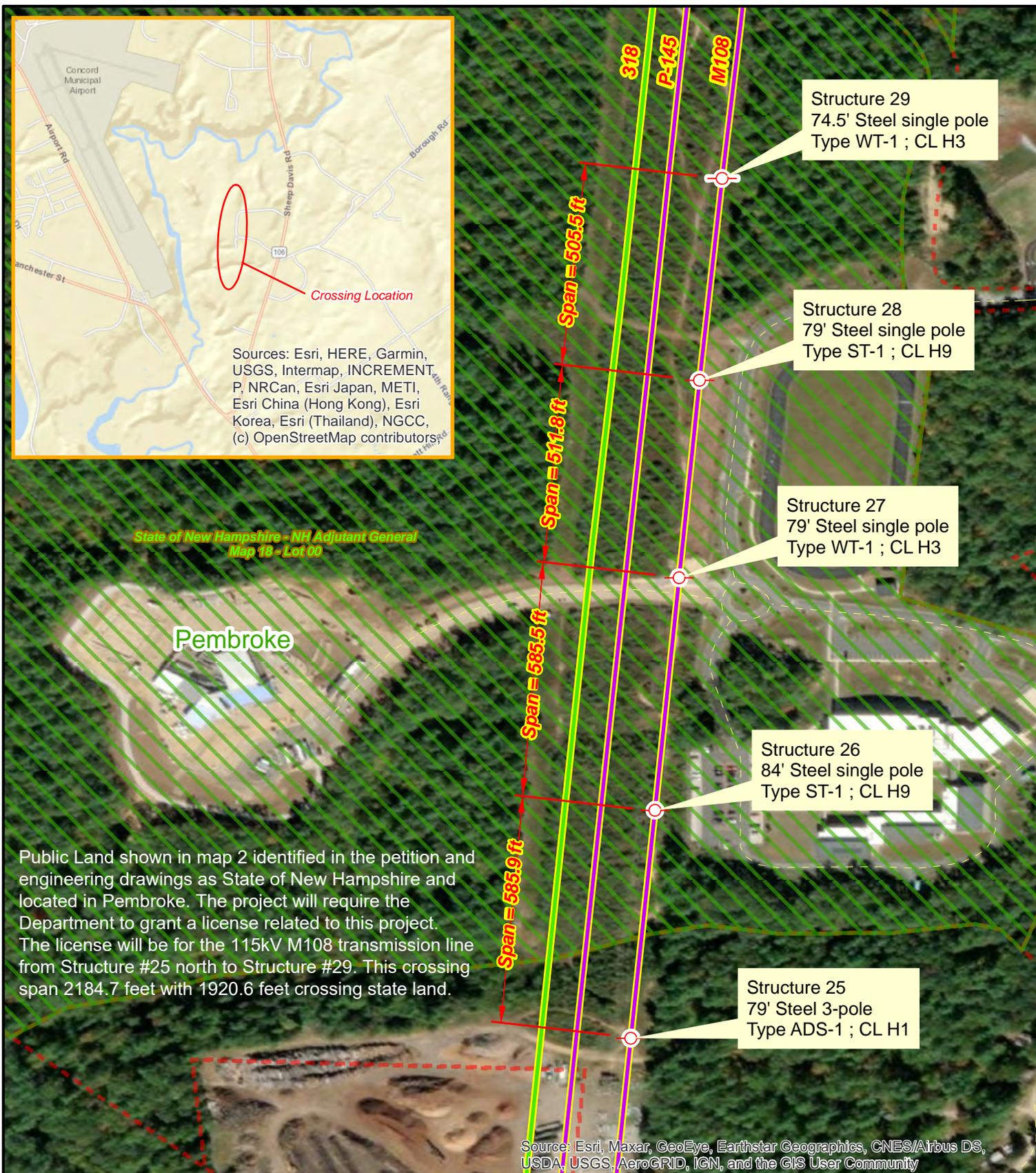


Prepared by:  
NH Department of Energy ; Enforcement Division  
Safety Bureau



Public Water shown in map 1 identified in the petition and engineering drawings as State of New Hampshire and located in Bow and Concord. The project will require the Department to grant a license related to this project. The license will be for the 115kV M108 transmission line from Structure #2 East to Structure #3. This crossing spans 818.2 feet with 532.7 feet over and across state water.

# State Land (NHAG) - CRE 2022-009 Eversource Crossing - Map 2



	Utility Structure		State Land Parcel
	115 kV Line		Town Parcel
	34.5 kV Lines		



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