

STATE OF NEW HAMPSHIRE

Intra-Department Communication

DATE: May 24, 2023

AT (OFFICE): NH Dept. of Energy

FROM: Michael Soucy *MRS*
Administrator III – Division of Enforcement

SUBJECT: CRE 2023-010 Eversource Energy
Application for License to Construct and Maintain Electric Lines over and across public waters and State-owned land in Canterbury, Franklin, and Northfield, New Hampshire.

Staff 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
Andrew Harmon, Hearings Examiner, Enforcement Division

Review by the Division of Enforcement (DOE) of the above application consisted of the following elements:

- Application contents, replacement application contents, and history;
- Applicable State statutes;
- 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. Application contents and history.

On April 19, 2023, Public Service New Hampshire d/b/a Eversource Energy (Eversource, ES or the Company) filed an application for a license pursuant to RSA 371:17 to construct and maintain the Eversource V182 Line, over and across public water and State-owned land in Canterbury, Franklin, and Northfield, New Hampshire.

The Eversource V182 Line is a 115kV overhead transmission line, which was originally built in 1951 and rebuilt in 2007 with wood structures. The proposed project for the V182 Line encompasses the replacement of existing wooden structures in Canterbury, Franklin, and Northfield. ES states that structures 176, 177, 208, 209, 210, 267, 268, and 269 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' of the original structure locations. Structures 176, 177, 208, 209, 210, 267, 268, and 269 will be renumbered to 69, 70, 101, 102, 103, 160, 161, and 162, respectively.

The V182's existing three phase conductors, single OPGW wire, and single static wire will not be changed in the course of performing the structure replacements. Wire specifications are identified on Exhibits 2 through 5 submitted by ES.

The specifications and loading conditions to establish maximum sag for the crossing spans that are the subject of this application were indicated on the Profile View and Cable Schedule of Exhibits 2 through 5 submitted by ES. The conductor clearance requirements pursuant to the 2012 NESC, based on the design conditions at 285 deg F, ground elevation, and the 100-year level, which is more stringent than the 10-year flood level have been met. Staff verified the depicted sag clearances using Sag10 commercial software with the data inputs as stated in the application.

The location of the public water crossings and State-owned land that are the subject of this application are depicted on the Overview Map as Exhibit 1 submitted by ES, and the DOE Maps attached to this recommendation. Exact locations of the structures are expressed with Latitude and Longitude on Exhibits 2 through 5 submitted by ES and a detailed description are as follows:

The V182 Line crosses a State-owned land parcel administered by NH Department of Transportation in the Town of Canterbury and is located between Structures 69 and 70, which span commences approximately 65 feet northwest from where the V182 Line crosses Interstate 93 in Canterbury, which is approximately 1.5 miles north of Exit 18 on Interstate 93. The span continues approximately 89 feet northwest to the property boundary between State-owned land and Map 236, Lot 17 in the Town of Canterbury.

The V182 crosses the Merrimack River and State-owned land in the town of Northfield and City of Franklin between Structures 101 and 102 and 103, which is located east of where the line crosses Route 3 in Franklin, approximately 1.05 miles north of the intersection of Route 3 and Stirrup Iron Road in Boscawen. The first State-owned land boundary (Map 126, Lot 401) commences along the west bank of the Merrimack River and extends west approximately 240' where it abuts another State-owned land parcel, identified as the Northern Rail Trail. The span crosses the second State-owned property parcel, encompassing the Northern Rail Trail corridor which has a width of 35.9'. The Merrimack River crossing occurs within the same span as described above, between Structures 101 and 102. The east bank of the river crossing occurs approximately 0.65 miles west from where the line crosses Fiddlers Choice Road in Northfield.

The V182 crosses Chance Pond Brook and State-owned land in the City of Franklin from Structures 160 to 162 which span commences approximately 30 feet northeast from where the V182 Line crosses Chance Pond Road, which is approximately 90 feet northwest from the intersection of Chance Pond Road and Carr Street. The span continues approximately 523 feet to the northeast bank of Chance Brook Pond. The State-owned land span, identified as the Northern Rail Trail, commences approximately 165 feet northeast from where the V182 Line crosses Garneau Road, which is approximately 365 feet northwest from the intersection of Garneau Road and Carr Street. The span continues approximately 15.9 feet northeast where the State-owned land abuts Map 76, Lot 1.

The location of Structures (new) 69 to 70 in this application creates a total span of 660.3 feet with a span of 89.2 feet crossing State-owned land in the Town of Canterbury.

The location of Structures (new) 101 to 102 in this application creates a total span of 610 feet with a span of 319.9 feet crossing the Merrimack River in the Towns of Northfield and Franklin.

The location of Structures (new) 101 to 103 in this application creates a total span of 985.9 feet with a span of 276.5 feet crossing state-owned land in the City of Franklin.

The location of Structures (new) 160 to 161 in this application creates a total span of 523.3 feet with a span of 244.1 feet crossing the Chance Pond Brook in the City of Franklin.

The location of Structures (new) 161 to 162 in this application creates a total span of 220.7 feet with a span of 88.6 feet crossing State-owned land in the City of Franklin.

The following table provides the summary of this application with the crossing to include structure numbers, types, spans, ES design criteria, and NESC compliance.

Department of Energy, Enforcement Division Summary Table, V182 Line

Existing Structure #	New Structure #	Structure Type	Span (Pole to Pole)	Span Distance (feet)	Minimum NESC Table 232-1 Clearance (ft.)	ES Vertical Design Clearance (ft.)	Complies with NESC Table 232-1 (Y/N)
176	69	Steel 2 pole, T, CLH1	69-70	532.6	18.6	44.2	Y
177	70	Steel 2 pole, T, CLH1					
208	101	Steel 2 pole, T, CLH1	101-102	540.8	20.1	26.9	Y
209	102	Steel 2 pole, T, CLH1					
210	103	Steel 2 pole, T, CLH1	102-103	502.4	20.1	33.4	Y
267	160	Steel 2 pole, T, CLH4	208-209	645.5	20.1	27.8	Y
268	161	Steel 2 pole, P, CLH3	209-210	149.9	20.1	28.4	Y
269	162	Steel 2 pole, P, CLH3	210-211	471.5	20.1	36.0	Y

2. New Hampshire statute referenced in application (as modified by N.H. House Bill 1258 on August 22, 2022).

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, modify a previously licensed installation, or license a previously constructed installation, it shall apply to 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 apply to the department of energy for a license in the same manner prescribed for a public utility. The department of energy may condition any license issued under this paragraph in any manner necessary to assure that the license may be exercised without substantially affecting the public rights in public waters or State-owned lands. Using a non-adjudicative process, the department of energy may reject incomplete or improperly filed applications, and shall, also using non-adjudicative process, issue or deny the license within 90 days of receiving a complete application and all information subsequently requested of an applicant. 371:17 Licenses for New Poles (eff. Aug. 20, 2022)

3. Review of existing license(s) and permissions previously granted by the PUC for this location over and across public water and State-owned land in Canterbury, Franklin, and Northfield, New Hampshire.

The V182 Line crosses State-owned land between existing Structures 176 and 177, 209 and 210, and 268 and 269, which crossing spans were not previously licensed due to the line being built prior to the State having ownership, or due to an oversight. The public water crossings at the Merrimack River between existing Structures 208 and 209 and at Chance Pond Brook between Structures 267 and 268 was previously licensed under DE 08-064 (Order No. 24,859). Structure 208 was subsequently replaced from wood to steel in 2020 and was not licensed due to an oversight. As result of this application, the V182 Line will be licensed in its entirety.

The Merrimack River, from the Juncture of Pemigewasset & Winnipisaukee Rivers in Franklin, are 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) Standard Dredge and Fill permit and a shoreland statutory permit by notification will be required for temporary impacts associated with the structure replacements and will be obtained prior to commencement of construction.

4. Review of land ownership of proposed pole structures.

In its application, Eversource specifies that the structure replacement work will be accomplished within existing right-of-way easements, thereby mitigating impacts and concerns of property owners affected by the project scope.

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

The Enforcement Division staff reviewed the specifications related to the structure replacement work of this crossing project as described in the application, attachments, and all supplemental support documents filed by the Company 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 V182 Line is an integral part of Eversource's existing electric transmission system in New Hampshire. The crossing locations identified in the application are in Canterbury, Franklin, and Northfield, New Hampshire. The Company asserts in its application that the existing crossing will be exercised without substantially affecting public rights in the identified public waters and State-owned land in New Hampshire.

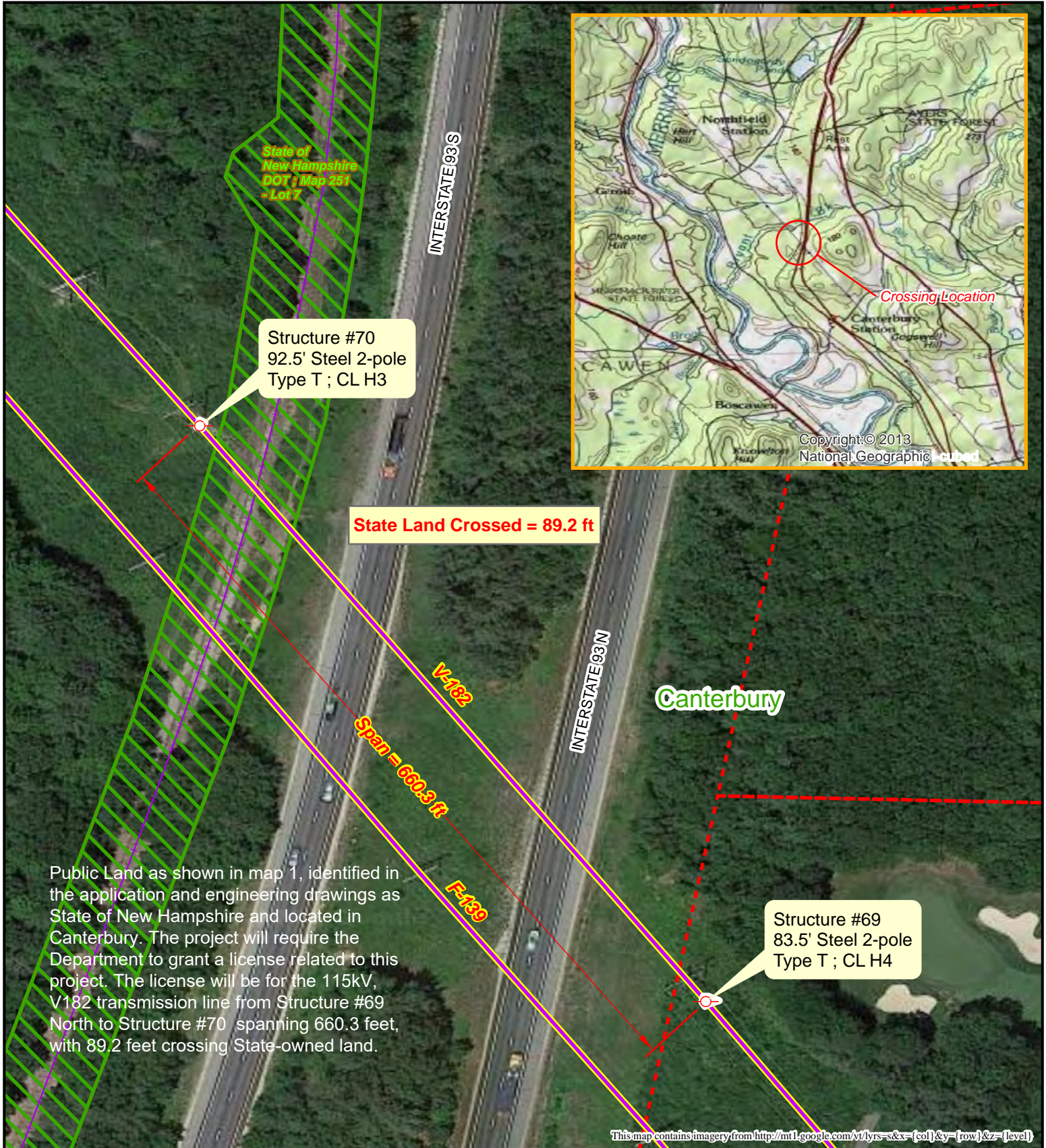
The Enforcement Division staff verified that minimum safe line clearances above the public water and State-owned land will be maintained at all times and determined that public use and enjoyment of the public water and State-owned land will not be diminished in any material respect as a result of the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

7. Enforcement Division Recommendation:

Based on the results of its review of the application, attachments, and all other supporting documents, the Enforcement Division recommends that the Department:

- 1) Find that the license Eversource requests in this application may be exercised without substantially affecting the public rights in public waters and State-owned land; and
- 2) Grant Eversource a license to construct and maintain electric lines pursuant to RSA 371:17 and Puc 306.01, over and across public waters in Franklin and Northfield and State-owned land in Canterbury and Franklin, New Hampshire as specified in the application.

State Land (NHDOT) - CRE 2023-010 Eversource Crossing - Map 1

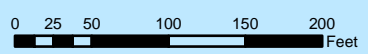


Public Land as shown in map 1, identified in the application and engineering drawings as State of New Hampshire and located in Canterbury. The project will require the Department to grant a license related to this project. The license will be for the 115kV, V182 transmission line from Structure #69 North to Structure #70 spanning 660.3 feet, with 89.2 feet crossing State-owned land.

	Utility Structure		State Land Parcel
	115 kV Line		Town Parcel
	Rail Trail		

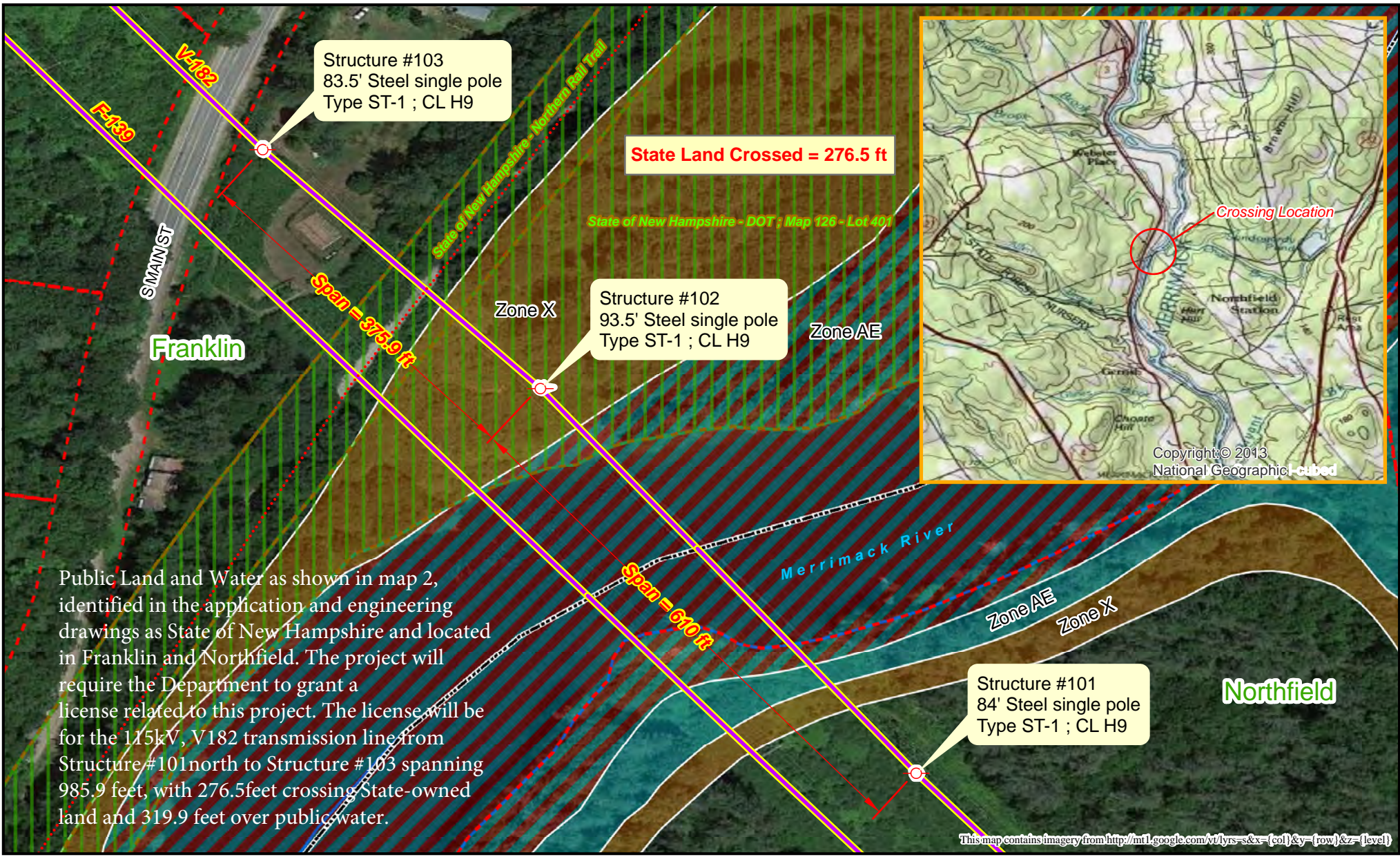


Prepared by:
NH Department of Energy
Enforcement Division



This map contains imagery from <http://mtl.google.com/vt/lyrs=s&x={col}&y={row}&z={level}>

Merrimack River & State Land (NHDOT) - CRE 2023-010 Eversource Crossing - Map 2



Public Land and Water as shown in map 2, identified in the application and engineering drawings as State of New Hampshire and located in Franklin and Northfield. The project will require the Department to grant a license related to this project. The license will be for the 115kV, V182 transmission line from Structure #101 north to Structure #103 spanning 985.9 feet, with 276.5 feet crossing State-owned land and 319.9 feet over public water.

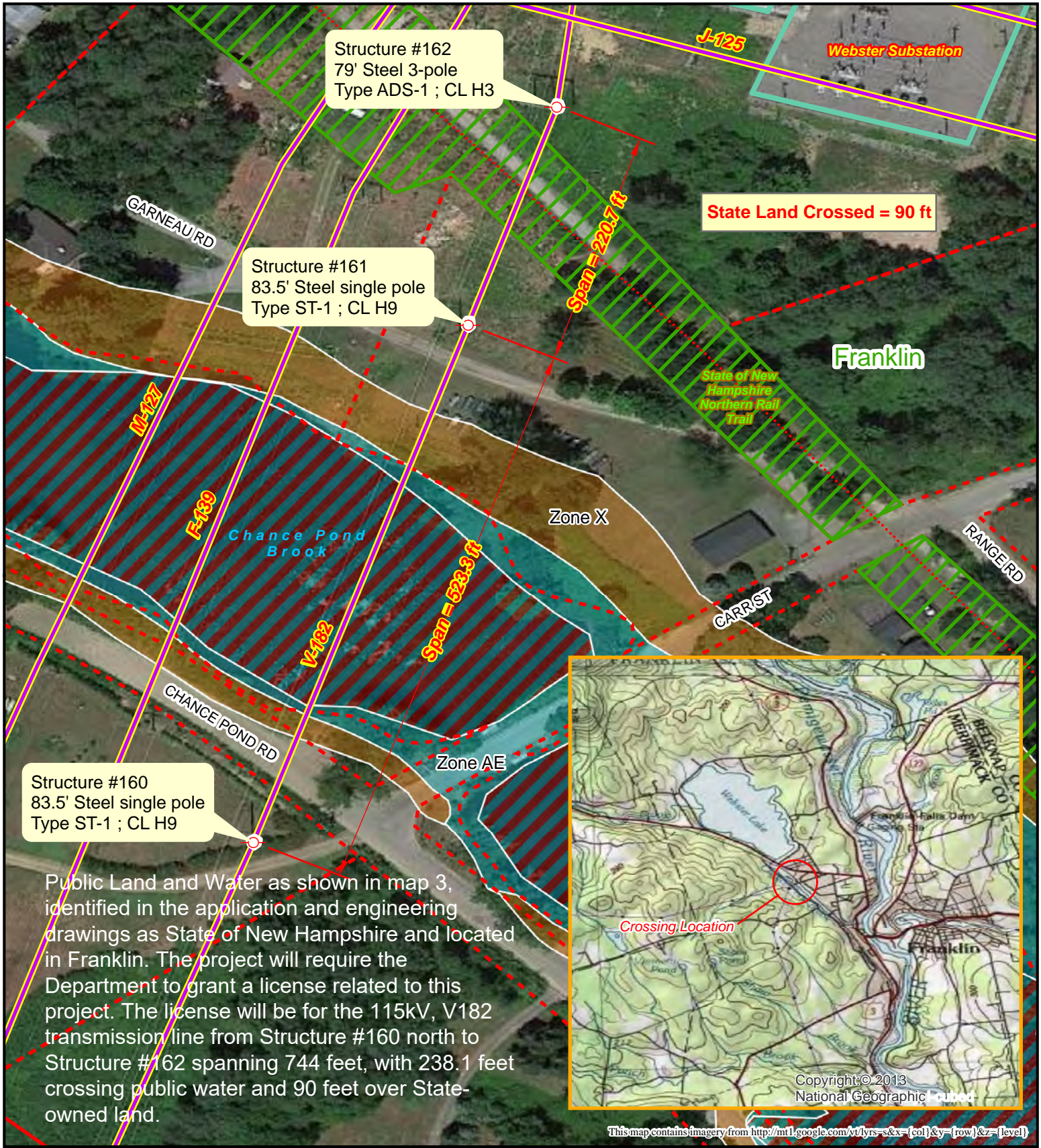
Utility Structure	Town Parcel	Flood Hazard Zones
Rail Trail	State Land Parcel	Regulatory Floodway
115 kV Line		1% Annual Chance Flood Hazard
		0.2% Annual Chance Flood Hazard



Prepared by:
NH Department of Energy
Enforcement Division



Chance Pond Brook & State Land (NHDOT) CRE 2023-010 Eversource Crossing - Map 3



Public Land and Water as shown in map 3, identified in the application and engineering drawings as State of New Hampshire and located in Franklin. The project will require the Department to grant a license related to this project. The license will be for the 115kV, V182 transmission line from Structure #160 north to Structure #162 spanning 744 feet, with 238.1 feet crossing public water and 90 feet over State-owned land.

	Utility Structure		State Land Parcel
	115 kV Line		Town Parcel
	Rail Trail	Flood Hazard Zones	
			Regulatory Floodway
			1% Annual Chance Flood Hazard
			0.2% Annual Chance Flood Hazard



	Prepared by: NH Department of Energy Enforcement Division
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