

**STATE OF NEW HAMPSHIRE DEPARTMENT OF ENERGY  
CITY OF PORTSMOUTH PUBLIC WORKS DEPARTMENT**

**LICENSE NO. CRW 2023-017**

**August 25, 2023**

**Application for License to Construct and Maintain Water Transmission Line  
Under Little Bay from Durham to Newington, New Hampshire**

This license is granted to the City of Portsmouth Public Works Department (PPWD) to construct and maintain the existing “Little Bay Subaqueous Water Transmission Main” line, under and across public waters of Little Bay in Durham and Newington, New Hampshire, all as described in its application and depicted in its filings, and as specified in the Enforcement Division’s recommendation. The existing water transmission mains were installed in the 1950s by the Army Corps of Engineers (ACOE). The City of Portsmouth acquired the easement and water infrastructure from the ACOE and the infrastructure is not currently licensed.

**I. BACKGROUND**

On August 1, 2023,<sup>1</sup> PPWD filed an application with the N.H. Department of Energy (Department), pursuant to RSA 371:17, requesting a license to construct and maintain its existing “Little Bay Subaqueous Water Transmission Main” line, under and across public waters of Little Bay in Durham and Newington, New Hampshire, all as described in its application and depicted in its filings. On August 24, 2023, the Department’s Enforcement Division Staff filed a recommendation that the application be approved, and a license granted, based on the application filings, applicable statutes, rules, NESC requirements, and land

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<sup>1</sup> The Company filed an amended application on August 23, 2023.

ownership, as well as public need, safety, and impact. The application and subsequent docket filings are posted to the Department's website ([energy.nh.gov](http://energy.nh.gov)) at [Utility Crossings Over State Lands and Public Waters | NH Department of Energy](#).

## **II. SUMMARY OF LICENSE**

### **A. Crossing Locations and Construction**

This license pertains to PPWD's "Little Bay Subaqueous Water Transmission Main" line, under and across public waters of Little Bay in Durham and Newington, New Hampshire, which is a 7-mile cross-country drinking water transmission line that brings treated water from the Madbury Water Treatment Plant to the Newington Booster Pump Station and is owned and maintained by the City of Portsmouth. The PPWD line was originally built in the 1950's by ACOE.

The proposed project for the "Little Bay Subaqueous Water Transmission Main" line encompasses the installation of approximately 3,200 feet of 24-inch diameter DR11 high-density polyethylene (HDPE) water main on the ocean bottom of Little Bay. The proposed water main will be constructed from the south shore of Wagon Hill Farm in Durham and continue southeast to the shore of Fox Point in Newington within the existing pipeline corridor and connect to the existing water main at either shore. At the inter tidal zone and within portions of the tidal buffer zone, the proposed pipeline will be buried to protect the pipe from freezing, anchor drag, and tidal currents.

The proposed installation method involves assembling the new pipeline on land and floating the pipeline into Little Bay. Since the HDPE pipe is buoyant, concrete collars are required to sink and anchor the pipeline along the bottom of the bay. The concrete anchors are designed to be installed while the pipeline is floating and full of air. Upon the evacuation of

the air from the pipe, the pipe sinks to the bottom at the proposed location. The water main will transition to ductile iron Class 52 pipe where it enters underground and will be pressure tested to 150PSI for 2 hours.

The new main will be connected to the existing main by installing a tapping sleeve and valve on the prestressed concrete pressure pipe on both sides of the crossing.

### **B. Regulatory Requirements**

PPWD is responsible for obtaining any and all other federal, state, or local permits required by authorities having jurisdiction for the construction and installation of the proposed crossing. According to the application, a New Hampshire Department of Environmental Services (NHDES) Wetlands Permit in the towns of Durham and Newington, NH has been submitted to account for the wetland impacts associated with the project described in this application. A permit approval for file number 2020-02959 has been issued. A Shoreland Permit by Notification (SPN) will be required for temporary impacts associated with the project and will be obtained prior to any construction.

The U.S. Army Corps of Engineers (ACOE) regulates the subject portion of Little Bay as navigable waters. A permit application has been submitted to conduct work in these waters. Permit file number: NAE-2019-01078.

### **C. Property Rights**

PPWD specifies that the majority of the proposed project area is located within the water line easement boundaries established for the water main when installed by ACOE in the 1950s. The pipeline crosses property owned by a private landowner on the Durham side in which The City of Portsmouth has acquired a temporary easement for construction and a permanent easement to construct and operate their facilities. The Town of Newington owns the

property on the Newington side of the crossing. The City of Portsmouth is coordinating with the Town of Newington to secure permission for temporary impacts associated with construction, construction laydown area, and construction access.

**D. Service to the Public and the Effect on Public Rights**

According to the application, the existing crossings were constructed, operated, and maintained to meet the reasonable requirements of service to the public. PPWD states that the Little Bay Subaqueous Water Transmission Main is vital in order to reasonably service the public and will not substantially impede the public's use and enjoyment of the public waters of Little Bay in Durham and Newington, New Hampshire. PPWD provided sufficient detail to verify that no potential safety hazards will result from the water crossing.

N.H. Code of Administrative Rules Puc 606 EQUIPMENT AND FACILITIES Puc 606.01 Standard Practice is the applicable standard used for reviewing the petition. It states:

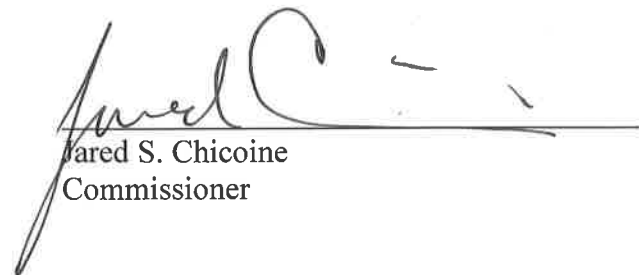
- (a) Each utility shall construct, install, operate, and maintain its plant, structures, equipment, and mains:
  - (1) In accordance with applicable American Water Works Association Standards copyrighted by the American Water Works Association, pursuant to the applicable standards described in N.H Code Admin. Rule Env-Ws 307.01, Standards of the American Water Works Association; and
  - (2) In such manner, insofar as practical:
    - (a) To best accommodate the public; and
    - (b) To prevent interference with service furnished by other underground facilities, including gas, electric, telephone, steam,

sewer, and other underground and above ground facilities. This rule was last readopted September 10, 2013, but subsequently DES updated the rules on June 1, 2014. The applicable rule is now Part 407 Env-Dw 407.01 Standards of the American Water Works Association. This in turn references AWWA Standard C906 1999 Polyethylene (PE) Pressure Pipe and Fittings, 4 in. through 63 in., for Water Distribution.

**II. DEPARTMENT DECISION**

PPWD is authorized pursuant to RSA 371:17, *et seq.*, to construct, install, operate, and maintain the “Little Bay Subaqueous Water Transmission Main” line, under and across the public waters of Little Bay in Durham and Newington, New Hampshire, as described in its application and depicted in its filings, and as specified in the Enforcement Division’s recommendation. Based on the factual representations set forth in the application and the recommendation, the Department finds that the requested crossing repairs are necessary to meet the reasonable requirements of reliable service to the public, as required by RSA 371:17, and that the requested license may be exercised without substantially affecting public rights in the public waters at the crossing locations in Durham and Newington, New Hampshire, as required for approval under RSA 371:20. Therefore, the application is approved.

By order of the Department of Energy of New Hampshire this 25<sup>th</sup> day of August 2023.



Jared S. Chicoine  
Commissioner

Pursuant to RSA 371:20, applicants and other persons directly affected by the issuance or denial of a license may appeal to the Public Utilities Commission within 30 days of the department's decision.