ADDENDUM NO. 2

TO

BIDDING AND CONTRACT REQUIREMENTS AND SPECIFICATIONS

FOR THE

LITTLE BAY SUBAQUEOUS WATER TRANSMISSION MAIN WP PROJECT NO. 14202

8/30/2023



PREPARED BY:

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LITTLE BAY SUBAQUEOUS WATER TRANSMISSION MAIN

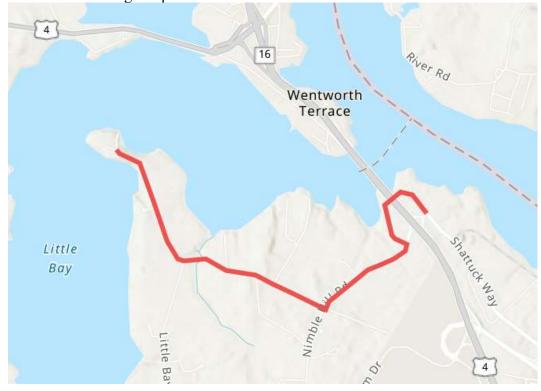
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WP PROJECT NO. 14202

As a point of clarification, it should be understood that the Contract Documents govern all aspects of the project. Discussions held during the Pre-Bid Conference or over phone or email are informal and informational only. All official changes to the Contract Documents are made only by addenda. The following changes and additional information are hereby made a part of the Contract Documents:

SPECIFICATIONS

- 1. **DELETE** Bid Schedule in its entirety and **REPLACE** with the attached Bid Schedule (pages 13 and 14 of Section A).
- 2. **ADD** the attached Performance Bond to Section B.
- 3. **DELETE** 01150.1.9.(1).A. "Method of Measurement Lump Sum. Total of bid item shall not exceed 5% of the Total Amount of the Bid." And **REPLACE** with, "Method of Measurement Lump Sum. Total of bid item shall not exceed 10% of the Total Amount of the Bid."
- 4. **ADD** the following to Specification Section 01010.3.4.D.1.b.i:



- 5. **ADD** the following to Specification Section 02628.3.1,
 - "G. Subaqueous pipeline alignment shall be within allowable tolerances of 15-feet north or south of the proposed alignment. The Contractor may utilize alignment devices along the pipeline route to verify allowable pipeline placement along proposed corridor. If alignment devises are utilized (i.e.: screw piles, pipe piles, etc.) and will remain in place for temporary or permanent pipeline anchorage, the design of the permanent anchors shall be reviewed by the Engineer and permitting agencies as required."
 - "H. The actual sizing of the concrete pipe anchors will be determined by the Contractor based on performance required to successfully float the pipeline when full of air and sink the pipeline when full of water. Actual percentage of pipe above the waterline when the pipe is full of air is determined by the Contractors means and methods. The use of supplemental floatation, if required, will be allowed. The Contractor shall submit the design of the concrete anchors and any needed supplemental floatation to the Engineer for review."
- 6. **ADD** the attached State of New Hampshire Department of Energy License into Appendix D.

DRAWINGS

- 1. On Drawing C-7, **ADD** between STA 136+50 and STA 138+00, within the limits of the existing water main easement, clear all existing trees and vegetation. Dispose of invasive species properly. Restore disturbed area with loam and New England Conservation seed.
- 2. On Drawing C-15 Water Main Connection Detail Newington Site, **ADD** two vertical restrained bends at STA 131+80 +/- and STA 132+0-0 +/- in the DI pipe as required to maintain acceptable pipe depth up the embankment.
- 3. Add attached Figure 1 and Figure 2, Valve Vault Replacement Details for Newington and Durham.

QUESTIONS AND ANSWERS

Questions Received During the Bidding Period

- 1. Q: Can you provide the supplemental conditions for this project or confirm this document is not available / applicable to this project?
 - A: Supplemental Conditions are included in the document as "Special Conditions", Section C-2.1 (page 71 of the PDF document).
- 2. O: Can the start date be later than indicated in the contract documents?
 - A: Contractors shall bid on the project with the dates indicated in the contract documents.
- 3. Q: Can the in-water work window be extended from the 4-month window of November 15, 2023, to March 15, 2024? An extension of at least 2-3 months is required to complete all in-water work.
 - A: Contractors shall bid on the project with the current in-water work window of November 15, 2023, to March 15, 2024, as indicated in the contract documents.

- 4. Q: Based on the lack of geotechnical information when would be the earliest that a pile load test program for end bearing and lateral loading of trestle piles could start?

 A: The earliest that a pile load test program could start is November 15. Design of the temporary trestle and temporary structures will be the full responsibility of the Contractor.
- 5. Q: We ask that the current working hours be reviewed based on the amount of work required for the complexity of the cofferdam installation, we do not feel that there is enough time to work single shifts and/or no weekends.
 - A: As addressed in Addendum No. 1, work hours in the contract documents are general hours per the agreements with the Towns of Newington and Durham, primarily for the consideration of the neighbors and residents of the towns. Additional longer work hours may be requested for critical construction items that would require continuous linear construction work.

END OF ADDENDUM NO. 2

Attachments Follow:

- A. Bid Schedule
- B. Performance Bond
- C. Department of Energy License
- D. Figure 1
- E. Figure 2

ADDENDUM NO. 2

BID SCHEDULE

BASE BID

Item No.	Qty	Unit	Brief Description of Item with Unit Bid Price in Words	Unit Bid In Figures	Amount In Figures
1	1	LS	Mobilization & Demobilization (Max 10%) The sum of \$	\$	\$
			Per Lump Sum	_	
2	1	LS	Stormwater Pollution Prevention Plan		
			The sum of \$	\$	\$
			Per Lump Sum	_	
3*	100	HR	Monitoring SWPPP and Sediment Controls		
			The sum of \$	\$	\$
			Per Hour	_	
4	1	LS	Erosion Controls		
			The sum of \$	\$	\$
			Per Lump Sum	_	
5	1	LS	Site Preparation		
			The sum of \$	\$	\$
			Per Lump Sum	_	
6*	4,000	SY	Furnish and install Geotextile for Temporary Road		
			The sum of \$	\$	\$
			Per Square Yard	_	
7*	1,500	CY	Furnish and Install Gravel (NHDOT 304.3)		
			The sum of \$	\$	\$
			Per Cubic Yard	-	
8*	200	CY	Furnish and Install Screened Stone		
			The sum of \$	\$	\$
			Per Cubic Yard		
9*	3,000	SY	Furnish and Install Timber Mats		
			The sum of \$	\$	\$
			Per Square Yard	_	
10*	120	LF	Furnish and Install Temp. 12" HDPE Culvert		
			The sum of \$	\$	\$
			Per Linear Foot	_	

ltem No.	Qty	Unit	Brief Description of Item with Unit Bid Price in Words	Unit Bid In Figures	Amount In Figures
11	1	LS	Little Bay Subaqueous Water Main complete with		
			all appurtenances		
			The sum of \$	\$	\$
			Per Lump Sum	<u> </u>	
12	1	LS	Marine Traffic Management		
			The sum of \$	\$	\$
			Per Lump Sum	_	
13*	100	CY	Submarine Rock Relocation		
	100	Ci	The sum of \$	\$	\$
			Per Cubic Yard	_	
14	1	EA	6-inch Water Service Tap for Wagon Hill		
14	-	Lit	The sum of \$	\$	\$
			Per Each	_	
15	1	LS	Salt Marsh Maintenance & Restoration		
			The sum of \$	\$	\$
			Per Lump Sum		
16*	26,000	SY	Turf Establishment with Till, Harrow, Mulch &		
			Tackifiers		
			The sum of \$	\$	\$
			Per Square Yard		
17	1	LS	Site Restoration – Durham		
			The sum of \$	\$	\$
			Per Lump Sum	_	
18	1	LS	Site Restoration – Newington		
			The sum of \$	\$	\$
			Per Lump Sum	_	
19	1	AL	Roadway Restoration – Newington		
			The sum of \$ Fifty thousand dollars	\$ <u>50,000</u>	\$ <u>50,000</u>
			Per Allowance	_	
	minate quant installed/co		med for comparison of bids. Quantities are not guarantee	d. Payment will be b	ased on actual
Total Ba	ase Bid (Sun	n of Item	ns 1 through 19)		\$

Sum of______

Total Base Bid (Sum of Items 1 through 19) in Words Above

Determination of the low Bidder shall be based on the lowest Total Base Bid cost. See Specification Sections 01150 Measurement and Payment for a complete description of the Bid Items 1 through 19.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

Transmission Main.

which is hereto attached and made a part hereof for the construction of Little Bay Subaqueous Water

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract <u>relative to the restoration of the construction</u>

<u>Access Route (Nimble Hill Road, Shattuck Way and Fox Point Road) and restoration of the Laydown Area</u> during the original term thereof, and any extension thereof which may be granted by the **OWNER**, with or without notice to the Surety and during the one year guaranty period, and if the **PRINCIPAL** shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the **TOWN** from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the **TOWN** all outlay and expense which the **TOWN** may incur in making good any default, then this obligation shall be void: otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to **WORK** to be performed thereunder or the specifications accompanying same shall in any way affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time alteration or addition to the terms of the contract or to the **WORK** or to the specifications.

PROVIDED, FURTHER, that it is expressly agreed that this **BOND** shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the **PRINCIPAL** and the **SURETY** to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this **BOND** and whether referring to this **BOND**, the contract or the loan Documents shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the **TOWN** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS	WHEREOF, this instrument	is executed in	co	unterparts, each one of which shall be
	original this day of			
ATTEST:				
DV.				(PRINCIPAL)
БҮ	(Principal) Secretary		DV.	
			BY:	
				(ADDRESS)
BY:				
	Witness as to Principal			
	(ADDRESS)			
				(SURETY)
ATTEST:			BY:	
BY:				(ATTORNEY in FACT)
J	Witness to Surety			(ADDRESS)

NOTE: Date of **BOND** must not be prior to date of Contract. If **CONTRACTOR** is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing **BONDS** must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of New Hampshire.

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, 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

¹ 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) at <u>Utility Crossings Over State</u>

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 25th day of August 2023.

ared 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.

