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Subject **Daily Monitoring Report**

Client Eversource Energy **Date** October 19, 2019

Project Independent Environmental Monitoring, Little Bay Submarine Cable Installation, Seacoast Reliability Project

Project No. E2X85301 **File** Daily Monitoring Report_SRP Little Bay IEM_Cable Removal 10-19-19

Prepared by Jeffrey Nield **Phone No.** 617-963-3109

Copies to Gregg Comstock, NH DES
 David Price, NH DES
 Chris Nash, NH DES
 Kurt Nelson, Eversource Energy

WEATHER OBSERVATIONS				
TIME	WIND (DIRECTION AND SPEED [KTS])	VISIBILITY (NM)	PRECIPITATION (PREV. 24H)	COMMENTS
09:30	Variable	>5 NM	-	41 °F Sunny
14:00	NW 6 gusts to 10	>5 NM	-	50 °F Partly cloudy, mostly sun
17:00	NW 13 gusts to	>5 NM	-	52 °F mostly sunny

Summary of Major Work Activities (Copied from Operational Log, Durocher Marine)

Activity	Time (EDT)	Marine Description
Cable Installation	700	MAP meeting at GBM
	725	Arrive at Hughes 2002 barge
	950	All personnel in position to continue plowing across channel
	1000	Pick spuds to align 2002 barge
		Move bow 20' south to plan line

Summary of Major Work Activities (Copied from Operational Log, Durocher Marine)		
	1016	Barge winches engaged, begin plowing
Cable Installation	1020	All stop to reposition the umbilical on plow
	1028	Resume plowing
	1032	Movement on the plow
Cable Installation	1144	GPS removed, switched to USBL
		Spuds down to reposition the stern anchors
		plow sta. 426+27
		DMG 749'
	1240	Port Stern anchor reset complete
	1320	Starboard Stern anchor reset complete
	1449	All anchors reset
	1454	Up on the spuds, prepare to adjust barge and continue plowing
	1508	plow sta. 426+43
		barge at sta. 427+08
		setback at 53 ft.
	1612	14° roll, all stop on plow to let jets work into sand wave
	1617	Let jets work for 5 mins, roll still at 11°
		1618
1631		All stop to work through sand wave, 16° roll, 6° pitch
1636		Resume plowing
1653		Setback to 61'
1709		All stop to adjust 2nd end cable on reel, adjust tieback and barge.

Summary of Major Work Activities (Copied from Operational Log, Durocher Marine)		
	1729	Resume plowing - plow sta. 434+94
	1743	plow sta. 436+18
		barge sta. 436+80
	1755	All stop to move forward anchors
	1904	Anchor move complete, move two forward anchors
		Waiting on word from water sample crew to continue jet plowing
		30 mins per anchor to change out.
	1926	Movement on plow, approx. 550' to go
	1959	All stop to reinstall the R8 GPS antenna
	2000	Plow at 60' setback
		Barge position at sta. 439+26
		plow 438+44
	2014	Resume plowing
	2040	All stop on anchors, moving plow setback from 70' to 55'
	2045	Continue on anchors
	2116	barge sta 441+97
Cable Installation	2125	Plow grade out, barge all stop, pump to idle
		sta. 441+83 start
		sta. 442+22 stop, DMG 2344
	2131	All stop on all equipment, spuds down, winches dogged
	2145	End of Day
	2155	At the dock

CABLE #1 (North Alignment, Phase 3)						
DATE	DAY	CABLE INSTALL LENGTH	JET SLED BURIAL LENGTH	DIVER BURIAL	CONCRETE MATS	NOTES
10/14/19	Mon	1870.0				Float cable from barge to jet sled. This section will be buried by jet sled.
10/15/19	Tue	782.0				Pull cable from jet sled to riser structure includes 80' of slack for terminations.
10/16/19	Wed		155.0			West tidal flats jet sled burial
10/17/19	Thu		1170.0			West tidal flats jet sled burial
10/18/19	Fri		670.0			West tidal flats jet sled burial
10/19/19	Sat	2252.0	2344.0			Channel jet sled burial
10/20/19	Sun					
10/21/19	Mon					
TOTALS		4904.0	4339.0			
% COMPLETE		82.9%	101.9%			
Jet Sled Burial Length						4260.0

Summary of Observations

Item	Observations and Notes
1	Jet plow operations – Resume Cable #1 installation where plowing left off on 10-18-19 on the western edge of the channel. Jet plow was winched to approximately 50' setback from barge with pump barge, dive barge and other work boats fastened to main barge. Anchor barge in center of channel, spuded down. Four-point anchor spread in use. One full anchor move and one-half anchor move completed using tug and work boats – no use of anchor barge. IEM tracking progress of plow with station numbers and Google Earth based survey markers.
2	Water quality monitoring – NH DES, IEM, Eversource and Normandeau conferred on Friday to discuss Saturday (10-18-19) planned operations. Parties agreed that water quality monitoring would continue as long as Normandeau boats could operate. With jet plow within viewing distance of barge, a localized plume was observed at the edge of

Item	Observations and Notes
	the channel but became less visible with depth as plow progressed across the channel. No turbidity exceedances reported from water quality monitoring team.


Turbidity Data Reports and IEM Actions/Responses

Turbidity (NTU) Reported	Time of Report	IEM Action/Response	Time of Response	Result
See below...				

Boundary Station Action Levels (BSAL) reported by Normandeau at
 Tidal: BSAL = 15 NTU
 Channel: BSAL = 16 NTU



Jet sled approximately 50' of setback from cable chute and barge. Plow is located on the western side of the channel in 3 – 5 feet of water. Slightly visible, localized plume near jet plow.

Turbidity (NTU) Reported	Time of Report	IEM Action/Response	Time of Response	Result
				
<p>IEM reports large (approx. 35-40 gallon plastic drum) in Little Bay directly in the path of the barge and jet plow. Durocher Marine deployed workers to recover the drum. It was brought onboard and reused/disposed off.</p>				

Summary of Work Stops, Modification and Other Operational changes requested by the IEM during Operations

Item	
1	No work modifications requested by the IEM due to water quality reports. IEM received regular reports from water quality monitoring onshore data coordinator.

Action Items

Item	
1	Completed installation of Cable #1 across channel. That completes jet plow installation of Cable #1. Following days involve bailing remainder for cable reel, attaching floats to cable and landing/pulling cable to the Gundalow (Newington, NH) side. Plan to begin Cable #2 installation from western tidal flat on Monday, start at 10:00 on 10-19-19 and complete installation across the channel.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my own inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate, and complete to the best of my knowledge and belief.

Signed: _____



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Dated: October 23, 2019