

Tuesday, December 17, 2019			Est. Tides: 9:51 a.m. Low; 4:10 p.m. High	
TIME	WIND (DIRECTION AND SPEED [mph])	VISIBILITY (NM)	PRECIPITATION (PREV. 24H)	COMMENTS
07:00	1 NW gusts to 2	>5 NM	-	28 °F; snow
13:00	7 NE SW gusts to 10	>5 NM	-	28 °F; snow
16:00	10 NE gusts to 15	>5 NM	-	28 °F; snow
Wednesday, December 18, 2019			Est. Tides: 10:51 a.m. Low; 5:11 p.m. High	
TIME	WIND (DIRECTION AND SPEED [mph])	VISIBILITY (NM)	PRECIPITATION (PREV. 24H)	COMMENTS
07:00	5 NW gusts to 6	>5 NM	5" snow	25 °F; snow & clouds
13:00	6 W gusts to 10	>5 NM	-	34 °F; sun
16:00	8 W gusts to 15	>5 NM	-	30 °F; sun

Summary of Work Activities

Day/Date	Work Description
Sunday, December 15, 2019	<p>In accordance with Condition 15 of the SRP NHSEC Docket #2015-04 Wetland Bureau, February 28, 2018 Final Decision, the IEM called off water quality monitoring due to excessively high winds and sea conditions.</p> <p>Mackworth Env on site to install a silt curtain on the eastern tidal flat because the original turbidity barrier failed.</p>
Monday, December 16, 2019	<p>Diver burial on east side only of Little Bay. East side diver burial – two teams started at 0815, paused at 0900 due to low tide, resumed at 1042 and finished for the day at 1645. A third dive team worked in the shallows from 1500 to 1645.</p> <p>Water quality monitoring using one vessel sampling every hour because of the high background turbidity and failed turbidity barrier. Drone flying.</p>

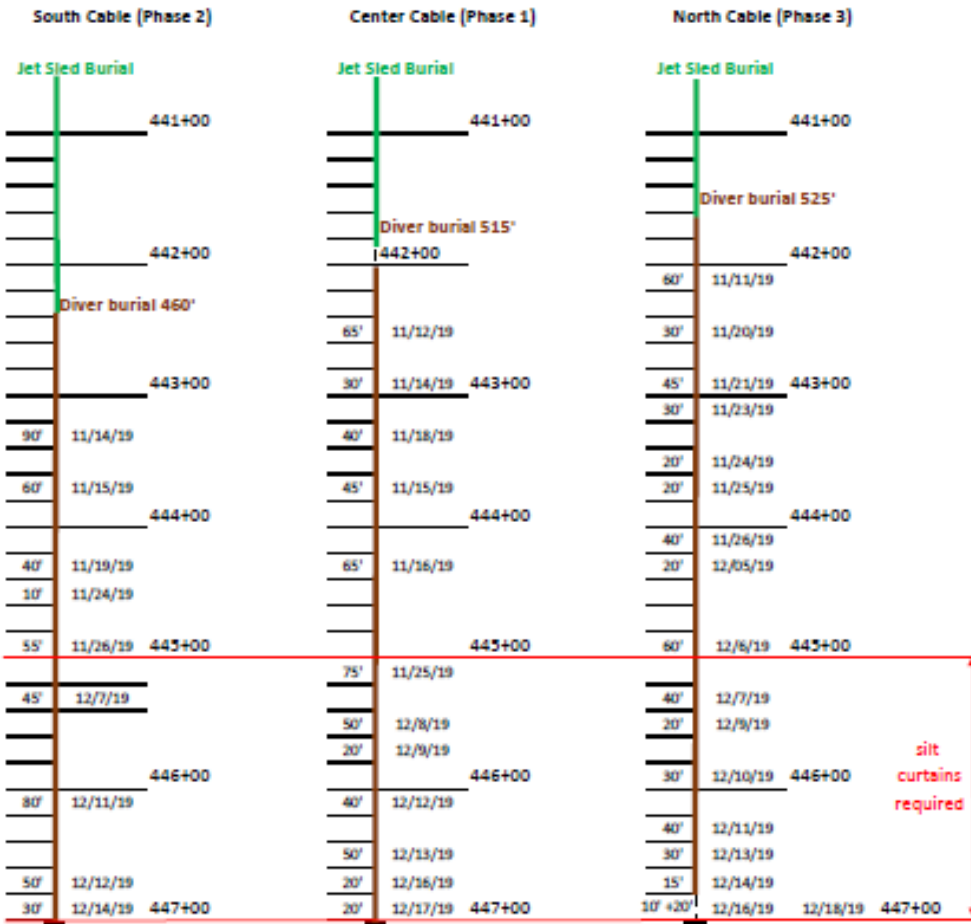
Day/Date	Work Description
	<p>Mackworth turbidity barrier on east side failed on Saturday, December 14, 2019. From Sunday, December 15 to Monday, December 16, 2019 Mackworth installed a hybrid silt curtain consisting of 500 feet (+/-) of Type I silt curtain and the remainder the bottom-founded turbidity barrier.</p>
<p>Tuesday, December 17, 2019</p>	<p>East side diver burial – three dive teams working from 0730 to 1655.</p> <p>Water quality monitoring using one vessel sampling every hour because of the high background turbidity and failed turbidity barrier. Drone not flying due to snow.</p> <p>Mackworth maintaining a replacement silt curtain system.</p>
<p>Wednesday, December 18, 2019</p>	<p>East side diver burial – three dive teams working from 0730 to 1425.</p> <p>Water quality monitoring using one vessel sampling every hour because of the high background turbidity and failed turbidity barrier. Drone flying.</p> <p>Mackworth maintaining a replacement silt curtain system.</p>

Weekly Monitoring Report – SRP Submarine
 Cable Diver Burial Activities
 December 15 - 18, 2019

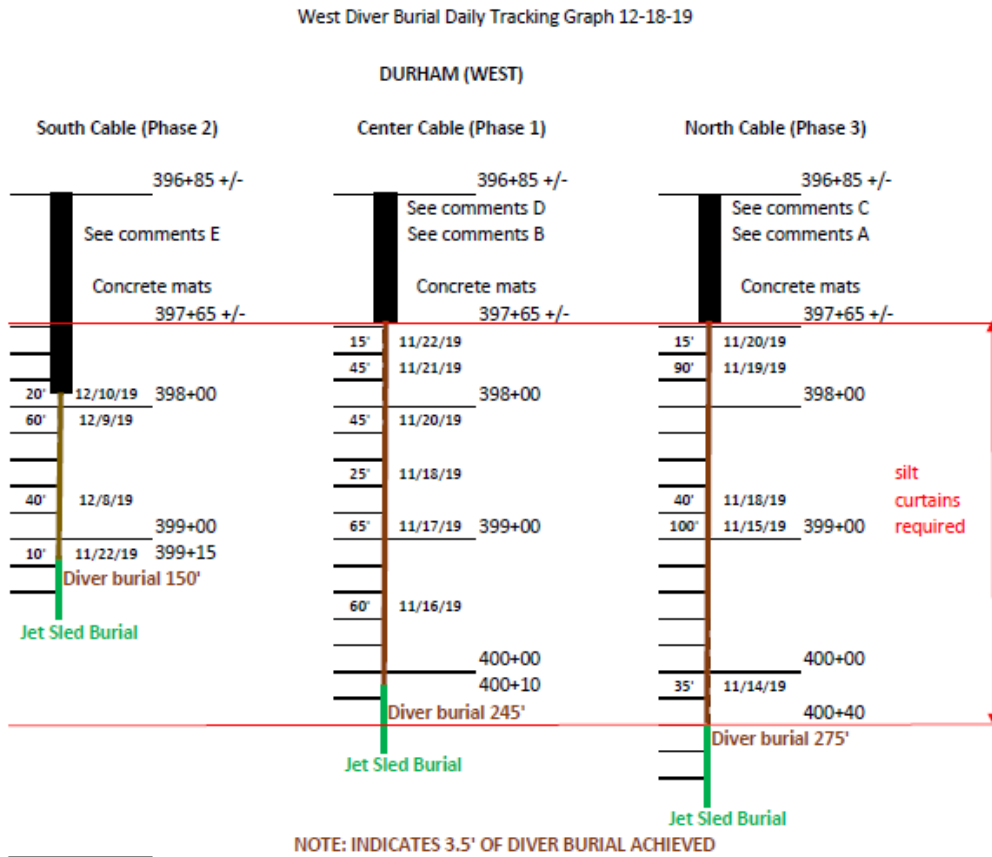
DIVER BURIAL TRACKING (provided by Durocher Marine, through 12-18-19)									
			Durham (west)			Gundalow Landing (east)			
#	Day	Sta. Start	South Cable (Phase 2)	Center Cable (Phase 1)	North Cable (Phase 3)	South Cable (Phase 2)	Center Cable (Phase 1)	North Cable (Phase 3)	Daily Total
			39915	40010	40040	44240	44185	44175	
25	Sun	12/15/19	Condition 15	SRP	NHSEC	Excessive	Wind	Delay	0
26	Mon	12/16/19	0	0	0	0	20	10	30
27	Tue	12/17/19	0	0	0	0	20	0	20
28	Wed	12/18/19	0	0	0	0	0	20	20
TOTAL			120	250	280	460	520	530	2160
Sta. Stop			39780	39760	39760	44700	44705	44705	
% Complete			100%	102%	102%	100%	101%	101%	+/-

East Side Burial Graph (through December 18, 2019, Durocher Marine)

East Diver Burial Daily Tracking Graph REV01_12-18-19



West Side Burial Graph (through December 18, 2019, Durocher Marine)



Summary of Observations

Item	Observations and Notes
1	<p>Diver burial (hand jetting) – See table above for contractor tracking of cable burial. East side diver burial only – three dive teams working. East side barrier system failed on December 14, 2019. Diver burial this period within hybrid silt curtain and barrier system. East side diver burial completed on December 18, 2019.</p>
2	<p>Water quality monitoring – Weather monitored for 72 hours before scheduled diver burial water quality monitoring events. Close communication with contractor and water quality teams whenever wind forecasts called for winds greater than 15 mph leading up to work days. IEM cancelled water quality monitoring and diver burial on Sunday, December 15, 2019 due to excessive winds.</p> <p>Due to recent heavy rain and high winds background turbidity levels have been high. Turbidity levels are dropping but remain high. Daily BSAL of 22 NTU reported on Tuesday, December 17, 2019 by Normandeau. High pre-construction turbidity reading on Wednesday, December 18, 2019 from Station 19 likely due to shore runoff.</p>

Item	Observations and Notes
	<p>No exceedances reported throughout duration of the week. However, turbidity readings running very high at pre-construction with elevated levels during hand jetting.</p> <p>Normandeau was instructed by IEM and DES to proceed with hourly monitoring for the diver burial on the eastern tidal flat with the replacement (hybrid) silt curtain and barrier.</p> <p>Normandeau providing daily water quality summaries to NH DES for previous day's events.</p> <p>IEM able to view activity for Gundalow landing with binoculars and drone imagery. Drone imagery continues to be useful to observe hand jetting activity. Drone continues to be used to guide the water quality monitoring team to run transects to "find" the plume with instruments. Water quality team did not detect elevated levels that could define a plume based on drone images. Any plume developed from hand jetting on the eastern channel edge quickly dissipated due to tidal forces.</p>
3	<p>Turbidity Barrier/Eastern Tidal Flat – At 1505 on December 14, 2019, the turbidity barrier on the eastern tidal flat completely failed when it broke free of its southern anchors and drifted over the cable to the point of the Beswick Property where is gathered around the rocks and Beswick dock. Eversource and its contractors requested of the IEM if work could proceed without a turbidity barrier. The IEM issued an email directing Eversource and its contractors to install a serviceable and safe turbidity curtain to contain the diver burial work area as soon as possible prior to resuming diver burial on the eastern tidal flat.</p> <p>Mackworth Env installed a replacement system using Type I silt curtain and segments of their turbidity barrier on December 15 – 16, 2019.</p>

Turbidity Data Reports and Photographs

Turbidity (NTU) Reported and Photographs
Per NH DES, Normandeau is providing daily water quality summaries via email for hand-jetting activities.

Turbidity (NTU) Reported and Photographs



View from Gundalow Landing site, looking at Adams Point, with two dive barges spudded in place. Mackworth Env turbidity barrier failed by breaking free of its southern anchors and drifting to the north.

Turbidity (NTU) Reported and Photographs



Mackworth Env barrier after breaking free. The barrier was drifting toward the Beswick dock to the right. Mackworth secured the barrier in place out of the way of the diver barges.

Turbidity (NTU) Reported and Photographs



Replacement silt curtain using segments of the turbidity barrier and Type 1 silt curtain. Remainder of the northern segment of the turbidity barrier was secured to the north of the work area.

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

Item	
1	IEM submitted an email to NH DES (on 12-14-19) providing input regarding the complete failure of the turbidity barrier on the eastern tidal flat and Eversource's request to continue work without it. Since permit conditions require that a silt curtain be in place during diver burial, Eversource and its contractors will install a silt containment system on the eastern tidal flat on 12/15 or 12/16.
2	No water quality exceedances of the BSAL were reported. Normandeau monitoring hourly because of failed turbidity barrier.
3	IEM made daily requests to Eversource and its contractors to monitor the state of the silt curtain and make any repairs or adjustments if gaps or shifts appeared.

Action Items

Item	
1	None. Diver burial completed on 12-18-19.

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: December 20, 2019