

HEB Engineers, Inc. • www.hebengineers.com

New Hampshire: Office (603) 356-6936 • Fax (603) 356-7715 • PO Box 440 • 2605 White Mountain Hwy • North Conway, NH 03860

Maine: Office (207) 803-8265 • PO Box 343 • 103 Main Street • Suite 6 • Bridgton, ME 04009

Date:	October 7, 2022	Project #:	2021-083	Page 1 of 6
To:	Town of Effingham 68 School Street Effingham, NH 03882	Project:	Bailey Road Culvert Replacement	
Email:	townofeffingham@effinghamnh.net	Location:	Effingham, NH	
Prepared By:	Eric Schroeder	Owner:	Town of Effingham	
Reviewed & Approved By:	Christopher Fournier, PE	Contractor:	Jake Dawson's Excavation & Utility Services, LLC	
		Weather Conditions:	55° Cloudy	

SITE VISIT

Arrived at site: 10:00 AM

Left site at: 12:30 PM

Personnel & Equipment on site:

- » HEB Engineers, Inc. (HEB): Eric Schroeder
- » Jake Dawson's Excavation & Utility Services, LLC (Dawson's): Owner (Jake), Foreman (Andy), 2 Laborers
- » Dawson's Equipment:
 - 1 Case Loader, 621F
 - 1 Case Excavator, CX145DSR
 - 1 Case Excavator, CX245DSR (idle)

Visitors to site:

- » Province Lake Association Dam Master: Mark Hempton

Purpose of Site Visit:

- » To observe the installation of alternate water diversion system.

Work Performed by Contractor since last site visit:

- » The Contractor installed sheet pile perpendicular to the existing roadway and terminating at the northwest and southwest corner of the existing sheet pile (see Photo 1).
- » The Contractor removed pavement on the west side of the road in order to install the alternate water diversion system. The Contractor also removed the roadway gravels and had set two lengths of 24-inch HDPE pipe; the inlet and the middle section for all three bypass culverts. Submittal #002B calls for two 24-inch culverts and one 18-inch culvert. The Contractor opted to install three 24-inch culverts (see Photos 2 and 3).
- » Silt fence had been restored on the northwest corner of the site. There is still no silt fence on the southwest corner of the site.
- » The Contractor was dewatering while the Engineer was on site. The sedimentation basin is still not installed according to the permitted detail.

Work Performed by Contractor during HEB site visit:

- » The Contractor set the outlet length of HDPE on all three bypass culverts (see Photo 4). The Contractor backfilled with the existing roadway materials and compacted using the bucket of the excavator (see Photo 5).

Items discussed/observed:

- » The road was closed and traffic was waiting to pass when the Engineer arrived on site. Traffic was restored at 10:45 AM. The Contractor stated that the road was closed for approximately one hour.
- » The Province Lake Association Dam Master, Mark Hempton, arrived at the site to remove the dam boards. The Contractor stated that Mark had informed them that removing the dam boards would reduce the elevation of the river by approximately 3 inches.
- » The Engineer asked the Contractor about the elevation for the alternate bypass culverts' inlet. The Contractor reported that the inlets were at an elevation of 478.5 feet. Submittal #002B specifies an inlet elevation of 479.6 feet. The Contractor opted to lower the inlet elevation because of low water levels and due to the dam boards being removed.
- » The Engineer asked about the location of the bypass outlet relative to the roadway and wetland impact areas. The Contractor responded that he believes the culverts are approximately 3-4 inches past the area of permitted impacts. The Contractor reported that he would double-check once the installation was complete and trim the culverts as necessary.
- » The bypass culverts are not sealed at the inlet. They are held in place only by the backfilled roadway material.
- » The Engineer commented on the location of the sediment basin and the Contractor was confident that the basin was located within the easement and therefore not impacting non-permitted wetlands. The Engineer reminded the Contractor that the plans require the basin to have a filter bag.
- » The Contractor reported that he had contacted the Eversource head of line transmission in regards to de-energizing the power lines on site. The Contractor stated that in order to de-energize the lines for a period of no longer than 8 hours, he must go door to door 4 days prior to notifying those affected. The Contractor stated that he will notify the Engineer once this process has begun.
- » The Contractor stated they would be installing sheet pile perpendicular to the existing roadway on the east side of the site, as well as, installing a trench box inside of the excavation. The roadway will continue to be supported by road plates. The Engineer reminded the Contractor that they needed to submit an erection plan. The Contractor stated that they were unaware of this and that it was too late notice. The Engineer replied that the erection plan requirement was stated in the contract plans and that he has reminded them of this requirement multiple times starting on September 15, 2022. The Contractor replied that he would contact Chris Fournier, PE (HEB) to further discuss the issue.
- » The Engineer asked for a tentative plan for next week (10/10/22-10/14/22). The Contractor restated that this is a tentative plan and subject to change. The Contractor reported that they will continue to dewater the site and install the remaining sheet pile and trench box. When the Engineer left the site, the Contractor had begun to pick up for the weekend.

Work Scheduled:

- » Monday, October 10, 2022 – Continuing installation of additional sheet pile and dewatering.

Outstanding Construction Issues:

- » ~~Erection plan submittal is needed to demonstrate the capability of roadway shoring (FR #002, 09/15/22).~~
 - After discussion with Chris Fournier, the erection plan submittal was determined to not be required because the trench box and road plate proposed was deemed to be a pre-engineered solution.
- » Stabilize site in accordance with erosion control requirements (FR#005, 09/22/22).
- » ~~Provide revised alternate water diversion submittal (FR#008, 10/04/22).~~
 - Alternate water diversion submittal was provided and has been approved as corrected.
- » Install silt fence along the southern edge of the site (FR#008, 10/04/22).
- » Install sedimentation basin according to permitted detail (FR#008, 10/04/22).
- » Verify that bypass culverts do not impact non-permitted wetlands.

Next Observation:

- » To be determined.

Photos:

- » Taken by Eric Schroeder on October 7, 2022.

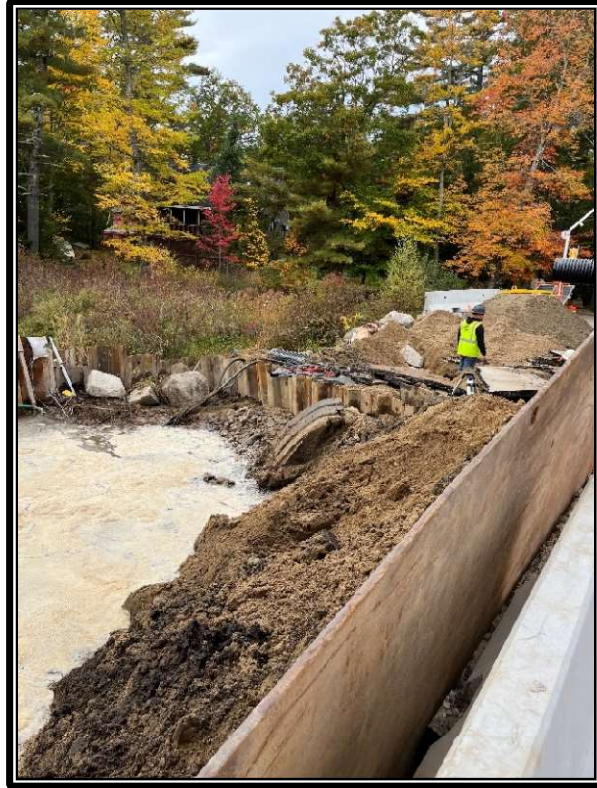


Photo 1: The sheet pile has been installed perpendicular to the existing roadway connecting the existing northwest and southwest corner of sheet pile.



Photo 2: The middle section of the bypass culverts.

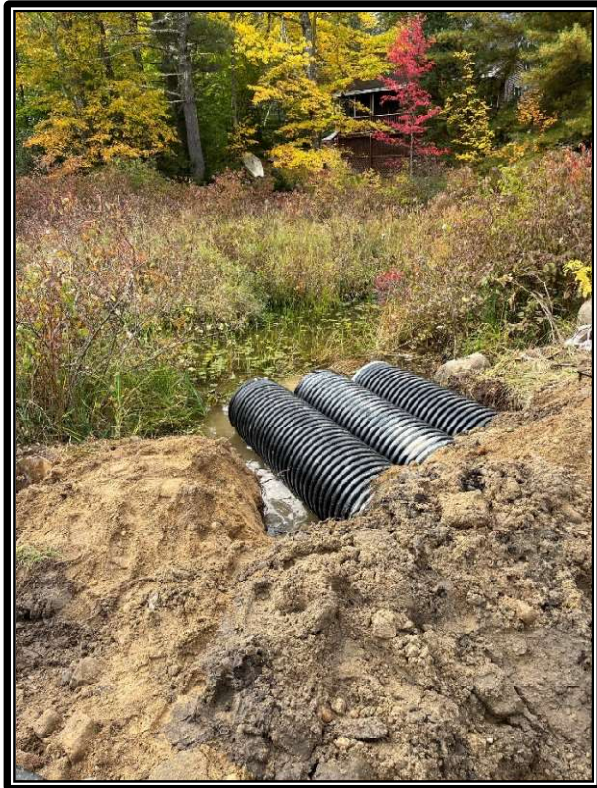


Photo 3: The inlet of the bypass culverts.



Photo 4: The outlet of the bypass culverts.



Photo 5: Compacting the roadway with the excavator bucket.

Copy: Jake Dawson's Excavation & Utility Services, LLC
File

P:\Jobs\2021\2021-083 Effingham - Bailey Road Culvert, Effingham, NH\Construction Observation\Field Reports\Bailey Road Culvert - Field Report #009 10-07-22.docx