



# EXETER PUBLIC WORKS DEPARTMENT

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## MEMO

DATE: August 4, 2023  
TO: Russell Dean, Town Manager  
FROM: Paul Vlasich, PE - Interim Public Works Director  
RE: Siphon Project Update

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The last written Select Board update on Friday July 21<sup>st</sup> had the conductor pipe installation stopped at 50 feet because siphon pipe movement was observed during the hammering operation on the conductor barrel. The soil between the conductor pipe and siphon pipe was beginning to deform the 12-inch HDPE siphon pipe.

The soil between the pipes was removed with a Jet truck and the pipe was restored to its original shape. However, within 10 feet of additional conductor pipe installation the siphon pipe began to deform once again.

The conductor pipe installation plan was abandoned. The new plan was to slowly pull the siphon pipe out of the hole while simultaneously back out the 18-inch reamer by pushing from the Mill side. This procedure was successful on July 27<sup>th</sup> and an intact drill shaft spanned the river. A bracket on the piece that connected the reamer to the swivel had sheared off causing the original loss of connection with the siphon pipe. The conductor pipe was removed.

Approximately 230 feet of siphon pipe was replaced and fused together. Another siphon installation pull was attempted on Wednesday, August 2<sup>nd</sup> again by inserting on the Parkway and pulling toward the Mills. This siphon pull was unsuccessful too. The 12-inch HDPE siphon pipe was pulled to 220 feet from the Swasey Parkway side when the pull encountered an obstacle and could not be advanced any further. This is just short of the distance where the pulling shaft lost contact with the pipe on the initial pull attempt. The siphon pipe was backed out of the hole and the drill shaft remained intact across the river.

The current game plan now is to ream the hole again to remove any obstacles starting on the Mill side of the river and advancing toward Swasey Parkway. First the 12-inch reamer will be utilized, then followed on separate passes with the 18-inch reamer. The direction of the pipe insertion has been switched. Pipe will be inserted from the Mill side and pulled toward the parkway. The siphon pipe had been cut for the move across the river and will be fused together again next week. The Mills have given permission for this activity. The reaming process will begin on Monday August 7<sup>th</sup>.