This is an overview of the capital projects needed for Woodstock Aqueduct Company. You can find additional information in the 90% Engineering Report prepared by Otter Creek Engineering:

#### Elm Street Main Suspension

Location: Elm Street Cost: \$650,000-\$720,000 Duration: <1 year

First in 2011 during Tropical Storm Irene and again in the July 2023 rain events, the water main that runs under the Ottauquechee River at the Elm Street "iron bridge" burst. In both cases, the severed pipe resulted in a significant loss of pressure in the water system and left users without water for almost two weeks. WAC decided to pursue a more flood resilient solution after the 2023 event, and implemented an interim solution of 4" pipe that runs between hydrants and over the Elm Street bridge pedestrian path.

This water main will be replaced with a new 12" insulated pipe that will be suspended under the bridge instead of being buried under the riverbed. This will protect the pipe from the impacts of future flooding events.

### New Well #005 and Pump Replacement

Location: 206 Stimets Road, Route 12 Cost: \$800,000 Duration: <1 year

Well #005 was installed in 1993, and is one of two working wells for WAC. The Town plans to replace it with a new deep gravel-packed well. This well will help the Town cover its Average Day Demand (ADD) and permitted Maximum Daily Demand (MDD) within 12 hours instead of 18 hours, creating a reserve capacity.

## Water Distribution Main Replacement (aka "Option 1b)

Location: Cox District Road from Vondell to Route 4 (1a), along Route 4 to the "Rec Center Bridge" after the Little Theatre Cost: \$4,400,000 Duration: 2-3 years

The current water main is 8" and goes cross country down to Route 4 (we do not have exact mapping). Otter Creek Engineer proposes the creation of a route that would follow Cox District Road down to Route 4, so that future maintenance would be easier. The existing line can remain undisturbed throughout the construction process. From the intersection with Cox District Road, the existing water main that runs east along route 4 would also be upgraded from 8" to

12". These combined upgrades are projected to bring at least 86.5% of the 96 fire hydrants into compliance with the increase in water pressure.

#### New Water Storage Tank

Location: TBD, but on the east end of Woodstock Cost: \$4,800,000 Duration: 3-5 years

Currently, water is pumped from wells along Route 12 to the 948,000 gallon storage tank on Cox District Road at an elevation of 924 feet (floor of the tank). The reliance on just one storage tank exposes the water system to sudden events such as a large fire, a power outage or pump failure, a burst water main or damage to the tank itself. Constructing a second tank on the east side of Woodstock at the same elevation addresses those vulnerabilities and increases water pressure to meet fire flow requirements, with the possibility of expanding the service area for the water system.

This project would require the Town to purchase land at one of the four sites that meets design and engineering requirements.

#### **Upgrades of Water Mains**

Location: Throughout Service Area Cost: Unknown Duration: ongoing 20 - 30 years

About two-thirds of the water mains are 100+ years old, and just 48% of all the mains are 8" in diameter or larger. The Town will develop a long-term plan to replace the undersized or failing sections of the water mains and build the cost of those improvements, or the debt service on a bond to fund the cost of the improvements, into a new rate structure. The Town, when replacing sections of the municipal sewer system or the water system, will consider upgrading the other system at the same time since the ground will already be dug up and all infrastructure will be exposed.

# **Ongoing Infrastructure Maintenance**

Location: Throughout Service Area Cost: TBD Duration: Ongoing

Knowing that all infrastructure needs ongoing maintenance and repairs, the Town will include infrastructure capital improvements for the water system