Hopkinton Interconnection Project

June 14, 2022

Background and Project Need

- Hopkinton is seeking a new permanent connection to Massachusetts Water Resources Authority through the Town of Southborough.
- Hopkinton currently operates 8 wells and purchases water from the Town of Ashland.
- Wells have excessively high iron and manganese concentrations.
- One well, the largest in the system, has elevated concentrations of PFAS.
- Current supply is severely restricted in the summertime and times of drought.

Benefits to Hopkinton

- Sustainable, safe, and reliable water supply to meet the Town's essential needs.
- Quality meets all DEP and public health standards.
  - Eliminates PFAS, Iron and Manganese contamination
- Resilient to climate change and droughts.
- Redirects town resources to conservation and management measures.

Project Elements in Southborough

- Two main goals – no adverse impact to Southborough customers and create opportunities to enhance service to Southborough customers.

- Increased capacity at Hosmer and Boland Pump Stations
- Water main upgrades at multiple locations in Southborough
- Replacement of the Oak Hill Storage Tank
- Eliminate 4 existing pressure reducing valves and add one in a new location.
- New booster pump station at for the Skylar and Fairview Drives neighborhood.

Benefits to Southborough

- <u>Pump Station Upgrades:</u>
- As part of this project, Hosmer and Boland would be upgraded to increase capacity, which would mean all new pumping and piping in the stations.
- While these upgrades are not a high priority for Southborough because the stations were recently upgraded, they come at no cost to Southborough and would result in extended life of each station.

Benefits to Southborough

- <u>Water Main Upgrades:</u>
- The installation of new pipes in certain parts of Town will increase transmission capacity for Hopkinton and improve circulation in the system for Southborough.
- These new pipes will also result in improved fire protection in the areas that they serve.
- These new pipe will replace smaller diameter pipes in the system that vary in age from 30 to 60 years old.

Benefits to Southborough

- <u>Oak Hill Tank Upgrade:</u>
- The benefits of a new, larger and taller tank at Oak Hill are both significant and numerous.
  a. Replacing Oak Hill with a tank that is 23 ft taller single pressure zone across Town, eliminating the need for the 4 pressure reducing valves that exists currently.
  b. Adding 23 ft would add 10 psi to the Low Service Area of Town, which would improve pressure overall and would offset the small reduction in pressure that might occur when Hopkinton is drawing water at its peak draw rate in the summer.

Benefits to Southborough (cont…)

- <u>Oak Hill Tank Upgrade:</u>
  c. Adding 10 psi to the system would improve fire protection throughout the Low Service Area.
  d. Adding 10 psi to the system would improve delivery capacity to the Ashland interconnection.
  e. The current Oak Hill tank has a significant amount of unusable storage; the new tank would be designed to be 100 percent usable.

Benefits to Southborough (cont…)

- <u>Oak Hill Tank Upgrade:</u>
  f. The new tank would be larger than the old tank, which could eliminate the storage deficit the Town of Southborough has had for many years.
  g. Having another tank in the system at the same elevation as Tara means that maintenance on Tara would be much simpler.
  h. You may be able to eliminate the Overlook tank entirely (still under evaluation but looks favorable).

Benefits to Southborough (cont…)

- Upgrades in Southborough will be phased and coordinated to minimize disruptions in service to Southborough residents.
- Investment in Southborough's water infrastructure by Hopkinton is expected to be $8M (hard costs and soft costs).

Questions?

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