

*City of Rochester Water selected R.M. Headlee to assist in restoring to working condition the fountain at the Cobbs Hill Reservoir*

### The Client

City of Rochester

### The Challenge

- Sizing Control Valve for Fountain
- Cost Effective
- Fast Turn-around

### The Solution

(1) Pinch Valve with 24" x 20" Cone Sleeve

### The Result

- On-Time Project Completion
- Long Term Maintenance Flexibility



The City of Rochester's drinking water comes from the Cobbs Hill Reservoir located near the center of the city. It is fed thru a 36" main by gravity from the Hemlock Water Plant 30 miles away. The iconic fountain, in the middle of the reservoir (built in 1908), utilized a gate valve in the fountain structure and operated by the hydraulic power system located in the gate house, to create the back pressure necessary for the fountain to work.

The gate valve and hydraulic system served a long service life of over 100 years. When it became inoperable, the city searched for options to keep the fountain in service. The requirements were:

- Vendor needed to size valve to create the required backpressure during summer and winter months
- The solution required the valve and actuator to be capable of total submergence.
- Valve actuator needed to be throttled from the gate house

Using [Red Valve's](#) sizing program, the optimum size was determined to be a Type A Pinch Valve with a 36" x 20" cone sleeve. To save considerable cost, R.M. Headlee proposed using (2) 36" x 24" ductile iron concentric reducers, (1) upstream & (1) downstream of the valve, with the 24" Type A pinch valve with a 24" x 20" cone sleeve.

Actuation of the Type A, the PINCHING action, is accomplished by air or hydraulic pressure placed on the elastomeric sleeve. The valve body acts as a built-in actuator, eliminating costly and hard to submerge pneumatic, hydraulic or electric actuators.

Modulating the air/hydraulic pressure within the annular space between the body and sleeve will open, throttle or close the valve. RM Headlee proposed using city water, that was readily available, to actuate the valve.

R.M. Headlee's solution was accepted, installed and to this day still proving the spectacular view of the 115 year old fountain that is enjoyed by hundreds of daily walkers, bikers and joggers!

