

**The City of Auburn Hills Secures A Valve Vault That Will Not Fail**

**Redundant Control & Diaphragm**



**Problem:** The City receives 140 PSI water pressure from the City of Detroit. The existing pressure reducing valve vault structure housed two 12” and two 4” pressure reducing valves, two of each size were installed to provide the City with redundancy in the event of a valve failure. The 4” valves were required to provide stable control at low flows. This was required as the 12” valves were not capable of stable lower demand flows. Maintenance on 4 valves, which included complete rebuilds every 2 years, warranted an investigation into new pressure reducing valve technology.

**Solution:** After researching advancements in pressure reducing valve technology the city purchased one 12” Singer 106SRD-PR-SM control valve to

replace all four existing valves. The Singer pressure reducing valve features rolling diaphragm technology which is designed for low flows and capable of handling the maximum flows required even during fire flow events. The Singer Valve design also features a separate back-up diaphragm in valve body which provides complete redundancy. If the main diaphragm fails or the strainer becomes completely plugged the secondary diaphragm and pilot system controls the valve. If this occurrence happens the valve actuates a switch tied into the City’s SCADA system indicating that the valve has moved to the second diaphragm. The City can schedule service with out having to make an emergency service call. The City can now rest a little easier knowing the valve will provide the flows they need and provide redundancy.

**Fusion Bonded Epoxy & S.S. Bolting Standard**



**Singer PR-SM Pressure Reducing Valve Product Features:**

- Made for applications where failure is not an option
- Integral backup system protecting against pilot or diaphragm failure
- Protects against downstream surges
- Reduces unnecessary maintenance