



Pressure Surge Relief Facility for the Water Distribution System – Design



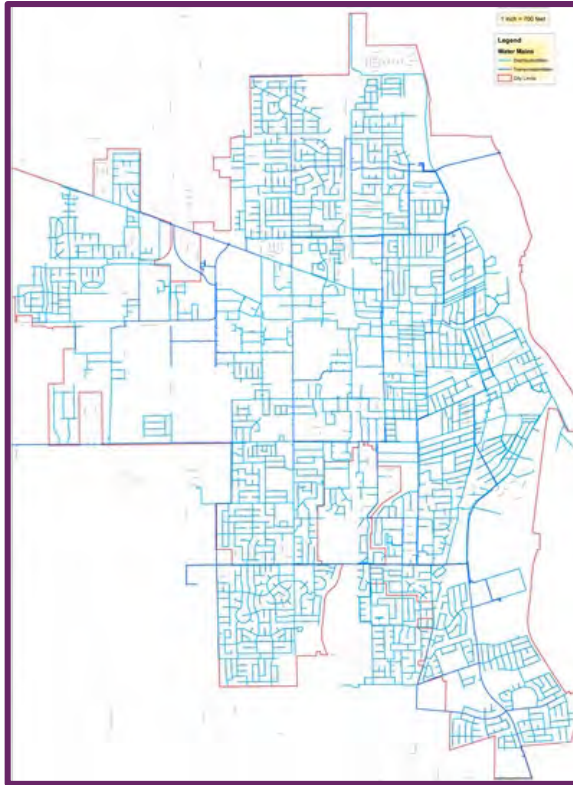
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Water System



- Water Treatment Plant (WTP)
 - Constructed in 1969
 - Multiple upgrades since
 - Currently 36 mgd capacity
- Water Distribution System
 - Approximately 275 miles
 - 6 water storage sites/booster stations (20 MG capacity)
- Approximately 19,000 service connections

Water System



Need for Pressure Surge Relief



- Consistent pressure must be maintained in the distribution system
 - Power outages cause sudden, dramatic pressure swings
 - Pressure swings cause water leaks
 - Pressure drops activate fire alarms and require emergency services response
- Regulatory requirement – min. 20 psi pressure

Pressure Surge Relief Facility



- Pressure Surge Relief Facility will address the pressure fluctuation issue
- Hydraulic Analysis identified size and location
 - Water Treatment Plant
 - Harter Tank storage facility site
- Next phases:
 - Design
 - Competitive bid process
 - Construction and startup

Fiscal Impact



\$359,995 – Account No. 971246 (Pressure Surge Relief Facility)

\$329,995 – Design Contract

\$30,000 – Contingency

Recommendation



Award a Professional Services Agreement to West Yost Associates of Davis, CA in the amount of \$329,995 plus \$30,000 contingency to prepare the design documents for the Pressure Surge Relief Facility for the Water Distribution System, with the finding that it is in the best interest of the City.