

Project Identifier:	TD-5	CIP Budget:	\$60,000
Project Name:	21st Street Booster Station Automated Return Bypass	Funding Source:	Rates

PROJECT DESCRIPTION: This project consists of replacing a manually-operated pressure reducing valve with a flow meter and flow control valve at the 21st Street Booster Station. The system intertie flow control valve will enable water to backflow from the South High Service Level to the High Service Level. The system intertie project will replace an existing PRV valve with new electrically-actuated control valves. The valve will modulate automatically to maintain a flow setpoint based on an analog signal from a new magnetic flow meter. Signals from existing suction and discharge pressure transducers in the booster stations will be incorporated to allow downstream and upstream pressure to be maintained at or above an operator-defined setpoint when the flow control valve is open. All equipment will be connected to the SCADA system to allow remote monitoring of flow rate, valve position, and suction and discharge pressure.

NEED OR JUSTIFICATION: The system intertie connection enables operators to backfeed water from the South High Service Level to the High Service Level to provide automated emergency and redundant water supply to the High service level. This project is required to supply water to the High Service Level during WTP shutdowns, maintenance or during emergencies.

Project Identifier:	TD-6	CIP Budget:	\$60,000
Project Name:	Southwest Booster Station Automated Return Bypass	Funding Source:	Rates

PROJECT DESCRIPTION: This project replaces a manually-operated pressure reducing valve with a flow meter and flow control valve at the Southwest Booster Station to enable water to backflow from the Southwest Service Level to the High Service Level. The system intertie flow control valve will replace an existing PRV valve with a new electrically-actuated control valve. The valve will modulate automatically to maintain a flow setpoint based on an analog signal from a new magnetic flow meter. Signals from existing suction and discharge pressure transducers in the booster stations will be incorporated to allow downstream and upstream pressure to be maintained at or above an operator-defined setpoint when the flow control valve is open. All equipment will be connected to the SCADA system to allow remote monitoring and control of flow rate, valve position, and suction and discharge pressure.

NEED OR JUSTIFICATION: The system intertie connection enables operators to backfeed water from the Southwest Service Level to the High Service Level to provide automated emergency and redundant water supply to the High Service Level. This project is required to supply water to the High Service Level during WTP shutdowns, maintenance or during emergencies.