

City of Surprise SPA2 Wastewater Reclamation Facility

Project Name:	City of Surprise SPA2 Wastewater Reclamation Facility
Location:	City of Surprise, AZ
Owner:	City of Surprise Water Services Department
Project Construction Cost:	\$ 24M

The City of Surprise's SPA2 involved a design and build project for a 2 MGD Regional Membrane Water Reclamation Facility (WRF)'s treatment systems to deal with the City's rapid growing community. This SPA2 plant's Supervisory Control and Data Acquisition (SCADA) system comprised of two main independent Programmable Logic Controllers and Operator Interface Terminals (PLC/OIT) for both local and remote monitoring and controlling of the treatment facilities.

The plant's SCADA system encompasses the following subsystem controls and features:

- Modicon Quantum PLC with a Magelis OIT serving as the plant PLC
- GE Fanuc RX3i with Quickview OIT serving as the membrane treatment system PLC
- Ethernet radio network system
- Fully automated wastewater treatment system
- Fully automated reclaim and well recharge system
- Remote monitoring and alarming system

