



City of Phoenix Booster Pump Stations and Reservoirs

Project Name:	City of Phoenix Booster Pump Stations and Reservoirs
	<ul style="list-style-type: none">• Zones 1, 1A, and 2 Booster Pump Station• Rio Salado RTU Replacement & Control Rehabilitation• Upper Camelback BPS• Camelback Heights BPS• Phoenician BPS• Mummy Mountain BPS• Lower Coral Gables Booster Pump Station• Upper Coral Gables Booster Pump Station• Osborn Booster Pump Station• Lincoln Booster Pump Station• Meig Booster Pump Station• Lower Cloud Croft Booster Pump Station• Lincoln Booster Pump Station• Hayden Crossover Pump Station• 52nd Street Booster Pump Station• Anthem Booster Pump Station• Dynamite Road PRV Station• Tatum Blvd PRV Station• Highline Booster Pump Station• Reservoir Chlorination Facilities
Location:	City of Phoenix, Arizona
Owner:	City of Phoenix, Water Services Department
Project Construction Cost:	\$500,000 to \$11M

Various booster pump stations were designed to incorporate the following equipment and systems:

- 3 to 5 pumps between 15HP to 200HP in parallel pumping water into a pressurized system
- Depending on system operation pumps were designed across the line, with solid state soft starter, or variable frequency drives
- These well pumps were equipped with waste and fill valves (automated) in order to fill reservoirs
- Well pump motors from 100HP to 350 HP on solid state soft starters
- Chlorination system was provided for chlorinating the discharge water into the reservoir(s)
- Flow, pressure, and level instruments were used for monitoring as well as controlling the well pumps
- SCADA system including PLCs and radios were designed for remote monitoring and control of the site

Pumps to Pressurized Systems:

- These well pumps were equipped to pump directly into the water system
- Well pump motors from 100HP to 350 HP on variable frequency drives

- Chlorination system was provided for chlorinating the discharge water into the system
- Flow, pressure, and level instruments were used for monitoring as well as controlling the well pumps
- SCADA system including PLCs and radios were designed for remote monitoring and control of the site
- These sites were equipped with hydro-pneumatic systems with compressors and level and pressure controls

