



Custom Two Piece Riser Creates Bypass System For Sacramento Pump Station

During daily peak flows, 17,000 gallons per minute of raw sewage courses through the Arden Pump Station in Sacramento, California. Needing to clean and upgrade the wet well and replace corroding sluice gates, metal floors, and gratings, the Sacramento County Sanitation District commissioned a bypass pumping station to divert the sewage from the wet well.

Project Details

Project Owner	Sacramento Regional County Sanitation District
Architect/Engineer	Carollo Engineering
Contractor	W.M. Lyles Co.
Location	Sacramento, California
Project Scope	Precast Concrete Traffic Loading Utility Vaults 10'W x 14'L x 7'H 10'W x 14'L x 6.25'H Cover Slab, Grade Rings, Cast Iron Covers





Problem

Contractor W.M. Lyles Co. needed a fast solution for a bypass around the Arden Pump Station. A geotechnical report on the site detailed seismic conditions dictating thicker walls and additional reinforcement. A cast in place base needed a 17'H riser section to accommodate a 36" pipe for inflow and four 18" pipes for outflow. Specifications included 12" thick walls and an HDPE lining with pipe sleeves cast in.

Solution

With a limited time frame, precast concrete allowed the install to be done quickly. Jensen Infrastructure had a full submittal package delivered to the Sanitation District in two weeks and lead time was cut in half. Jensen delivered two risers weighing a combined 156,000 pounds, along with the cover slab to cap the structure when the wet well maintenance was completed so that the bypass structure could be covered and buried.

Key Outcomes

Full Steam Ahead

The temporary bypass station makes it possible to proceed with the rehabilitation of the Arden Pump Station Wet Well.

Helping Hand

Facilities such as the Arden Pump Station Wet Well provide a critical link in the wastewater infrastructure of a community.

Maintenance Saves

Maintenance of these collection systems mitigates the possibility of a catastrophic failure and protects the environment.