

INSTA-VALVE 20-24 SUCCESS STORY

City Avoids Full Shutdown of Wastewater Facility for Repairs with Valve Insertion

Tuscaloosa, Alabama | Population: 99,600

SUMMARY

The Insta-Valve 20-24 provided a targeted shutdown to remove and replace inoperable valves without substantial shutdown.

THE PROBLEM

The City of Tuscaloosa's Infrastructure and Public Services department owns, operates, and maintains the Hilliard N. Fletcher Water Resource Recovery Facility, a conventional activated sludge facility with a permitted treatment capacity of 24 million gallons per day. Raw wastewater enters the facility through the raw sewage pump station.

Isolation valves installed on the discharge segments of each pump had reached the end of their useful life and, due to the necessary continuous operation of the pump station, shutdowns and bypass pumping was not a realistic nor cost-effective solution.

THE SOLUTION

With engineering support provided by Garver, the city contracted Water Services Group to solve their complex repair issue, and they chose the Insta-Valve 20-24 insertion valve to complete the project. First, the Water Services Group's crew mounted six (6) 24-inch Insta-Valve 20-24s—one on each live line. Then they tested, tapped, and inserted each valve one at a time—without the need to shut down the system. The entire process took under three working days.

The newly installed insertion valves allow pinpoint control to isolate the repair area to remove and replace the valves without disrupting the facility.

RESULTS

BETTER CONTROL

With prolonged shutdown impossible, the Insta-Valve 20-24 provides targeted control without impacting the facility's service during repairs.

COST REDUCTION

By utilizing insertion valves, the city avoided the cost of renting, installing, and removing a temporary bypass pumping system. Additionally, the Insta-Valves isolate each pumping segment, allowing the replacement of the existing valves with a spool piece of pipe.

LONG-TERM VALUE

The City of Tuscaloosa now has six permanent, reusable points of control for their wastewater resource recovery facility that can be capitalized.



“The insertion valves provided a cost effective solution to replace the existing valves without the need for a costly, complex temporary pumping system.

— Wes Cardwell, P.E., **GARVER**”

