



INDUSTRIAL
FLOW
SOLUTIONS™

CASE STUDY
OverWatch®

SHERMAN, NY, USA

Annual Cost Savings: **\$8,480**

Transforming Troubles: How Sherman, NY Overcame Pumping Challenges with OverWatch®



BEFORE



AFTER

Problem

The Village of Sherman, a rural community in western New York with a 40-year-old, 140,000 GPD design package wastewater treatment plant, faces several challenges with its existing lift station. The station, which uses centrifugal pumps to move effluent to the plant head works, struggles with frequent pump clogs caused by mop rags accumulating in the wet well. This results in disruptive shutdowns for repairs and requires weekly cleaning of bar screens and quarterly septic tank servicing. Additionally, the 20-foot deep, 36-inch diameter silo poses significant safety risks, as confined space entry gear is needed for maintenance. The combination of these issues leads to costly maintenance repairs, operational interruptions, and ongoing safety concerns.

After much research, the OverWatch® Direct In-Line Pump System was installed to address the problems effectively, leading to trouble-free operation and significant labor decrease.

“One pump can handle 100 percent of our normal flow. It’s nice to know we have plenty of pump power, especially since we have an I&I issue. When we get heavy rains or thaws, we have enough capacity without any problem,”

- Jay Irwin, Chief Operator, Village of Sherman Wastewater Treatment Plant

Solution

The OverWatch® system provides an effective solution for the town's persistent inflow and infiltration (I&I) issues by integrating (2) 15hp pumps, each capable of handling 100% of the normal flow in a clean, dry pit environment.

Designed to address frequent clogging problems, this system utilizes the DIPCUT® impeller, which enables self-cleaning through its Variable Frequency Drives (VFD). When the impeller encounters solid objects, the VFD detects increased torque and reverses the pump direction, allowing hinged vanes to fold flat and expose cutting knives that shred and remove obstructions such as mop rags and fibrous materials. As a result, confined space entry issues are eliminated, maintenance costs are reduced due to the prevention of clogs, operational efficiency is increased with minimal downtime, and access to pump system equipment is improved.

The OverWatch system was installed efficiently, transforming the wet well into a dry pit in just 11.5 hours, placing the pumps 10 feet below the surface without the need for retaining liquid volume. This installation has effectively eliminated clogs in the pit and bar screens, saving the town significant labor and cleaning costs while enhancing safety and cleanliness for employees.

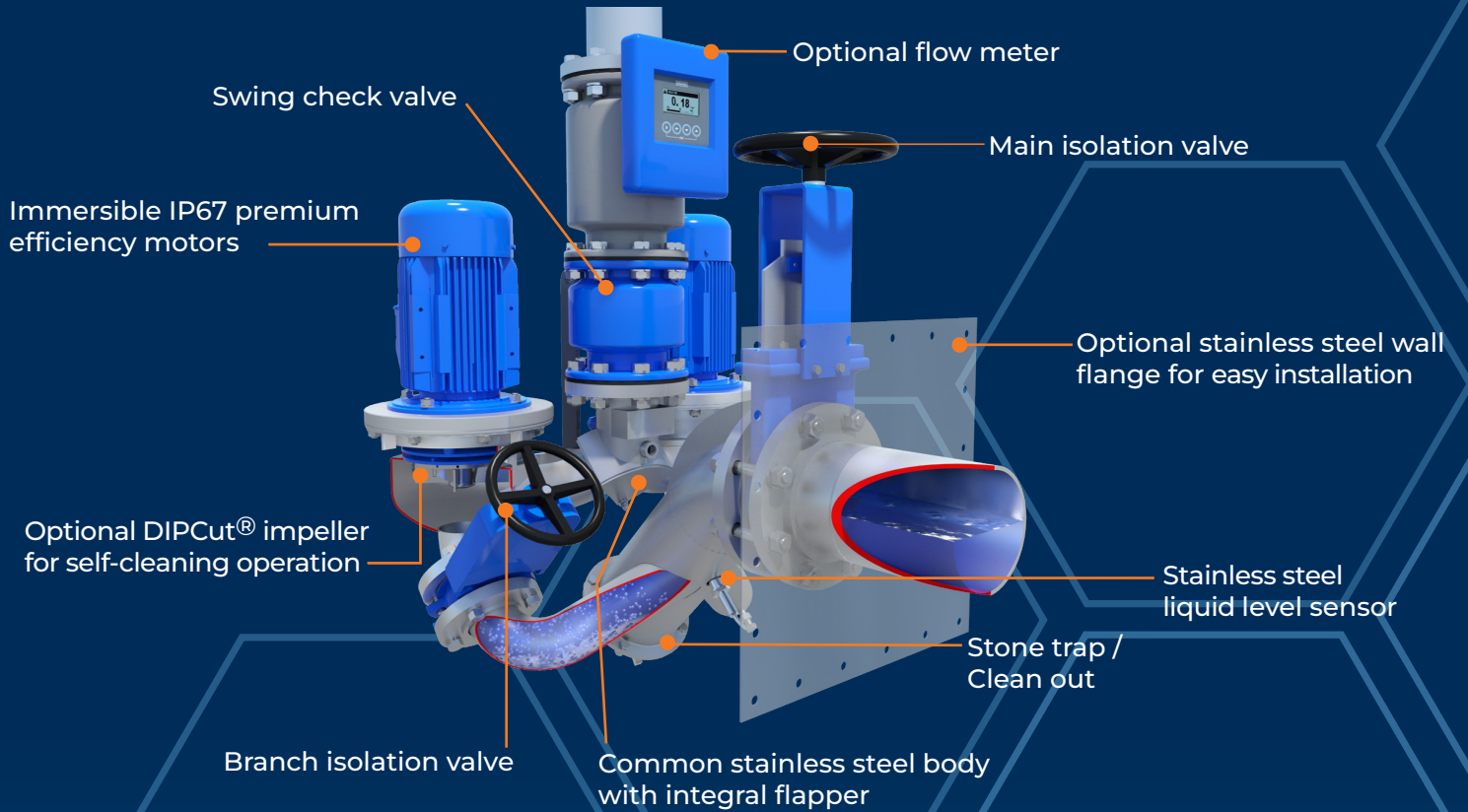
Costs Eliminated per Year: **\$8,480**

- o Quarterly Vacuum Truck - \$1,760
- o Weekly manual cleaning of screens - \$1,920
- o Weekly manual pump unclogging - \$2,880
- o Preventative Maintenance - \$1,920



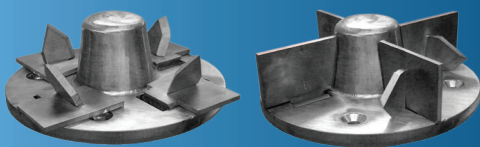
OverWatch®

Direct In-Line Pump System



OverWatch® Direct In-Line Pump System by Industrial Flow Solutions™ is a breakthrough technology designed to lift influent from the point of entry, eliminating the wet well. Influent is contained, eliminating odors, and reducing maintenance. The stainless-steel body is designed to withstand the effects of corrosion from harsh materials and solutions, making **OverWatch®** an ideal solution for the Municipal, Industrial, or Commercial industries.

STAINLESS STEEL IMPELLER OPTIONS



DIPCUT®

Shredding

Pumping



VORTEX



HIGH EFFICIENCY



INDUSTRIAL
FLOW
SOLUTIONS™