CASE STUDY

Vortex Flow™

The Patrick Flood & Stanley Pump Station

The Patrick Flood and Stanley Pump Station located in Farmington, Connecticut, a suburb of Hartford, was scheduled for replacement in 2007. Pumping station wet wells are often a problem for odor and corrosion where excessive turbulence can increase H_2S emissions significantly.

The engineering firm CDM designed plans to include a Vortex Flow Insert in a drop manhole outside of the wet well because it offered a unique product for energy dissipation and odor control without the use of power or chemicals, both of which add cost and maintenance to a sewer system.

As in most wet wells, the drop is typically less than in your standard manhole drop structure. In this case, the drop was only 5.2 ft however the design of the Vortex Flow Insert was able to suppress turbulence and effectively oxygenate the wastewater, thereby eliminating odor and corrosion.

PROFILE

PROJECT
Patrick Flood & Stanley Pump Station Replacement
Farmington, CT

CONTACT
Andy Stachowiak, PE
Town of Farmington

ENGINEER
Kristie Gersley
CDM

INSTALLATION
One Vortex Flow Insert
Type: Wet Well
Peak Flow: 3.19 MGD
VFI Design: 5.2' Drop