

Tideflex CheckMate® Inline Check Valve Prevents Stormwater Backflow in Ann Arbor, MI

During typical rain events, the Allen Creek Drain would rise significantly and backflow into a connecting storm sewer causing flooding on heavily traveled streets and properties adjacent to the storm sewer. As a result, the City of Ann Arbor installed a duckbill check valve to help prevent the backflow. Unfortunately, the valve protruded out from a retaining wall and was damaged by violent surging that occurred at the mouth of the drain during storms.

The City of Ann Arbor needed an inline check valve that would be out of the flow path, prevent backflow and also open with positive gravity flow to drain the storm line. An all-rubber construction was ideal as it would allow for minimal user maintenance and durability in submerged or weather-exposed conditions. It would also have the ability to open with very little head pressure.

The Tideflex CheckMate® Inline Check Valve provided the City of Ann Arbor with the solution they needed. The CheckMate® has an all-rubber design that opens with as little as 1" of head pressure. Designed to close silently, the CheckMate® seals tightly in up to 40' of backpressure with no leakage. The CheckMate® also slips entirely inside the pipe and is pressed securely into the pipe I.D. using a stainless steel expansion clamp. Installation is simple, fast and there are no mechanical parts to maintain. The CheckMate® has been hydraulically tested to insure reliable performance.

Using the CheckMate®, the City of Ann Arbor was able to prevent storm water backflow from Allen Creek Drain onto streets and surrounding properties. The inline design removed the valve from the surge path, protecting it and making it nearly unnoticeable to the public. The Tideflex CheckMate® Inline Check Valve will provide the City of Ann Arbor with years of dependable and cost-saving backflow prevention.

KEY CHECKMATE® FEATURES:

- All-Rubber, Inline Design
- Extremely Low Headloss
- Opens With as Little as 1" of Head Pressure
- No Mechanical Parts, Low Maintenance
- No Backflow with Up to 40' of Backpressure
- 25+ Year Life Expectancy



Allen Creek Drain Surging During a Storm



48" Tideflex CheckMate® Being Delivered for Installation



48" Tideflex CheckMate® Installed on Storm Sewer at Allen Creek Drain