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## MENOMONEE FALLS SANITARY SEWER SYSTEM Lannon, WI

#### **Application Overview**

The Village of Lannon is part of the Menomonee Falls Sanitary Sewer System. The maintenance staff of Menomonee Falls manages over 200 miles of gravity sewers, 11 pumping stations and over 5,000 manholes. Menomonee Falls is a pass through operation with waste water from its collection system being treated in three treatment plants located in the Milwaukee Metropolitan Sewerage District, the Village of Sussex and the Village of Brookfield. Menomonee Falls has a population of 35,000 people with 1,200 residing in Lannon.

One of the most problematic pump stations for Lannon was the Main Street station. The station was built in the early 1990s and receives sewage from nearby industries, commercial establishments, condo complexes and residences. The Main Street station discharges into downstream stations before flowing into the Sussex waste water treatment plant. Since the Main Street station is located near a quarry and a construction site, water containing rocks and stones would frequently enter the station. The station also experiences huge inflow & infiltration during heavy rains. The existing non clog sewage ejector type pumps in the station were no match for the tough application and were failing and clogging repeatedly due to rags and stringy material.

#### Installation

Energenecs, a municipal distributor of Crane Pumps & Systems, worked with Menomonee Falls to install two 4" 10HP explosion proof Sithe chopper pumps in the lift station in April 2018. Since installation, the two pumps have been working without any issues, and Menomonee Falls' maintenance staff hasn't had to remove the pump for any maintenance or service. The Sithe chopper pump's heat treated stainless blades have been chopping and pumping hard solids including stones and sand without any clogging or wear.

### **Key Takeaways**

#### **Pain Points**

- The existing pump could not handle the tough solids including stones and rocks at the lift station causing it to fail repeatedly
- The existing pumps were clogging on rags and stringy solids

#### Solution

- The Sithe Chopper pumps have been working without problem since installation
- The Sithe's heat treated blades are chopping and pumping solids without any impact on the blades sharpness













