

## New Castle, IN

### MUNICIPALITY OVERVIEW:

The city of New Castle, IN is located about 40 miles Northeast of Indianapolis, and has a population of 18,000 people. The city's Utilities department strives to provide safe drinking water and efficient sewer services for its residents and businesses. New Castle has 9 pump stations for waste water and storm water pumping.

### LIFT STATION DETAILS:

One of the most problematic pump stations for New Castle was the State Route 3 pump station. The duplex station was built in late 2000s, and receives sewage from a nearby food processing plant. The pumps in the station discharge to gravity sewer which then flows into the city's waste water treatment plant.

The station's submersible pumps had been causing problems to the city's maintenance staff right from the beginning. The staff's biggest pain point with the station was pump clogging. The traditional non-clog pumps in the station were clogging at least twice a week due to nets, bags and gloves that washed from the food processing plant. These stringy items would wrap around the non-clog impeller vanes making it look like a "ball of spaghetti". Wooden chips used to heat treat meat would also choke the pumps, decreasing flow, increasing run times and damaging the motors. Frustrated with clogging and high costs, the WPC Superintendent, Mr. Steve Swoveland, decided to trial a submersible chopper pump in the station.

### INSTALLATION:

American Pump Repair & Service Inc., a municipal distributor of Crane Pumps & Systems, worked with the city of New Castle to size and install a 4" 10HP Barnes Sithe chopper pump in the station in May 2018. The pump never clogged for six months. Highly impressed, Mr. Swoveland replaced the other non-clog pump in the station with a Sithe chopper pump. Both pumps have "not had any problem" since their installations. The city's staff loves the Sithe chopper's plug-n-play cord and patented open center cutter design. Mr. Swoveland is extremely happy with Sithe chopper pumps and with American Pump Repair's passion for solving customer problems and quality of service. He feels Sithe chopper pumps are "what every station needs".

## KEY TAKEAWAYS

### PAIN POINTS:

- Pumps in State Route 3 lift station were clogging twice every week.
- Nets, bags, gloves and wooden chips were clogging the pumps.

### SOLUTION:

- The city installed a 4" 10HP Sithe chopper pump in the station.
- The pump has not clogged even once since installation.
- Impressed, the city replaced the second pump in the station with Sithe chopper pump.



**PUMP**  
Barnes Sithe Chopper



**OPERATIONAL IMPROVEMENT**  
Reduced Clogging and Run Time



**MUNICIPALITY POPULATION**  
18,000



**INSTALL DATE**  
May 2018

Old clogged  
Non-Clog Pump.

