

# Garfield Interceptor Rehabilitation Project



Leading-Edge Trenchless Solutions

SEKISUI SPR-TM

»»» Case Study



## Project Details

Macomb County had concerns about the sewer pipe located beneath the busy Garfield Interceptor. Over time, the pipe had deteriorated due to age, heavy usage, and the release of a sewer gas called hydrogen sulfide (H<sub>2</sub>S). The release of the acidic gas, H<sub>2</sub>S, caused the pipe to become heavily degraded. If it were to be left as it was, the deteriorating pipe presented a severe risk of collapse, potentially leading to a sinkhole formation that could endanger both public safety and nearby infrastructure. The solution to this growing concern was to rehabilitate the sewer pipe using a 78" liner of SPR TM Spiral Wound technology in the 84" host pipe. This solution was able to be processed in a timely manner with the usage of the SEKISUI SPR TM Technology and the contractor for this project, SAK Construction.

The quick response and collaborative efforts by Macomb County and SAK Construction successfully prevented a potential disaster. By addressing the immediate risks and implementing long-term rehabilitation measures, the sewer pipe was restored to a safe and stable condition. The repair process was completed within a reasonable timeframe - when weather allowed placement, minimizing disruption to daily life, and ensuring the continued usage of the sewer system.

### 78 IN.

Pipe Liner

### 800 FT

Project Length

SPR TM  
32" - 200"

## Challenges:

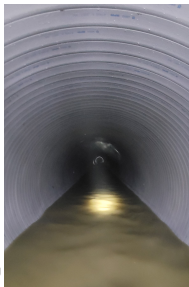
Before the process of installation began, there were some challenges to think of. One challenge kept in mind was the time frame of this project. The urgency to address the deteriorating pipe required fast action to prevent any potential collapse or sinkhole formation. Another challenge was traffic management. The sewer pipe ran beneath a busy intersection. This meant that careful traffic management was needed to minimize disruption to daily commutes. Only one lane of the major street was closed off to complete this project - this allowed for minimal changes to traffic flow near this street.

## Solutions:

To begin the repair process, both SEKISUI SPR and SAK Construction engineers and technicians conducted an assessment of the sewer pipe's condition. The evaluation identified the extent of the pipe's deterioration, potential risks, and most effective repair strategies and action plan. It was then planned to utilize SEKISUI SPR TM Technology; this was Macomb County's first time using this technology. There were some days when the weather did not permit the installation of the SPR TM product, but technicians began the process again when the weather permitted.

One of the notable benefits of this project was SAK's ability to utilize existing manholes to line the pipe, which resulted in significant cost savings for Macomb County. This approach eliminated the need to construct a new shaft, as would have been required with other rehabilitation methods or technologies. Furthermore, our products are specifically designed for installation under live flow conditions, ensuring not only cost savings by minimizing the need for extensive bypass operations during the rehabilitation project but also guaranteeing the structural integrity of the installed liner.

This process of spiral wound installation began in January 2023 and was completed in March 2023. A quick and effective solution was provided for Macomb County and the usage of the SPR TM Spiral Wound Technology is designed for a service life of 50 years, and will hopefully last for even more.



See the Spiral  
Wound Process



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