



COMBINED SEWER REHABILITATION

Indianapolis, Indiana

As concerns for ailing infrastructure increase and “going green” becomes more prevalent, cities nationwide are addressing these concerns with trenchless rehabilitation projects. The Indianapolis Department of Public Works (DPW) desired to rehabilitate the Merrill Street sewer in order to extend its useful life, and if possible, to increase capacity through the pipe. The selected rehabilitation method was Cured In Place Pipe (CIPP), and this project featured the largest diameter CIPP liner DPW has undertaken to date. The project was completed in 2010 and crossed five major thoroughfares without a single road closure.

The Merrill Street Combined Sewer is a 60 to 66-inch reinforced concrete sewer handling both sanitary and stormwater flow through the heart of downtown Indianapolis. The sewer was installed in the late 1940’s, is roughly 30 feet deep, and serves two major downtown customers: Eli Lilly & Company and the U.S. Postal Hub. Approximately 2,900 LF of the sewer was rehabilitated along Merrill St. between Alabama St. and Capitol Ave.

To install the CIPP, a 60 MGD bypass pumping operation was first established to ensure the sewer remained dry during rehabilitation. Above ground, this looked like ten pickup truck-sized pumps pushing flow nearly three quarters of a mile through three 24" bypass sewers.

A high level of coordination and cooperation with downtown businesses was required to make this project a success. The



main bypass pumping pit was located in front of Eli Lilly & Company’s corporate headquarters. The bypass lines ran in front of the U.S. Postal Hub whose truck and delivery traffic could not be disrupted.

Wessler was responsible for the design and bid phase and provided construction administration

assistance for this landmark project. During the design phase, numerous sewer rehabilitation options were evaluated including shotcrete (guniting), CIPP, sliplining, and sewer replacement by open excavation. The CIPP option was determined to be the best combination of cost, minimized disruption, and flow capacity increase (+25%). Wessler remained DPW’s go-to consultant for dealing with technical issues throughout construction.



DPW Engineering Division was very active in all phases of the project. Representatives worked hand-in-hand with Wessler to evaluate rehabilitation options, present solutions to area businesses, and minimize disruption to its downtown customers. Construction Cost: \$3,500,000.

For help with your next project or information on sewer rehab, please contact Eric Haenlein at EricH@wesslerengineering.com or visit us online.



HONOR AWARD
WINNER