

39th Street Conduit Rehabilitation - Phase II, SSA

Project Number	01-103-AS
Service Area	Stickney
Location	Chicago, IL
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$29,400,000
Contract Award Date	February 2024
Substantial Completion Date	February 2026



Project Description This project will rehabilitate a portion of the 100+ year-old conduit lying under 39th Street (Pershing Road), stretching from a former pumping station near Lake Michigan to its discharge at the Racine Avenue Pumping Station (RAPS). The project includes approximately 3,280 feet of concrete intercepting sewer rehabilitation from Halsted Street to RAPS, as well as associated manholes and connecting structures.

The 39th Street conduit consists of the following three segments:

1. The first segment is a 22'-0" x 23'-0" horseshoe constructed of reinforced concrete that extended the conduit westward approximately 2,466 feet from Halsted Street to east of Racine Avenue.
2. The second segment is a 24'-0" x 27'-0" horseshoe constructed of reinforced concrete that runs northwest for approximately 367 feet and drops into the double-barrel sewer connecting to RAPS.
3. The third segment is the 16'-0" x 12'-0" RAPS double-barrel rectangular reinforced concrete connecting sewer, with invert elevation approximately 10-feet lower than the invert of the rest of the 39th Street conduit. This runs west approximately 447 feet and curves into the Racine Avenue Pumping Station.

Project Justification The 39th Street conduit is approximately 90 years old. The conduit receives combined sewage from a service area of approximately nine square miles on the southeast side of Chicago. Video inspection of this conduit indicates severe deterioration, including loss of bricks, infiltrating joints, and mineral deposits at a number of places, which could eventually lead to a collapse. Under Phase I of the project, a bypass tunnel was constructed to allow for the rehabilitation of the 39th Street conduit. Rehabilitation of the conduit will ensure long-term drainage for over 145,000 people in its service area.

Project Status Design