



CHALLENGE

A DOWNTOWN STREET IN COLUMBUS WAS IN NEED OF A QUICK AND COMPREHENSIVE IMPROVEMENTS TO INCREASE SAFETY AND AESTHETICS.

SERVICES

- Sustainable Design
- Storm Sewer Design
- Public Involvement
- Lighting Design
- Signing and Pavement Marking
- Maintenance of Traffic

AWARDS



2007 PROJECT OF THE YEAR
American Public Works Association
(APWA) Ohio

2009 OUTSTANDING
ACHIEVEMENT AWARD
American Council of Engineering
Companies (ACEC)

GAY STREET IMPROVEMENTS

ms consultants prepared construction contract documents for the improvements to Gay Street from Front Street to Cleveland Avenue in downtown Columbus, Ohio. This project switched the operation

of Gay Street from one-way to two-way traffic flow and added aesthetic improvements studied by the city's Downtown Development Office.

The plans included final design of roadway bump-outs and treed median areas, pavement resurfacing improvements, limited drainage improvements, decorative crosswalk treatments, ADA compliant curb ramps with limited sidewalk work, street lighting plans

and maintenance of traffic plans. ms also provided coordination of mast arm traffic signal design, signing and striping design, and parking meter location and design.

STORM SEWERS AND RAIN GARDEN DESIGN

This project included the installation of a new 36-inch storm sewer to facilitate future sewer separation. The design of the new 36-inch storm sewer was complicated by a narrow right-of-way, the presence of many existing utilities, and regulatory space requirements between sewers and existing waterlines. ms engineers also designed an urban rain garden into the drainage system, which channels and filters stormwater runoff to irrigate streetscape plantings. For the city of Columbus it was the first rain garden developed for a public works project.

In addition, the project called for the rehabilitation of approximately 2,600 feet of combined sewer ranging in size from 8- to 36-inches in diameter, using cured-in-place pipe. One segment of sewer was estimated to be 17 percent out-of-round, and typically, a pipe cannot be cured-in-place lined if it is more than 5 percent out-of-round. Therefore, ms staff worked closely with Reynolds Inliner, who supplied a specially-made high-strength liner. The sewer rehabilitation project also included cementitious lining of manholes, repair of damaged pipe with grout, and replacement of existing manhole frames and covers.

FAST TRACK DESIGN AND CONSTRUCTION

ms consultants staff performed quick resolution of construction issues, low shop drawing turnaround time and close coordination with other city departments to expedite this premier project for the city of Columbus. The \$7 million construction project was designed in nine months, and had an accelerated design schedule review process with additional coordination by the city.