



CHALLENGE

THE CITY OF COLUMBUS WANTED TO REVIVE ONE OF ITS MAJOR ROADWAYS, NORTH HIGH STREET, WITH AESTHETIC UPGRADES AND RECONSTRUCTION PROJECTS.

SERVICES

- Electrical Engineering
- Environmental Engineering
- Highway Engineering
- Hydraulic Modeling
- Water Resources
- Structural Engineering
- Survey
- Traffic Engineering

AWARDS



2011 HONOR AWARD
American Council of Engineering
Companies (ACEC) of Ohio

NORTH HIGH STREET IMPROVEMENTS

High Street is the major arterial through the center of Columbus, Ohio. The area directly north of the Ohio State University campus along High Street is

an important commercial link for the city and university alike.

In an effort to revitalize the 11-block stretch of North High from Lane Avenue to Arcadia Avenue, a length of approximately 4,400 feet, the city of Columbus turned to ms consultants to supply design services to upgrade

the streetscape. The city hopes that the revitalization will encourage pedestrian traffic and shopping; and, as a result, local businesses and homeowners will invest in the upkeep of their businesses and homes.

DETAILS

This project involved the reconstruction of sidewalks, curbs, tree lawns, street lighting, handicap access ramps, and drive approaches on both sides of High Street. The project also separated stormwater from the existing combined sewers, sizing the storm sewer for future separation projects, and designing curb inlet spacing.

The proposed scope of work included site survey, subsurface utility engineering and construction plans containing roadway plans, streetscape plans, signing and marking plans, maintenance of traffic plans, street lighting plans, permanent traffic control plans and right-of-way plans.

The site survey included the identification and location of all utilities, drainage features and structures, in addition to typical topographic features, such as pavement, curbs and sidewalks.

The roadway and streetscape plans include landscape trees with tree grates and brick pavers, in addition to coordinated ornamental street lighting, benches and trash receptacles. Curb ramp and sidewalk details were prepared to meet the most current guidelines for compliance with ADA requirements. The project also included the installation of mast arm traffic signals at four intersections, including new underground interconnect.

UNDERGROUND UTILITY DESIGN

Underground utility design work included a new storm sewer system along High Street and Dodridge Street to accommodate the separation from sanitary sewers. ms designed a vertical storm sewer drop shaft 22 feet wide and 20 feet deep to connect a 66-inch storm sewer to an 84-inch outlet to a tributary of the Olentangy River.

An existing 8" water line was abandoned and all connections were designed to be transferred to an existing 12" water line within the project limits. In order to avoid conflicts with proposed storm sewer work, several spot relocations and lowerings were designed along this existing 12" water line.

OVERHEAD UTILITY COORDINATION

The design also included the relocation of overhead utility lines to poles on adjacent streets and, in some cases, in underground duct systems. Coordination with American Electric Power was necessary to provide duct and manhole systems for their facilities crossing High Street.