AI Engineers, Inc.

An Integrated Approach to Infrastructure Solutions

U.S. Route 1, Operational Lanes - Highway Design

Milford, CT

Location
Milford, CT

Owner
ConnDOT

Duration
2005-Present

Prime/Sub
Sub

Construction Cost
$7 million

Project Description:

AI Engineers, Inc. was retained by the Connecticut Department of Transportation to provide complete design services for approximately 1 mile of Route 1, a heavily urbanized state highway located in Milford, Connecticut. The design assignment included the widening of the existing four lane roadway to add a 14 foot wide central common turning lane and six foot outside shoulders and sidewalk areas to accommodate the new roadway width. While also providing room for the wider travel way, AI Engineers carefully controlled the vertical profile to minimize easements or outright takes from the abutting property owners, many of which utilized the abutting space for storefront parking and automotive dealership lots.

Along the route, Route 1 crosses seven signalized intersections for adjoining roads including an on-ramp onto Interstate 95 and a shopping complex. AI performed the traffic counts/traffic studies for these intersections and designed new signal heads and timings to best control the new traffic through these subject areas. AI also performed the drainage analysis for the new roadway back to pipe outflows that included an analysis of the existing and proposed piping network.

In Connecticut, the Department of Environmental Protection oversees state agency permit requirements. Permit preparation was required for DEP Inland Wetland/Water Course Permit, Water Quality Certification, NEPA Documentation, Public Hearing plan preparation and Public Hearing participation/presentation. Additionally, application and permit was required from the Department of Health for work required in the reservoir crossed over in the project footprint.

Salient Features

- Common Center Left Lane
- Traffic Signal Improvements
- Minimize Right-of-Way Acquisition of Abutting Commercial / Business Concerns
- Permits
- Quantity / Cost Estimates
- Drainage System Design
- Traffic Controls
- Utility Coordination