

## Design of Scott Road Bridge over I-84 Waterbury, CT

### Project Description:

#### Location

Waterbury, CT

#### Owner

ConnDOT

#### Duration

2002 – 2009

The LRFD design entailed the replacement of a 2 span simply supported bridge over I-84, ADT: 85,000, in a congested downtown area with a widened structure, 2 - 95ft span continuous welded steel girder composite with concrete deck slab on a new solid stem pier and new abutments. The superstructure design consists of 11- welded plate girders with 35.4 inch webs supporting a 8-1/4" inch thick composite deck spaced to allow for stage construction. The bridge has an overall length of 190 ft. and an out to out structure width of 81 ft. including two sidewalks. A New solid stem pier was designed for seismic and impact loading conditions. Staged construction was required to maintain traffic.



### Salient Features

- Superstructure Replacement
- Widening of Existing Pier
- Replacement of Abutments
- Staged Construction
- Seismic Design
- Survey