

# Pedestrian bridge over Northbound Lake Shore Drive at 47th Street

**LOCATION:**  
Chicago, Illinois

**CLIENT:**  
Chicago Department of  
Transportation

**CONTACT:**  
Mr. Dan Burke  
Deputy Commissioner  
312.744.3520

**CONSTRUCTION COST:**  
\$2.5 Million (Total)  
\$1.9 Million (Structural)

**PROJECT TEAM:**  
Project Manager  
Salvatore Di Bernardo, PE, SE  
Project Engineer  
Mark Johnson, PE, PTOE  
Lead Structural Engineer  
Brett Sauter, PE, SE

**SCOPE OF SERVICES:**

- Preliminary Design
- Final Design

**AWARDS:**

- 2007 Special Achievement Award from the American Council of Engineering Companies (ACEC) of Illinois
- 2007 Best Small Structure Project Award from the Structural Engineers Association of Illinois (SEAOI)
- 2007 Public Works Project of the Year Award for Structures from the American Public Works Association (APWA), Chicago Chapter



## PROJECT DESCRIPTION

Ciorba Group, Inc. was selected by the City of Chicago to provide preliminary engineering and final design plans, specifications and cost estimates for a new pedestrian bridge over Lake Shore Drive at 47th Street. This project involved the removal and replacement of a 65-year-old plate girder pedestrian bridge with a tied-arch steel tube truss structure. Over 1,300 feet of multi-use paths in Burnham Park were also realigned and reconstructed. The structure was designed to connect the existing bicycle trails on the east and west sides of northbound Lake Shore.

The intent of the project was to provide pedestrians and bicyclists with a safer crossing of Lake Shore Drive and to enhance the overall aesthetics of the area along Lake Michigan. The proposed bridge is a tied steel truss arch, which spans 116 ft over three lanes of traffic. Ciorba minimized traffic interruption time by extensive use of pre-fabrication. The spliced truss was completed on site before erection and the bridge deck consisted of precast concrete planks that were assembled and connected to the top chord of the truss. A three-inch cast in place wearing surface completed the deck.

The project included bike and pedestrian ADA landscaped ramps at the bridge approaches, accent lighting, an architectural galvanized steel railing, and aesthetics light diffusers.

Ciorba met all of the goals set by the City of Chicago and delivered the construction documents on time and within budget. **This project received the Best Small Project Award from the Structural Engineers Association of Illinois (SEAI) and a Special Achievement Award from the Illinois section of the American Council of Engineering Companies (ACEC) and 2007 Public Works Project of the year Award for Structures from the American Public Works Association (APWA), Chicago Chapter.**

