



## Project Description

The Oneida bridge, located in Oswego County, New York, provides a total of 6 lanes of traffic (i.e., 3 northbound and 3 southbound) and spans over the Oneida Lake. The bridge, originally constructed in the 1960s, consists of precast prestressed girders and features unique post-tensioning patterns.

In 2010, due to severe ongoing corrosion of the prestressing strand, emergency repairs were conducted on the bridge. The portion of the bridge requiring repairs and strengthening spanned 320 feet.

Kline's primary objective was to design the external post-tensioning system to strengthen the main span of the bridge. The goal was to provide an uplift force at select locations along the length of the drop-in girders.

Our team used state of the art computer modeling for the design and analysis. Accessories such as new concrete anchor blocks (i.e., at the stressing and dead ends of the cables), and steel tendon deviators, used to create the bends at the high and low points of the profile, were also designed by Kline.



Brewerton, NY

## CAPABILITIES

- Post-tensioning
- Rehabilitation

Developer:

**NYSDOT**

Builder / Contractor

**Terry Contracting, Inc.**

Project completion:

**2011**

Industry:

**Governmental - Transportation**

Project type:

**BRIDGE  
REPAIR &  
STRENGTHENING**