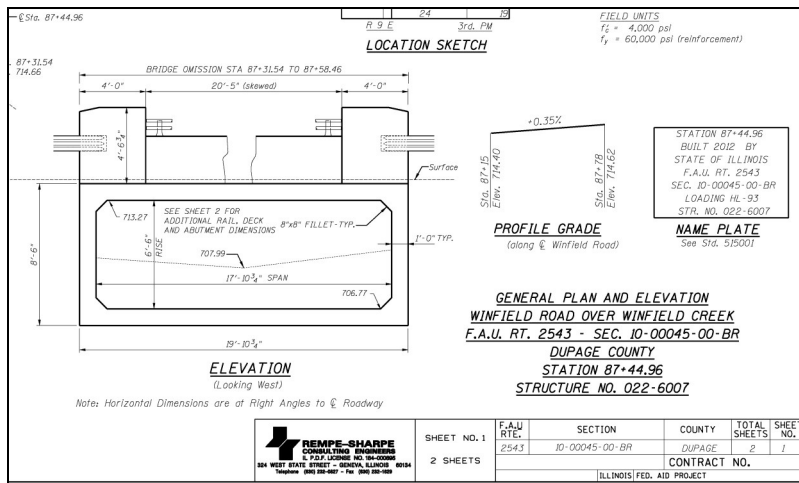


2014 WINFIELD ROAD BRIDGE—WINFIELD, ILLINOIS



Fast track schedule constructed in town bridge reconstruction June-October, 2013.



Detailed Plans and Specifications resulted in very precise structural tolerances and no change orders.

Client: Village of Winfield

Winfield Road Bridge is the primary crossing of Winfield Creek and is therefore of major importance to the Village and surrounding area. The original scope of engineering services was for a simple deck replacement. Upon investigation, due to the deteriorated state of the existing structure, the bridge was scheduled for complete removal and replacement..

Rempe-Sharpe:

- ◆ Complete Preliminary replacement design plan and details
- ◆ Structural design.
- ◆ Bridge structure field survey measurements and stream cross section topographical survey including land use and stream characteristics
- ◆ Detailed IDOT Hydraulic Report Analysis including:
 - Complete research and review of multiple existing flood insurance studies, FEMA HEC-2 hydraulic models and insurance profiles and the DuPage County regulatory flood maps
 - Resolved conflicting flow rate data between multiple Flood Insurance Studies and correlated to historical observations.
 - Detailed complex HEC-RAS computer modeling of natural, existing and proposed conditions including all upstream and downstream structures for the 10, 30, 50, 100 and 500 year critical duration analysis.
 - Bridge Scour analysis
- ◆ IDOT, IDNR-Office of Water Resources, Illinois Endangered and Threatened Species, US Army Corps of Engineers Wetland and DuPage County Permitting
- ◆ Prepared Engineers Estimate Cost

Rempe-Sharpe acted as Resident Engineer on this critical bridge replacement project. Significant stakeholders included Central DuPage Hospital located just north of the project, as well as numerous downtown Winfield businesses. Expediently resolving issues to keep the bridge reconstruction was therefore critical, and the experienced staff provided by Rempe-Sharpe utilized weekly project meetings to work through several issues, including interface with IDOT to hold project schedule and open the road in four (4) months—on schedule.

REFERENCE:

Tye Loomis,
Village Manager
630.933.7140

