

COUNTY ROUTE. 119 BRIDGE OVER CANISTEO RIVER

Steuben County, New York

CASE STUDY

BACKGROUND

As part of the Build Now New York Initiative, Empire State development issued for the construction of several new replacement bridges in the Cameron, NY area. One of these replacement bridges was County Route 119 over the Canisteo River, located in Steuben County, NY. The construction of this bridge would require building two abutments, a wing wall, and shoring. The contractor for this project, Twin Tier Constructors Inc, decided to use Samuel Roll Form Group as the sole supplier of all foundational steel products used on this project.



CHALLENGES

The construction team had to install a sheet piling wing wall to prevent shifting of the existing bridge foundation, while the bridge was still in use. Adding to this challenge was the installation of threaded bars, horizontally underneath the existing road through a dead man wall located on the opposite side. Roll Form Group's XZ95 Sheet Piling was used to construct both the wingwall and the dead man wall.



CASE STUDY

BRIDGE ABUTMENTS

In order to connect the bridge to the embankments located on both sides of the river, the construction team first needed to build two new abutments that ran parallel to the old, existing ones. These two abutments were built using 131 pieces of 14" x .500 Pipe Piling. These pipe piles, installed with a diesel impact hammer, would be used as foundational piles for the abutment. Additionally, conical points were attached to these pipe piles prior to delivery to allow for better driving.

WING WALLS & SHORING

This 116-foot wing wall was made using XZ95 sheet piling. The shoring walls would stabilize the existing bridge's foundation while the new bridge was under construction. XZ95 sheets were ideal for this part of the project for multiple reasons such as their versatility, they met all engineering specifications and the constructor was familiar with them. Additionally, Samuel Roll Form Group also provided the components for a double channel water system, which was used to increase the strength and stability of the wing wall.



MATERIALS USED

131 pieces of 14-inch Pipe Piling with points

58 pieces of XZ85

58 pieces of XZ95

Nuts, Washers, Tubing, Bolts

13/8 Inch 150 KSI Threaded Bar

PROJECT TEAM

Twin Tiers Constructors, Inc.

Atlas Tube

