



MUS-CR32-00.00 – Philo Bridge Replacement

Muskingum County, Ohio

Client: Muskingum County Engineer's Office

Contact: Mark Eicher, (740) 454-0155

Key Personnel:

Rick Engel (PE) PM
 Kevin White, PE
 Matt Cornett, PE, PTOE
 Michael Vogt, PE
 Tim Sheldon, PE

Project Cost:

\$10 Million Construction
 \$1.5 Million Design

Year Completed:

July 2020 Construction
 November 2017 Design

E.L. Robinson's Role:

Prime Consultant
 Bridge/Geotechnical Design
 Roadway Design
 Hydraulic Design

This project involved the replacement of the existing 809' long Bridge Street Bridge over the Muskingum River with a new widened structure. The existing truss bridge maintained vital connectivity between the communities of Duncan Falls and Philo in Muskingum County, Ohio. The Feasibility Study and Structure Type Study evaluated several alignment options for the new river crossing as well as multiple bridge types, including galvanized steel beams and concrete I-beams. This project was on an accelerated schedule due to the extremely poor condition of the existing structure, which was continued to be used until the new bridge was completed. The ELR team worked with MCEO and ODOT District 5 on a first of its kind initiative process for FHWA, which involved acquiring right of way with federal funds prior to environmental clearance. This collaboration was successful in expediting the schedule so that the construction could start one year ahead of the originally planned construction date. The proposed design alternatives evaluated utility impacts, right of way impacts, cost differences, and an environmental analysis. The proposed design consisted of a 7-span prestressed concrete I-beam design supported by wall type piers, a new 114" culvert to maintain an existing inlet channel, 700' of realigned approach roadway, a new traffic signal at SR-60 and Bridge St, and a parking/overlook area for the historic river lock area nearby.