

MARKLAND BRIDGE PHASE 2

Beam repair using FRP

OVERVIEW

Fyfe worked with the Army Corps of Engineers on a bridge project in Warsaw, Kentucky. The Army Corps was assigned to deal with repairs needed on this bridge's AASHTO beams due to water drainage from the bridge causing spalling and corrosion.

This bridge was assigned to the Army Corps because one side of the bridge is bearing on a dam operated by the Army Corps. Engineers from the Army Corps worked with Fyfe engineers to come up with a design solution to offset any steel loss due to corrosion and spalling. Tyfo® SCH41 and SCH41-2X was utilized on the project. Beams received two and three layers of longitudinal reinforcement along the bottom to supplement the beam in flexural strength and U-wraps for shear reinforcement.

Cornerstone Engineering was hired as the general contractor on the project. Cornerstone hired Hydratech, an Ohio Fyfe certified applicator to install the fiber-reinforced polymer (FRP) materials on the project.

The project was completed successfully, and all parties were happy with the results. The FRP installation took four weeks to complete.



Project Overview	
Project	Markland Bridge Phase 2
Location	Warsaw, Kentucky
Owner	Army Corps
Contractor	Cornerstone
Installer	Hydratech

