



PREPARATION PAYS OFF DURING A FLOOD EVENT

UNDERSTANDING SITE CONDITIONS AND CUSTOMER
CONCERNS RESULTS IN RELIABLE SITE ACCESS



is a leading nationwide electric utility delivering electricity to more than five million customers in 11 states.



is a power utility contractor serving customers in the Mid-West, Mid-Atlantic, and nationally on large specialty and design/build work.



**Sterling uses concrete barriers
to mitigate risk in flood plain**

CHALLENGE

When New River Electrical and AEP needed to install new concrete 69kV monopoles and transmission lines in the Ohio and Scioto Rivers' floodplains, they turned to Sterling to create and execute a safe and efficient site access plan that would meet any potential flooding challenge.

PROJECT EXECUTION

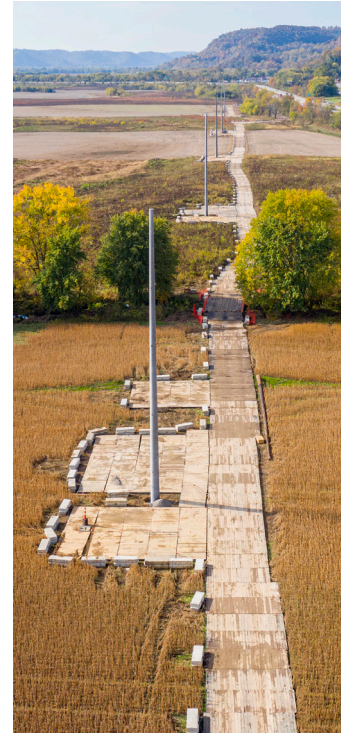
Sterling's team started by reviewing the historical data to establish area flooding patterns based on river crest data and time of year. Then they did a thorough walk down of the project to understand the present conditions and to call out any areas that needed additional attention.

The combination of historical data and walk down provided clarity in preparing a site access plan. Multiple teams from Sterling collaborated on a plan with a precise execution schedule that met the customer's needs while mitigating potential risks in a worst-case scenario.

A catastrophic flooding event would cause costly delays and safety hazards if the site access was damaged or washed away. To mitigate that risk, Sterling connected 4,000 mats TerraLam CLT mats and timber mats to 2,500 concrete jersey barriers along the ROW.

Sterling provided and installed over four miles of temporary access roads, work pads, and SWPPP around the contractor's installation schedule. Additionally, Sterling provided two 40' engineered TerraCross bridges, four 30' timber bridges, and several thousand feet of 12" filter sock and barrier fence.

Between Christmas and the end of the year, that preparation paid off. The Ohio River rapidly rose 17 feet in about 12 hours, dramatically flooding the job site. Because Sterling proactively installed and maintained mitigations like the concrete barriers and connection straps, no matting or bridges were lost during the flooding event.



RESULTS

Sterling understood the customer's objectives for safe, efficient, and timely site access and executed the plan on schedule and under budget. To mitigate potential flood risks, Sterling found creative solutions like connecting the mats on the job site to concrete barriers which allowed the project to handle a catastrophic flood event without losing a mat.

At the conclusion of the project, Sterling restored over 800,000 square feet of ROW including fine grading, seeding, and mulch. There were no recorded environmental or safety incidents during the project.

By taking the time to understand the customer's needs, ground conditions, and potential hazards, Sterling acted as a site access partner at every phase of the project. They added considerable value by providing site access that kept the workers safe while creating efficiencies that allowed the project to proceed on schedule.

