

Fermi National Accelerator Laboratory

118 Assignments / 1976 –2020

Batavia, Illinois



Civil Consultant FermiLab Experience

Site Wide Utilities Study - 2020

Fermi National Accelerator Laboratory has experienced flooding issues with their 14,000 gpm pump station utilized for cooling the massive equipment necessary to conduit sitewide experiments and is critical for maintaining operations. Rempe-Sharpe was tasked with studying the site drainage and flood level characteristics of the site and determine the cause and potential solutions to this issue. Upon initial site inspection and review, Rempe-Sharpe identified and flagged the backwater of Kress Creek almost immediately as a likely cause to the flooding concern and was verified with operations staff. Detailed hydrologic and hydraulic level pool modeling established 100 year flood elevation estimates, confirmed these findings and identified additional potential flooding issues at other previously unknown locations. Several alternates were developed for consideration to reduce the frequency and severity of potential flooding to allow Fermilab to maintain operations during large storm events. These alternates are being budgeted now for future implementation.

Client Contact: Chuck Federowicz
Project Manager
Project Engineer: Brian J. Bennet, P.E., CFM



ICW - 2017

West Wilson/Kidney Pond – 2018 - 2019

Rempe-Sharpe has demonstrated cutting edge value engineering on a number of Fermi Lab infrastructure projects throughout their years of service. A recent example would be in the design cycle of the Kidney Pond parking lot (west of Wilson Hall – 2018 construction). An extensive analysis of alternatives was provided, which successfully eliminated the stormwater pumping station that had been an ongoing flooding and maintenance issue for the entire west at-grade parking lot, as well as Kautz loop road. The new gravity system was made possible due to the engineer's local first-hand knowledge of the Fermi Lab infrastructure.



NTSB Resolved Flooding - 2019