

## MCCOOK RESERVOIR STAGE 1 GROUT CURTAIN

Chicago, IL



- **Owner:**  
U.S. Army Corps of Engineers, Chicago, IL
- **Technique(s) Utilized:**  
Computer-Monitored Cement Grouting

**GROUT I.T.**  
REAL-TIME INFORMATION TECHNOLOGY FOR GROUTING

Nicholson constructed a 7,800-linear foot grout curtain around a new surface reservoir under construction for a combined sewer overflow (CSO) system. The grout curtain, which was installed beneath an overburden cutoff wall around the perimeter of the reservoir, provides the necessary ground treatment to decrease the flow of water in and out of the 7-billion-gallon reservoir. Two rows of grout curtain, one on each side of the cutoff wall and staggered 15 degrees from vertical in opposite directions, are drilled through 65 feet of overburden soil and then extended 325 feet into the limestone bedrock under the reservoir.

On this project, Nicholson used the GROUT I.T. system which measures, records and graphically displays in real-time the total volume of fluid placed in the rock, the effective injection pressures, the rate of injection, the start and stop times of grout injection, and the total time and volume of fluid placed.