

Green Bay Metropolitan Sewerage District Utilizes FPVC™ Pipe for Critical Dual Force Main HDD Installation

In summer 2009, Gabe's Construction Co. of Sheboygan, WI completed two dual force main horizontal directional drill (HDD) installations using 10" DR18 FPVC™ pipe. Due to increased wastewater volumes, the Green Bay Metropolitan Sewerage District (GBMSD) determined that two additional 10" force main lines would need to be added to its wastewater collection system to handle the load. Challenges on the project included installing the new lines under the Fox River and Interstate I-43 at drill depths up to 70 feet.

After evaluating the needs of the project, Earth Tech/AECOM (Sheboygan, WI office) performed a detailed analysis to determine appropriate HDD pipe materials. Both FPVC™ pipe and HDPE were deemed acceptable for the HDD sections. To meet buckling pressure and design flow requirements, FPVC™ pipe was specified at 10" DR18, while HDPE was specified at 12" DR9. The reduced outside diameter of the FPVC™ pipe bundle resulted in lower drill costs, leading to its selection by Gabe's Construction.

Pipeline Details and Project Summary

Utility:	Green Bay MSD
Location:	Green Bay, WI
HDD Contractor:	Gabe's Construction
Pipe	6,100 LF, 10" DR18 FPVC™
Pressure Test:	150 psi
Installation:	HDD Bundled Pull
Pull Lengths:	1,800 LF and 1,200 LF



UGSI fused the pipe while Gabe's completed two separate drills: 1,800 LF (under I-43) and 1,200 LF (under the Fox River). Two 10" fused pipelines were simultaneously pulled back through each borehole. Nick Atkins, HDD Project Manager with Gabe's, commented: "We were very impressed with the professional support we received from UGSI; from pre-project conference calls to on-site fusion services. Gabe's will look forward to future opportunities to work with UGSI and Fusible PVC™ pipe in the near future."

Terry Johnson, Project Manager with AECOM, commented: "The project went very smoothly and was completed ahead of schedule."



For additional project information or project reference contacts, please contact Brett DeRousse at (847) 946-2850 or (bderousse@underground solutions.com)