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Fauquier County WSA

The Fauquier County Water and Sanitation Authority (FCWSA) uses MUNICPEX creatively during water main replacement project.

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MUNICIPEX keeps Virginia residents' water running during replacement of water main

When road crews need to complete major repair work, they can shut down highways or streets and reroute traffic. It's not as easy when a municipality needs to replace aging water mains. These projects can take months, but residents clearly cannot go that long without water service.

The Fauquier County Water and Sanitation Authority (FCWSA) used a creative solution while upgrading the water main in the northern Virginia town of Bealeton.

Crews laid out 10,000 ft (3,048 m) of 2-in. REHAU MUNICIPEX crosslinked polyethylene (PEXa) water service pipe, using it as an above-ground temporary water main serving nearly 40 homes while they burst the aging existing water main and pulled in a new 8-in. high-density polyethylene (HDPE) main.

FCWSA project manager Robert Good said the flexibility and durability of the MUNICIPEX pipe won him over, as well as the ease with which it could be handled. Crews rolled out the temporary line, laid it above ground, where it would remain flat and in place. If they had used traditional polyethylene pipe as the temporary water line, it would have required placing 100 lb (45 kg) sandbags on the pipe every 50 ft (15 m) to hold the line in place, adding time and labor costs to the project.

Because the temporary water line was going to remain above ground in a residential area where residents and utility crews would be frequently driving over the pipe, Good wanted to be certain it was durable enough to withstand some punishment. He admits he was skeptical at first, but quickly became convinced of its durability. FCWSA had no issues with the temporary line even with the repeated weight of a 20,000-lb (9,000 kg) rubber-tired loader rolling over it.

That's not surprising. According to a Plastics Pipe Institute (PPI) report, PEXa pipe such as MUNICIPEX surpasses the performance of HDPE in terms of resistance to stress cracking, slow crack growth and creep. It is more flexible than other piping, is highly resistant to gouges or scratches, and is resistant to crush, kink or collapse under pressure. It's also more affordable. Good estimates the FCWSA saved \$25,000 in product and labor costs by using MUNICIPEX.

FCWSA chose MUNICIPEX specifically for this temporary project, but after working with it and experiencing the flexibility and toughness, foreman Gilberto Saravia and engineer Michael Edelen agreed they wanted to use MUNICIPEX exclusively for future water service applications. As a result, FCWSA changed their specification to name REHAU MUNICIPEX as an equal to copper for all water service applications up to 2 in. for the county.ny.



Project: Fauquier County Water and Sanitation Authority
Construction type: Water main replacement, completed 2016
Project scope: 10,000 ft (3,048 m) of pipe
REHAU systems used: MUNICIPEX® water service line

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