



Flexible, durable, corrosion resistant, leak free using PE4710 with HDD installation.

CASE STUDY

FT. WORTH CLEAR FORK FORCE MAIN

The City of Fort Worth is one of the fastest growing cities in the nation, and infrastructure and capital facilities play a critical part in that continued growth. Its 2021 through 2025 Capital Improvement Plan includes over \$1.85 billion in planned capital expenditures of which \$127 million is for stormwater and approximately \$1 billion is for water and wastewater projects. Stormwater capital improvements are required to mitigate flood risk and to ensure system reliability by replacing aging infrastructure and facilities. Water and wastewater capital improvements address system growth, rehabilitation, corporate priorities, legislative and regulatory mandates, and operational enhancements.

Ft. Worth's existing 48" diameter sanitary sewer and 54" diameter wastewater collection lines that parallel the Clear Fork of the Trinity River from west of the University Drive/I-30 intersection downstream through Trinity Park to Forest Park Boule vard at 5th Street were undersized. To support growth and to eliminate repeated sanitary sewer overflows near the

intersection of University Drive and Rosedale Street, Ft. Worth installed approximately three miles of 36 DIPS PE4710 sanitary force main from west of University Drive to its deep tunnel sewers in Downtown Ft. Worth in 2023. The pipe was installed by S.J. Louis Construction of Texas using both open cut and horizontal directional drilling (HDD). HDD was used to go under the Union Pacific Railroad, Chisholm Trail Parkway, I-30, and Clear Fork Trinity River and along North Forest Park Blvd.

This \$19.6 million project used 9,200 feet of DR 13.5 and 6,000 feet of DR11 36 DIPS PE4710 pipe manufactured by WL Plastics which is headquartered in Ft. Worth with three manufacturing facilities located in Texas (Bowie, Snyder, and Lubbock). The pipe was supplied by ISCO Industries. PE4710 pipe was chosen because it is flexible, durable, corrosion resistant, leak free, able to handle continuous surge pressures 50% over its rated pressure, and easily installed by HDD. Construction impacted the Fort Worth Downtown Alliance, Fort Worth Botanic Garden and Trinity Park, as well as apartment complexes and businesses along 7th Street and 5th Street. Local sourcing of PE4710 pipe from WL Plastics helped reduce construction delays.





