

ERIE WATER WORKS (EWW)

SPOTLIGHT ON 2020 CAPITAL IMPROVEMENT PROJECTS

WATER STORAGE PROJECTS

➤ EAST BOOSTER TANK & HYDROPILLAR INTERIOR & EXTERIOR RECOATING

It is necessary to maintain and repair tank coatings in order to prevent corrosion of the steel underneath. Failure of the steel could cause significant disruption to our customer's water service. Keeping EWW tanks in a reliable operational state is critical to our business.

The **East Booster Tank** and **Hydropillar** (shown to the right) are partner tanks along Zenith Drive in Millcreek Township that provide stored water to parts of the City of Erie and Millcreek Township. The



tank holds 800,000 gallons while the hydropillar contains 1,500,000 gallons of water. The interior and exterior were recoated in 2020 and new, continuously operated, mechanical mixing systems were installed in order to promote uniform water quality and to help control disinfection byproducts. Circulating water in storage facilities helps to keep chlorine levels uniform, to reduce water age in the distribution system, and to prevent thermal stratification year round.

TRANSMISSION & DISTRIBUTION PROJECTS

➤ BOYER ROAD, WILDWOOD WAY, CREAK LANE AND ROCKLEDGE ROAD WATER MAIN REPLACEMENT PROJECT

The water mains in these areas of the EWW system had become increasingly failure prone over time. In fact, there have been over 40+ water main breaks in the past 20 years. The design was completed by the EWW Engineering Department. The project replaced 4,150 feet along Boyer, 2,400 feet along Creek and Wildwood, and 250 feet along Rockledge Drive near the intersection of Pelham Road. The work on Rockledge connected two dead ends as part of EWW's continued effort to meet and to exceed Department of Environmental Protection standards. Initially, 8 utility contractors submitted bids though the project was awarded to Konzel Construction in an amount not-to-exceed \$815,000. In addition, 102 customer service taps, 14 isolation valves, and 6 fire hydrants were renewed or added as part of this important infrastructure investment.



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➤ STATE STREET WATER MAIN REPLACEMENT PROJECT

In 2020, EWW replaced the water mains along State Street between 21st and 26th Street in the City of Erie. The project resulted in a nearly \$800,000 investment in the water system. The project was a collaborative effort between EWW, the City of Erie, property owners, and Konzel Construction as contractor. The scope of the project included replacing aging 12-inch and 6-inch water mains with one new 12-inch water main. The mains replaced were originally installed between 1904 and 1953. Frequent failures interrupted water service to many customers, caused major traffic disruptions, and lead to expensive pavement restoration on this highly traveled roadway. As part of the work, the 5-ft. by 7-ft. “Koehler Beer Tunnel” under State Street that once connected buildings on both sides of the street was filled with grout and abandoned to help ensure the stability of the roadway above it. EWW appreciated the patience and cooperation of customers, business owners, and motorists during construction. Renewing infrastructure is an important challenge facing utilities across the U.S., but also one that must be addressed strategically and methodically.



➤ CHESTNUT HILL, DORCHESTER & MILLER WATER MAIN REPLACEMENT



This \$850,000 investment funded the replacement of 2,600+ feet of problematic water main along Chestnut Hill Drive, Dorchester Drive and Miller Avenue in the City of Erie and Millcreek Township. This project renewed critical infrastructure where it was needed. New service lines were provided to all customers in the area and enhanced fire protection is now provided. There were 44 customer service taps, 18 isolation valves and 3 fire hydrants renewed or added as part of the work.

➤ WATER MAIN LOOPING PROJECTS

EWW annually prioritizes and completes water main “loops” in order to eliminate dead ends where water can become stagnant from lack of use. In 2020, about 25 dead ends were eliminated. Chivers Construction Company constructed 6 loops while EWW’s Distribution Department completed 10 looping projects. Work occurred in Wesleyville Borough, Millcreek Township, Harborcreek Township, and the City of Erie. About \$800,000 was invested in order to improve water quality and fire protection for EWW customers.