



# LAUDERTRAC

## INFRASTRUCTURE UPDATE FORT LAUDERDALE

Tracking Progress on Commission Priorities for 2020



December 2020

## INVESTING IN OUR FUTURE

Throughout 2020 the City made significant progress on a variety of infrastructure improvements designed to improve the services we provide to our neighbors. From water and sewer projects to bridges and seawalls, the City has over 150 infrastructure projects in the active stages of planning, design, bidding and construction. This year the Public Works Department completed 25 projects, representing more than \$32 million in improvements. See a brief overview of some projects below. To learn more, visit [www.fortlauderdale.gov/lauderworks](http://www.fortlauderdale.gov/lauderworks).



### Redundant Sewer Line Reaches Sixty Percent Completion

The most notable project to get underway in 2020 was the installation of the 7-mile redundant sewer force main line. The City has committed \$65 million to construct a new service line from the lift station at the Coral Ridge Country Club on Northeast 37 Street south to the George T. Lohmeyer Wastewater Treatment Plant on Southeast 17 Street.

Determined to complete the project as quickly as possible, the City hired two contractors to work simultaneously. Murphy Pipeline is installing the northern portion of the line from Northeast 8 Street to Northeast 37 Street. David Mancini & Sons is installing the southern portion of the line, from the treatment plant to Northeast 8 Street.

The new line is made of high-density polyethylene pipe (HDPE). Crews are installing the pipe using a process called underground directional drilling. The trenchless method is more efficient than traditional open cut construction and is helping to expedite the project. Directional drilling also reduces the need for digging, so there is less disruption to roads and less restoration work. They're using HDPE pipe because it is more resistant to corrosion than iron. It has fewer mechanical joints and is more flexible than traditional ductile pipe, which will reduce maintenance needs and improve the infrastructure's resilience to rising groundwater tables and sea level rise. Fewer repairs and greater longevity equate to more reliable service and resident quality of life.

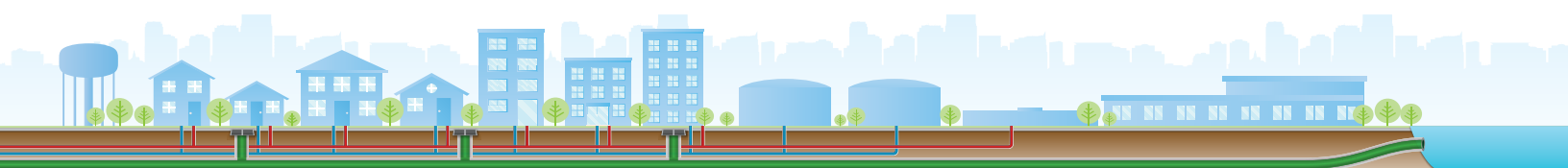
A 1.5-mile section of the line, from downtown Fort Lauderdale south to the wastewater treatment plant on Southeast 17 Street was activated in October. Once the entire seven-mile line is activated, the concurrent existing line will be taken out of service, rehabilitated and maintained, resulting in two wastewater transmission lines. The secondary line will create a truly redundant system that will enable the City to use either line as needed, which will minimize interruptions to service.



### Investing in Stormwater Improvements

The City will invest \$200 million over the next five years into critical stormwater master plan projects in our most vulnerable areas throughout the city. More than \$70 million in stormwater infrastructure improvements are planned for the Edgewood and River Oaks neighborhoods. Earlier this year construction plans were submitted to Broward County for approval. In the coming months the City will initiate a bidding process, hire a contractor, and begin construction. The project for both neighborhoods will take about 36 months and will include:

40,000 linear feet (LF) of new storm sewers; 10,000 LF of storm sewer replacement; 5,500 LF of exfiltration trench; 19,000 square yards (SY) of new swales; 35,000 SY of permeable pavement; nine water quality structures and two stormwater pump stations.





## Pursuing New Water Treatment Plant

The City has been evaluating options to upgrade the Fiveash Water Treatment Plant through renovation and rehabilitation. Carollo Engineers evaluated the water treatment plant and recommended that the City construct a new one rather than continue to invest in repairs to the current one. Following Carollo Engineer's recommendation, the City began exploring options to construct a new plant and invest only in maintenance needed to continue to provide quality drinking water for the next seven years, which will include short-term repairs, addition of a pH control system, and improvements to the lime delivery system. By cutting out longterm repairs that do not affect operations, the City expects to save about \$14 million that can go towards other infrastructure improvements. Funding in the amount of \$250,000 for an owners representative to move the Fiveash Water Treatment Plant replacement project forward was appropriated in the FY 2021 budget. A contract is expected to be secured for this service in early 2021.

## Creating Water System Model to Inform Future Planning

Fort Lauderdale created a hydraulic model of the City's water distribution system, which can help analyze operational conditions including flow, pressure, pipe size, valve locations, and system capacity. The model will also be used to evaluate system impacts from proposed developments and new connections so that proactive measures may be taken to ensure capacity and anticipated demands.

## Proactively Maintaining Water Valves

In the event of a water main break, knowing where valves are located enables crews to quickly isolate water flows and make fast and efficient repairs with minimal water service disruption. The City follows the American Water Works Association's best practices, which recommend completing a cycle of valve inspections and maintenance every five years. This year, crews inspected and exercised 4,493 (or 35%) of the system's 12,915 valves. Such efforts help maintain a high-performing water distribution system.

**Additional infrastructure improvements underway to increase capacity and provide neighbors with enhanced service and reliability in 2020 included:**

- ▶ Investing \$4.9 million to replace 25,000 linear feet of existing water mains in Bermuda Riviera
- ▶ Investing \$6 million to replace approximately 26,500 linear feet of existing water mains in Victoria Park
- ▶ Investing \$8 million to rehabilitate more than 46,500 linear feet of the sanitary sewer system in Dorsey-Riverbend
- ▶ Investing \$3.6 million to replace the existing bridge on South Ocean Drive in Harbor

## GET INFORMATION AND UPDATES



CITY OF FORT LAUDERDALE

**24-hour Neighbor Call Center:** 954-828-8000

**Website:** [www.fortlauderdale.gov/infrastructure](http://www.fortlauderdale.gov/infrastructure)

**LauderWorks:** [www.fortlauderdale.gov/lauderworks](http://www.fortlauderdale.gov/lauderworks)

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