



Trinity River Authority of Texas
Central Regional Wastewater System

WEST FORK 1



WEFTEC Tour
October 24, 2006

The Central Regional Wastewater System serves

ONE MILLION PEOPLE

The Trinity River Authority is a political subdivision of the state of Texas and encompasses all of five and parts of 12 counties located within the Trinity River Basin. Public services currently provided and/or being developed by the Authority include multiple regional wastewater treatment, water treatment, recreation, water supply and reservoir systems.

In 1957, the Trinity River Authority established the Central Regional Wastewater System. In December 1959, the Central Regional Treatment Plant was placed into operation to serve four member cities: Irving, Grand Prairie, Farmers Branch and a portion of western Dallas.

During the late 1960s and early 1970s, the Central Regional Wastewater System expanded its original 28-mile pipeline to approximately 140 miles that extended services to several other cities. More recently, expansion has extended the pipeline system (collection system) to over 200 miles serving all or part of 21 contracting parties with almost one million people being served.

INTERESTING FACT

While excavating the property for the West Fork I interceptor, contractors found fossils ...

Dr. C. Reid Ferring, Director of the Center for Environmental Archeology, Institute of Applied Science at the University of North Texas in Denton, excavated the site and believes the bones are remains of deer, bison, and elk and could be 12-15 thousand years old.

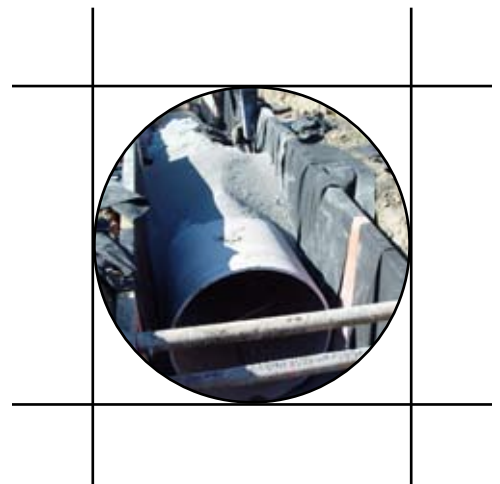


WHAT IS WEST FORK 1?

WEST FORK 1 is a 3.5-mile, 108-inch relief interceptor generally paralleling the Authority's existing 84- and 54-inch pipelines and Interstate 30.

PHASE I of the project is approximately 6,000 feet in length, running along the east side of the treatment plant, parallel with Mountain Creek in Grand Prairie, Texas, then under and parallel with I-30 for a short distance.

PHASE II starts along I-30 and moves west to a point between MacArthur Blvd. and Belt Line Road in Grand Prairie.





The Trinity River Authority's Central Regional Wastewater System began construction on the West Fork Relief Interceptor WF-1 Project on October 4, 2004. The new 108-inch fiberglass wastewater pipeline, designed by Alan Plummer Associates, Inc., will ultimately stretch for 19,500 feet.

West Fork I has four major junction boxes, some the size of mobile homes.

Future phases of the West Fork Relief Interceptor will be constructed following the completion of right-of-way acquisition state.

“WHAT MAKES THIS PROJECT UNIQUE FROM OTHER PIPELINE CONSTRUCTION IS THE REQUIREMENT THAT AN UNDERGROUND TUNNEL BE BORED FOR PARTS OF THE PIPELINE,” SAID BILL DECKER, MANAGER OF WATER DEVELOPMENT IN TRA'S NORTHERN REGION. “MOST PIPELINES ARE LAID USING AN OPEN-TRENCH METHOD,” HE ADDED.

The original West Fork Interceptor was constructed and placed into service in the early 1960's. This pipeline system, in its entirety, consists of 36 meter stations and approximately 46 miles of varying diameter pipelines. It is one of the major interceptors that transports wastewater flows to the 162 million-gallon-per-day CRWS treatment plant. The West Fork pipeline system has been paralleled and extended on several occasions in order to expand its service area coverage. This project, West Fork Relief Interceptor WF-1, provides a flow capacity of 363 million gallons per day, which should meet system requirements projected past the year 2020.

Because of the corrosion resistant aspects of the centrifugally cast fiberglass pipe material, the pipe should be able to serve the region well beyond the minimum 50-year design life requirement of the Texas Commission on Environmental Quality.

The West Fork Relief Interceptor is located in unstable soil conditions in a relatively narrow space between existing pipelines and a levee that surrounds the CRWS plant. In addition, the gravity-fed pipe had to be placed at depths varying from 20 to 42 feet underground. Those three factors made it necessary to bore an underground tunnel in which to install much of the pipe.

Two sections, totaling a distance of approximately two-thirds of the pipe, will be installed using the boring method. A 3,275-foot section will be bored followed by a smaller section of 359 feet.



For more information,
contact:

Bill Cyrus
Manager, Technical Services
Central Regional
Wastewater System
6500 West Singleton Blvd.
Dallas, Texas 75212
(972) 263-2251
cyrusb@trinityra.org

