

## By Charlie Ingram

Three underground pipelines help meet pumping capacity needs looding has been as much a part of New Orleans' 300-year history as jazz, jambalaya and French Quarter juke joints.

One of the city's worst floods occurred in the mid-1990s and led to the creation of the Southeast Louisiana Urban Flood Risk Reduction Project (SELA). The main objective of SELA is to reduce flooding in three parishes: Orleans, Jefferson and St. Tammany. Funding issues stymied SELA's initial progress, but federal money began pouring in after a Katrina-related levee break flooded 80% of New Orleans in 2005.

According to the U.S. Army Corps of Engineers, the drainage program's overall objective in Orleans and Jefferson parishes is to modify and improve drainage and pump excess water from floodprone areas into the Mississippi River. Those waters currently drain into Lake Pontchartrain. Plans for St. Tammany Parish include channel enlargements, bridge replacements, detention ponds, levees and elevation of flood-prone structures. A substantial amount of this work has been completed in Jefferson and Orleans parishes, but work has yet to begin on the St. Tammany Parish projects, according to the Corps' website.

## **Pumping & Piping**

A major part of the project involves meeting the need for large pumping capacity, and American SpiralWeld Pipe is helping meet that need. Beginning several years ago, SELA's \$100 million-plus Harahan Pump to River project used spiral-welded pipe. B&K Construction Co. LLC, of Mandeville, La., currently is executing a \$24.3 million Harahan Pump to River contract that involves the installation of more than 6,000 ft of 84-in.-diameter spiral-welded steel pipe.

The piping consists of three different lines being installed underground along Powerline Drive

from Jefferson Highway to River Road Drive. From there, the lines continue up and over the levee to the Mississippi River. Pumping capacity is 1,200 cu ft per second. B&K Construction started this phase of the project in March 2013 and is slated to finish it in early 2016.

In addition to providing all discharge piping for this project, American also is supplying fabricated discharge cones. "Their product is one of the best our field personnel have dealt with in recent years," said Bo Markovic, project manager for B&K Construction. "The pipe is being delivered on flatbed trucks, and it's cradled for support and tied down with nylon straps to protect the exterior coating. Interior cribbing is used to keep the pipe diameter true to its dimensions.

"The quality control inspectors on the project have not had any issues with the pipe coating, handling, length, roundness or thickness of the interior mortar lining. Comments from welders and operators while handling and installing the pipe often include remarks on how well the pipe fits together and how easy it is to handle. "

The pipe production was on time, and communication between the production facility and the B&K Construction field staff was constant and flowed without issues. Sales representatives continue to make visits to the jobsite and follow up with all requests.

Markovic said the biggest challenge on any underground project stems from the possibility of encountering unforeseen structures while excavating. He said the key to overcoming this challenge is to approach things with a calm mind and gather input from management and the design team. Only then can a solution be proposed and the structure removed. **W&WC** 

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