

2 WAYCROSS LOCOMOTIVE



Pipe awaiting installation stretches across tracks southwest of the coach shop.

High-tech upgrade at back shop

When it came time to replace the Waycross heavy equipment shop's fire suppression system, CSXT employed cutting-edge technology known as pipebursting to minimize disruption to normal operations.

Pipebursting uses the existing line as a host pipe. A cone-shaped head slightly larger than the new pipe is driven through the old line, bursting the original pipe and clearing the way for the new line, attached to the rear of the head.

An emerging technology in the U.S., pipebursting has been standard practice in the United Kingdom for more than 20 years — where Andy Mayer learned the technique.

Mayer moved to Jacksonville from London eight years ago and founded Murphy Pipeline Contractors Inc. Mayer and his employees are replacing the system in coordination with Robert Bates Jr. RBA Inc. Consulting Engineering president and principal engineer.

Pipebursting technology eliminates the need for an open cut along the utility line. On the railroad, that allows tracks to remain in place and yard operations to continue with minimal disruption.

Rather than an open cut, pipebursting uses pits at locations for the placement of machines pulling the bursting head and at the insertion point of a new pipe run.

Waycross's new fire-suppression system required 600 feet of 10-inch pipe and 4,200 feet of 8-inch pipe installed in 300- to 600-foot runs. Nine hydrants also were replaced.

The project began in November and was completed by Dec. 31.

The old system dates to the early 20th Century. Murphy Pipeline employees unearthed valves stamped with the years 1908 and 1913. They worked with an original drawing of the system dated 1917.

"It was so old it would blow holes in the lines when we turned the pumps on," said Frankie Manuel, electrician.

The new pipe successfully held 150 pounds of pressure for two hours during a test, though Bates said normal operation will require approximately 80 to 85 pounds of pressure.

The project is Mayer's first with the railroad. While the location presents unique challenges, Mayer said he enjoys a good relationship with CSXT.

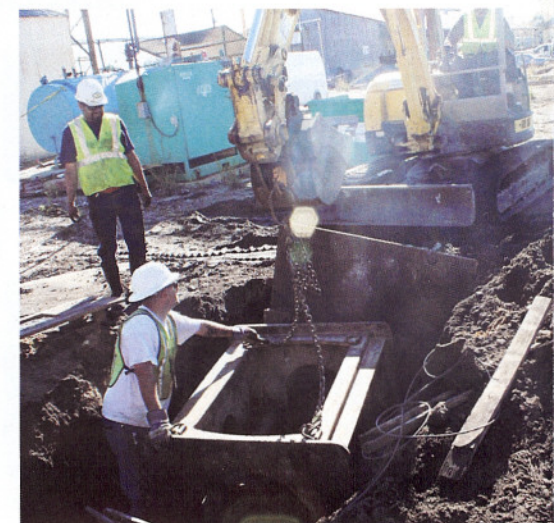
"It's very challenging, the fact that we're in a confined working area," he said. "We can't shut the yard down to work."



Robert Bates Jr., RBA Inc. Consulting Engineering president and principal engineer, left, and Andy Mayer, Murphy Pipeline Contractors Inc. president.



Pipebursting equipment pushes new pipe through the existing bore.



Murphy Pipeline Contractors Inc. employees set up equipment in the insertion pit.