

Hearnes Forensic Complex Fulton State Hospital

Heating and Cooling

Background

Fulton State Hospital, located in Fulton, Missouri, opened in 1851 as the first public mental institution west of the Mississippi River. Since its opening, the three-building campus has since undergone numerous upgrades and expansions.

The original design for the entire campus had the utility systems located in tunnels connecting each of the buildings. In 2017, an engineering firm was tasked to design the replacement of the tunnel utilities, including the existing chilled water supply and return, steam supply, chilled water pump, and domestic water piping, as well as relocating the tunnel utility lines to locations above ground and on existing roofs.

Solution

The scope of project included removing the corroded steel piping and replacing it with more than 9,000 ft of fiberglass piping for the chilled and hot water supply and return systems in the tunnels surrounding the Hearnes Forensic Complex at Fulton State Hospital. Our Red Thread™ fiberglass pipe was chosen for the 4,100 ft of 2 to 6 in. chilled water supply and return, while our Green Thread™ fiberglass pipe was selected for the 5,060 ft of 2- to 6in. hot water supply and return.

Fiber Glass Systems' local distributor, Westfall Company, based out of Eureka, Missouri, provided on-site training to the contractor, MSI Constructors, who was installing fiberglass pipe for the first time. The project consisted of thousands of feet of pipe as well as hundreds of fittings and offsets, and MSI Constructors was very impressed with the ease of installation.

"MSI Constructors proudly partnered with Westfall Company on a \$3.5 million project in Fulton, Missouri. A large part of the project was the installation of a fiberglass piping system Westfall Company provided. MSI Constructors had never worked with this type of material on past projects, but once our men received training it became one of the easiest systems our company had installed. Over 9,000 ft of material was installed in existing underground tunnels covered by concrete lids. The flexibility, durability, and weight of the material made it easy for our men to mobilize large sections of pipe in a short amount time. We look forward to working with the system on future projects."

Adam Howey

President, MSI Constructors

Case study facts

Location: Fulton, Missouri

Customer: Fulton State Hospital

Time Frame: 2019

Results

The fiberglass pipe installation project was completed in 2019. Since completion, the system has functioned properly through both a full heating and cooling season and continues to perform above expectations.



Our Red Thread piping was selected for the 4,000 ft. of chilled water supply and return.



Fiberglass pipe was selected to replace the corroded steel piping in the hot and chilled water systems.