

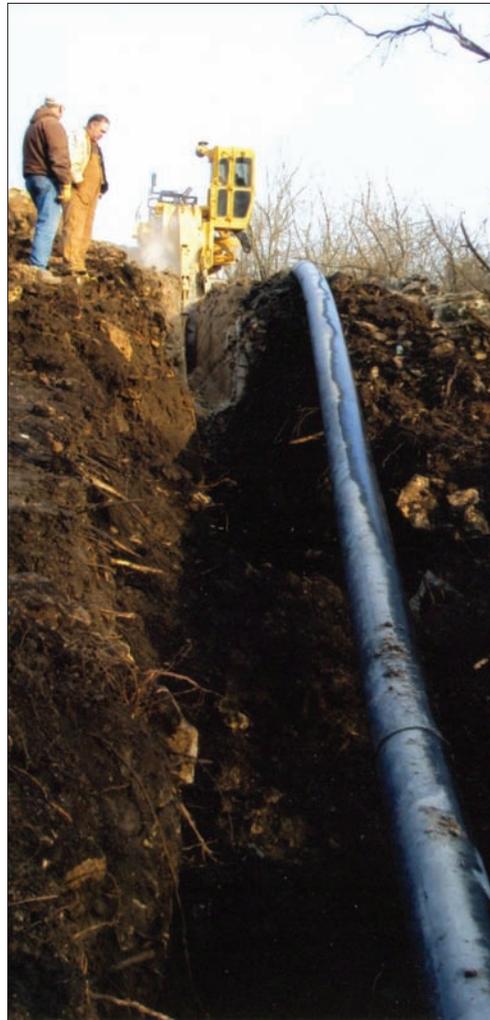
Jefferson RWD 13 Makes Major Improvements

The catwalk for the new elevated storage tank is lifted by a crane to the top of the pedestal.

While some rural water districts have taken the attitude that they will not spend money to make improvements to serve additional customers, I'd like to showcase a northeastern Kansas district that has been upgrading and improving regularly since it was founded. It's Jefferson RWD 13 that serves areas in southeastern Jefferson County, southwestern Leavenworth County, and northeastern Douglas County.

Originally chartered in 1974 with 294 meters and 108 miles of line, Jefferson RWD 13 has served the people of Jefferson County for the past thirty-six years. The district has grown to more than 940 customers, 290 miles of water line over a 110-square mile area. The district currently has two wells as its source of water. The district uses approximately 125,000 gallons of water per day.

When the district was first constructed in 1975, it consisted of the water treatment plant and two wells, a 10-foot by 100-foot standpipe and the necessary distribution system to serve the 294 original customers. The district has



made numerous subsequent improvements. In 1977, the district added its first booster pump station. In 1985 the district added a 10-foot by 95-foot standpipe and another 10-foot by 100-foot standpipe. In 1990 the district built a new office on Wellman Road northwest of Lawrence. In 1995 the water district constructed a new eight-inch mainline from the two wells to the water treatment plant. This new line replaced a pipeline that was used to connect to the city of Lawrence as an emergency water supply line. This project was constructed at a cost of \$51,960 and was built by Steele Construction Co. of De Soto, KS. The district also added 25,500 feet of new six-inch PVC waterline, constructed by Larkin Excavating, of Lansing, KS at a cost of \$167,860, and it added a 350 KW Cummins Genset backup generator at the district's treatment plant. In 1996, a new 250,000-gallon elevated storage tank was constructed Gerard Tank and Steel, Inc., Concordia, KS at a cost of \$333,380; the district also modified a booster pump station and added a telemetry system by Micro-Comm,



A crane crew sets the new booster pump station; the station replaces an original station installed in 1974.



A crew for Engineering American pours concrete for the base of the new 200,000-gallon water storage tank.

Olathe, KS. In 1998, the district made major improvements to its treatment plant.

District Manager Jerry Stewart has been with the district for more than ten years. He has seen many changes in the district over these years and is now looking forward to the district's latest improvements.

In 2010, Jefferson County RWD 13 was awarded a loan of \$2,360,113 from the Kansas Public Water Supply Loan Fund using American Recovery and Reinvestment Act Funds.

The project's consultant is James Challis of Ponzer-Youngquest Engineering, Olathe, KS. The work has been let in three contracts. They consist of a 200,000-gallon elevated tank, a new pump station, two new master meters installed above ground, a new system wide SCADA system and approximately 30,000 feet of HDPE pipeline.

Contract #1 was awarded to R.W. Vaught Technical Services of Yellville, AR. This contract is for the new SCADA telemetry system. This system is installed at every major infrastructure site and will allow for the monitoring and control of the entire supply system. This contract was for \$120,000. This is a major improvement for the district as it has never before had monitoring of the water storage tanks.



District Manager Jerry Stewart lifts a cover of one of the two new well meters built by Engineered Fluid, Inc.

Contract #2 was for the new 147-foot tall storage tower. This 250,000-gallon tank elevated composite tank was constructed by Engineering America, Inc., of Oakdale, MN at a cost of \$718,000. The design features glass-fused-to-steel technology and is corrosion resistant. The tower is situated west of Wellman Road on 54th Street.

Contract #3 was awarded to Heartland Midwest of Olathe for \$993,951. It includes a new booster pump station and approximately 30,000 feet of eight-inch and twelve-inch HDPE pipe. The pipe was installed between the new pump station and the new storage tower. Also as part of this contract were two new master meter enclosures that are installed above ground. They include VFD's Auto Climate Controllers and are capable of be run off a portable generators.

Another improvement by the district, using reserve funds, was to install 3,900 feet of new 6-inch pipeline to replace a section of existing 2-inch pipe. This contract was awarded to Monarch Pipeline, LLC, of McLouth, KS for \$42,207. This was paid for out of the district's capital improvement fund.

The district plans to retire its three existing standpipes when all of the improvements are completed.

Manager Jerry Stewart stated that the district needs these

improvements to better serve its customer base to the north today and the rest of the district in the future. The district is confident that these improvements will allow for growth throughout the district without any major projects in the future.

If your city or RWD has need for an improvement project and wishes to discuss funding options, give KRWA a call at 785-336-3760 or email me directly at gary@krwa.net or also contact KRWA Tech Rita Clary via email at rita@krwa.net.

Gary Armentrout has been a Technical Assistant for KRWA since December 1999. Gary holds a Class 1 Wastewater Operator certification and worked in a water plant for more than six years.

