

City of Chase gets a new distribution system

The city of Chase, population 500, located in west-central Rice County in central Kansas has a new water distribution system. It's providing fail safe service and residents are pleased with it.

For years, the streets in Chase have been notoriously regarded as among the poorest in Rice County. Although the city wanted to improve the streets, city superintendent Tim White wanted to replace the aging water distribution system before any street repair was started. It just doesn't make sense to lay a nice asphalt street down and have

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to constantly dig it up to repair water main breaks.

The old distribution system was originally installed like most in the early 1940s after the city issued bonds for the sum of \$36,000. The system was the typical sand-cast pipe, a 50,000-gallon elevated storage tank and one well. Later, concrete asbestos pipe was added for line extensions. Most of the system was 2- and 4-inch pipe with a limited amount of 6-inch. The system had the common problems associated with cast iron pipe; there would be the occasional crack or a chunk would simply blow out resulting in leakage.

The valves were in poor condition with several being inoperable. The condition of the fire hydrants was no better.

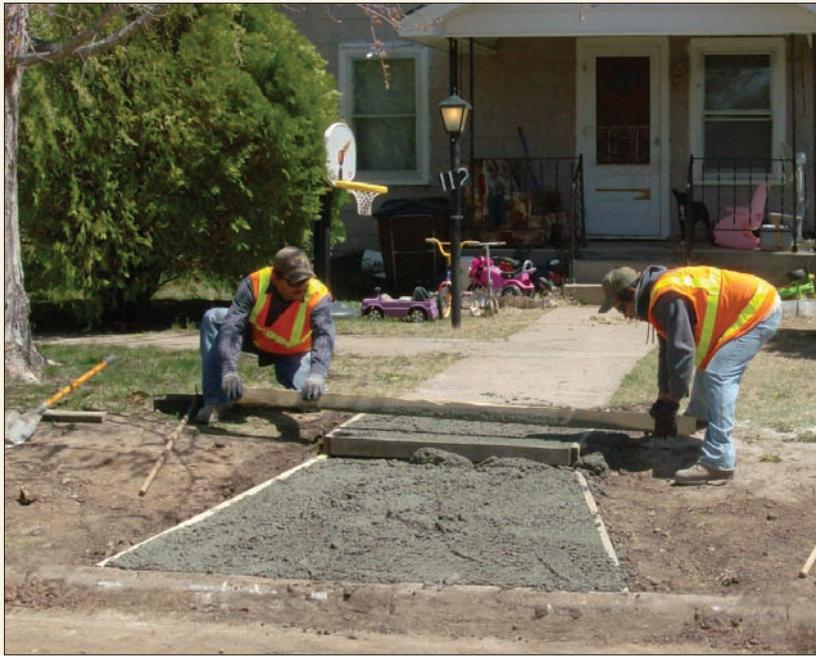
The new system consists of 22,325 feet of C-900 6-inch PVC pipe, 113 new valves, and 22 new fire hydrants. The entire system now consists of all 6-inch line with no smaller sizes. The larger line should do wonders for fire flow and insurance ratings. The service lines and meter settings were all reinstalled with 1-inch poly pipe. New meter pits, setters and meters were also installed. If there's a water loss problem, it shouldn't be because of inaccurate metering.

According to superintendent Tim White, the job went pretty smooth with only a few glitches. The contractor was able to install from 300 to 600 feet of pipe per day. Several times existing lines were damaged; some service lines were also hit as were several phone lines and one gas line that was incorrectly marked. The gas line was hit with a probe; the point punctured the poly pipe. If the worker pulled the probe out, there was a leak. Push the probe back in and the leak stopped. The most significant problem was where a line was supposed to be installed. It was just too close to one building and under another building floor. That wasn't appropriate and so the pipeline was rerouted to keep the city's water lines from being under a building.

It seems that any time there's a construction project, the one thing to count on is the unexpected. The as-built maps will be always slightly different from the proposed drawings and sometimes, major changes are needed to accommodate field conditions. This makes the inspector's job critical to



The water system in Chase, KS was replaced recently. The project included an all new distribution system, including fire hydrants.



Workers for APAC Shears, the contractor on the Chase, KS project, repair a sidewalk after installation of a new water line.

ensure that any changes are always accurately reflected on the as-built drawings. The person who'll have to take care of the system will have to live with the system long after the engineer and the contractor have gone home. The city or RWD should always be satisfied with the project before anyone signs off on it.

The Chase project was financed through a USDA Rural Development loan and grant. The cost was \$885,000 of which \$184,000 was provided in the form of a grant to help keep the rates at what were considered under Rural Development guidelines as being reasonable. USDA provided a \$701,000 financing in the form of a 40-year loan. Water rates were adjusted from \$9.50 minimum with 1000 gallons included and \$2.35/1000 gallons thereafter to \$13.50 monthly minimum with 1000 gallons included; the cost per thousand stayed the same at \$2.35.

The construction began in November 2008; the new lines went into use in April 2009 although final clean up and patch work were still being made in May.

The engineer on the project was Kirkham and Michael, Inc., Ellsworth, KS; the contractor was APAC Shears Construction of Hutchinson, KS.

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History of Chase, Kansas

The town of Chase was founded in 1880; it was named after J. D. Chase of Little Falls, New York. Chase was an officer with the Santa Fe Railroad. At the time, the railroad was a small struggling business with a mere 600 miles of line. A decade later the Santa Fe was transcontinental with more than 7,000 miles of track. The first train (iron horse) passed through what was to be Chase in 1880. A year later the town was laid out and platted by the Arkansas Valley Town Company. The town site was originally owned by R. Carpenter, Wash Grove, Mrs. Sunderland, and the A.T. and S.F.R.R. Co. During the fall and winter of 1881 several buildings went up including J. M. Chatten and Sons lumber, hardware and groceries, Muscett Bros. General Merchandise, Dr. W.W. Spier's drugstore. J.G. Eckles and Sons dry goods and clothing, Sutton Swisher and Dupree Hardware and Lumber, Chas. Baker, buying grain for R.M. Quade, and A.P. McCown boardinghouse and livery stable. Things were rolling along fine until April 5, 1882 when a deadly tornado hit the town causing one death and destroyed most of the town site. But the tornado seemed to spark new energy in the town's people. The number of buildings doubled. The town not only rebuilt, it grew larger.

During the 1930's and 1940's, the entire county surrounding Chase became a booming oil area. Chase was at the center of it all. With companies like Skelly, Gulf, Sinclair putting up regional offices in and around Chase the area was growing, people were moving in and around town faster than accommodations could be made. The oil companies set up camps for workers in what by the photos looked like to me a military operation. Chicken houses, old out buildings or various makeshift buildings were converted into apartments to make room for the influx of people. The heavy trucks were taking their toll on the roads before they could be paved. The city marshal reported at times that the traffic was so bad in Chase that jams often developed. Towns like Chase grew out of proportion. In the years immediately preceding World War II it was reported that over one million dollars in business annually was done from the small depot in Chase.

Chase, KS today is home to Farley Machine, an original from the 1930's, a major machine shop that specializes in oil production equipment repair. There are two oil field supply shops for repair parts and fittings. Together, they service the area's oil field production. Within the last ten years Cargill, now Cal Maine, erected a large egg laying operation which presently has 1.8 million hens.