

# What Could Go Wrong? A Contractor Comes to Town . . .



**T**his summer a contractor came to bore in fiber optic cable for a telephone company in the city of Effingham. Effingham has a population of about 550 residents; it is located in central Atchison County.

The boring contractor reported that he had called Dig Safe. However, the city operator, James Ellis, was not even aware of the arrival of the contractor. Jim reported speaking to the contractor. The contractor advised that he would be boring five feet deep. An hour or so into the bore project, the contractor had hit the main waterline that supplies the city's elevated water storage tank. Not only did he bore into the line, he bored right through the bell of the 8-inch pipe. As anyone with experience knows, this location of breakage makes the repair much more difficult.

City workers were able to close valves on the water storage tank to shut it down before it completely drained. KRWA was contacted for help. This was an emergency. It took several hours to make the repairs because of the amount of water that had to be

pumped out and obtaining repair parts for the 8-inch line. Once the repair was made, we started pressurizing the system and flushing downstream of the break. The city had to issue a boil water advisory due to the loss of pressure.

## Slow recovery

As we all know after a repair, the system should be thoroughly flushed and checked for chlorine residual. The problem we had was a limited amount of water that could be flushed due to having the small amount in the water storage tank and the system's wells only producing 46 gallons per minute.

During the night the operator continued to flush to remove the air from the system. The next morning we took chlorine residual samples and then bacteriological samples. Kansas Rural

Water Association has special sampling bottles on hand to help systems when special tests need to be collected. We took the samples to the lab for analysis with the goal of getting the city off the boil water advisory as soon as possible. Shortly after 12 p.m. the same day, the boring company hit another line. The line they hit this time was a 4-inch line which fed a fire hydrant a few feet away on the corner of the intersection.

In order to make this repair, some sections of sidewalks and curbs had to be removed. This repair required seven hours of time because of the tight working area. Due to the leaks the day before, the city had not been able to refill the water storage tank. The tank was only about half full before the system had to once again be shut down. And so residents were without water service once again. In addition, the

Atchison County fair was about to begin in the city and water demands were going to increase.

It took 24 hours for the city to have the system fully resupplied. Additional time was required to refill the elevated tank. For many days after this, the city had small leaks popping up on service lines and meter setters. It's my opinion that those breaks occurred due to the air in the line, which caused water hammer. Some customers also had leaks on their service lines. This experience cost the city several thousand dollars and a lot of upset customers.

Once all the repairs were made, the operator marked out all lines in question in the area of the boring. The boring company should have notified the city no less than three days prior to their arrival so the lines could be marked out. The operator



stated that he wasn't notified until the morning they showed up to start the boring. The operator talked to the contractor about the repair costs and who's going to pay for it. The contractor didn't think it was his responsibility because he called Dig Safe. The city is planning on billing the company for the repairs. If the company refuses to pay, the city may have to take them to court and let the court decide who is responsible.

It all sounds so familiar to the experiences many other local communities have had to deal with.

**The boring company should have notified the city no less than three days prior to their arrival so the lines could be marked out.**

*Lonnie Boller is a Technical Assistant at KRWA. He has been employed by KRWA since 2001. Lonnie is a Class II certified operator; he previously was Water Plant Supervisor for the City of Horton. He has also attended and completed training at the University of Kansas Law Enforcement Training Center.*



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