

How did they do that?

Water main installation using directional drilling

With all the construction activity around town in recent weeks, we at the “New Rockford Transcript” are enamored with all the machines, people and processes. So, Publisher Amy Wobbema went on scene to capture all the phases of the water main replacement project to help readers understand what’s actually going on. In this week’s edition, we’re highlighting the directional drilling process used downtown and in select other areas, where the existing water main remains in place while a new one is pulled through a hole made underground. In future issues, we’ll document the excavation process— where crews physically unearth the old cast iron lines and replace them with new ones, the street rehabilitation process, and even profile some of the workers on the crew.

Phase I: Utility location

Crews locate all the water service lines to residences and businesses as well as other utility service lines such as fiber optics and sewer. In order to locate these lines, small holes are dug using a vac truck.



Phase 3: Pipe Installation

The new PVC water main is pulled through the bore hole 16 feet at a time. In the photo at right, a backhoe bucket guides the new water main through the bore hole. Go to our website, [www.newrockfordtranscript.com](http://www.newrockfordtranscript.com), to see a short video of the pipe installation phase.



Phase 4: Testing

Testing is done to ensure the water main does not have any leaks, and that the water is safe to drink per the ND Department of Environmental Quality standards. The photo at right shows a pressure gauge used to determine if there is sufficient water pressure in the line. Low pressure indicates a leak somewhere in the new main, which must be addressed.



Progress Update

As of Thursday, directional drilling was underway along Eighth Street from First Avenue North to Second Avenue North.

BEK also installed new water mains on Central Avenue and First Avenue North from the west frontage road to Second Street last week. Once Carstensen Contracting completes its drilling along Eighth Street, their crew will connect the two blocks of pipe by installing new main along Second Street from Central to First Avenue North using the directional drilling process.

BEK Consulting plans to begin digging in new lines under Central Avenue downtown, from Eighth Street to 10th Street, soon.

For up to date information on where crews are working and what you might encounter on those streets, please go online to <http://www.interstateeng.com/newrockford/>. The interactive map highlights the progress throughout the city and alerts residents and travelers as to where activity is imminent or already underway.



Phase II: Directional drilling (boring)

Phase 2: A horizontal directional drilling machine is used to create a hole for the new water main to follow at 8 ft. depth. This machine uses a metal rod and a special bentonite clay slurry similar to concrete to bore a hole through which the water main can be pulled. The boring is done at least three times, first to dig the hole, second to ream the hole, and third to pull the pipe. A 12 inch diameter reamer and bore head are used to create the hole.



New Rockford got its name for a reason! Just as the sandy and rocky soil underneath us creates issues for farmers and builders, the directional drilling machine can also become a victim to it. The photo above shows what happens when the metal rod hits a rock! Spoiler alert: the rock wins!

Photo at left: Throughout phases 2 & 3, this vacuum tank draws out slurry, or mud, from the hole to ensure that the hole does not collapse and that the pipe will travel easily through the bore hole and into place.



Note: A shout out to Jeff Douty of Interstate Engineering for showing me around the work sites and taking photos in my absence, and for Wade Senger of Interstate Engineering for his help with the technical terms. Also, a special thank you to the workers who have been so “photogenic!”



Phase 5: Service line connection & operation

Workers use an excavator to dig down to the new main near the corporation stop, or valve that controls the flow of water to a business or residential service line. Once the valve is closed, they disconnect the service line from the old main and attach it to the new main. Then the hole is backfilled with dirt and leveled off. Businesses along Seventh Street, including Miller’s Fresh Foods, were getting their service lines connected this past week.

BEALS RINGS THE BELL

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good friends and Beals even catered her wedding. “Being able to take care of people close to home has been a real highlight for me,” she said. In addition to his oncologist, Beals said he looks forward to seeing registered nurses, K.C. Robison and

Garret Hillius, in a social setting one day. “Stories like Bill’s help drive a cancer nurse to do what we do. All patients experience adversity during treatment. Bill never let that adversity get him down. From his first treatment here at JRMC, he knew he was going to ring that bell. Every time he walked through the front door, you knew he was in a good, positive mood. His personality and sense of humor made our days better. Our patients thank us for what we do for them, but an important thing that I think

gets missed is that it’s people like Bill and many of our other patients that help us be the best nurses we can be. The way they view life and carry themselves in some of the toughest times is truly something to live by. It’s really exciting to see Bill finish his cancer treatment. Although we’ll miss him, we’re excited for him to move on and we wish him the best,” Hillius said. Beals said he appreciates the support of his medical team, his family and even his colleagues in Eddy County. Even though he needed six weeks off for

treatment in Fargo, Beals said his colleagues donated enough paid time off that he never missed a paycheck. “You don’t want to be by yourself in this,” he said. “I’m very fortunate.” About the JRMC Cancer Center Jamestown Regional Medical Center, in partnership with Sanford Health, opened the JRMC Cancer Center in 2019. The JRMC Cancer Center serves 100 people from Sanford and other healthcare organizations in the Jamestown area each month, saving more

than 160,000 miles of travel each year. For more information, visit [www.jrmcnd.com](http://www.jrmcnd.com) or call (701) 952-1050

EMPLOYEE OF THE MONTH

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complement each other, giving patients the best chance at managing their mental health. Brittany Long is accepting new patients. To request a referral, you should contact

your primary health care provider. Appointments are available both in-person and now virtually as well. Have you experienced great customer service from an employee of a local business? If so, please consider nominating that person for this award. Nominations are also accepted via email to [newrockfordchamber@gmail.com](mailto:newrockfordchamber@gmail.com). One person receives the award each month.