

J&A/Charter Township of West Bloomfield Garners Two Prestigious Regional Awards



The Charter Township of West Bloomfield and its engineering consultant, Johnson & Anderson, Inc., recently received two prestigious regional awards for the **Pre-Chlorinated Pipe Bursting** project:

- *Engineering Merit Award*, American Council of Engineering Companies of Michigan; and
- *Project of the Year Award, Environment \$1-\$5 Million*, Detroit Metro Brach Executive Board.

West Bloomfield Township needed to replace 60 year old 6-inch and 8-inch diameter cast iron water main that had experienced multiple costly breaks in recent years. J&A provided design engineering, construction inspection, and contract administration for the

rehabilitation of 11,910 feet of water main on eight residential streets within various plats of the 1950s developed subdivision, Franklin Valley. J&A researched trenchless technology methods and presented the pros and cons of each method to the Township Water & Sewer Utilities Department. Methods researched included Cured-in-Place Pipe (CIPP) lining, directional drilling with high density polyethylene (HDPE) pipe, pipe bursting, and pre-chlorinated pipe bursting. After much consideration and deliberation, it was decided to complete the project using pre-chlorinated pipe bursting.

The pre-chlorinated pipe bursting construction method is new to Southeast Michigan. The method utilizes trenchless technology in an area where leaving a minimal footprint during construction is paramount. The goal at the start of the project was to use a construction technique that involved minimal restoration and did not require temporary water supply to the residents during the course of the project. The installation involved a day of preparation, exposing the existing pipe at key locations and fusing the required length of HDPE pipe, pressure testing the pipe, chlorinating the pipe, and completing bacteriological testing. Once the new pipe passes the testing it is pulled through the existing pipe (usually the next day). Customers were without water on the day the new water main was installed for approximately eight hours. There was minimal disturbance to yards, landscaping, and the aging paved roads within the project area. The affected customers were very pleased with the overall project cleanliness, speed of construction, and attention to detail by the contractor. The project was completed one month ahead of the projected schedule. It was estimated that there was approximately a 10% cost savings over open cut installation. The new HDPE water main is expected to remain in service for at least 50 years before needing replacement.

Contact us today to find out how we can assist you.

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