

Addendum No. 1
West Main Street
Pavement and Drainage Improvements
Village of Haskins
Bid Date: October 21, 2009
October 14, 2009

Construction Plan Set

Add the following notes to the Construction Plans:

1.) Water Pipe

All waterline materials shall conform to AWWA Standards.

Water pipe shall be ductile iron Class 52 meeting AWWA Specification C-151 with joints meeting AWWA C-111.

Water pipe shall be suitable for a working pressure of 200 psi.

Fittings – AWWA C-110 (Mechanical joint).

Valves – Cast iron meeting AWWA Specification C-509 and the City of Bowling Green.

2.) Fire Hydrants

Before pressure testing the waterline, hydrants shall be adjusted to grade and the upper body turned so that the streamer nozzle faces the street. All fire hydrants and fittings shall meet all requirements and specifications of the City of Bowling Green. Fire hydrants – AWWA C-502 Specification – American Flow Control B 62 B, or Mueller Centurian. Two 2-1/2” hose connections, one 4-1/2” steamer connection and 5-1/4” compression valves, and NSA threads.

3.) Water Testing

The waterline shall be installed, tested and sterilized under the direct supervision of the representative of the City of Bowling Green. Upon completion of the sterilization, the waterlines shall be filled with water, all the air exhausted, and a leakage test applied. The Contractor shall furnish all materials and labor required for the sterilization of the waterlines and leakage test. The contractor shall include in his bid all costs necessary to perform the disinfection and leakage test. Leakage test shall be performed in accordance with AWWA Standards C-600. Disinfection shall be performed in accordance with AWWA Standards C-651. De-chlorinate test water before discharging.

4.) Bacteriological Tests

After the watermain has been sterilized and tested for leakage, bacteriological samples shall be collected from the extremities and intermediate points along the main by an employee of the City. Bacteriological samples shall not be taken by the contractor. If results of two (2) consecutive tests show the water to be unsafe, the main may be placed in service. If any test results show the water to be unsafe, the main shall be completely sterilized and retested. The City will perform two (2) sets of bacteriological tests and no charge to the contractor. Additional testing will be at the contractor's expense.

5.) Depth of Bury

A minimum ground cover of five (5) vertical feet shall be maintained for all waterlines. The waterline shall be constructed at the minimum depth wherever possible.

6.) Pipe Clearance

A minimum horizontal clearance of ten (10) feet shall be maintained between all waterlines and sanitary sewers as well as eighteen (18) inch vertical separation between such. This applies to main line sanitary sewers and lateral services. A minimum ground cover of five (5) vertical feet shall be maintained for all waterlines. The waterline shall be constructed at the minimum depth wherever possible.

7.) Mechanical Joint Restraint

All pipe shall be anchored at dead ends, bends, tees, valves and other fittings requiring restraint by means of mechanical joint restraint. Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts multiple wedging action against the pipe, increasing its resistance as the pressure increases. Flexibility of the joint shall be maintained after burial. Glands shall be manufactured of ductile iron conforming to ASTM A 536-80. Restraining devices shall be ductile iron heat treated to a minimum hardness of 370 BHN. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-had bolts conforming to ANSI/AWWA A21.11 and ANSI/AWWA C153/A21.53 of latest revision. Twist-off nuts shall be used to insure proper actuating of the restraining devices. The mechanical joint restraint device shall have a working pressure of at least 250 PSI with a minimum safety factor of 2:1.

8.) Pipe Specials Payment

Payment for all pipe specials, such as wyes, tees, plugs, etc. shall be included in the unit price bid for the pertinent conduit item, unless separately itemized in the General Summary.

9.) Bedding and Backfill

Pipe embedment and backfill shall be in accordance with the trench detail including in this plan. All waterline shall be placed on a minimum six (6") inch deep layer of ODOT Item 603.04 Type 1 bedding material. All longitudinal or transverse pipe under the pavement or walk or within five (5) feet from the edge of pavement shall be backfilled with ODOT Item 304 stone to the top of the subgrade or to existing ground. Pipe outside of the five (5) foot limit may be backfilled with excavated material free from debris, compacted in 8" lifts. House services shall comply with the above backfill. However, the bedding shall be yellow sand, as approved by the owner, extended 6 inch above the service line.

10.) Ohio EPA Requirements

The Ohio Environmental Protection Agency requires a conformance to the 2003 edition of "Recommended Standard." This standard shall be equaled or exceeded for waterlines. Special attention shall be given to the following sections of part 8:

- 8.0.1 Materials conform to AWWA Standards
- 8.1.2 Minimum 6" diameter fire protection
- 8.5.3 Minimum 4' ground cover
- 8.5.5 Pressure testing AWWA C-600*
- 8.5.6 Disinfection AWWA C-651*
- 8.6.2 10' horizontal separation watermain/sewer
- 8.6.3 18" vertical separation watermain/sewer
- 8.6.6 No entry and/or contact with sewer manhole

*Note: It shall be the contractor's responsibility to perform this test properly and the responsibility for adequate supervision and approval rests with the appropriate governmental agency. Any deviations from the above will not be permitted unless specifically included in the general notes or otherwise shown on the plans. In cases where one or more of the above mentioned OEPA Standards fall short of the local standards, the latter shall govern.

11.) Connections to Existing Waterline

When closing a water main, the contractor shall give the residents affected a written waterline notice 48 hours prior to turning water off. Notice shall also reference that resident is to boil water until further notified. Work shall be coordinated to shut-down and testing phase does not interfere with weekends or holidays. Water main shall be shut down only on Mondays or Tuesdays between the hours of 9 AM and 4 PM, unless otherwise permitted by the Village of Haskins.