

City of Marysville

Water Line Notes to be on all Future Plans

Revised 9-Jan-09

1. All water line and appurtenances, materials and installation procedures, shall be in accordance with the current rules and regulations of the City of Marysville.
2. All water line materials and installation procedures shall be in accordance with the current rules and regulations of the **City of Marysville** and the **AWWA**.
3. Water Line trenches shall be dewatered to 2" below the bell of pipe prior to installation.
4. In case of a conflict in grade between storm sewers and water line, the water line shall be lowered.
5. All water meters shall be installed inside of the proposed structure, not in a meter pit, unless said meter pit is approved by the **City of Marysville**.
6. A bronze pad lockable meter bypass ball valve, Apollo 75-100 Series or equal, is required for 1 1/2" and larger meters.
7. Water service boxes shall be set 2 feet from the edge of sidewalk, between sidewalk and curb.
8. Water lines shall have a minimum cover of 4 feet 6 inches from final grade.
9. All water lines are to be enclosed in a seamless polyethylene encasement. The polyethylene encasement shall conform to AWWA C105.
10. Contractors shall provide concrete backing for bends, elbows, tees. Hardwood wedges shall be used where necessary. There is a local supplier of this product. **Megalug** retaining glands, or approved equal, shall also be used in accordance with Marysville Standard Drawings.
11. Fire hydrants shall be **Mueller Company Centurion 250 Hydrant** with a 4 1/2 main valve opening. They are to have a three way upper barrel with one 4 1/2 inch pumper nozzle and two 2 1/2 inch hose nozzles. An integral 5" **Storz** connection shall be installed on the pumper nozzle. Must meet **A.W.W.A. C-502** standards.
12. All service lines shall be Type K soft copper conforming to **ASTM B-88**, and underground joints must be compression. Ductile iron shall be used if service exceeds 2 inches.
13. Water line shall be deflected, per manufacturer specifications, to provide 1 ft 6 in vertical and 10 ft horizontal clearance with sewers. If this is not feasible, then **Standard Construction Drawings Number 22, 62, 63, and 74** will apply.
14. All water mains are to be separated 10 feet horizontally and 1.5 feet vertically from all parallel sanitary sewers.
15. Whenever a water main and sanitary sewer must cross, the water main shall be 1.5 feet above the crown of the sewer pipe. Measurement to be between the outside of pipe walls.
16. If the top of the operating nut for water valve is greater than 36 inches below finish grade, an extension stem shall be furnished to bring the top of the operating nut to 36 inches below final grade.

17. Transverse water lines within the pavement area shall be backfilled with ODOT 304 compacted granular material or ODOT 613 (LSM) to three feet beyond the face of curb or edge of pavement.

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18. The water line material shall be clearly identified as conforming to **A.W.W.A.** standards.
19. Pressure testing will be in accordance with **A.W.W.A. C-600**, as described in **City of Marysville Water Division Specification, Section 14**.
20. All water mains shall be disinfected in accordance with the **City of Marysville** specifications. Special attention is directed to applicable sections of **A.W.W.A. C-651** particularly for flushing (Section 5) and for chlorinating valves and fire hydrants.
21. Individual booster pumps will not be allowed for any individual service.
(Ohio Administrative Code Rule 3745-95-07(A))
22. The normal working pressure in the waterline will not be less than 35 PSI.
(2003 Recommended Standards for Water Works, Pressure, section 8.2.1)

Backfill operations shall conform to Standard Construction Drawing 63 and meet the specifications listed below in Notes 1, 2, and 3.

1. Trenches outside of the influence of streets shall require 95% of maximum dry laboratory weight at plus or minus 2% of optimum moisture. Material shall be per **ODOT 203.07 and Supplemental Specification 1015**.
2. Storm, sanitary, and utility trenches within 3 feet of the edge of pavement and within the cone of influence shall require 98% of the maximum dry laboratory weight at plus or minus 2% optimum moisture. Backfill material shall be **ODOT 304** aggregate or **ODOT 613, Low Strength Mortar (LSM)**. Where said results indicate the trench backfill does not meet the compaction requirements of **ODOT 203.07** of the construction and materials specification, all backfill shall be removed and retested until compaction meets the requirements of 203.07. Cone of influence to begin 3 feet from the edge of pavement and extend one foot in distance for every one foot of depth.
3. Storm, sanitary, and utility trenches under road pavement shall require 98% of the maximum dry laboratory weight at plus or minus 1.5% optimum moisture. Backfill material shall be **ODOT 304** aggregate or **ODOT 613, Low Strength Mortar (LSM)**. Backfill to begin 3 feet from edge of pavement and extend one foot in distance for every one foot of depth. Where said results indicate the trench backfill does not meet the compaction requirements of **ODOT 203.07** of the construction and materials specification, all backfill shall be removed and retested until compaction meets the requirements of **203.07**.