

DEL-CO WATER COMPANY
GENERAL NOTES FOR WATER LINE CONSTRUCTION
FOR WATER LINES INSIDE DELAWARE CITY LIMITS

1. General Notes as modified by Del-Co and shown on the approved Construction Drawings shall supersede the requirements of the Subdivision Construction Standards Manual wherever discrepancies occur.
2. Standard General Notes:
 - a. Water line materials and installation methods shall conform to The Del-Co Water Subdivision Construction Standards Manual, latest revision. Contractor shall obtain a copy of the standards and have in his possession at all times during construction. Coordinate work with Del-Co Water (740) 548-7746.
 - b. Water mains shall become the ownership of Del-Co Water upon final acceptance.
 - c. Water line construction plans are approved for a period of one year from the date of the approval letter or signed plans. If construction has not started within one year of the date of approval, plans shall be resubmitted to Del-Co Water Company for approval.
3. Water Line Construction:
 - a. Main water lines shall be AWWA Class 52 DIP with mechanical joint fittings.
 - b. All 12-inch diameter and smaller valves shall be Mechanical Joint Gate Valves. All valves 16-inch and larger shall be "Pratt-Groundhog" Butterfly Valves. Valve hardware shall be AISI 304 Stainless Steel.
 - c. Heavy-duty valve boxes shall be used on all hot-taps and valves located under pavement.
 - d. Top of valve box shall be flush with finished grade in paved areas, and 4 inches above finished grade in non-paved areas.
 - e. Crosses shall not be used without the prior written approval of Del-Co Water Company.
 - f. Maintain a minimum 10-foot horizontal and 1.5-foot vertical separation distance between water lines and the sanitary and storm sewers.
 - g. Water lines shall be NSF 61 approved.
 - h. Provide concrete thrust blocking for all fittings, valves, anchor tees, and hydrants.
 - i. Minimum depth of cover shall be 42-inches to the top of pipe, except where otherwise required or approved by Del-Co.
 - j. Place a 5-foot steel fence post or 4"x4" wood post at valves and the ends of lines. Paint blue.
 - k. Install 14-gauge solid copper jacketed tracer wire on all water main and service lines. Bind wire to pipe in two places per pipe section. Extend tracer wire to surface at all valves as shown in the Del-Co standard detail. Splice wires using brass or copper splicing fastener.
4. Water Service Construction:
 - a. Service line pipe shall be minimum ¾-inch Type K, soft tempered, copper per ASTM B88.
 - b. Fittings shall be brass with compression type joints. No fittings are permitted between the main line and the curb stop.
 - c. Connections to DIP shall be by direct tap or saddle with an approved corporation stop per Del-Co's Subdivision Construction Standards Manual.
 - d. Provide a curb stop with 1-inch female iron pipe threads on the customer side at the end of service lines. Locate at ROW, but a minimum of five feet from edge of sidewalk.
 - e. All service line valves 1½-inch and larger shall be mechanical joint gate valves, restrained with Duct-Lugs and galvanized all thread rod or anchor tees where applicable.
 - f. Minimum depth of cover shall be 36 inches.
 - g. Place a 5-foot steel fence posts or 4"x4" wood post at the ends of all service lines.
 - h. Contractor shall be responsible for special backfill material for all lines, including those installed by Del-Co Water Co. Inc., where required by the County or City Engineer.

5. Fire Hydrants:
 - a. Fire hydrants shall conform to AWWA C502 for dry barrel hydrants.
 - b. Main valve: 5.25-inch compression.
 - c. Nozzles:
 - i. Threading: Conform to NFPA National Standard fire hose threads.
 - ii. One 4.5-inch steamer.
 - iii. Two 2.5-inch hose.
 - d. Inlet Connection: 6-inch mechanical joint.
 - e. Operating Nut: 1.5-inch pentagon, turn counterclockwise to open.
 - f. Extensions and parts: Shall be manufactured by the original equipment manufacturer.
 - g. Approved Manufacturers: Mueller Super Centurion 200, American Flow Control B-84-B, or Clow Medallion, M&H Model 129M, or AVK Nostalgic 2780.
 - h. Painting: Repaint all hydrants after installation.
 - i. Public Hydrants: Safety Yellow
 - ii. Fire hydrants located on private water lines shall be painted Industrial Green.
6. Disinfect all water lines in accordance with AWWA C651 and Del-Co specification.
7. Pressure testing:
 - a. Pressure-test all water lines in accordance with AWWA C600 for ductile iron pipe and C605 for plastic pipe and Del-Co Specifications.
 - b. Contractor shall provide all equipment necessary to perform test.
 - c. Schedule test between 8:00 AM and 2:00 PM weekdays. Notify Del-Co 24 hour's prior to test.
8. Obtain written approval of material and manufacturers list from Del-Co Water prior to beginning construction.
9. Provide casing pipe for all road crossings unless otherwise approved by Del-Co. Casing pipe shall be Steel pipe with 0.375-inch wall thickness, or PVC SDR 21 Class 200. Casings larger than 12-inch may be AWWA C905 DR25.
10. Easements shall be provided to Del-Co Water before permission will be given to make new service line connections.
11. Connections to existing water lines will be made by Del-Co Water at the contractor's expense, or performed by contractors who are approved for making connections.
12. Do not fill new water lines until approved by Del-Co Water Co.
13. Booster pumps are not allowed on individual services.
14. Normal working pressure shall not be less than 35 PSI.