
Special Provision to Special Specification 7049

Water Mains



Special Specification 7049 "Water Mains," is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 2.3.2., "Fittings for Ductile-Iron Pipe" the second paragraph is replaced by the following:

2.3.2. Provide ductile iron pipe that has ductile iron mechanical joint fittings.

Section 2.4.4., "Bends and Fittings for PVC Pipe" 4 in. through 20 in. is supplemented by the following:

2.4.4. Provide PVC pipe that has ductile iron mechanical joint fittings.

Section 2.7., "Copper Tubing for Copper Service Lines and Small Mains" the fourth paragraph is replaced by the following:

2.7. Provide pack joint brass fittings for use with Type K annealed copper tubing in accordance with AWWA C800.

Section 2.8.1., "General" the third paragraph is replaced by the following:

2.8.1. Pack joint fittings may be used for unions except where they occur under existing or future paving. Use compression tube fittings with Buna-N beveled gaskets.

Section 2.8.2., "Corporation Stops" the third paragraph is replaced by the following:

2.8.2. Provide outlet ends with a pack joint type fitting.

Section 2.8.3., "Curb Stops" the first paragraph is replaced by the following:

2.8.3. Curb Stops. Provide inlet ends with pack joint type fitting.

Section 2.8.4., "Service Saddles" the first paragraph is replaced by the following:

2.8.4. **Service Saddles.** Provide service saddle with dual straps and vinyl coated with stainless steel straps.

Section 2.9.1., "Gate Valves" the second paragraph is replaced by the following:

2.9.1. Provide direct-bury valves and valves in subsurface vaults that open counter-clockwise. Provide above-ground valves that open counter-clockwise.

Section 2.9.1.2., "Gate Valves 2 in. in Diameter" is replaced by the following:

2.9.1.2. **Gate Valves 2 in. in Diameter.** Use an iron body, double gate, non-rising stem, 150 lb. test; 2 in. square nut operating counter-clockwise to open.

Section 2.10., "Butterfly Valves" the second paragraph is replaced by the following:

2.10. Provide direct-bury valves and valves in subsurface vaults that open counter-clockwise. Provide above-ground and plant valves that open counter-clockwise.

Section 2.11., “Valve Boxes” the second paragraph is replaced by the following:

- 2.11. Valve Boxes. Provide Type “A,” cast-iron (in concrete) or ductile-iron slide-type (outside of concrete) valve boxes as manufactured by Bass and Hays Foundry, Inc. or approved equal. Ensure the chemical composition of Casting “A” conforms to the requirements of AWWA Standard C110. Fabricate the base of each valve box from 6 in. cast-iron or ductile-iron pipe, conforming to the requirements of this specification except that the lining and coating will comply with this section.

Cast a letter “W” into the lid, 1/2 in. in height and raised 3/32 in. for valves serving potable lines, and paint blue for identification.

Section 2.12.1., “General” is replaced by the following:

- 2.12.1. **General.** Provide fire hydrants, including 6 in. gate valve and box, conforming to the requirements of AWWA C502., Standards for Dry Barrel Fire Hydrants (Latest Edition). Provide City standard Mueller Company Super Centurion 250 5-1/4 in. A423 fire hydrant. Only hydrants with a current Certification of Responsibility will be allowed. Alternative hydrants will not be considered.

Ensure they are of dry-barrel, tamper resistant, and collision-safety construction design. Provide hydrants from same manufacturer throughout the project.

Installation of used, salvaged, or reconditioned fire hydrants will not be permitted.

Section 2.12.6., “Painting” is replaced by the following:

- 2.12.6. **Painting.** Shop coat the fire hydrants exterior with 1 coat of rust prohibitive primer. Ensure the top half of the hydrant from the traffic flange up, receives 1 coat of red enamel before delivery to the jobsite as outlined by the following:

Section 2.12.6.1., “Exterior Above the Traffic Flange (Including Bolts and Nuts)” the second paragraph is replaced by the following:

- 2.12.6.1. Coat with a 3-coat alkyd/silicone/alkyd system with a total dry film thickness (DFT) of 6-9 mils as follows:
- **Prime Coat.** Oil Modified Alkyd Primer, Acro Products No. 1104, Heavy Duty Tank & Steel Primer, or approved equal, in general accordance with SSPC Paint Specification No. 25. Apply with a total dry film thickness (DFT) of 2-3 mils.
 - **Intermediate Coat.** Heavy Duty Heavy Duty Industrial Alkyd Enamel, Acro Products No. 2214, or approved equal, in general accordance with SSPC Paint Specification No. 104, and Federal Standard TT-E-489. Apply with a total dry film thickness (DFT) of 2-3 mils.
 - **Finished Coat.** Silicone Alkyd Resin Enamel, Acro Products No. 2215, or approved equal, in general accordance with SSPC Paint Specification No. 21. Apply with a total dry film thickness (DFT) of 2-3 mils.
 - **Colors:** For primer, use the manufacturer’s standard color. For the finish coat of the hydrant body, use red. Finish coat the hose connection caps red. For intermediate coat, use a contrasting color to the red finish coat, such as white.

Section 2.12.6.2., “Exterior Below the Traffic Flange” the second paragraph is replaced by the following:

- 2.12.6.2. Coat with a 3-coat system as follows:
- **Primer and intermediate coat - coal tar epoxy,** Acro Products No. 4467, or approved equal, in general accordance with SSPC Paint Specification No. 16. Apply 2 coats with a dry film thickness (DFT) of 8-10 mils each, for a total dry film thickness (DFT) of 16-20 mils.

- Finish coat - water based vinyl acrylic mastic, Acro Products No. 7782 or approved equal. Apply 1 coat with a dry film thickness (DFT) of 6-8 mils. For the color of the finish coat, use the same as for the finish coat for the exterior above the traffic flange i.e. red.

Section 2.12.6.4., “General.” Remove the third paragraph and Table 5 from specifications.

Section 2.17.1., “Water Meters” is replaced by the following:

2.17.1. **Water Meters.** Water meters will be provided by the City, as needed.

Section 2.17.3., “Meter Boxes” is replaced by the following:

2.17.3. **Meter Boxes.** Meter boxes will be supplied by the City, as needed.

Section 3.2.1., “General” is supplemented by the following insert after the fifth paragraph:

3.2.1. Coordinate auger pit locations and any other locations requiring open trench installation with an urban forester. Avoid pits where roots 1 in. and greater are observed. If 1 in. or greater roots not visible are encountered, ensure that no damage to the tree roots occurs.

Section 3.17.1., “Disinfecting Mains” the fifth paragraph is replaced by the following:

3.17.1. After laying and backfilling the pipe, disinfect the newly laid pipe. Unless otherwise shown on the plans, the Contractor will disinfect the newly laid pipe and the City will perform the required sampling and disinfection testing. Slowly fill each valves section of pipe with water and expel the air from the pipe. Furnish and install taps at the points of highest elevation, if required to accomplish this. After filling the main with water and expelling the air, charge the pipe with the disinfecting agent and allow it to stand for 24 hr. Unless otherwise shown on the plans, the Utility Owner will then flush the main with water. After flushing, draw samples from the main and test for 2 consecutive days at a valid, approved testing facility. After samples are drawn and the test results pass, proceed with the pressure test and any necessary repairs. If the samples do not pass, re-disinfect the pipe until the samples taken are passed by the certified and approved testing facility. Unless otherwise shown on the plans, if more than one disinfection of the main (or portion of the main) is required, the additional disinfection will be charged to the Contractor at rates established by the Utility Owner.

Section 3.32., “Abandoning Valves” is appended by the following:

3.32. **Abandoning Valves.** This item refers to each valve that is abandoned in place. Ensure that in-line valves on existing lines being abandoned are closed watertight, plugged, and the operating nut on said valve is cut off. Remove valve boxes on abandoned lines, except those in paved areas. For those located in paved areas, pour full of concrete and permanently remove the cap.

Section 4.6., “Gate Valves, Tapping Sleeves and Valves, and Butterfly Valves” is replaced by the following:

4.6. **Gate Valves, Tapping Sleeves and Valves, and Butterfly Valves.** Measured by each assembly installed, of the various sizes specified.

Section 4.11., “Blow Off Valves” is replaced by the following:

4.11. **Blow Off Valves.** Measured by each assembly, of the various sizes and types, with the valve box installed. Temporary blow off valves required for testing are subsidiary to the water lines.

Section 4.20., “Adjusting Meter Boxes” is replaced by the following:

4.20. **Adjusting Meter Boxes.** Adjusting meter boxes are subsidiary to the pertinent bid items.

Section 4.28., “Abandoning Valves” is appended by the following:

4.28. **Abandoning Valves.** Abandonment of existing valves must be measured by each valve abandoned in place.

Section 5.1., “Water Main Pipe and Steel Casing” is replaced by the following:

5.1. **Water Main Pipe and Casing.** Payment for water main pipe, and casing will be made at the unit prices bid for “Water Main Pipe (Ductile Iron),” “Water Main Pipe (Polyvinyl Chloride)(PVC),” and “Casing (Steel),” of the various sizes and types specified, installed by trenchless construction. This includes open cut sections for installations of fittings, valves, fire hydrants, etc. If the Contractor chooses to install the water line by open cut construction, submit a request to be approved by the Engineer. No separate payment will be made for surface restoration, including but not limited to pavement, sidewalk, driveway, and curb removal and replacement for open cut construction, unless shown on plan drawings. The Contractor is responsible for maintaining traffic per the Traffic Control Plan and access to streets and driveways if the Contractor chooses to install water line by open cut construction and when constructing auger pits if installation by auger is chosen.

Fill the annular space around pipe in the auger hole with bentonite drilling mud at no additional cost to the Department. Assume responsibility for the proper storage, handling, and disposal of drilling mud. Bedding and backfill auger pits are to conform to the water line bedding and backfill detail on the plans.

Unless otherwise shown on the plans or specifications, excavating, disposing of unsuitable excavated material, backfilling, and the material for backfill, for the complete installation of the water main system, are subsidiary to this bid item.

Construct water lines crossing Buffalo Speedway with restrained joints (Certa-Lok or approved equal) the full length of the crossing, from existing connection to existing connection. Include the cost in the unit price bid for the various size of pipes installed. No separate pay item will be allowed.

Section 5.6., “Gate Valves, Tapping Sleeves and Valves, and Butterfly Valves” is replaced by the following:

5.6. **Gate Valves, Tapping Sleeves and Valves, and Butterfly Valves.** Payment for gate valves, tapping sleeves and valves, and butterfly valves will be made at the unit price bid for “Gate Valve,” “Tapping Sleeve and Valve,” and “Butterfly Valve,” of the various sizes specified, with the valve box installed.

Section 5.11., “Blow Off Valves” is replaced by the following:

5.11 **Blow Off Valves.** Payment for blow off valves with boxes will be made at the unit price bid for “Blow Off Valve” of the various sizes and types specified, with the valve box installed. No payment will be made for temporary blow off valves.

Section 5.20., “Adjusting Meter Boxes” is replaced by the following:

5.20. **Adjusting Meter Boxes.** Adjusting meter boxes is subsidiary to the pertinent bid items.

Section 5.25., “Wet Connections” is supplemented by the following:

5.25. This also includes removal of existing pipe as necessary to make the connection.

Section 5.27., “Adjusting Manholes” the sixth paragraph is replaced by the following:

5.27. Furnishing and installing taps, risers, jumpers, blind flanges, cast-iron sleeves, plugs, blow off valves, reducers etc., as required to disinfect and pressure test the new mains is subsidiary to the various bid items. In addition, necessary excavation and backfill, site grading, and maintenance until completion of pressure testing are subsidiary to the various bid items.

Section 5. Payment is supplemented by the following:

- 5.28. Abandoning Valves. Payment for abandoning valves will be made at the unit price bid for "Abandoning Valves."