

# Special Specification 7266

## Water Mains and Sanitary Sewers



### 1. DESCRIPTION

This Item will govern for all materials, equipment, and labor necessary for the installation of all water mains and sanitary sewer lines, as shown on the plans and in compliance with the Department's Utility Accommodation Rules (UAR) (Title 43, T.A.C., Sections 21.31-21.55). Special provisions or design specifications in the plan set will supersede this item.

1.1. **Abbreviations.** The AWWA, ASA, ASTM, ANSI, and NSF, as used in this Specification and referred to in the City of Austin Specifications, refer to the following organizations or technical societies:

- AWWA – American Water Works Association,
- ASA – American Standards Association,
- ASTM – American Society for Testing and Materials,
- ANSI – American National Standards Institute, and
- NSF – National Science Foundation.

Where reference is made to the Specifications of the above organizations, it is to be construed to mean the latest standard in effect on the date of the proposal.

1.2. **Austin Water Construction Standards.** Austin Water Standards are part of this Specification and are available on the City of Austin website at <https://www.ausintexas.gov/department/construction-standards>. The construction standards include:

- Utilities Criteria Manual,
- Current Standard Specifications,
- Current Standard Details, and
- Standard Products List.

### 2. MATERIALS

Furnish all materials in accordance with the requirements shown on the plans and deliver to the project site. Items that will conform to Department Standards and Specifications are as follows.

- Item 100, "Preparing Right of Way"
- Item 104, "Removing Concrete"
- Item 105, "Removing Treated and Untreated Base and Asphalt Pavement"
- Item 132, "Embankment"
- Item 160, "Topsoil"
- Item 164, "Seeding for Erosion Control"
- Item 166, "Fertilizer"
- Item 169, "Soil Retention Blankets"
- Item 247, "Flexible Base"
- Item 334, "Hot-Mix Cold-Laid Asphalt Concrete Pavement"
- Item 351, "Flexible Pavement Structure Repair"
- Item 400, "Excavation and Backfill for Structures"
- Item 401, "Flowable Backfill"
- Item 402, "Trench Excavation Protection"

- Item 403, "Temporary Special Shoring"
- Item 420, "Concrete Substructures"
- Item 421, "Hydraulic Cement Concrete"
- Item 432, "Riprap"
- Item 440, "Reinforcement for Concrete"
- Item 442, "Metal for Structures"
- Item 461, "Structural Plate Structures"
- Item 471, "Frames, Grates, Rings, and Covers"
- Item 476, "Jacking, Boring, or Tunneling Pipe or Box"
- Item 479, "Adjusting Manholes and Inlets"
- Item 496, "Removing Structures"
- Item 500, "Mobilization"
- Item 502, "Barricades, Signs, and Traffic Handling"
- Item 506, "Temporary Erosion, Sedimentation, and Environmental Controls"
- Item 528, "Colored Textured Concrete and Landscape Pavers"
- Item 530, "Intersections, Driveways, and Turnouts"
- Item 531, "Sidewalks"
- Item 666, "Retroreflectorized Pavement Markings."

If conflicting provisions between Department and City specifications occur, the more stringent will apply or as directed.

When appropriate, materials may be used that are specified in these Specifications; however, a submittal is still required that clearly indicates the applicable City of Austin Water Material Specification.

- 2.1. **Material Warranty.** Provide a 1 yr. warranty for all materials used on the project. The warranty will take effect on the date that the material is delivered to the project site.

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### 3. CONSTRUCTION

- 3.1. **General Requirements.** Install each system in accordance with the construction methods detailed on the plans and adhere to any guidelines set forth in the latest version of the City of Austin Water Construction Standards.

Exclusions to City of Austin Water Construction Standards include all environmental protection measures, traffic control, trench safety measures, and roadway construction which must be in accordance with the standard Department methods and as detailed on the plans or as directed.

Unless stated elsewhere, perform all work in accordance with the Utility Accommodation Rules as set forth in 43 Texas Administrative Codes §21.31 et seq. adopted by the Department.

Protect all water mains, sewer lines, vaults, and appurtenances during construction operations. Promptly repair, at no additional cost to the Owner, any damage to the existing water or sewer system and any interruption to the services such as line stoppages or breakage caused by the Contractor's operation.

Construct the City of Austin facility in accordance with the Rules adopted by the Texas Commission on Environmental Quality (TCEQ) or have prior approval for a variance from TCEQ.

Complete all adjustments before the placement of the final surface.

Unless otherwise approved, perform connections to existing lines or reconnections of services at night or on the weekend.

- 3.2. **Permits.** The owner of the utility will acquire all necessary permits from the City in which the work is to be performed in. The City of Austin will provide all right of way and utility adjustments needed for performance of work on sites not owned or to be acquired by the Department. If the City of Austin is the owner of any part of the projectsite, the City of Austin will permit the Department or its authorized representative access to the site to perform any activities required to execute the work.
- 3.3. **Testing.** Provide testing for water mains in conformance to the City of Austin requirements or as directed. Request testing in accordance with deadlines shown on the plans. Retesting charges will be deducted from payments to the Contractor for any test that fails to meet the required Standards described in the City of Austin Specification items. Make appropriate repairs to those elements that do not pass any of the tests.
- 3.4. **Service Impacts.** Provide notice to owner of the utility and utility customers for impacts or shutoff of service. Provide the notice in accordance with the deadlines shown on the plans or as directed.
- 3.5. **Safety.** When pedestrian facilities are closed or relocated, provide temporary facilities that will be detectable and will include accessibility features consistent with features presented in existing pedestrian facilities. Place temporary facilities in accordance with the Texas Manual on Uniform Traffic Control devices (TMUTCD).
- 3.6. **Inspection.** All water main, sewer lines, and their appurtenances will be inspected by a representative of the City of Austin. These representatives' decision of acceptability of the installation will be final. The City of Austin will hold 2 final inspections, one at water line completion and the other at roadway completion for final utility grade adjustments according to specifications.
- 3.7. **As Built Drawings.** Provide as built drawings to the City of Austin.
- 3.8. **Performance Period.** All work must meet the requirements of this specification for at least 90 calendar days after commencement of service or roadway work is complete, whichever occurs last. Unless otherwise directed, remove work that fails to meet requirements, and replace at no additional cost to the Department.
- Replace within 30 days of notification. All replacement work must also meet all requirements of this Item for a minimum of 90 calendar days after installation.
- The City of Austin will assume responsibility for the maintenance of the existing water and wastewater facilities during and until completion of the construction contract, and will retain responsibility for the maintenance of completed water and wastewater facilities upon completion of the construction contract.

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#### 4. MEASUREMENT AND PAYMENT

Work and acceptable materials as prescribed by this Item and as shown on the plans will be measured and paid as follows.

- 4.1. **Austin Water.** The work performed and materials furnished for items of work under the latest City of Austin Water Construction Standards will be measured and paid for as described in each work item number or Series, which is available in the Current Standard Specifications. This price is full compensation for all staking and engineering work, construction, testing, disinfection, furnishing, and installing all materials, accessories and incidentals necessary to complete the work prescribed in this specification and as detailed on the plans or as directed. Payment will also be full compensation for all excavation and backfilling, all freight, loading, unloading, handling of materials, labor, tools and equipment and incidentals necessary to complete work.
- Excavation, shaping, bedding, and backfill will be measured in accordance with Item 400, "Excavation and Backfill for Structures."
- Controlled Low Strength Material will be measured and paid for as required under Item 401, "Flowable Backfill."

Protection methods for excavations greater than 5 ft. deep will be measured and paid for as required under Item 402, "Trench Excavation Protection," or Item 403, "Temporary Special Shoring."

When jacking, boring or tunneling is required, measurement and payment will be made under Item 476, "Jacking, Boring or Tunneling Pipe or Box."

Mobilization will be measured and paid for as required under Item 500, "Mobilization".