

**RULE NO.: R161-24.02****NOTICE OF RULE ADOPTION****ADOPTION DATE: 05/08/24**

By: Shay Ralls Roalson, P.E., Director  
Austin Water

The Director of the Department of Austin Water has adopted the following rule. Notice of the proposed rule was posted on 03/28/24. Public comment on the proposed rule was solicited in the 03/28/24 notice. This notice is issued under Chapter 1-2 of the City Code. The adoption of a rule may be appealed to the City Manager in accordance with Section 1-2-10 of the City Code as explained below.

A copy of the complete text of the adopted rule is attached to this notice.

**EFFECTIVE DATE OF ADOPTED RULE**

A rule adopted by this notice is effective on 05/08/24.

**TEXT OF ADOPTED RULE**

The adopted rule contains no changes from the proposed rule as shown below.

R161-24.02: Proposed revision to UCM 2.5.1, 2.9.3, 2.9.4 & 2.9.6

**Rule 1 – Revisions to Utility Criteria Manual Sections 2.5.1, 2.9.3, 2.9.4 & 2.9.6**

1. **SECTION 2.5.1 – Construction Plan Information and Submittal Requirements – General – Section 2.5.1.A – Update the CAD Standard Manual website.**
2. **SECTION 2.5.1 – Construction Plan Information and Submittal Requirements – General – Section 2.5.1.E.6 – Remove the language "include a copy of the service extension form," because it is not required on the cover sheet anymore.**
3. **SECTION 2.5.1 – Construction Plan Information and Submittal Requirements – General – Section 2.5.1.E.22 – Add language to require the inclusion of the current version of the Austin Water General Information and Construction Notes, latest Standard Austin Water Construction Notes, Service Extension Request documentation, meters, fire flow tests etc.**
4. **SECTION 2.9.3 – Reclaimed Water Systems – Section 2.9.3.B.4 – Change the language to match the language in 2.9.2.B.4.**
5. **SECTION 2.9.4 – Wastewater Systems – Section 2.9.4.G.5 – Fix the language to clarify the option of a large diameter cleanout at termination points depending on the size of the line. Add the depth limit for large diameter cleanouts at 14'.**

6. SECTION 2.9.6 – Exceptions – **Section 2.9.6** – Change the word “Exceptions” to “Waivers” in four locations. AW utilizes a waiver process for allowing alternatives to the rules in the UCM.

## **SUMMARY OF COMMENTS**

Austin Water did not receive comments regarding the rule adopted in this notice.

## **AUTHORITY FOR ADOPTION OF RULE**

The authority and procedure for adoption of a rule to assist in the implementation, administration, or enforcement of a provision of the City Code is provided in Chapter 1-2 of the City Code. The authority to adopt this rule is established in Section 552.001 of the Texas Local Government Code, Section 552.017 of the Texas Local Government Code, and Section 15-9-9 of the City Code.

## **APPEAL OF ADOPTED RULE TO CITY MANAGER**

A person may appeal the adoption of a rule to the City Manager. **AN APPEAL MUST BE FILED WITH THE CITY CLERK NOT LATER THAN THE 30TH DAY AFTER THE DATE THIS NOTICE OF RULE ADOPTION IS POSTED. THE POSTING DATE IS NOTED ON THE FIRST PAGE OF THIS NOTICE.** If the 30th day is a Saturday, Sunday, or official city holiday, an appeal may be filed on the next day which is not a Saturday, Sunday, or official city holiday.

An adopted rule may be appealed by filing a written statement with the City Clerk. A person who appeals a rule must (1) provide the person’s name, mailing address, and telephone number; (2) identify the rule being appealed; and (3) include a statement of specific reasons why the rule should be modified or withdrawn.

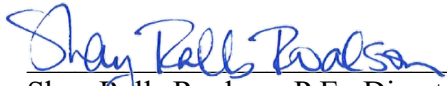
Notice that an appeal was filed will be posted by the City Clerk. A copy of the appeal will be provided to the City Council. An adopted rule will not be enforced pending the City Manager’s decision. The City Manager may affirm, modify, or withdraw an adopted rule. If the City Manager does not act on an appeal on or before the 60th day after the date the notice of rule adoption is posted, the rule is withdrawn. Notice of the City Manager’s decision on an appeal will be posted by the City Clerk and provided to the City Council.

On or before the 16th day after the City Clerk posts notice of the City Manager’s decision, the City Manager may reconsider the decision on an appeal. The City Manager shall decide not later than the 31st day after giving written notice of an intent to reconsider.

## **CERTIFICATION BY CITY ATTORNEY**

By signing this Notice of Rule Adoption R161-24.02, the City Attorney certifies that the City Attorney has reviewed the rule and finds that adoption of the rule is a valid exercise of the Director’s administrative authority.

**REVIEWED AND APPROVED**



Shay Ralls Roalson, P.E., Director  
Austin Water

Date: 4/30/2024

*Anne L. Morgan*

Anne L. Morgan  
City Attorney

Date: 5/5/24

## 2.5.0 CONSTRUCTION PLAN INFORMATION AND SUBMITTAL REQUIREMENTS

### 2.5.1 General

- A. Construction plans for water, reclaimed water, and wastewater service (including all associated facilities and appurtenances) shall be submitted to Austin Water's (AW) Utility Development Services (UDS) - Pipeline Engineering for verification of conformance to City of Austin (COA) Standards and Specifications. All plat, preliminary plan, site plan and subdivision construction cases shall be submitted in PDF (.pdf) format to allow electronic review by AW. Any other file type(s) submitted for review purposes will be rejected. In addition to providing PDF files, all final designs shall be submitted in Computer-aided design (CAD) format as follows: For AW funded Capital Improvement Projects, CAD files shall be in accordance with the COA ~~Public Works Department Engineering Services Division Design~~ CAD Standards Manual (~~<http://austintexas.gov/departments/engineering-services-division>~~) (<http://www.austintexas.gov/CADResources>), as amended, prior to AW approval. For water, wastewater, and reclaimed water infrastructure projects that are not AW funded Capital Improvement Projects, final designs shall be submitted in a CAD format (not necessarily using the City's CAD standards) prior to AW approval. Plans in CAD format shall only apply to base files and not sheet files (plan and profile) for all projects in which AW infrastructure is relocated, constructed, abandoned, or repaired. Utility construction activities must be initiated, as documented by an issued Notice to Proceed, within three years of the date of approval of a City site plan or general permit, otherwise they must be resubmitted to the AW review team to ensure compliance with any changes in requirements related to health and safety. Utility Construction activities related to Water and Wastewater tap plan reviews must follow the requirements outlined in Section 15 of the Building Code.
- E. All water, reclaimed water, and wastewater plans will include the following items:
1. Engineer's dated signature and seal of a Professional Engineer licensed in the State of Texas on each plan sheet and including the engineering firm name and Texas registration number (Title 22 TAC § 137.33 and § 137.77).
  2. Date of Plans and revisions.
  3. North arrow and scale must be shown. The standard horizontal scale for plan and profile sheets shall be 1" = 40', 30' or 20' for the plan view. The vertical scale shall be 1" = 4', 3' or 2', respectively. The same scale shall be used on all plan and profile sheets. All Texas Department of Transportation design build projects, Capital Improvement Projects, and General Permit projects shall be 1"=20' horizontal scale for the plan view. For sheets other than plan and profile, horizontal scales of 1" = 40', 30' or 20' may be used as appropriate. Where relevant and applicable, a scale of 1" = 10' for plan views and a scale of 1" = 1', 2', 3', 4', or 5', as needed to fit the area on the page and provide the most clarity for profiles, shall be used for detailed water, reclaimed water, and wastewater connections, designs, utility crossings, and/or special detail drawings. The minimum size for plan and profile sheets shall be 22" × 34". Plan view and associated profile shall appear on the same sheet with the plan view at the top half of the sheet.
  4. A general location map, showing MAPSCO and grid numbers.
  5. Current standard COA Water and Wastewater construction notes.

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2.5.1 GENERAL

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6. Indicate on the cover sheet, the subdivision file number, include a copy of the service extension form, and show all required permit numbers such as development permit, Texas Department of Transportation permit, railroad crossing permit, etc.
7. Volume and page number of recorded easement and of any temporary working space.
8. For sites and subdivisions, show GIS numbers of all existing mains and appurtenances. For City-funded, City-reimbursed, and City-cost-participation projects, show GIS numbers for all existing and proposed mains and appurtenances.
9. Property lines and dimensions, legal description, lot and block numbers, right-of-way dimensions, and curb and sidewalk locations and street names.
10. Location, size, and material of all existing and proposed water, reclaimed water, and wastewater mains, lines and services with respect to easements and rights-of-way. Existing and proposed mains 24 inches and larger shall be shown by double lines indicating pipe outside diameter. The direction of flow in the wastewater mains shall be indicated on the drawings. COA record drawings for potable water, wastewater, and reuse water may not be reliable. The Engineer is encouraged to collect subsurface utility data according to American Society of Civil Engineers (ASCE), Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data, Standard CI/ASCE 38, latest edition.
11. Location, size, and description of other existing and proposed utilities within the limits of construction. Existing and proposed utilities 24 inches and larger shall be shown by double lines indicating the outside diameter.
12. Curve data for roads, property lines, water, and reclaimed water lines.
13. Final plat recording or land status report.
14. Street address for all existing structures shall be shown on the lot(s) where the structures are located.
15. Pressure zone designation for subject tract and zone boundaries where applicable.
16. Where water, wastewater, and/or reclaimed water mains cross each other, details shall be shown to indicate compliance with TCEQ requirements.
17. Typical cross sections showing multiple utilities proposed to be within private streets or easements.
18. An index on the cover sheet or on the 2nd page of the drawings.
19. Construction drawings shall contain Overall Location Maps and Key Maps for any individual water, reclaimed water, or wastewater line that requires three or more plan and profile sheets.
20. Current, applicable City of Austin Standard drawings (modified Standard drawings are not permitted).
21. Supplementary drawings in the form of special details, as needed, to clearly and concisely convey the design intent.
- 22. Inclusion of current version of the Austin Water General Information and Construction Notes Sheet, latest Standard Austin Water Construction Notes, Service Extension Request documentation, meters, fire flow tests, and Reclaimed Water and Onsite Water Reuse System Meter Demand Sheet.**

### **2.9.3 Reclaimed Water Systems**

**B. Mains**

1. Sizing of Mains - Computer modeling is preferred for sizing reclaimed water mains. However, for mains less than 16 inches in diameter other engineering calculation methods may be accepted. Standard main sizes are: 6 inches, 8 inches, 12 inches, 16 inches, 24 inches, 30 inches, 36 inches, 42 inches, and 48 inches.
2. Reclaimed water mains shall be constructed of ductile iron pipe, Pressure Class 350 minimum for pipe 12-inch diameter and smaller and Pressure Class 250 for pipe greater than 12-inch diameter. PVC pipe 16-inch diameter and smaller conforming to the requirements of AWWA C-900, DR 14 shall also be acceptable. Plans shall indicate that all mains and appurtenances shall be manufactured in purple, factory painted purple or bagged in purple. Color shall match Pantone 522.
3. Piping materials and appurtenances shall conform to City of Austin (COA) Standard Specifications, Standard Details, and AW Standard Products List (SPL).
4. ~~Minimum depth of cover over the uppermost projection of the pipe and all appurtenances shall comply with COA Standard Details.~~ ***Minimum depth of cover over the uppermost projection of pipe shall be at least 48 inches below proposed ground elevation.*** Maximum depth will be approved by AW for the specific materials, application and conditions. If fill or embankment placed over existing reclaimed water mains or services increases by more than 4 feet or results in a final depth exceeding two times the easement width if applicable, AW review and approval is required. If a cut over the existing reclaimed water mains or services results in less than the minimum cover required by COA Standard Details, AW approval is required.
5. For mains of 16 inches and larger, drain valves shall be placed at low points.
6. RESERVED.
7. Dead-end mains shall terminate with a flushing device and flushing devices shall be installed as necessary to facilitate flushing of the system.
8. Mains shall have an approved flushing device located at the high point between main intersections.
9. Joint restraint for pipes larger than 16-inch diameter shall be by use of integral, factory joint restraint systems, or by restraint gaskets.
10. Joint restraint shall be provided for all pipe bends, reducers, and tees. When joint restraints are required in intersections, the joint restraints shall extend, at a minimum, to the point of curvature (PC) of the curb line. Notes shall be placed in both plan and profile views and shall include at a minimum the type of restraint to be utilized and the beginning and ending stations of the restraint.
11. The proximity of other utilities and structures must be taken into account when specifying the use of thrust blocking. The use of thrust blocks will be prohibited in the downtown area (Loop 1 to I35 and Lady Bird Lake to 30<sup>th</sup> Street) due to the congestion of utilities, structures and excavations in the right-of-way. Concrete thrust blocking may be approved on a case-by-case basis.

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2.9.3 Reclaimed Water Systems

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12. Connections of new reclaimed mains to existing reclaimed mains shall be made by cutting in a tee. Tapping sleeves may be allowed in lieu of cutting in a tee on a case-by-case basis. Full-body tapping sleeves shall be used. A tapping sleeve will not be allowed if the materials and conditions of the existing main preclude tapping. "Size on size" taps will not be permitted, unless made by use of an approved full bodied mechanical joint tapping sleeve.
13. Deflection of joints in ductile iron pipe shall not exceed manufacturer's maximum allowable deflection. For PVC pipe, the deflection at pipe joints shall not exceed 1°, or the manufacturer's maximum allowed deflection, whichever is less.
14. Where mains transition from polyethylene (PE) pipe to a different pipe material (ductile iron pipe, PVC pipe, etc.), the PE pipe segments shall be designed to undergo hydrostatic testing separately from the segments of different pipe material by way of isolation valves or other means.
15. Mains shall be located so that isolation valves, air valves, and flushing devices will be readily accessible during their service life for maintenance and operations personnel and equipment.

### **2.9.4 Wastewater Systems**

G. Service Lines.

1. Wastewater services shall be in accordance with COA Standard Details.
2. Wastewater service lines, between the main and property line, shall have an inside diameter not less than 6 inches. The minimum grade allowed for service lines is 1 percent. In all new systems, grade breaks exceeding allowable joint deflection must be made with approved fittings and shall not exceed a cumulative total of 45 degrees.
3. No service connections shall be made to mains larger than 15 inches in diameter.
4. Service connections to force mains that are 2 inches in diameter and smaller may be allowed on a case-by-case basis. Service connections to force mains that are larger than 2 inches in diameter shall not be allowed.
5. Potable water and wastewater service lines shall be a minimum of **nine** feet apart unless the potable and wastewater service lines are located on a common lot line and constructed in accordance with COA Standard Details per TCEQ rules. Services to lots without a water/wastewater easement shall terminate at the property line with **a 2-way cleanout** **either a standard two-way cleanout or a large diameter cleanout, depending on the service line pipe diameter.** Service to lots having a 5 feet by 5 feet water/wastewater easement shall terminate within the easement with **a 2-way cleanout** **either a standard two-way cleanout or large diameter cleanout, depending on the service line pipe diameter.** A **2 two**-way cleanout shall be installed for service lines 4 inches to 6 inches in diameter, and a large diameter cleanout shall be installed for service lines 8 inches to 12 inches in diameter. **Large diameter cleanout structures are limited to a maximum depth of 14 feet.** For service lines larger than 12 inches in diameter, contact Industrial Waste for design requirements. For details, see the COA Standard Details.
6. Wastewater clean-outs are not allowed in sidewalks, paved areas, load bearing pavement, or driveways.
7. Sample and inspection ports are required for service lines when industrial waste monitoring is required. They shall be located at the property line within the public right-of-way (ROW) or utility easement line to indicate the line of responsibility of the utility. They shall not be located in traffic areas, paved parking areas or sidewalks.



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**2.9.6 ~~Exceptions~~ Waivers.**

~~Exceptions~~ Waivers to these design criteria must be requested in writing. Written approval from the Director of the Austin Water Utility or a designee must be obtained before any ~~exceptions~~ waivers will be allowed.