



Technical Advisory Review Panel (TARP) Quarterly Report – April 16, 2024

Submitted by: Brydan Summers, Land Development Rules Administrator

Executive Summary

TARP Development

This report provides a summary of the development of the TARP and the meetings held during January, February, and March of 2024.

In March of 2023, Mayor and Council passed [Resolution 20230323-057](#) directing the City manager to collaborate with housing and development community stakeholders to establish a Technical Advisory Review Panel to review the City’s technical criteria manuals with the purpose of identifying challenging issues and providing recommendations for improving the manuals and their adoption process.

In addition, in the [FY22-23 budget](#), Council funded a position for the Land Development Rules Administrator (LDRA) to “provide substantive review, oversight, and coordination of the interdepartmental rules posting process, with the goal of better aligning criteria manuals to larger City goals and policies.”

Under this direction, the LDRA collaborated with the development community, City of Austin departments, and the Office of the City Manager to develop a framework for the TARP’s operations, select TARP panelists, and make modifications to the City’s administrative rules adoption process. Detailed information on the TARP’s structure, standards for evaluating administrative rules, and process changes can be found here: [Technical Advisory Review Panel | AustinTexas.gov](#)

Key Updates from this Quarter

The TARP began operating in January with its first meeting aimed at onboarding panelists. In the following February meeting, the TARP reviewed a proposed rule to the Environmental Criteria Manual to allow for water quality credit for rainwater harvesting systems, as well as two proposed rules related to water, reclaimed water, and waste water criteria; one in the Utilities Criteria Manual and one in the Standard Specifications



Manual. During the March meeting, the TARP reviewed a proposed rule to the Transportation Criteria Manual that would allow for up to two driveways on lots with more than one housing unit, along with criteria for waivers if spacing requirements cannot be met due to site constraints.

All rules, some with modified language, have been approved by the LDRA to move forward with the rules adoption process outlined in City Code Chapter 1-2.

A total of 9 changes were incorporated into rule language based off the TARP's discussion. In addition, the TARP identified 11 areas for additional review that could improve, or better clarify, requirements for criteria manual users and City staff.



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January Meeting

Meeting Details

January 11, 2024
Room 1405, Permitting and Development Center
6310 Wilhelmina Delco Dr., Austin, TX 78752

Meeting Summary

The LDRA gave an onboarding presentation to panelists which included the following topics:

- History and Use of Administrative Rules at the City of Austin
- Review of Council Direction
- Roles and Responsibilities of Panelists
- TARP Structure and Processes
- Rule Screening Standards
- Workflow Overview
- Key Performance Indicators
- Community Agreements
- Panelist Expectations

Information was intended to provide more detail on the [TARP's standard operating procedures](#), and to ensure panelists understand how to participate in the TARP.



February Meeting

Meeting Details

February 8, 2024
Room 1405, Permitting and Development Center
6310 Wilhelmina Delco Dr., Austin, TX 78752

Proposed Rule: Water Quality Credit Through Rainwater Harvesting

Proposed Rule Language

1.6.2 General Design Guidelines

B. Water Quality Volume Diversion Structures.

2. SCMs that are allowed to stack the required detention volume or allow all storm events to flow through the SCM above the water quality volume are as follows:
 - Partial sedimentation with sand filtration or biofiltration controls
 - Full sedimentation with sand filtration or biofiltration controls
 - Retention Irrigation controls that are not subject to compliance with the SOS ordinance.
 - Rainwater Harvesting controls that are not subject to compliance with the Onsite Water Reuse Systems Ordinance of Chapter 15-13 of the City of Austin Code.
 - Rain Gardens
 - Porous Pavement

In-line SCMs that propose to stack the required detention volume or allow all storm events to flow through the SCM above the water quality volume must comply with the following criteria:

- a) The velocity of the flows entering the SCM for the developed 100 year peak flow must not exceed two feet per second.
- b) Velocity breaks and energy dissipation should be incorporated into the design to reduce erosive impacts on the SCM and to protect the medium (sand or biofiltration) from washing out or eroding.
- c) Detention pond and SCM wall elevations must meet the minimum freeboard requirements provided in the Drainage Criteria Manual.



1.6.7 Green Storm Water Quality Infrastructure

1.6.7.2 Water Quality Credit

The water quality credit system presented in this section sets forth a method for designers to achieve full credit or partial credit for innovative controls that are either undersized or capture runoff from only a portion of the developed site. The objective of the water quality credit system is to provide flexibility for meeting the City's water quality requirements. For example, in many cases full water quality credit can be met through the use of a single control located at the downstream end of the developed site. Alternatively, water quality credit can be achieved through green stormwater quality infrastructure controls distributed throughout a developed site and integrated into the landscape. Water quality credit can also be accrued for the drainage area with Rainwater Harvesting (RWH) systems that capture and beneficially reuse water on-site. The remaining required water quality volume that is not treated with Section 1.6.7 controls must be treated using other controls approved in the Environmental Criteria Manual.

The amount of credit for the practices described below can be applied as either a reduction in the size of a water quality control or, in Urban Watersheds, a reduction in the payment instead of structural controls.

The basic credit equation is:

$$WQC = IAF * BMPDF \text{ (Equation 1.6.7-1)}$$

Where

- WQC = Water Quality Credit, a value between 0 and 1, with 1 meaning 100% credit;
- IAF = Impervious Area Factor, or the fraction of total impervious area treated by the control; and
- BMPDF = Best management practice (BMP) Design Factor, a measure of the degree of design equivalency with sedimentation-filtration systems. Values are on a scale of 0 to 1, with 1 meaning 100% credit.

For two of the practices, porous pavement for pedestrian use and non-required vegetation, the water quality credit is applied as a deduction in the drainage area for sizing water quality controls, as described in the subsections below.

For vegetated pond-type controls, which include biofiltration and rain garden controls, the BMPDF factor is based on the following factors:

WQV_{bmp} = water quality capture depth provided by the BMP in inches, and



WQV_{ecm} = ECM required water quality capture depth in inches.

Specific drawdown time requirements for vegetated pond-type controls are described below in respective subsections for each control. The BMPDF for vegetated pond-type shall be determined using Figure 1.6.7-1 below.

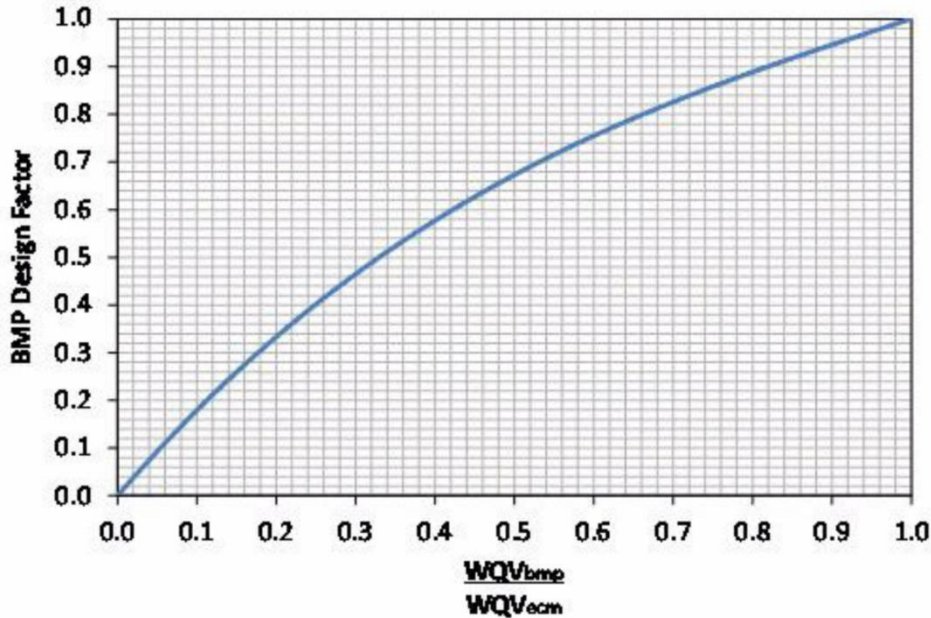


Figure 1.6.7-1. BMP Design Factor for vegetated pond-type controls.

For Rainwater Harvesting systems, the BMPDF is a function of water quality capture depth and drawdown time depends on the type of system, the size of the tank, and how quickly the tank is emptied as described in 1.6.7.D.

For Vegetative Filter Strips (VFS) the water quality credit is a function of percent infiltration and hydraulic loading rate as described in 1.6.7.B.

Credit may be restricted or disallowed in some cases for watersheds in the Barton Springs Contributing and Recharge Zones as described below in the subsections for each control.

1.6.7.D. Rainwater Harvesting

1. Introduction. Rooftops can generate large volumes of runoff which, when discharged to paved surfaces and landscaped areas, can generate large pollutant loads. Rainwater Harvesting (RWH) systems can capture this runoff before it is discharged, thus preventing pollution while also putting the captured water to beneficial use, such as landscape irrigation, toilet flushing, or cooling water. In acknowledgement of the pollutant load removal provided by RWH, commercial developments that comply with and implement RWH as required



by Chapter 15-13 shall be allowed a stormwater quality “credit” which would allow developers to reduce the size of their water quality ponds by a specified amount in the drainage area where the RWH system is located. The amount of runoff captured over the long-term, and thus the allowed stormwater credit will depend on the size-volume of the cistern (water quality volume) and drawdown time of the rainwater harvesting system rate at which the cistern empties.
[Propose end Paragraph here]

There are two types of RWH systems for the purposes of determining water quality credit. Type I systems generally are designed for stormwater control with ancillary potable water offset benefit. Type II systems are designed primarily for potable water offset with ancillary stormwater control. Both systems will be permitted for commercial developments and multifamily residential developments.

For the purposes of calculating water quality credit, the RWH system types are defined as follows:

- A. **Type I** – a RWH system in which the collection cistern has a maximum drawdown time of 120 hours. These can be either gravity drained (Type IA) or pumped (Type IB) to an infiltration area. These systems are prohibited from having a potable water supply connection.
- B. **Type II** – a RWH system in which the collection cistern empties as stored water is used to meet onsite demand. Type II systems are designed and permitted in accordance with Chapter 15-13 of the Code of Ordinances (Onsite Water Reuse) and will have potable back up water to supply demands when there is no rainwater available. For the purpose of calculating the stormwater credit, Type II RWH systems are further defined as follows:
 - **Type IIA** – a Type II system with a 1-inch capture depth and is located outside the Barton Springs Zone. This type allows a streamlined water quality crediting approach.
 - **Type IIB** – a Type II system with a custom-sized collection cistern and/or is located inside the Barton Springs Zone. This type requires site-specific engineering analysis to obtain water quality credit.
 -

The Type I and Type II systems can also control the peak flow rate for the 2-year storm. See Section 1.6.8 if specifically designed for this purpose. Rainwater harvesting Type I RWH systems can provide equivalent treatment to a standard sedimentation/filtration system and may be used within the Barton Springs Zone if the design achieves the non-degradation load requirements detailed in Section 1.6.9. Rainwater Harvesting Type I and II RWH-systems will



only be permitted for commercial developments. All systems with pumps (whether Type I or Type II systems) are subject to cross-connection testing in accordance with Chapters 15-1 (Cross Connection Regulations) and 25-12 (Technical Codes).

In an effort to promote water conservation, the State of Texas offers financial incentives and tax exemptions to offset the equipment costs. Additionally, the Water Conservation staff of the City of Austin Water Utility Department is available to provide input on how to achieve cost efficient design and equipment selection that will also help reduce water and wastewater costs.

2. Water Quality Credit.

The water quality credit will typically be applied as either a reduction in the water quality volume for a structural control or a reduction in the payment fee-in-lieu cost. The basic water quality credit equation is calculated using Equation 1.6.7-1.

A. Water Quality Credit for Type I rainwater harvesting systems.

For rainwater harvesting Type I RWH systems, the BMP Design Factor (BMPDF) variable is a function of the following factors:

- WQV_{rwh} is the water quality capture depth provided by the rainwater harvesting system in inches,
- WQV_{ecm} is the ECM required water quality capture depth in inches, and
- DDT_{rwh} is the rainwater harvesting system drawdown time in hours (a maximum of 120 hrs.).

The BMPDF for Type I systems shall be determined using Figure 1.6.7.D-1 below:

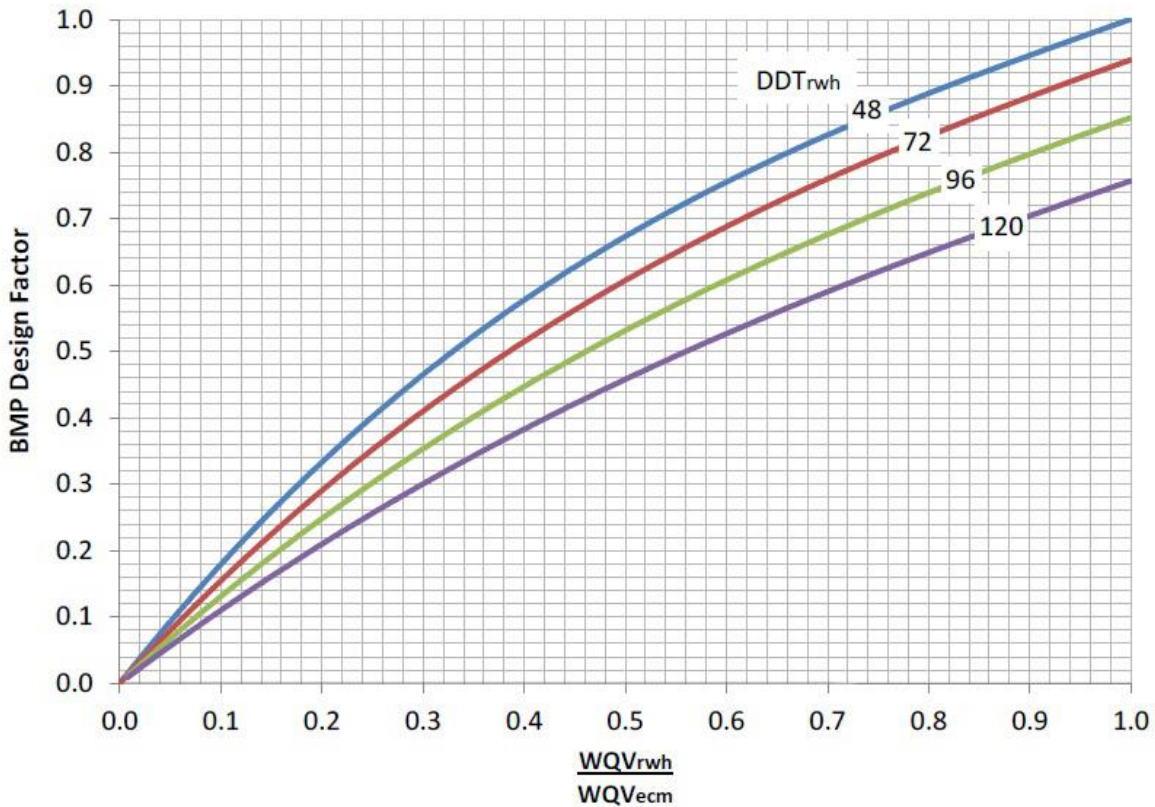


Figure 1.6.7.D-1. BMP Design Factor for Type I Rainwater Harvesting Systems.

The derivation of the drawdown time will vary with the type of system, as described below for specific design options. In all cases the drawdown is calculated as:

$$DDT = WQV/Q_{rwh}$$

Where:

- DDT is the drawdown time, or time for full control to empty, including any lag time (hours)
- WQV is the water quality volume
- Q_{rwh} is the rate of discharge from the rainwater harvesting system

B. Water Quality Credit for Type II rainwater harvesting systems.

For Type II RWH systems, the approach for determining BMPDF is based on the Net Annual Reuse Demand Intensity (NARDI). The NARDI is a ratio of the net annual demand to the available rainwater storage capacity and is calculated as:



$$\text{NARDI} = (D_{\text{npr}} - S_{\text{acc}}) / V_{\text{rwh}}$$

Where:

- D_{npr} is the annual non-potable reuse demand in gallons,
- S_{acc} is the annual air conditioning condensate supply in gallons, and
- V_{rwh} is the volume of the rainwater harvesting system tank in gallons.

Values for D_{npr} and S_{acc} shall be determined using Austin Water's Water Balance Calculator, which is available at Austin Water's Onsite Water Reuse web page (<https://www.austintexas.gov/department/onsite-water-reuse-systems>). The BMPDF for Type IIA systems can be determined using Figure 1.6.7.D-2 or the equation below:

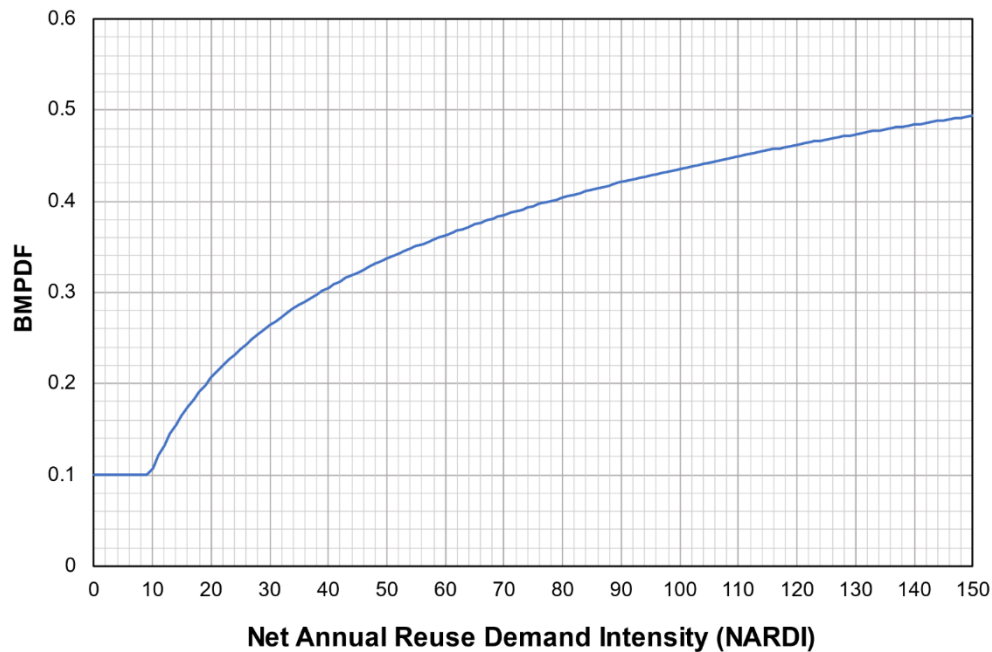


Figure 1.6.7.D-2. BMP Design Factor for Type IIA Rainwater Harvesting Systems.

For Type IIA systems, the BMPDF is calculated as:

$$\text{BMPDF} = \max(0.1, \min(0.5, 0.1429 \ln(\text{NARDI}) - 0.2221))$$



The equation above yields a BMPDF ranging between a minimum value of 0.1 and a maximum value of 0.5. The BMPDF is based on a Type IIA RWH. Systems designed to meet the minimum requirements of LDC §25-9-412 are considered Type IIA.

For Type IIB RWH systems, applicants must provide a site-specific engineering analysis. The site-specific engineering analysis shall demonstrate that average annual pollutant loads from the proposed developed site with the proposed Type IIB system do not exceed the average annual pollutant loads produced by the site under baseline conditions (as defined below). Applicants are encouraged to contact Watershed Protection Department and Austin Water Onsite Water Reuse staff prior to submitting plans proposing Type IIB systems. The site-specific engineering analysis shall meet the following requirements:

- SWMM software - The analysis shall be based on long-term continuous simulation calculations using the Environmental Protection Agency's Storm Water Management Model (SWMM) Version 5.2 or later and should follow COA's SWMM Guidance Manual which is available from the Watershed Protection Department. SWMM is a Windows-based desktop program. It is open-source public software and is free for use worldwide.
- Rainfall record – SWMM calculations shall incorporate a long-term continuous 13-year, 15-minute rainfall record (2006-2018) from the Lady Bird Lake gauge. The rainfall record is available from Austin Watershed Protection Department.
- Pollutant concentrations – Pollutant concentrations in runoff, SCM effluent, and SCM bypass shall be based on those listed in ECM Section 1.6.9. The pollutant loading analysis shall be based on total suspended solids, total phosphorus, and zinc. Pollutant concentrations in AC condensate shall be assumed to be zero. Pollutant concentrations in RWH system bypass shall be equal to those entering RWH systems.
- Baseline conditions scenario (see Figure 1.6.7.D-3) – SWMM shall be used to calculate average annual pollutant loads for the site for baseline conditions. For sites outside the Barton Springs Zone, the baseline scenario shall calculate annual pollutant load for the developed site including a sedimentation-filtration system sized with the standard half-inch plus WQV. For sites inside the Barton Springs Zone, the baseline scenario shall calculate pollutant loads for the existing site conditions in accordance with the Save Our Springs Ordinance.

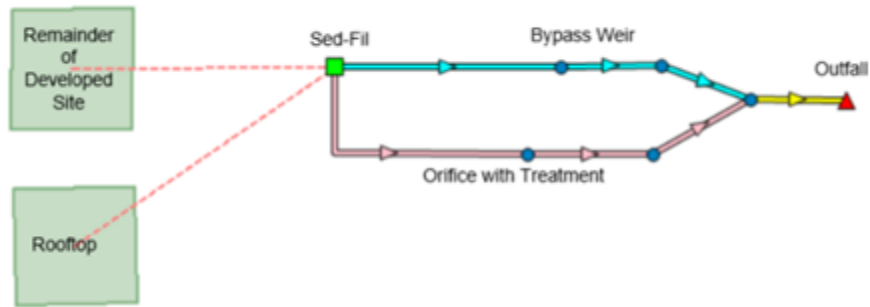


Figure 1.6.7.D-3. Model Network for Sedimentation-Filtration Baseline Scenarios

- Proposed conditions scenario (see Figure 1.6.7.D-4) – SWMM shall be used to calculate average annual pollutant loads for the site under proposed developed conditions. Proposed conditions shall include the Ordinance-mandated RWH system with the proposed RWH cistern. Overflow from the RWH system and runoff from the remainder of the developed site shall be routed to one or more stormwater control measure(s). The RWH system and other proposed SCMs shall be designed and sized to demonstrate that average annual pollutant loads for the site do not exceed the average annual pollutant loads for baseline conditions. The analysis shall account for reuse demands on a daily basis at rates and frequencies to match proposed conditions. For example, reuse rates for indoor commercial uses shall be applied five days per week if weekend demands are expected to be significantly less than weekday demands. Similarly, reuse rates for landscape irrigation shall be applied one or two days per week to match the expected irrigation frequency.

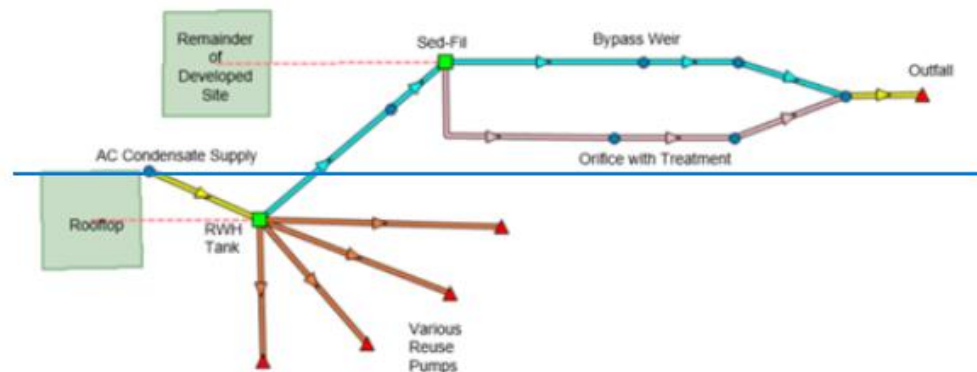


Figure 1.6.7.D-4. Model Network for Beneficial Reuse Scenarios



3. Design Options.

A typical configuration for a rainwater harvesting Type I RWH system is shown in [Figure 1.6.7.D-2](#) [Figure 1.6.7.D-5](#). To receive water quality credit, rainwater harvesting systems must be designed so that captured runoff is held for at least 12 hours after rainfall has ceased, then either gravity-drained to a vegetated area sized large enough to infiltrate all the water ([Option Design Guidance for Type I A](#)); or ~~used to irrigate the~~ pumped to a vegetated area ([Option Design Guidance for Type I B](#)). The latter design is similar to a retention/irrigation system and Section 1.6.7(A) should be referenced for guidance. The vegetated area can also serve as a vegetated filter strip for flows that by-pass the rainwater harvesting system.

Because the required drawdown time is no more than five (5) days, these systems generally cannot be used to meet water conservation-oriented landscape irrigation needs (e.g., 5-day watering schedule). However, the portion of the system capacity that is recovered during the 5-day (maximum) drawdown period may be eligible for water quality credit. For example, water in the system may be pumped to a separate tank for subsequent beneficial reuse such as landscape irrigation during dry conditions. ~~Or, a portion of the tank may be designated as water quality volume that empties within 5 days and the remaining portion of the tank is reserved for beneficial reuse. The amount of water harvested for beneficial reuse should be evaluated so that it may be usefully deployed over the service area to which it is directed. The annual capture and annual use (for irrigation, etc.) for the device should balance, and if they do not the annual use becomes the limiting capture quantity.~~

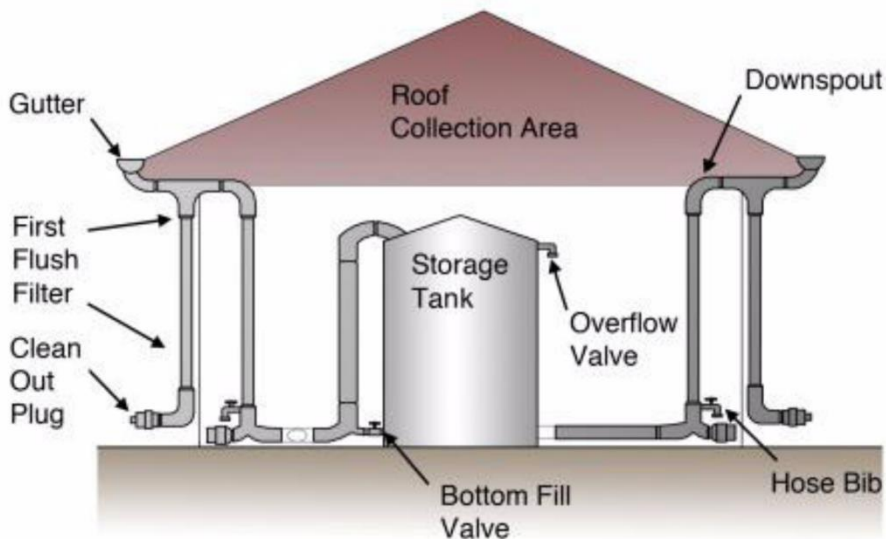




Figure 1.6.7.D-25. Typical configuration for a rainwater harvesting system.

Alternatively, and with approval from the Director, the system may be designed to empty or partially empty prior to the next forecasted rain event using an advanced real-time controller.

Option A – Captured Runoff Gravity-Drained to a Vegetated Area for Infiltration

Design Guidance for Type IA RWH System - Runoff Gravity-Drained to a Vegetated Infiltration Area

The water quality volume must be provided by the system designer, with the drawdown time set to a maximum of 120 hours. The designer must demonstrate that the vegetated area is sufficiently large to infiltrate the entire water quality volume within 120 hours (see Figure 1.6.7.D-3 below).

The average "treatment" rate of the rainwater harvesting system is:

$$Q_{avg} = WQV/DDT$$

Where:

- Q_{avg} is the treatment rate
- WQV is the water quality volume
- DDT is the drawdown time, which is set to a maximum of 120 hours

It is reasonable to assume saturated conditions, and the infiltration rate of the vegetated area can be calculated as:

$$Q_{veg} = k * i * A$$

Where:

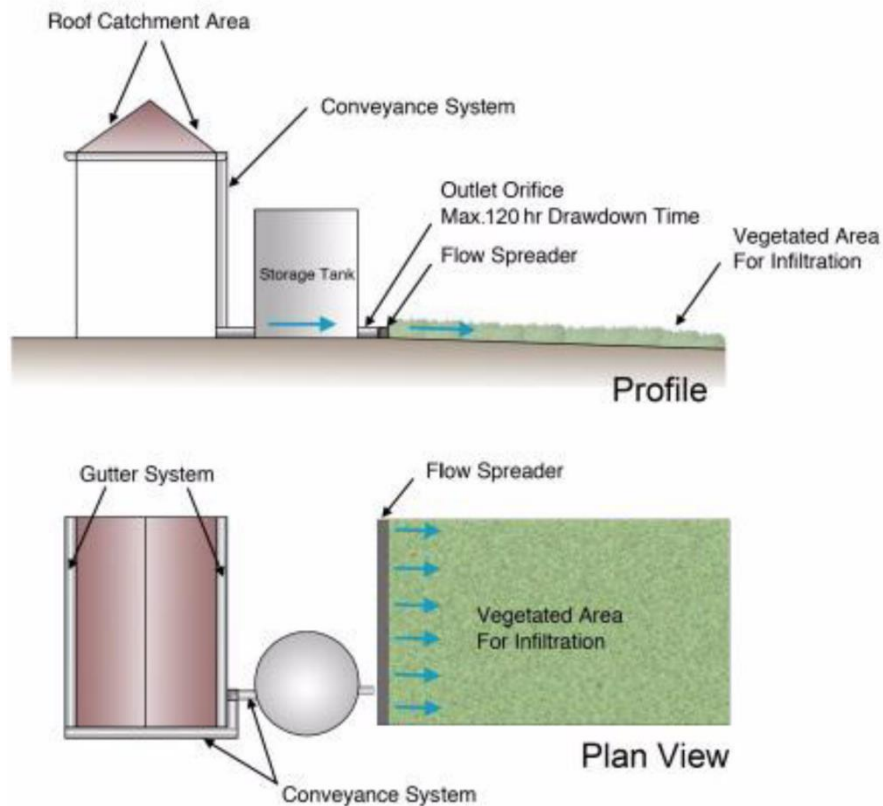


Figure 1.6.7.D-36. Design Option Type IA RWH System with captured runoff discharged to a vegetated area for infiltration.

As minimal ponding of water over the vegetated area is expected, the hydraulic gradient can be assumed equal to 1, thus:

$$Q_{veg} = k * A$$

To be conservative, design the vegetated area for the maximum flowrate discharged from the rainwater harvesting system. A reasonable assumption is to assume a value twice Q_{avg} , and to also assume a lag time (LT) between the time runoff ends and when the rainwater harvesting system begins discharging:

$$Q_p = (2 * WQV) / (DDT - LT)$$

Setting the peak flow rate discharged from the rainwater harvesting system equal to the vegetated area infiltration rate, and solving for A:

$$A = (2 * WQV) / (k * (DDT - LT))$$



Where

A design infiltration rate (i.e., hydraulic conductivity) for the site must be established through desktop study and field sampling as described in Section 1.6.7.4. The lag time LT should be set to a minimum of 12 hours.

To be eligible for water quality credit the vegetated area also must meet the following criteria:

- The length (dimension in direction of flow) of the vegetative area should be at least 15 feet.
- The average slope of the vegetative area must be between 1% and 10%, with no portion exceeding 15%.
- The hydraulic loading rate should not exceed 0.05 cfs per ft. width for the maximum flowrate applied to the vegetated area (see below for procedure to calculate peak flowrate). Higher hydraulic loading rates are allowed but will reduce water quality credit. In this case, a maximum allowable rate of 0.15 cfs per ft. width is allowed.
- The soil depth should be a minimum of twelve (12) inches.
- The vegetated area should have dense vegetative cover (minimum 95% coverage as measured at the base of the vegetation). The use of native grasses is strongly recommended due to their resource efficiency and their ability to enhance soil infiltration. In the case of natural wooded areas where 95% vegetative cover is not present, a minimum of four inches of leaf litter or mulch must be in place.
- An irrigation plan is required. Type IA RWH systems are prohibited from having a potable water supply connection.

Option B - Captured Runoff Used to Irrigate Vegetated Area

Design Guidance for Type IB RWH System - Captured Runoff Pumped to Vegetated Irrigation Area

A typical design configuration in which captured runoff is **used pumped** to irrigate a vegetated area is shown in Figure **1.6.7.D-4 1.6.7.D-7** below. The water quality volume must be provided by the system designer, with the drawdown time set to a maximum of 120 hours. The system should be designed according to the retention/irrigation criteria in Section 1.6.7.A.

Rainwater systems are considered auxiliary water sources by the Austin Water Utility. When a rainwater harvesting system meets the definition of Auxiliary Water per the City



of Austin - Utility Criteria Manual (UCM) then the design of this system must comply with the backflow protection requirements established in Section 2.3.4 of the UCM, Backflow Prevention Rules and Regulations Pertaining to Sites With Both City Potable Water and Auxiliary Water.

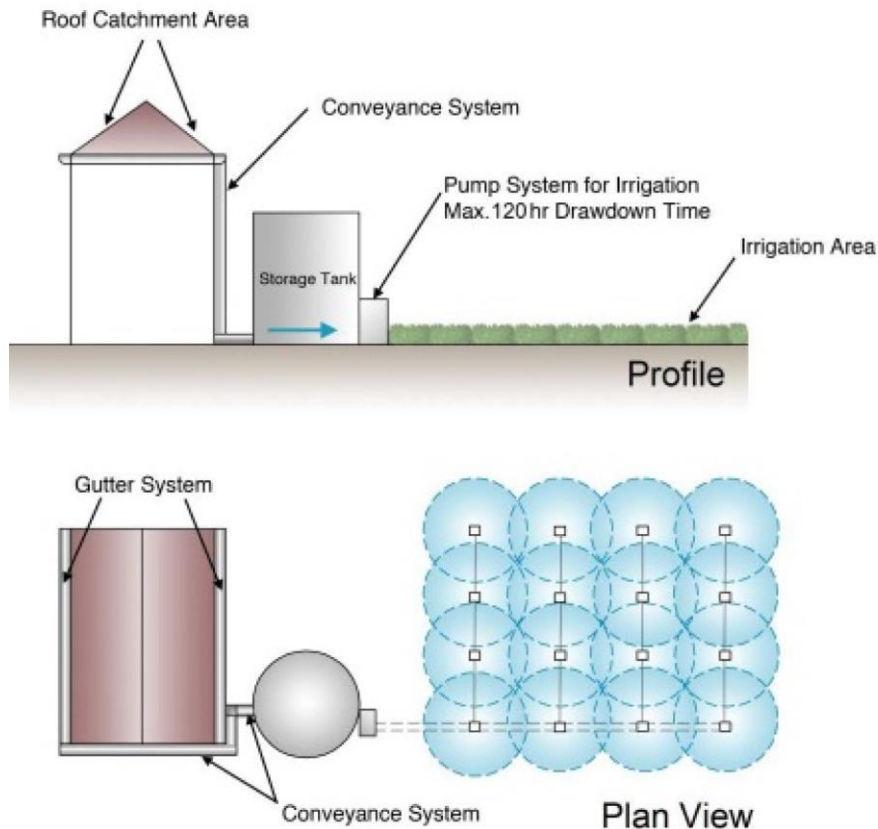


Figure 1.6.7.D-4 1.6.7.D-7. **Design Option Type IB RWH system** with captured runoff used to irrigate a vegetated area.

Design Guidance for Type II Rainwater Harvesting Systems

Type II RWH systems (both A and B) must be designed in accordance with requirements set forth in Chapter 15-13 – Regulation of Onsite Water Reuse Systems of the City of Austin Code of Ordinances. Some developments may be required to install Type II systems per LDC §25-9-412 (Onsite Water Reuse System Requirement). In addition, Type II RWH systems are subject to in Chapters 15-1 (Cross Connection Regulations) and 25-12 (Technical Codes).

4. Example.



A 5 acre commercial development with 50% impervious cover (2.5 impervious acres) is proposing a rainwater harvesting system that would capture runoff from 1 acre of rooftop and drain it by gravity to a vegetated area (Option A). The development is located outside of the Barton Springs Zone. The system would have a water quality volume of 25,000 gallons, which would be emptied in 96 hours by discharging to a vegetated area that is 260' wide by 90' long. The design hydraulic conductivity for the site was established to be 0.06 in/hour, or 0.005 ft/hour. Evaluate this design and determine the water quality credit it may be eligible for.

The water quality credit will typically be applied as either a reduction in the water quality volume of a structural control or a reduction in the payment instead of structural controls.

As the alternative control is for 1 acres of impervious cover, and the site has a total of 2.5 impervious acres, the IAF value is 0.40 ($=1/2.5$).

- The BMPDF factor is a function of two components, the rainwater harvesting system and the vegetated area. The BMPDF value for the rainwater harvesting system is based on the water quality volume and drawdown time, subject to the requirement that the vegetated area must be large enough to infiltrate the captured volume.

To determine the BMPDF value, first convert the water quality volume from gallons to inches:

$$WQV_{rwh} = (25,000 \text{ gallons} * 1 \text{ ft}^3 / 7.481 \text{ gal}) = 3,342 \text{ ft}^3 = 0.92\text{-inch}$$

The BMPDF value is a function of the following factors:

$$\frac{WQV_{rwh}}{WQV_{ecm}} \text{ and} \\ DDT_{rwh}$$

The rainwater harvesting system will be capturing runoff from a rooftop that is 100% impervious cover. The water quality capture depth for 100% impervious cover is 1.30-inch for projects located outside of the Barton Springs Zone. Therefore, the factors to determine BMPDF are:

$$\frac{WQV_{rwh}}{WQV_{ecm}} = 0.92/1.3 = 0.71, \text{ and}$$

$$DDT_{rwh} = 96 \text{ hours.}$$

Inserting these values into Figure 1.6.7.D-1, gives:

$$BMPDF = 0.68.$$



Before this credit can be applied first determine if the vegetated area is sufficient to infiltrate the water quality volume in 96 hours.

Is it large enough?

Minimum size $A = (2 * WQV)/(k * (DDT - LT)) = (2 * 3,342)/(0.005 * (96-12)) = 15,914 \text{ ft}^2$.

Size provided = $260' * 90' = 23,400 \text{ ft}^2$ - this is large enough

Is the length of the vegetated area at least 15 feet?

Yes as the proposed length is 90 feet.

Does it meet the 0.05 cfs/ft. width hydraulic loading rate for the discharge from the rainwater harvesting system?

To estimate peak flowrate and hydraulic loading rate:

$Q_p = (2 * WQV)/(DDT - LT) = (2 * 3,342)/(96 - 12) = 80 \text{ cfh} = 0.022 \text{ cfs}$

$HLR = Q/W = 0.022/260 = 0.00008 \text{ cfs/ft width}$ - Okay as < 0.05

All other slope, soil depth, vegetative cover, etc. criteria is also met, thus the vegetated area is acceptable and:

The total water quality credit for the proposed system is:

$WQC = IAF * BMPDF = 0.4 * 0.68 = 0.272$

5. References:

1. The Texas Manual on Rainwater Harvesting, 3rd edition 2005
2. City of Tucson Water Harvesting Guidance Manual, October 2005
3. City of Austin Energy, Green Building Program, 1995



Discussion Summary

Austin Water (AW) gave a presentation on a proposed rule change for the Environmental Criteria Manual (ECM) that would allow sites that are utilizing rainwater harvesting to get water quality credit. By capturing rainwater and reducing the volume of water that requires water quality controls, the size of water quality controls can be reduced. Allowing for developments to obtain water quality credit is essential because onsite water reuse (OSWR) requirements for developments with 250,000+ sq. ft. became effective on April 1, 2024.

This change would allow for developments that meet OSWR requirements through rainwater harvesting to reduce the size of their water quality controls, which are typically detention ponds. The credit amount is determined by the size and type of cistern, and the uses of the captured water. The rule differentiates between cistern types where Type 1 features a constant drawn down of water and Type 2 allows for the use of captured rainwater as needed throughout the development but requires potable backup and backflow prevention. Rainwater harvesting systems must meet health and safety and reporting requirements in Chapter 15. This ensures the City knows they are appropriate and maintained, and thus deserving of the water quality credit.

During the presentation and subsequent discussion, the scope of this specific rule change was better defined. Chapter 15-13 of City Code is what requires developments over 250,000 sq. ft. to implement OSWR. This rule allows those that use rainwater harvesting to meet the OSWR mandates to obtain water quality credit for those systems. As such, this rule does not require mandatory participation or present more stringent regulations.

Generally, this rule is intended for commercial and large multi-family developments but is available regardless of the project size. Single family residential projects do not require storm water quality controls, so it is not relevant to those projects. Some possible exceptions are if the proposed impervious cover is over 8,000 sq. ft. on the lot, and for residential subdivisions. In these instances, projects are eligible to use this rule.

In terms of creating more developable area, projects that are not subject to the OSWR mandate may not find this useful. Some water quality controls such as detention ponds and rain gardens can be placed in zoning setbacks and compatibility buffers, while rainwater cisterns cannot. In that instance, the cistern would be taking up developable land. Each project will need to determine how beneficial this credit would be to their project, but it is anticipated that it will be most helpful for those subject to OSWR requirements.



Regarding costs, the ECM already allows for water quality credit for rainwater harvesting in what would now be classified as a Type 1 cistern. These projects are reviewed by drainage and water quality reviewers, and it is expected that no additional staff would be needed to review plans to implement this rule. Thus, it is not expected to create a new review fee.

AW provided the following table which estimates potential savings for projects taking advantage of water quality credits granted by the rule.

Typology	Savings	Units	Savings Per Unit
High-rise Res	\$12,743	221	\$58
Suburban Res (irrigation only)	\$92,465	570	\$162
Mid-rise Mixed use	\$26,885	150	\$179
Mid-rise Res	\$32,073	225	\$143

These estimates do not factor in costs for the rainwater harvesting system itself, other aspects of an OSWR system, or ongoing maintenance. These estimates are the sum of AW data on the cost per cubic feet of water quality controls multiplied by the water quality credit requirements for each typology based off the OSWR mandate's Affordability Impact Statement. There are additional cost estimates on the OSWR mandate requirements, they can be found here: [document.cfm \(austintexas.gov\)](http://document.cfm(austintexas.gov))

Consensus Rule Language Changes

In response to discussion, AW and WPD agreed to include the language changes (shown in red), along the following lines, in the posted version of the rule:

Section 1.6.7.2

Water quality credit can also be accrued with Rainwater Harvesting (RWH) systems that capture and beneficially reuse water on site, **such as rainwater, AC condensate, and graywater to meet a project's existing water demand such that the project's total demand for potable water is reduced.**

This aligns with the language in section 1.6.7.D. and better clarifies the type of features and functionality that constitutes what is beneficial. Providing this clarification is important given that "beneficial" is a standard of review for compliance and is used frequently throughout the requirements.



Section 1.6.7.D.

In acknowledgement of the pollutant load removal provided by RWH, commercial developments that **comply with and implement RWH, as required by Chapter 15-3, shall be allowed a stormwater quality “credit”...**

This further clarifies that the RWH requirements needing to be fulfilled are spelled out in Chapter 15-3, and if an applicant meets them, they will automatically (shall) receive the credit. The original language said “may”.

Potential Future Actions

Though not a part of this proposed rules posting, discussion among the TARP panelists identified the following related topics for future consideration:

- Update Appendix R-7 of the ECM.
- Determine if Type 2 systems meet requirements for innovative management practices (Title 30, Section 5-151).
- Calibrate requirements for Type 2 residential rainwater harvesting.
 - Requirements for auxiliary water source and backflow prevention are a barrier to using rainwater harvesting. If residential systems that maintain a lower level of pressure and volume could participate without these requirements, it could potentially reduce the risk of back charging while removing cost burdens that prevent projects from implementing rainwater harvesting for this purpose. Since there are many more small projects than large ones subject to OSWR, this could increase the City’s overall conservation efforts.

Proposed Rules: Utilities Criteria Manual Section 2 (Water, Reclaimed Water, and Wastewater Criteria) and Standard Specifications Item No. 510 Updates

Proposed Rule Language (2 Rules)

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/department/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.
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.**

ITEM NO. 510 PIPE ~~11-7-22~~**XX-XX-24**

510.3 Construction Methods

(6) Trench Depth and Depth of Cover

All pipe and in-line appurtenances shall be laid to the grades indicated. The depth of cover shall be measured from the established finish grade, natural ground surface, subgrade for staged construction, street or other permanent surface to the top or uppermost projection of the pipe.

(a) Where not otherwise indicated, all potable/reclaimed water piping shall be laid to the following minimum depths:

- ~~1. Potable/reclaimed water piping installed in undisturbed ground in easements of undeveloped areas, which are not within existing or planned streets, roads or other traffic areas shall be laid with at least 36 inches of cover.~~
- ~~21. Potable/reclaimed water piping installed in existing streets, roads or other traffic areas shall be laid with at least 48 inches of cover below finish grade. **Minimum depth of cover over the uppermost projection of pipe shall be at least 48 inches below proposed ground elevation.**~~
- ~~32. Unless approved by the E/A, installation of potable/reclaimed water piping in proposed new streets will not be permitted until paving and drainage plans have been approved and the roadway traffic areas excavated to the specified or standard paving subgrade, with all parkways and sidewalk areas graded according to any applicable provisions of the drainage plans or sloped upward from the curb line to the right-of-way line at a minimum slope of ¼ inch per foot. Piping and appurtenances installed in such~~



proposed streets shall be laid with at least 36 inches of cover below the actual subgrade.

- (b) Where not otherwise indicated, all wastewater piping shall be laid to the following minimum depths:
 1. Wastewater piping installed in natural ground in easements or other undeveloped areas, which are not within existing or planned streets, roads or other traffic areas shall be laid with at least 42 inches of cover.
 2. Wastewater piping installed in proposed streets, existing streets, roads or other traffic areas shall be laid with at least 66 inches of cover.

Discussion Summary

Most changes are not substantive but are intended to clarify existing rules and update language to what is used by AW staff today. Examples include updating the website, clarifying the construction notes required during review, better defining when a two way clean out is required, and changing the word “exception” to “waivers” which is the term used by staff. The substantive change is in regard to minimum depth for reclaimed water, this change matches the depth required for potable water which was updated in the past. The change to the Standard Specifications Manual is so that it will match the depth in the Utilities Criteria Manual.

It was determined these changes would not have an impact on cost, development potential, or housing. The specified depths meet the minimum used by the Texas Administrative Code and there were no concerns about the requirement exceeding that depth. It was confirmed there are forms used by applicants when requesting the mentioned waivers.

In August of 2023. AW published a Revised and Restated Exception Policies for Residential Users document that details exceptions for residential projects that align with the City’s affordable housing goals. It was confirmed with the AW Industrial Waste division that these changes do not impact those policies.

Consensus Rule Language Changes

In response to discussion, TPW agreed to include the language changes (shown in red), along the following lines, in the posted version of the rule:

Summary page for Utility Criteria Manual Sections 2.5.1, 2.9.3, 2.9.4 & 2.9.5.

- On item six, change “three” locations to “four”

Section 2.9.6 Waivers –



- Change 2.9.6 to 2.9.5

These changes are correct numbering errors in the proposed rule.

Potential Future Actions

Austin Water is planning future rules changes that:

- Better detail requirements to obtain a waiver, so that its clearer to applicants. This includes clarifying which waivers are automatically granted if certain is met, versus instances which may require consultation with AW staff to make a determination.
- Include information about requirements related to swapping out appurtenance sizes and the impacts of property lines and easements.

LDRA Determination on Proposed Rules

Subject to the above consensus changes, these updates to ECM Section 1.6.2 and 1.6.7, UCM Section 2, and SSM Item 510 are approved to moved forward with a Notice of Proposed Rule pursuant to rules posting process (City Code Chapter 1-2).



March Meeting

Meeting Details

March 21, 2024
Room 1405, Permitting and Development Center
6310 Wilhelmina Delco Dr., Austin, TX 78752

Proposed Rule: TCM 7.6.1.1 – Multi-Unit Residential Development on Level 1 Streets

Rule Language

The Transportation Public Works Department (TPW) gave a presentation on a proposed rule change for the Transportation Criteria Manual (TCM) that would allow for up to two driveways on lots with more than one housing unit when there is at least 20 feet of continuous street frontage is present or if certain site constraints are present. This rule is intended to maintain the goals of the Austin Strategic Mobility plan while also allowing for an additional driveway as the City anticipates densification of residential lots. This rule was developed with stakeholder input prior to the TARP's creation in 2023. The proposed rule language is as follows:

7.6.1.1 – Multi-Unit Residential Development on Level 1 Streets

If a lot fronting a Level 1 street has less than 300 feet of street frontage and at least two dwelling units are proposed on the lot, two driveways are allowed if at least 20 feet of continuous street frontage (i.e., curb) can be provided between driveways. The 20-foot driveway spacing requirement may be reduced administratively if any of the following site conditions prevent the required spacing:

1. Existing utility infrastructure such as a power pole, drainage inlet, water meter, wastewater cleanout, manhole, or fire hydrant on site or in the ROW frontage;
2. A drainage easement on-site;
3. The critical root zone for on-site trees of more than 19 inches;
4. At least 40% of the critical root zone for neighboring trees of more than 19 inches is located onsite; or
5. There is a slope of greater than 8% outside of the apron in the right-of-way.



If less than 20 feet of street frontage is proposed between the two driveways, the applicant shall identify the applicable site condition above and provide sufficient documentation why the site condition creates a constraint on driveway spacing with any permit application.

Additionally, a corner lot may have one driveway on each street that it fronts provided that each driveway meets all other TCM spacing and offset criteria and does not create a circular driveway (the driveways must be independent and not create a circular drive).

Discussion Summary

It was requested that for site condition #1 that “Proposed utility” be included along with “Existing utility infrastructure”, because there are times where utility providers do not allow non-existent, but planned utilities, to be moved. TPW is agreeable to this inclusion, and it will be reflected on an updated version.

A concern was made about the applicability for multiple driveways on ‘Through Lots’ (mentioned in City Code 25-4-172), where it would be possible to drive through the entire lot. This circumstance needs to be addressed in TCM 7.6.2. so that it is clear what is allowed.

There was discussion about clarifying what constitutes a minor driveway in the context of multi-unit residential sites on a corner lot. In instances where a lot sits on a local street and an arterial street, a connected driveway might make for safer conditions. TPW noted potential updates could clarify that multi-unit residential sites have permission to take access through a minor driveway if they are capped at four units. This reduces the number of vehicles taking access on to the lower-level street. There is a desire to codify these rules around major and minor driveways to provide more clarity for larger, multifamily, projects which is not the purpose of this rule but would be a welcome change in a future rule update.

Language was suggested to clarify that if a corner lot can have two driveways on one side if that is more appropriate for the site. TPW is agreeable to this change but noted that the Law Department was requesting specific language in certain parts of the proposed rule, and they would need to look at all changes that are made.

Clarity was provided on why driveways need to be spaced 20 feet apart, it is the space of one off-street parking spot. In practice, the flare of a curb cut can be used when measuring this distance, and the measurement begins at the property line.



Regarding the waiver criteria related to trees, there was a suggestion to include unprotected trees, under 19 inches in diameter, that are in the right of way, to incentivize leaving them in place due to their value for the City. Community Tree Preservation staff would be supportive of this addition but would also suggest making the criteria species specific, so that only certain species of trees trigger the waiver.

Staff from the Community Tree Preservation Division proposed removing the specific criteria in this rule and instead replacing it with a citation to the Environmental Criteria Manual where these regulations are better defined. This is a stylistic choice in rule development where the trade-off is making a rule less readily clear or useable because you now must reference two manuals, but it ultimately provides greater clarity and reduces the likelihood of conflicts if/when regulations are updated in future rule changes. The TARP agreed that referencing regulations in other manuals is the most appropriate way to handle these situations.

There was a question about why criteria #5 specifies a slope no greater than 8%. This was included to allow for more flexibility when there are site specific constraints, like when the right-of-way is flat but then there is an immediate slope which prohibits the driveway to be placed there. In this case a waiver could be allowed so it can be placed elsewhere. To allow for this flexibility, a triggering slope percentage must be identified, and that was 8%. No change will be made to this section.

Language was suggested to include the proximity of driveways on adjacent lots as a factor for waiving criteria. TPW clarified that its cleaner to just focus on site constraints present on the lot seeking a waiver. Panelists also raised the concern that this could create a situation where lots are racing to place their driveways first which could then limit their neighbors' options.

A panelist requested that this rule not be included as a subsection to 7.6.1.1, and instead just be within the base text for 7.6.1, with the justification that it becomes difficult to understand how many driveways are allowed once a lot has been subdivided. 7.6.1.1 already assumes each lot is allowed one driveway, while 7.6.1 allows for one driveway if the lot is <300 feet. 7.6.1 applies to a tract as a residential use or as a site plan, while 7.6.1.1 applies just to residential lots not requiring a site plan. By way of example, if you subdivide a lot into 10 lots, assuming there is enough street frontage and potentially using HOME Phase 2 changes, the idea that you need a waiver for additional driveways that would be allowed under 7.6.1.1 as part of the subdivision process is at odds with this rule's intended purpose. TPW views this as a process issue that does need more clarification within the TCM to provide guidance for single family development.



Considering the recent Phase 1 HOME Initiative changes which allows three units on a single lot, as well as potential reduction of lot sizes being considered under HOME Phase 2, there was a suggestion that this rule should be further expanded to allow for up to three driveways on a lot. TPW indicated that they have not yet internally vetted this concept, particularly with consideration to existing City goals on mobility, or done peer city research. TPW does want to be responsive to this request but raised concerns about how increases in driveways are at odds with Austin Strategic Mobility Plan goals to reduce driveways and promote multi-modal transportation. The City is trying to move towards people taking transit, using bikes, and having safe streets for pedestrians. Due to this if you want certain entitlements you may need to commit to joint access, especially if we want to maintain street parking on Level 1 streets.

Consensus Rule Language Changes

In response to discussion, TPW agreed to include the language changes (shown in red), along the following lines, in the posted version of the rule:

Including proposed utility infrastructure as a waiver criteria:

1. Existing **and proposed** utility infrastructure such as a power pole, drainage inlet, water meter, wastewater cleanout, manhole, or fire hydrant on site or in the ROW frontage;

Language to clarify that if you have a corner lot, you can take two driveways on one side if that is more appropriate:

Additionally, In addition to the above option, a corner lot may have one driveway...

Or

Additionally, An alternative to the above option, a corner lot may have one driveway...

Including trees less than 19 inches in diameter as a waiver criteria:

3. The applicant intends to preserve, per Standard Preservation Criteria in ECM section 3, a tree that (a) is not a Protected or Heritage tree, and (b) meets criteria in ECM 3.5.4.B.2.a, which addresses preserving non-regulated trees for mitigation credit. It is not necessary that a waiver under this section be for trees preserved specifically for mitigation credit.



Tree related criteria for a waiver is defined in the ECM as opposed to providing specific guidance in this rule:

~~3. The critical root zone for on site trees of more than 19 inches;~~

~~4. At least 40% of the critical root zone for neighboring trees of more than 19 inches is located onsite; or~~

4. Protected or Heritage trees located on-site or on an adjacent site such that the required driveway spacing would result in impacts exceeding Standard Preservation Criteria as identified in Environmental Criteria Manual Section 3;

Potential Future Actions

Address “Through Lots” (mentioned in City Code 25-4-172), where it would be possible to drive through the entire lot. This circumstance needs to be addressed in TCM 7.6.2. so that it is clear what is allowed.

Clarify requirements for major and minor driveways. To provide better context for multi-unit residential sites on a corner lot.

Update section 7.6.1 to provide clear, comprehensive guidance on driveway allowances as it relates to subdivisions, lots requiring site plans, and residential lots not requiring site plans.

Conduct staff review for allowing three driveways for lots with multiple units, including an analysis of impacts on goals established in the Austin Strategic Mobility Plan and best practices from other cities that are promoting dense developments with a focus on multi-modal transportation planning.

LDRA Determination on TCM 7.6.1.1

Subject to the above consensus changes, these updates to the Transportation Criteria Manual Section 7.6.1.1 are approved to move forward with a Notice of Proposed Rule pursuant to rules posting process (City Code Chapter 1-2).

To allow for two driveways and the criteria for an administrative waiver to be effective sooner, this rule will move forward without allowing a third driveway at this time. The TARP will place on a future agenda another meeting about driveways and include discussions on the suggestions to clarify section 7.6.1 and to allow three driveways on



lots with multiple units. In the meantime, TPW can provide waivers for lots requesting three driveways on a case-by-case basis.

Guided Discussion on Driveways as it Relates to HOME Phases 1 and 2

TPW is agreeable to reducing minimum driveway width from 12 feet to 10 feet, the TARP agreed that this would be helpful for design and to reduce site constraint issues.

To allow for broader implementation of HOME Phase 1 where three units are allowed on a lot, a reduction in the size of the shared driveway may create more design opportunities and reduce site spacing conflicts for utilities. Currently the minimum width is 15 feet, but TPW is considering a reduction to 12 feet, which initial research suggests is in alignment with peer cities that have dense transit-oriented development. There is also a maximum number of units that can be served by a shared driveway in City Code. TPW believes this regulation is only applicable to major roadways but can provide more information, any suggested changes to the maximum number of units served would be specific to the Land Development Code, not criteria manuals, but could be reflected in the TARPs reporting.

Driveway strips (driveways with material that only spans the length of each tire leaving space in-between to reduce total impervious cover) are currently not mentioned in the TCM and are only addressed in a policy memo. Waivers are frequently granted for their use, but this should be codified in the TCM to provide clear guidance. This issue also requires input from the Watershed Protection Department (WPD), to determine how it impacts impervious cover calculations, and the Community Tree Preservation Division in the event a Critical Root Zone is impacted. If the use of certain materials impact review criteria (such as uncompacted gravel), a standard specification which lists those materials would be needed.

The TARP discussed whether utility cleanouts and metering can be located under driveways. Austin Water (AW) said this create issues for servicing and maintaining that infrastructure over time, but they do give waivers. For new construction, or a redevelopment where the driveway is removed and then rebuilt and new plumbing lines are installed, utilities can be placed in the apron. There are standard specifications to show how that is done. However, when maintenance is needed, they need to remove the driveway apron and rebuild it after it's been serviced. This issue will require further discussion to find ways to reduce impacts to AW while also allowing for more flexible placement during site design.



There is a requirement for a public utility easement in the joint driveway section of the TCM. This is an obsolete section that is no longer applied, and it will be removed in a future rule change.

Potential Future Actions

The following will be addressed by proposed rule changes and/or as agenda items at a future TARP meeting:

Update minimum driveway width for standard driveways.

Update minimum driveway width for shared driveways.

Insert requirements for driveway strips so that a waiver is not required.

Analyze possible solutions to utility placement within driveways. To include, an analysis of impacts on goals established by Council actions to create density and “missing middle” housing, best practices from other cities that are promoting dense developments with a focus on multi-modal transportation planning, and impacts on utility maintenance operations and costs.

Update Section 7.6.4.B. of the Transportation Criteria Manual to remove the requirement that joint use driveways have a permanent joint use access easement.

Rules Exempted from TARP Review

The following proposed rules were administratively exempted from TARP review by the LDRA and allowed to move forward with the adoption process as it was determined they did not create substantive changes to the development process. The TARP was informed of their approval and did not indicate a desire to place them on an agenda.

Drainage Criteria Manual

9.5.5.D e. Timeline.

1. Discount is valid for ~~two~~ **four** years starting on date of approval. To renew discount, customer must complete renewal process.
2. If SCM (e.g., rain barrel) is moved to a different benefitted property, customer must reapply for discount.



Building Criteria Manual

1.2.11 Building Permit Application – Expiration

1) Unless a permit is issued, a building permit application for any proposed work expires one year after the date the application is filed. If building plans are approved before the application expires:

- a. The update deadline is extended as needed to allow any permits shown as “pending” to expire not earlier than the 181st day after the building permit application approval.
- b. The application, including any permits shown as “pending,” expire 365 days after the date the application is filed or the 181st day after application approval, whichever is later.

Rule Language Changes in Response to February TARP Meeting

After TARP review, the following changes were made to the proposed rule language of Section 1.6.7. of the Environmental Criteria Manual. These changes were requested by the WPD to ensure the credits given for water quality controls are only applied in the area of the development where the rainwater harvesting took place; which is the place where drainage and water quality mitigation has occurred. The LDRA recommends approval for this language move forward with the adoption process. The TARP was informed of the approval and did not indicate a desire to place it back on an agenda for further discussion. Changes between the version reviewed by the TARP and the newly proposed language are **highlighted in green**.

Drainage Criteria Manual – 1.6.7.2 Water Quality Credit

1. Introduction. Rooftops can generate large volumes of runoff which, when discharged to paved surfaces and landscaped areas, can generate large pollutant loads. Rainwater **H**arvesting (RWH) systems can capture this runoff before it is discharged, thus preventing pollution while also putting the captured water to beneficial use, such as landscape irrigation, toilet flushing, or cooling water. **In acknowledgement of the pollutant load removal provided by RWH, commercial developments that comply with and implement RWH as required by Chapter 15-13 shall** be allowed a stormwater quality “credit” which would allow developers to reduce the size of their water quality ponds by a specified **amount in the drainage area where the RWH system is located**. The amount of runoff captured **over the long-term, and thus the allowed stormwater credit will depend on the size-volume of the cistern (water quality volume) and drawdown time of the rainwater harvesting system** rate at which the cistern empties.
[Propose end Paragraph here]



There are two types of RWH systems for the purposes of determining water quality credit. Type I systems generally are designed for stormwater control with ancillary potable water offset benefit. Type II systems are designed primarily for potable water

offset with ancillary stormwater control. Both systems will be permitted for commercial developments and multifamily residential developments.

A follow up question was asked if it is possible to change requirements for easements for cisterns so that they can be moveable and reusable. Joydeep Goswami, Land Use Review Division Manager for DSD stated this is being considered in the site plan review process for single family subdivision but is not pertinent to this language change. Leslie Lilly, Environmental Program Coordinator for the WPD agreed that this could be considered for the dedicated easements of cisterns, but if the cistern is part of the water quality controls on site that it doesn't need to be contained in an easement, and that has not been a part of this rule change.

General Announcements

Brian Block the Music Program Manager from the Development Services Department's (DSD) Entertainment Service Group gave a brief presentation on proposed changes to sound assessment and disclosure requirements. A recent City Council resolution has directed staff to improve compatibility between residents, lodging establishments, and music related businesses. Staff are seeking feedback on requiring all residential and hotel developments that require a site plan within 600 feet of outdoor music venues, and within 300 feet of performance venues, to perform a sound assessment during the development review process. These properties would also be required to disclose when they sell or lease units that they are near these venues and that an assessment has been conducted. This does not require staff review during the development review process, other than certifying the assessment has been completed, and does not mandate any new additional building standards. Those interested in providing feedback can find more information hear: [Sound Assessment and Disclosure Requirements In-Person Stakeholder Engagement | AustinTexas.gov](#).

An update was provided on the TARP transitioning to Microsoft Teams as its document sharing platform instead of using SharePoint. This change is being made due to the better functionality of Teams and for the ability of panelists to use the chat feature to communicate with each other between meetings.

TARP panelists were updated on potential changes to the Screening Standards Worksheet to minimize redundancy with some of the questions asked by the Housing Department when performing the Affordability Impact Statement. To address these



concerns, which several TARP panelists have raised, staff are exploring if the Screening Standards Worksheet and Affordability Impact form can be consolidated and improved.

During the March 21, 2024 City Council meeting, [Resolution 20240321-039](#) was passed, directing the City Manager to “*provide an opportunity for the Technical Advisory*

Review Panel to discuss technical challenges with the implementation of this initiative which should include but are not limited to:

- *Identify key conflicts within the administrative manuals.*
- *Develop standard specifications and details.*
- *Identify other roadblocks to achieving a higher percentage of green infrastructure including street trees.”*

A working group will be formed to explore this further and provide the TARP with an analysis of how the administrative manuals impact street trees, along with any potential recommendations. Street trees and green infrastructure will be placed on a TARP agenda prior to when the City Manager is directed to brief the Council Mobility Committee, which is September 19, 2024.