

RULE NO.: R161-23.16**NOTICE OF PROPOSED RULE****POSTING DATE: July 6, 2023**

The Director of the Watershed Protection Department proposes to adopt the following rule after August 8, 2023.

Comments on the proposed rule are requested from the public. Comments should be submitted to Kelly Strickler, at kelly.strickler@austintexas.gov or (512) 974-1845. To be considered, comments must be submitted before August 7, 2023 the 32nd day after the date this notice is posted. A summary of the written comments received will be included in the notice of rule adoption that must be posted for the rule to become effective.

An affordability impact statement regarding the proposed rule has been obtained and is available by contacting Kelly Strickler at kelly.strickler@austintexas.gov or (512) 974-1845.

EFFECTIVE DATE OF PROPOSED RULE

A rule proposed in this notice may not become effective before the effective date established by a separate notice of rule adoption. A notice of rule adoption may not be posted before August 7, 2023 (the 32nd day after the date of this notice) or not after September 14, 2023 (the 70th day after the date of this notice).

If a proposed rule is not adopted on or before September 14, 2023, it is automatically withdrawn and cannot be adopted without first posting a new notice of a proposed rule.

BRIEF EXPLANATION OF PROPOSED RULE**Drainage Criteria Manual**

- 1.2.2 - General The changes address incorrect figure references, fix grammar and spelling errors, and clarify RSMP existing participation requirements per DCM 1.2.2.G. These proposed updates do not change program eligibility or add any restrictions.
- Appendix D Figure 5-3 The existing figure has been updated to add clarity regarding the number of bends between access points.

A copy of the complete text of the proposed rule is available for public inspection and copying at the following locations. Copies may be purchased at the locations at a cost of ten cents per page:

Watershed Protection Department, located at 505 Barton Springs Road, 12th Floor, and

Office of the City Clerk, City Hall, located at 301 West 2nd Street, Austin, Texas.

AUTHORITY FOR ADOPTION OF PROPOSED RULE

The authority and procedure for the adoption of a rule to assist in the implementation, administration, or enforcement of a provision of the City Code is established in Chapter 1-2 of the City Code. The authority to regulate design and construction of drainage facilities and improvements is established in Section 25-7-64 of the City Code.

CERTIFICATION BY CITY ATTORNEY

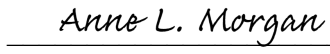
By signing this Notice of Proposed Rule (R161-23.16), the City Attorney certifies the City Attorney has reviewed the rule and finds that adoption of the rule is a valid exercise of the Director's administrative authority.

REVIEWED AND APPROVED



Jorge Morales, Director
Watershed Protection Department

Date: 06/26/2023



Anne L. Morgan
City Attorney

Date: 6/28/23

Drainage Criteria Manual

1.2.2 - General

A. Stormwater runoff peak flow rates for the two (2), ten (10), 25 and 100-year frequency storms shall not cause increased inundation of any building or roadway surface or create any additional adverse flooding impacts.

B. Street curbs, gutters, inlets and storm drains shall be designed to intercept, contain and transport all runoff from the 25-year frequency storm.

C. In addition to B. above, the public drainage system shall be designed to convey those flows from greater than 25-year frequency storm up to and including the 100-year frequency storm within defined public rights of way or drainage easements.

D. Stormwater runoff peak flow rates shall not be increased at any point of discharge from a site for the two (2), ten (10), 25 and 100-year storm frequency events.

E. Regulation of peak flows to allowable levels, as determined by the provisions of this policy, shall be achieved by storage on-site or off-site or by participation in an approved Regional Stormwater Management Program. The Stormwater Management Section of this manual provides a guide to acceptable methods, but does not limit the designer to the methods presented therein. Guidelines for participation in the Regional Stormwater Management Program are contained in the Stormwater Management Section of this manual.

F. Developments that meet the following requirements are not subject to Subsection D. or E. above:

1. Developments that are immediately adjacent to and discharge directly into Lake Travis, Lake Austin, Lady Bird Lake and the Colorado River, or
2. Developments that are immediately adjacent to and discharge directly into Waller Creek below the Waller Creek Tunnel Inlet (downstream of 12th Street) and that are located in the Waller Creek Tax Increment Reinvestment Zone (TIRZ).

G. Detention Alternatives. The City recognizes the need for small projects to have an alternative means of meeting stormwater quantity mitigation (detention) requirements. Section 8.2.0 of the Drainage Criteria Manual defines the Regional Stormwater Management Program and describes the requirements for participation in the program. The City will allow small land developments that meet the following **simplified** requirements to **automatically** participate in the RSMP ~~per the following simplified requirements~~. This participation shall take the form of off-site improvements or payment-in-lieu of detention at the discretion of the Director of the Watershed Protection Department. Activity that meets all of the following requirements is not subject to D. above:

1. Commercial, multi-family or mixed-use developments with a site development area (limits of construction for redevelopment) of 0.5 acres or less or a single-family residential subdivision of one acre or less that does not require a preliminary plan application;
2. The proposed impervious cover does not exceed the maximum allowed by a restrictive covenant or plat note for the property, if applicable;

3. The activity does not propose impervious cover over and above current zoning maximums through the application of the various infill options provided in neighborhood plans; and

4. Any increase in runoff from the site shall be discharged to an existing storm drainage system, right-of-way, or dedicated drainage easement. If this cannot be achieved, a licensed engineer must submit the following:

i. A signed and sealed drainage plan; and

ii. A signed, sealed and dated letter, addressed to the Director of the Watershed Protection Department, stating without qualification: "I certify that I have personally conducted a topographic review and field investigation of the existing and proposed flow patterns for stormwater runoff from the subject development to the main stem of (name of creek). At build-out conditions allowable by zoning or watershed impervious cover limit, the stormwater flows from the subject development will not cause any additional adverse impacts for storms of magnitude up through the 100-year event."

H. For site plans or subdivisions that are part of a phased development where prior phases of the development have been permitted or constructed using rainfall criteria pre-dating Atlas 14, the following drainage criteria shall apply:

1. The current rainfall criteria shall be used to design the storm drain system (including gutters, inlets, pipes, spread requirements, etc.) within the current phase;

2. The 100-year runoff generated from the current phase using the current rainfall criteria must be conveyed to the detention pond or designed outfall location via a storm drain system, including pipes, channels, and streets. This analysis must use the current rainfall criteria for the entire drainage area to the pond or outfall. For this analysis, the drainage system is not required to satisfy the minimum clear width requirements for the 25-year event in Table 3-1; and

3. The 100-year runoff generated using the current rainfall criteria for the entire drainage area to the detention pond must not cause the peak water surface elevation of the pond to overtop the dam/embankment outside the controlled weir/overflow structure. The development will not be required to match the peak flow rates to pre-development conditions using the current rainfall criteria.

4. If the development cannot satisfy these conditions, the design of the current phase must satisfy one or a combination of the following until the above conditions are satisfied:

a. Modify the existing detention pond or the intervening storm drain system; and/or

b. Provide on-site detention within the current phase until the above conditions are satisfied or the peak flows from the current phase are not increased.

Cross reference— Supplemental requirements for development applications in certain planning areas, § 25-7-66.

5.6.1 - Spacing

Due to equipment constraints, every point within the storm drain must be a maximum of 250 feet from an access point for drains 30 inches in diameter or smaller. For storm drains greater than 30 inches in diameter, manholes shall be placed so that there is a maximum distance of 300 feet to an access point. Storm drain outfalls may be considered as access points for maintenance purposes. Access points must be accessible in accordance with the requirements of Section 1.2.4.E of this Manual and must provide a maintenance path within the storm drain that has no more than one horizontal bend, with that bend having a deflection of no more than forty-five (45) degrees in the direction of the maintenance path, and no vertical bend with a deflection of greater than five (5) degrees. Storm drain slope adjustments of less than five (5) degrees are not subject to this requirement. An inlet may be considered as an access point for maintenance purposes if that inlet is: (1) the upstream terminus of the storm drain system, (2) located less than 250-feet from a downstream manhole, and (3) the inlet has a manhole cover that is colinear with the connecting pipe.

Manholes shall also be located where two or more laterals intersect the main line within five (5) feet of each other (See Figure 5-123 in Appendix D of this manual for examples of possible manhole locations). Manholes shall also be placed at locations where changes in pipe size occur.

5.3.6 - Condition ~~Criteria~~Criteria

The condition of the downstream conveyance system shall be considered at all proposed connections to existing storm drain systems. If the condition indicates repairs or improvements may be needed, then the design engineer shall work with the City to determine the appropriate way to connect to the existing system, which may include participation from the City. The minimum improvements shall be to the next structurally sound downstream location in the storm drain system.

5.7.1 - Clearance

A. Submitted plans shall include the following for existing and proposed storm drain systems:

1. Horizontal alignment of the storm drain system in plan view; and
2. Vertical alignment of the storm drain system in profile view.

B. Plans and drawings shall:

1. Label all storm drain lines "SD";

2. Label all storm drain lines with size (diameter for circular pipes, span by rise for box culverts, etc.) and material;

3. Label clearance distances on the plan and profile when minimum clearances are not met; and

4. Show storm drain lines that are 24-inches and larger as double-lined to render actual internal dimension(s) of the storm drain.

C. Penetration of storm drain infrastructure by other utilities or structures is not allowed.

D. The following clearance requirements apply to all fixed infrastructure and utilities. Fixed infrastructure and utilities include, but are not limited to:

1. Water and wastewater mains and service lines;

2. Gas lines; and

3. Dry utility services.

E. Clearances shall be measured from the outside edge of the other utility or infrastructure to the outside edge of the storm drain, manhole, inlet, or other appurtenance.

F. The minimum horizontal clearance shall be 60 inches (5 ft) for storm drain, inlet, or other appurtenance. The minimum horizontal clearance shall be 36 inches (3 ft) for storm drain manholes.

G. For storm drains smaller than 42 inches with a depth of cover of 6 feet or less, the minimum vertical clearance will be 12 inches above the storm drain and 18 inches below the storm drain.

For storm drains 42 inches or larger or with a depth of cover greater than 6 feet, the minimum vertical clearance will be 18 inches above the storm drain and 24 inches below the storm drain.

This language is equivalent to the following table:

Table 5.8 Minimum Vertical Clearance Table based on Storm Drain Size and Depth of Cover		
	Depth of Cover for Storm Drain	
Diameter/Height of Storm Drain	≤6 ft.	>6 ft.
<42-inch	12-inch (above)	18-inch (above)
	18-inch (below)	24-inch (below)

Table 5.8 Minimum Vertical Clearance Table based on Storm Drain Size and Depth of Cover		
	Depth of Cover for Storm Drain	
≥42-inch	18-inch (above)	
	24-inch (below)	

Above: Minimum vertical separation above storm drain outer edge of pipe/box.

Below: Minimum vertical separation below storm drain outer edge of pipe/box.

H. Storm drain laterals and trunk lines shall:

1. Not be built under structures or within 5 feet of building foundations; and
2. Be offset from public sidewalks by a minimum of 2 feet from the edge of pipe to the edge of public sidewalk but may cross under public sidewalks as necessary.

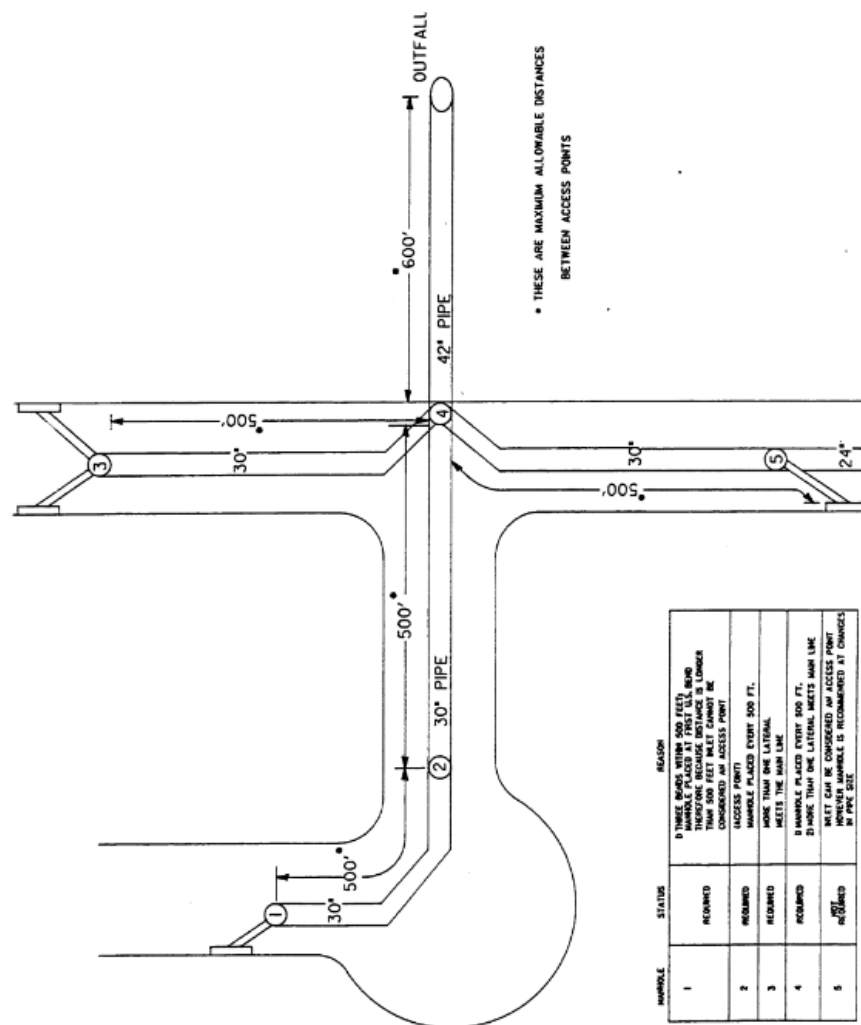
I. New street trees placed within the right-of-way shall have a horizontal clearance of 5 feet from the edge of the tree well to the outer edge of the storm drain, manhole, inlet, or other appurtenance.

J. Consideration for less than the minimum clearances will be given on a case-by-case basis dependent upon:

1. Site ~~constraints~~ constraints;
2. Size, depth, and material of proposed utility or street tree in conflict; and
3. Alternatives considered to meet minimum clearances.

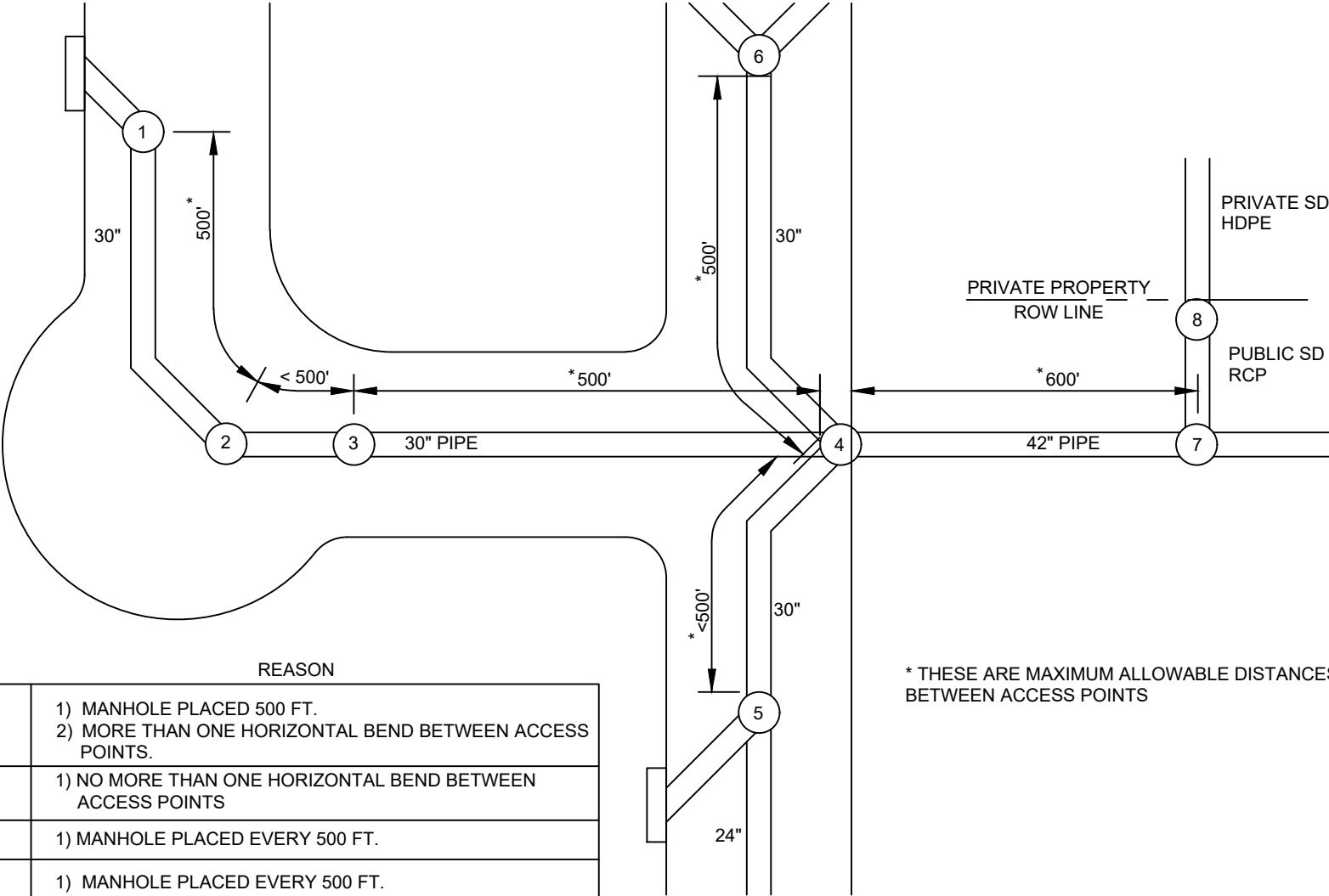
REMOVE

Figure 5-3



Source: City of Austin, Watershed Management Division

Figure 5-3



MANHOLE	STATUS	REASON
1	REQUIRED	1) MANHOLE PLACED 500 FT. 2) MORE THAN ONE HORIZONTAL BEND BETWEEN ACCESS POINTS.
2	REQUIRED	1) NO MORE THAN ONE HORIZONTAL BEND BETWEEN ACCESS POINTS
3	REQUIRED	1) MANHOLE PLACED EVERY 500 FT.
4	REQUIRED	1) MANHOLE PLACED EVERY 500 FT. 2) MORE THAN ONE LATERAL MEETS THE MAIN LINE 3) MANHOLE REQUIRED AT CHANGES IN PIPE SIZE
5	REQUIRED	1) NO MORE THAN ONE HORIZONTAL BEND BETWEEN ACCESS POINTS 2) MANHOLE REQUIRED AT CHANGES IN PIPE SIZE
6	REQUIRED	1) MORE THAN ONE LATERAL MEETS THE MAIN LINE 2) MANHOLE PLACED EVERY 500 FT.
7	REQUIRED	1) MANHOLE PLACED EVERY 600 FT. 2) CONNECTION @ GREATER THAN 45° REQUIRES MH
8	REQUIRED	1) MANHOLE REQUIRED AT PUBLIC/PRIVATE TRANSITION 2) MANHOLE REQUIRED AT MATERIAL TRANSITION