

IDM Chapter 9

STORMWATER DESIGN AND WATER QUALITY REQUIREMENTS

The following supplement modifies IDM Chapter 9. Where a portion of the IDM Chapter 9 is modified or deleted by this Supplementary, the unaltered portions of the Specification shall remain in effect.

Delete existing 9.2.01.H.2.d and replace with the following:

- d. City no longer allows timing analysis to avoid detention requirements.

Delete existing 9.2.01.H.3.a, b, c, d, e, f Calculation of Detention Volume and replace with the followings.

- 3. Calculation of Detention Volume.
 - a. Detention volume for Development areas is calculated on the basis of disturbed area that results in impervious surface, as defined in 9.1.04.O, associated with the project development.
 - b. Single family residential (SFR) lots of 7,500 square feet in area or less: SFR Lots are not required to provide detention if the Impervious area is less than or equal to 65%. Detention volume of 0.75 acre feet per acre is required for Impervious area in excess of 65% of the lot.
 - (1) Detention Requirement = 0.75 acre feet per acre of impervious cover (including all disturbed area that results in impervious surface) surface exceeding over 65% of the project area;
 - (2) Without sharing storm outfall with others, a point of connection through a curb via a 4-inch PVC pipe within the ROW shall be permitted. When sharing storm outfall with others, a point of connection should be at the storm sewer system not through a curb.
 - c. SFR lots of 7,500 square feet or less utilizing a shared driveway are required to provide detention at a volume of 0.75 acre feet per acre. The individual lots will be required to detain based on area in excess of 65% impervious. The entire shared driveway (access road, permanent access easement [28' PAE], private alley, public alley, or common driveway) will be required detention; no 65% reduction will be allowed. The total detention for the development will be a combination of these two volumes. Sharing storm outfall with others, a point of connection should be at the storm sewer system not through a curb.

(1) Detention Requirement =

[0.75 acre feet per acre of impervious cover surface (including all disturbed area that results in impervious surface) in excess of 65%]

+

[0.75 acre feet per acre] x [The area of the common or shared driveway, the access easement, a permanent access easement (28'PAE) access road, private alley or public alley, or similar access way by any other name, must be included in the calculation of the project area.]

- d. Tract size less than one acre and not subject to 9.2.01.H.3.b or 9.2.01.H.3.c: Detention volume will be required at 0.75 acre feet per acre of disturbed area that results in impervious surface. Additionally, detention volume will be required to offset redevelopment of existing impervious surfaces.

If shared driveway is used, detention volume of 0.75 acre feet per acre is required. In other words, for projects that are platted to contain more than one lot and access to these individual lots is to be provided by a common or shared driveway, such as an access agreement, an access road, a permanent access easement (28' PAE) private alley or public alley, the detention requirements shall be calculated as this section:

The area of the common or shared driveway, the access easement, a permanent access easement (28'PAE) access road, private alley or public alley, or similar access way by any other name, must be included in the calculation of the project area.

Any project when a shared driveway is used, subsurface drainage system is required. A point of connection should be at the storm sewer system not through a curb.

Total Detention Volume required is calculated as follows:

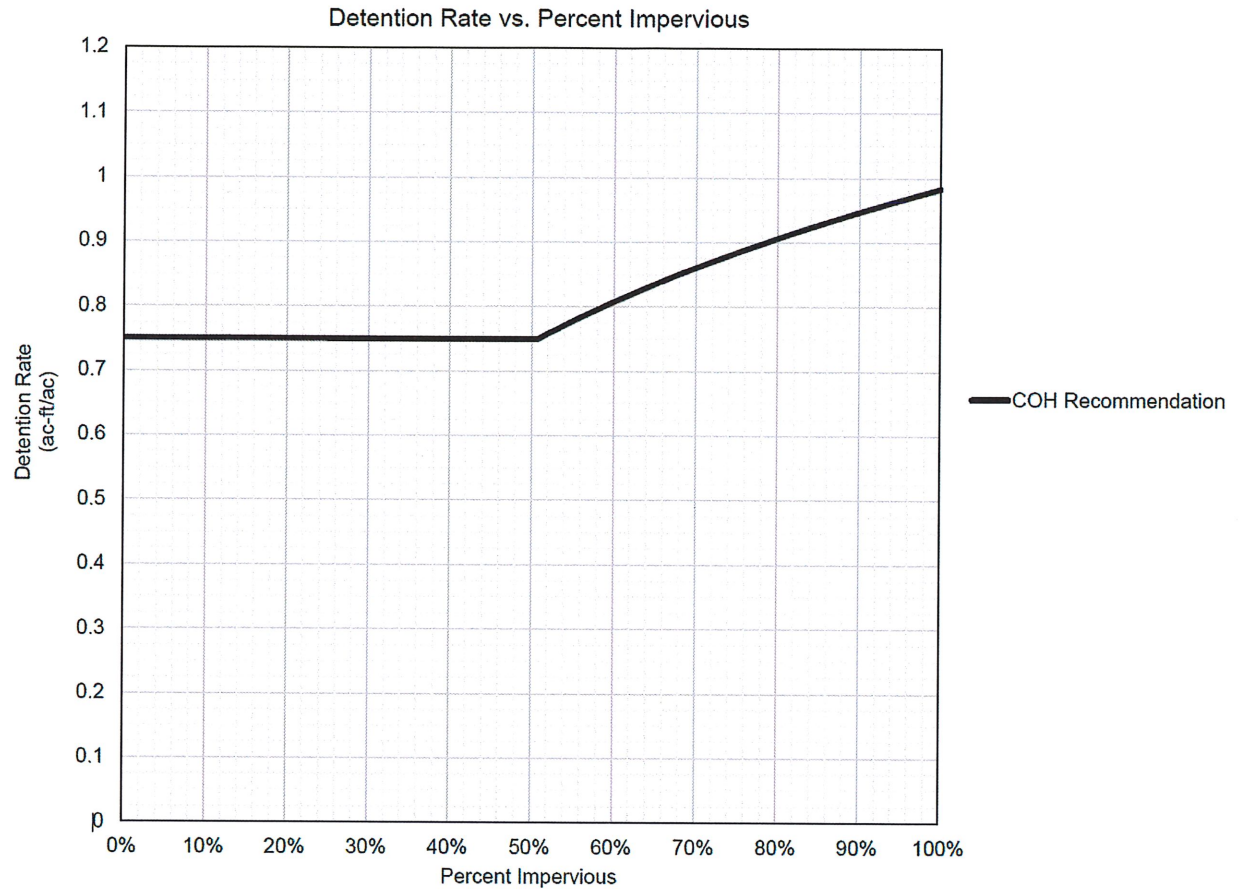
$$V_T = [43,560 \times (0.75 \times A_{II})]$$

V_T = Total Detention Volume for the proposed project (Cubic Feet)

A_{II} = Area of impervious surface (including all disturbed area resulting in impervious surface) (Acres)

Subdividing of larger tracts (greater than 1 acre) into smaller tracts of 1 acre or less to reduce stormwater detention requirements will not be permitted. The detention calculation will be based on the equal or greater than 1 acre. (See 9.2.01.H.3.e)

- e. Tract size equal or greater than 1 acre and less than or equal to 20 acres: Detention volume will be required at the acre feet per acre of disturbed area that results in impervious surface as depicted on the following chart.



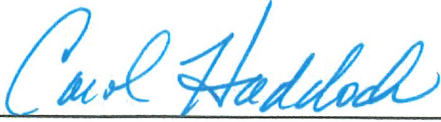
- f. Tract size greater than 20 acres: Detention calculation will be per the most current version of the HCFCD PCPM. Refer to

<https://www.hcfcd.org/About/Technical-Manuals/2019-Atlas-14-Policy-Criteria-and-Procedures-Manual-PCPM>

END OF SECTION

END OF SUPPLEMENT

To be included in the next publication of Standard Construction Specifications:



Director and City Engineer
Carol Ellinger Haddock, P.E.
Houston Public Works

January 4, 2021

Date

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