

**Executive Regulation
of
Town of Chevy Chase**

June 13, 2012

Subject: Final Regulation 2012-1 governing the following: the applicability of the water drainage regulations; required standards for structural water drainage management measures; approval of alternative water drainage management measures; classification of pervious and semi-pervious surfaces; maintenance and inspection standards for water drainage systems; the calculation of on-site retention requirements; and posting requirements.

Authority: Article IV of Chapter 2 of the Municipal Code (“Code”) of the Town of Chevy Chase (the “Town”) generally authorizes the Town to adopt regulations. In addition, Section 28-15 of the Code authorizes the Town to adopt Executive Regulations deemed proper to effectuate the purpose and intent of Chapter 28 of the Code concerning water drainage.

Legal Sufficiency: Legal counsel reviewed the final regulation for legal sufficiency on the 5th day of June, 2012.

TOWN OF CHEVY CHASE

Ronald M. Bolt, Town Attorney
Town of Chevy Chase

Summary: The final regulation clarifies the applicability of the water drainage regulations. It specifies certain required standards for structural water drainage management measures. The final regulation authorizes the Town Engineer to approve alternative engineering methods as part of a water drainage plan under Chapter 28 of the Town Code, such as the use of rain barrels and green roofs, for water drainage management, if such methods satisfy certain criteria. It authorizes the Town Manager to specify what surfaces and systems are to be considered pervious or impervious for purposes of Chapter 28. The final regulation provides that certain semi-impervious driveways and other surfaces may be treated as on-site infiltration devices for the volume of stormwater that falls directly on the surface. Additionally, the final regulation authorizes the Town Manager to publish maintenance standards for infiltration devices and other water drainage measures and to publish the calculation methodologies to be applied by the Town Engineer in determining on-site retention requirements. Finally, the final regulation specifies requirements for notices to be posted by applicants when a water drainage plan is submitted.

Notice: On June 13, 2012, this final regulation was published in the Chevy Chase Register, and the Town Manager posted notice of this final regulation at the Town Hall in a conspicuous place and on the Town Website. The Town Manager has also provided that notice be published in the July edition of The Forecast. The notices at the Town Hall, on the Town Website, and in The

Forecast state where a copy of the final regulation may be reviewed, indicate the topic of the regulation, and the effective date of the regulation.

Consideration of Comments: The proposed regulation was published in the Chevy Chase Register on May 1, 2012. Notice was provided as set forth in Sections 2-403 and 2-405 of the Code and the deadline for submitting comments to the proposed regulation was May 31, 2012. The Town received one comment concerning the proposed regulation. The comment is available for review at the Town Hall.

The comment questioned why credit is not given under Section 28.3.01(c) for the removal of an impervious surface when replaced by a pervious surface. In determining whether a water drainage plan is required, the Town considers the new impervious surface created by a development activity. The Executive Regulation does not alter the requirements of Chapter 28 of the Town Code. Rather, the Executive Regulation below confirms that, if development activity creates seven hundred (700) square feet, or more, of new impervious surface, a plan is required and no deduction to this calculation is afforded for additional impervious surface removed elsewhere. Allowing a deduction would eliminate the requirement for a water drainage plan for projects where plans should be compelled. Water drainage measures are necessary throughout the Town and the Code drafters found that water drainage plans must be compelled when development activity passes the requisite threshold. Accordingly, there are no modifications to text of the Executive Regulation below based on the comment received.

Approval and Effective Date: The Mayor has reviewed and approved publication of the following final regulation on June 13, 2012. The following regulation shall be effective on June 29, 2012.

TOWN OF CHEVY CHASE

Patricia Burda, Mayor
Town of Chevy Chase

Final Regulation. Under the authority set forth above, the Town promulgates and modifies the following executive regulations:

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Chapter 28

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Section 28.3

[Reserved] Applicability.

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Section 28.5 Water Drainage Criteria, Methodologies, and Construction Specifications

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.02 Structural Water Drainage Management Measures

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.04 Alternative Water Drainage Management Measures

.05 Pervious and Semi-impervious Surfaces.

.06 Maintenance and Inspection Standards.

.07 Calculation of On-Site Retention Requirements.

.08 Posting of the Property.

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Section 28.3 [Reserved] **Applicability.**

.01 A water drainage plan is required if, among other things, the new impervious surface created by a development activity and all other development activities concluding within the two (2) year period prior to filing an application exceeds seven hundred (700) square feet. The following guidelines apply in determining whether proposed development activity creates a new impervious surface:

- (a) The seven hundred (700) square foot threshold applies to the ground level footprint of the new impervious surface.**
- (b) The two (2) year period is measured from the date of the town’s final inspection for projects that require a building permit.**
- (c) No credits are provided for removing an impervious surface, whether or not it is replaced with either a permeable surface or an impervious surface.**
- (d) The surface areas of uncovered decks, porches, stoops, or similar surfaces that allow water to pass through to an unimproved (grass or soil) surface below are not included in the seven hundred (700) square foot threshold.**
- (e) Clean gravel surfaces where the gravel is at least four (4) inches deep are considered to be permeable, and are not included in the seven hundred (700) square foot threshold.**

- (f) Unless otherwise stated herein, all other semi-permeable surfaces are included in the seven hundred (700) square foot threshold.**
- (g) The water surface area of a pool is not deemed an impervious surface. Except as provided in subparagraph (d) above, all decking around a pool is considered to be impervious surface.**
- (h) An existing driveway may be replaced in-kind, but not expanded, without a water drainage plan. If the driveway is expanded, the entire surface of the driveway is subject to a water drainage plan if the impervious surface threshold is reached.**

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Section 28.5 Water Drainage Criteria, Methodologies, and Construction Specifications.

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.02 Structural Water Drainage Management Measures

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- (c) All infiltration devices must be installed within the applicant's property, and not within adjoining properties, unless a variance is granted by the water board in accordance with chapter 28 of the code.**
- (d) All proprietary systems must be installed following the manufacturer's recommended guidelines.**
- (e) For all systems that utilize gravel as "void space" for infiltration, the gravel used must be clean (washed) and free of sediment when installed. Unless the town arborist approves otherwise, no trees may be planted within five (5) feet of a drywell.**
- (f) An infiltration trench that receives surface water directly from an at-grade source must conform to the specifications required by Montgomery County, Maryland for infiltration trenches, as amended or replaced.**
- (g) In limited circumstances, buried infiltration systems, or drywells, may be installed on slopes greater than fifteen (15) percent with the approval of the town engineer. These systems will be evaluated on a case-by-case basis based on existing and proposed site conditions, including but not limited to the following factors: (i) the volume of the proposed drywell; (ii) the ability to maintain the drywell in a working capacity; (iii) the steepness and length of the slope; (iv) the geological conditions; (v) the distance from neighboring properties; (vi) the condition of down-grade properties; (vi) results of percolation tests;**

and (vii) the proximity and extent of proposed grading and/or fill soils.

- (h) To allow periodic inspection, a drywell or similar buried infiltration device must have an observation well, installed in a manner approved by the town.**

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.04 Alternative Water Drainage Management Measures. Subject to the approval by the town manager, alternative water drainage management measures, such as the use of rain barrels and green roofs, may be used for water drainage management, including on-site retention requirements, if such measures meet design criteria established in this chapter and chapter 28 of the code, the measures are permitted by the Maryland Stormwater Design Manual, the measures utilize permanent equipment capable of being readily inspected, and any overflow is automatically directed into a traditional on-site infiltration system. Stormwater runoff cannot be retained with surface ponds or bioretention cells, as both promote mosquito production.

- (a) Rain Barrels. A rain barrel that is to be part of a water drainage plan must have an automatic drawdown device that empties the barrel into the infiltration system within the twenty-four (24) hour period following a precipitation event. All approved infiltration systems must be functional throughout the year including during periods when the resident is absent.**
- (b) Green Roofs. A green roof that is to be part of a water drainage plan must be supported by sufficient engineering evidence to demonstrate the amount of rainwater uptake by the plants (evapotranspiration), the expected infiltration, and the resulting runoff as determined by the types and density of plants, the type of planting media used, and the slope of the planted areas.**

.05 Pervious and Semi-Imperious Surfaces.

- (a) The town manager may publish lists of what surfaces and systems are to be considered pervious or imperious for purposes of chapter 28 of the code. Any published lists shall be made available at the town office and may be posted on the town website.**
- (b) Driveways, walkways, and similar at-grade improvements. If installed to manufacturer's specifications on a slope no greater than five (5) percent, a semi-imperious driveway, walkway, or similar at-grade improvement may be treated as an on-site**

infiltration device for the volume of stormwater that falls directly on the driveway, walkway, or similar at-grade improvement, provided, however, such improvements cannot accept water directed from downspouts or other impervious surfaces, or perform as an infiltration system for that excess water.

.06 Maintenance and Inspection Standards. The town manager may publish maintenance standards for any infiltration device or other water drainage measure included in a water drainage plan. Any published maintenance standards shall be made available at the town office and may be posted on the town website. The Town will perform inspections on at least an annual basis to confirm the proper function of all infiltration devices and other water drainage measures.

.07 Calculation of On-Site Retention Requirements. The town manager may publish the calculation methodologies to be applied by the town engineer in determining the on-site retention requirements of chapter 28 of the code. Any published calculation methodologies shall be made available at the town office and may be posted on the town website.

.08 Posting of the property. Within seven (7) days after submission of a proposed water drainage plan, the applicant shall erect a sign on the property in a manner and format specified by the town. The sign shall be furnished by the town and posted by the applicant on the subject property within ten (10) feet of the boundary line of each public road which abuts the property, facing in such manner as may most readily be seen by the public. The bottom of the sign shall be not less than two and one-half (2 1/2) feet from the ground. The sign shall be of such material, color, height, and width as the town shall specify, and shall state the nature of the water drainage plan, the file number, and the telephone number of the town manager or other official who has custody of the plan.

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Bold and Underline indicates new material

[Bold Brackets] indicates material deleted

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