

County Council Of Howard County, Maryland

2011 Legislative Session

Legislative Day No. 8

Resolution No. 115 -2011

Introduced by: The Chairperson at the request of the County Executive

A RESOLUTION revising Chapter 5, Stormwater Management, of Volume I (Storm Drainage) of the Design Manual in order to amend provisions related to the maintenance and inspection of stormwater management facilities in Howard County.

Introduced and read first time _____, 2011.

By order _____
Stephen LeGendre, Administrator

Read for a second time at a public hearing on _____, 2011.

By order _____
Stephen LeGendre, Administrator

This Resolution was read the third time and was Adopted __, Adopted with amendments __, Failed __, Withdrawn __, by the County Council on _____, 2011.

Certified By _____
Stephen LeGendre, Administrator

NOTE: text in strike-out indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Double strike-out indicates material deleted by amendment; Underlining indicates material added by amendment.

1 **WHEREAS**, on April 24, 2007 the Governor of Maryland signed the
2 “Stormwater Management Act of 2007” which is codified in Sections 4-201.1 and 4-203
3 of the Environment Article of the Annotated Code of Maryland; and

4
5 **WHEREAS**, the Stormwater Management Act of 2007 required each county to
6 adopt revisions to its stormwater management regulations by May 4, 2010; and

7
8 **WHEREAS**, on May 3, 2010, the County Council passed Council Bill No. 13-
9 2010 that amended provisions of the Howard County Code in response to the Stormwater
10 Management Act of 2007; and

11
12 **WHEREAS**, also on May 3, 2010, the County Council adopted Council
13 Resolution No. 38-2010 that adopted a revised Chapter 5, Stormwater Management, of
14 Volume I (Storm Drainage) of the Design Manual; and

15
16 **WHEREAS**, the State of Maryland is now seeking additional minor revisions to
17 the County Code and Design Manual in response to the Stormwater Management Act of
18 2007; and

19
20 **WHEREAS**, in accordance with Section 18.913 of the Howard County Code, the
21 Design Manual sets forth Howard County’s minimal control requirements and design
22 criteria for stormwater management, procedures for the approval of plans, and
23 construction inspection requirements for stormwater management in Howard County; and

24
25 **WHEREAS**, the State has proposed revisions to Design Manual provisions
26 related to the maintenance and inspection of stormwater management systems; and

27
28 **WHEREAS**, the Public Works Board approved the revision at their meeting on
29 July 12, 2011.

1 **NOW, THEREFORE, BE IT RESOLVED** by the County Council of Howard
2 County, Maryland this ____ day of _____, 2011 that it deletes current
3 subsection 5.4, Maintenance and Inspection, as found on pages 5-17 through 5-20 of
4 Chapter 5, Stormwater Management, of Volume I (Storm Drainage) of the Design
5 Manual.

6

7 **AND BE IT FURTHER RESOLVED**, by the County Council of Howard
8 County, Maryland that Chapter 5, Stormwater Management, of Volume I (Storm
9 Drainage) of the Design Manual is amended to include new subsection 5.4, Maintenance
10 and Inspection, as shown in the attached Exhibit A.

11

12 **AND BE IT FURTHER RESOLVED**, by the County Council of Howard
13 County, Maryland that the Director of the Department of Planning and Zoning is
14 authorized to publish Chapter 5 and to make any modifications necessary to the Table of
15 Contents.

16

17 **AND BE IT FURTHER RESOLVED**, by the County Council of Howard
18 County Maryland, that the revisions to Chapter 5, Stormwater Management, of Volume I
19 (Storm Drainage) of the Design Manual are effective when Council Bill No. ____-2011 is
20 effective.

5.4 MAINTENANCE AND INSPECTION

5.4.1 Maintenance

A. Maintenance Inspection

1. The county shall ensure that preventative maintenance is performed by inspecting all ESD treatment practices and structural stormwater management measures. Inspection shall occur during the first year of operation and at least once every 3 years thereafter. In addition, a maintenance agreement between the owner and the county shall be executed for privately-owned ESD treatment practices and structural stormwater management measures as described in the county code.
2. Inspection reports shall be maintained by the county for all ESD treatment practices and structural stormwater management measures.
3. Inspection reports for ESD treatment practices and structural stormwater management measures shall include the following:
 - a. The date of inspection;
 - b. Name of inspector;
 - c. An assessment of the quality of the stormwater management system related to ESD treatment practice efficiency and the control of runoff to the MEP;
 - d. The condition of:
 - i. Vegetation or filter media;
 - ii. Fences or other safety devices;
 - iii. Spillways, valves, or other control structures;
 - iv. Embankments, slopes, and safety benches;
 - v. Reservoir or treatment areas;
 - vi. Inlet and outlet channels or structures;
 - vii. Underground drainage;
 - viii. Sediment and debris accumulation in storage and forebay areas;
 - ix. Any nonstructural practices to the extent practicable; and
 - x. Any other item that could affect the proper function of the stormwater management system.
 - e. Description of needed maintenance.
 - f. Upon notifying an owner of the inspection results, the owner shall have 30 days, or other time frame mutually agreed to between the county and the owner, to correct the deficiencies discovered. The county shall conduct a subsequent inspection to ensure completion of the repairs.
4. If repairs are not properly undertaken and completed, enforcement procedures following 5.4.2.B shall be followed by the county.

5. If, after an inspection by the county, the condition of a stormwater management facility is determined to present an immediate danger to public health or safety because of an unsafe condition, improper construction, or poor maintenance, the county shall take such action as may be necessary to protect the public and make the facility safe. Any cost incurred by the County shall be assessed against the owner(s), as provided in 5.4.2.B.2.

B. Maintenance Agreement

1. Prior to the issuance of any building permit for which stormwater management is required, the county shall require the applicant or owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by a private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the county or its authorized representative to ensure that the facility is maintained in proper working condition to meet design standards.
2. The agreement shall be recorded by the applicant or owner in the land records of the County.
3. The agreement shall also provide that, if after notice by the county to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) within a reasonable period of time (30 days maximum), the county may perform all necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties. This may be accomplished by placing a lien on the property, which may be placed on the tax bill and collected as ordinary taxes by the County.

C. Maintenance Responsibility

1. The owner of a property that contains private stormwater management facilities installed pursuant to county code, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all ESD practices, grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices in perpetuity. Such repairs or restoration and maintenance shall be in accordance with previously approved or newly submitted plans.
2. A maintenance schedule shall be developed for the life of any structural stormwater management facility or system of ESD practices and shall state the maintenance to be completed, the time period for completion, and the responsible party what will perform the maintenance. This maintenance schedule shall be printed on the approved stormwater management plan.

5.4.2 Inspection

A. Inspection Schedule and Reports

1. The developer shall notify the county at least 48 hours before commencing any work in conjunction with the stormwater

management plan and upon completion of a project when a final inspection will be conducted.

2. Regular inspections shall be made and documented for each ESD planning technique and practice at the stages of construction specified in the Design Manual by Howard County, its authorized representative, or certified by a professional engineer licensed in the State of Maryland. At a minimum, all ESD and other nonstructural practices shall be inspected upon completion of final grading, the establishment of permanent stabilization, and before issuance of use and occupancy approval.
3. Written inspection reports shall include:
 - (a) Date and location of the inspection;
 - (b) Whether construction was in compliance with the approved stormwater management plan;
 - (c) Any variations from the approved construction specifications; and
 - (d) Any violations that exist.
4. The owner/developer and on-site personnel shall be notified in writing when violations are observed. Written notification shall describe the nature of the violation and the required corrective action.
5. No work shall proceed until the county inspects and approves the work previously completed and furnishes the developer with the results of the inspection reports after completion of each required inspection.

B. Inspection Requirements During Construction

1. At a minimum, regular inspections shall be made and documented at the following specified stages of construction:
 - (a) Ponds
 - (i) upon completion of excavation to sub-foundation and when required, installation of structural supports or reinforcement for structures, including but not limited to core trenches for structural embankments, inlet and outlet structures, anti-seep collars or filter diaphragms, watertight connectors on pipes and trenches for enclosed storm drain facilities;

- (ii) during placement of structural fill, concrete and installation of piping and catch basins;
 - (iii) during backfill of foundation and trenches;
 - (iv) during embankment construction; and
 - (v) upon removal of any temporary sediment control feature or devices; and
 - (vi) upon completion of final grading and establishment of permanent stabilization.
- (b) Wetlands
- (i) at stages specified for pond construction;
 - (ii) during and after wetland reservoir plantings; and
 - (iii) during the second growing season to verify a vegetation survival rate of at least 50 percent.
- (c) Infiltration trenches
- (i) during excavation to subgrade;
 - (ii) during placement of backfill of underdrain systems and observation wells;
 - (iii) during placement of geotextiles and all filter media;
 - (iv) during construction of appurtenant conveyance systems such as diversion structures, pre-filters, filters, outlets and flow distribution structures; and
 - (v) upon completion of final grading and establishment of permanent stabilization.
- (d) Infiltration basins
- (i) at stages specified for pond construction; and
 - (ii) during placement and backfill of underdrain system.
- (e) Filtering systems
- (i) during excavation to subgrade;

- (ii) during placement and backfill of underdrain system:
 - (iii) during placement of geotextiles and all filter media:
 - (iv) during construction of appurtenant conveyance systems such as diversion structures, pre-filters, filters, outlets and flow distribution structures; and
 - (v) upon completion of final grading and establishment of permanent stabilization.
- (f) Open channel systems
- (i) during excavation to subgrade;
 - (ii) during placement and backfill of underdrain systems for dry swales:
 - (iii) during installation of diaphragms, check dams, or weirs; and
 - (iv) upon completion of final grading and establishment of permanent stabilization.
- (g) Non-structural practices
- (i) upon completion of final grading;
 - (ii) upon the establishment of permanent stabilization; and
 - (iii) before the issuance of the final certificate of occupancy approval.

2. The County may, for enforcement purposes, use any one or a combination of the following actions:

(a) A notice of violation shall be issued specifying the need for corrective action if stormwater management plan noncompliance is identified;

(b) A stop work order shall be issued for the site by the county if a violation persists;

(c) Bonds or securities shall be withheld or the case may be referred for legal action if reasonable efforts to correct the violation have not been undertaken; or

(d) In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of the Stormwater Management Subtitle, the Design Manual, or the County Code.

3. Any Step in the enforcement process may be taken at any time, depending on the severity of the violation.
4. Once construction is complete, an as-built plan certification shall be submitted by the appropriate design professional licensed in the State of Maryland to ensure that constructed stormwater management practices and conveyance systems comply with the specifications contained in the approved plans. At a minimum, as-built certification shall include a set of drawings comparing the approved stormwater management plan with what was constructed. The county reserves the right to require additional information it deems necessary to ensure compliance with the approved plans.
5. The county shall submit notice of construction completion to the Maryland Department of the Environment, on a form supplied by MDE for each structural stormwater management practice within 45 days of construction completion. If BMP's requiring HSCD approval are constructed, notice of construction completion shall also be submitted to HSCD.