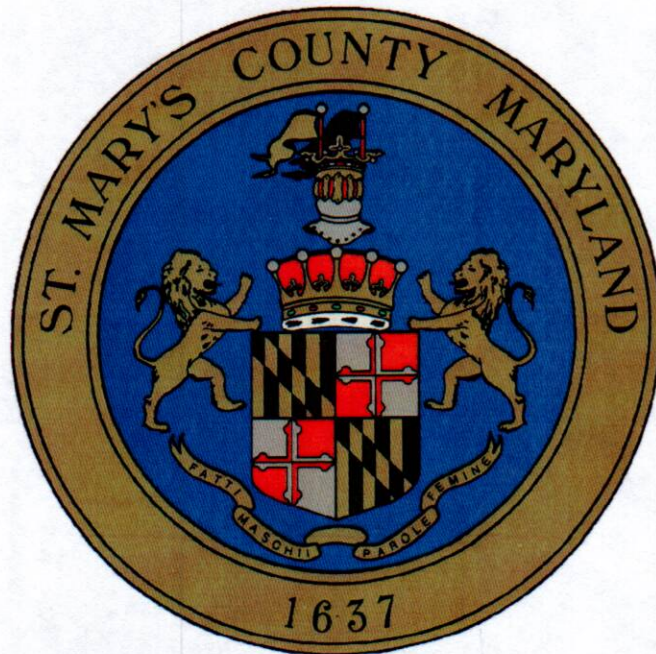


1 St. Mary's County
2 Stormwater Management, Grading,
3 Erosion and Sediment Control
4 Ordinance
5



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9 **COMMISSIONERS OF ST. MARY'S COUNTY**

10
11 Adopted: May 14, 2013
12 Effective: May 28, 2013
13
14
15

Subject: Stormwater & Erosion Control - To Repeal and Re-Enact, and Codify as Chapter 261 of the *Code of St. Mary's County, Maryland*, the St. Mary's County Stormwater Management, Grading, Erosion & Sediment Control Ordinance

Page 1 of 65

ORDINANCE

TO REPEAL AND RE-ENACT, AND CODIFY AS CHAPTER 261 OF THE *CODE OF ST. MARY'S COUNTY, MARYLAND*, THE ST. MARY'S COUNTY STORMWATER MANAGEMENT, GRADING, EROSION & SEDIMENT CONTROL ORDINANCE

WHEREAS, pursuant to §4-202 of the *Environment Article* of the *Annotated Code of Maryland*, the Commissioners of St. Mary's County are required to enact an ordinance necessary to implement a stormwater management plan that meets requirements established by the Maryland Department of the Environment and is consistent with the purposes of Subtitle 2 of Title 4 of the *Environment Article* of the *Annotated Code of Maryland*; and

WHEREAS, pursuant to §4-103(b) of the *Environment Article* of the *Annotated Code of Maryland*, the Commissioners of St. Mary's County are required to enact a grading ordinance necessary to carry out the provisions of Subtitle 1 of Title 4 of the *Environment Article* of the *Annotated Code of Maryland*; and

WHEREAS, pursuant to Article 25, §10J of the *Annotated Code of Maryland*, the Commissioners of St. Mary's County are authorized to enact by ordinance rules and regulations for erosion and siltration control requirement to facilitate sedimentation control within St. Mary's County; and

WHEREAS, a notice of a public hearing was advertised on January 4, 2013 and January 11, 2013 in *The Enterprise*, a newspaper of general circulation in St. Mary's County, and a public hearing was held on January 22, 2013 to receive public comment and consider adoption of an ordinance; and

NOW, THEREFORE, BE IT ORDAINED by the Commissioners of St. Mary's County, pursuant to §§4-103(b) and 4-202 of the *Environment Article* and Article 25, §10J of the *Annotated Code of Maryland*, that:

SECTION I. Ordinance 2010-02 ("St. Mary's County Stormwater Management, Grading, Erosion & Sediment Control Ordinance") be repealed and re-enacted, and codified as Chapter 261 of the *Code of St. Mary's County, Maryland*, to read as follows:

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1 **ARTICLE 1. GENERAL PROVISIONS**

2
3 **1.1 Title**

4
5 This document shall be cited as the "St. Mary's County Stormwater Management, Grading, Erosion and
6 Sediment Control Ordinance" (hereinafter the "Ordinance").
7

8 **1.2 Authority**

9
10 Pursuant to Article 25, §10-I; Article 25, §10-J; *Environment Article*, §4-103, *et seq.*; and *Environment*
11 *Article* §4-202, *et seq.* of the *Annotated Code of Maryland*, the Commissioners of St. Mary's County have
12 adopted this Ordinance.
13

14 **1.3 Purpose**

15
16 The purpose of this Ordinance is to protect and promote the public health, safety and general welfare, to
17 implement the provisions of the *Annotated Code of Maryland*, to implement the St. Mary's County
18 Comprehensive Plan, and to reduce the adverse effects of erosion, siltation, sedimentation, pollution, and
19 local flooding on lands and within the watersheds of St. Mary's County (hereinafter the "County"), by
20 establishing minimum requirements and procedures that control the adverse impacts associated with land
21 disturbances, grading, and stormwater runoff.
22

23 **1.4 Applicability**

24
25 The provisions of this Ordinance shall apply to the development and use of all land within the
26 unincorporated areas of the County, unless expressly and specifically exempted or provided otherwise in
27 this Ordinance. No development shall be undertaken without prior authorization pursuant to this
28 Ordinance. All development shall comply with the standards, criteria, and procedures of this Ordinance.
29

30 **1.5 Minimum Standards**

31
32 The provisions of this Ordinance are minimum standards necessary to accomplish the purposes of this
33 Ordinance, and nothing herein is intended to prevent any development or land use from exceeding the
34 minimum standards. Should the interpretation and application of any requirements in this Ordinance be
35 found to be in conflict with those imposed by other provisions of law, the more restrictive standards shall
36 prevail.
37

38 **1.6 Vested Rights**

39
40 St. Mary's County recognizes vested rights in accordance with Maryland law.
41

42 **1.7 Transitional Provisions**

43
44 1. Transitional Provisions. The following "grandfathering" provisions are hereby adopted to provide
45 for the continuance of certain development activities that would otherwise be subject to the
46 requirements of this Ordinance:

- 47
48 a. Plan Approvals Prior to May 4, 2010. The approving authority may grant an
49 administrative waiver to a development that received preliminary project approval prior
50 to May 4, 2010. Administrative waivers expire according to **Article 1.7.1.b.** of this
51 Ordinance, and may be extended according to **Article 1.7.1.d.** of this Ordinance. Those

1 projects that are granted an administrative waiver may proceed with development in
2 accordance with the regulations in *St. Mary's County Ordinance No. 02-11*.

3
4 b. Expiration of Administrative Waivers. Administrative waivers shall expire on:

5
6 (1) May 4, 2013, if the development project does not receive final approval by that
7 date: or

8
9 (2) May 4, 2017, if the development receives final project approval prior to May 4,
10 2013; or

11
12 (3) The expiration or revocation date of the approval of the development pursuant to
13 the St. Mary's County Comprehensive Zoning Ordinance, but only if that
14 expiration date is prior to the dates specified in Article 1.7.1.a. of this
15 Ordinance.

16
17 c. Deadline for Construction Completion: All construction authorized pursuant to an
18 administrative waiver must be completed by May 4, 2017 or, if the waiver is extended as
19 provided in Article 1.7.1.d., by the expiration date of the waiver extension.

20
21 d. Extension of Administrative Waivers. Administrative waivers may be extended by the
22 approving authority if the development project had received preliminary project approval
23 by May 4, 2010, and the development project is subject to a Development Rights and
24 Responsibilities Agreement, a Tax Increment Financing approval, an Annexation
25 Agreement. Any extension granted under this paragraph shall expire when the
26 Development Rights and Responsibilities Agreement, the Tax Increment Financing
27 approval, the Annexation Agreement or the approved phasing plan expires.

28
29 2. Continuation of Approvals. Approvals that are grandfathered as set forth above shall be in
30 accordance with the provisions of the St. Mary's County Comprehensive Zoning Ordinance.

31
32 3. Continuation of Project. Project development under an administrative waiver may proceed in
33 accordance with the plan approval unless such approval expires as provided above. In the case of
34 re-approval after expiration, the project shall be in conformity with all provisions of this
35 Ordinance.

36 **1.8 Effect of Previous Regulations**

37
38 To the extent that projects are "grandfathered" under this Article 1.7, the provisions of the ordinance in
39 effect at the time of plan approval shall remain in full force and effect.

40
41 **1.9 Rules for Construction of Language**

42
43 1. A reference to days is to calendar days unless otherwise indicated in this Ordinance, or specified
44 by State law. If a deadline falls on a weekend or County holiday, the time for performing an act is
45 extended to the next working day. A working day is defined as any day that is not a Saturday,
46 Sunday, or Official County holiday.

47
48 2. Use of "shall," "will" or "must" is mandatory; "should" and "may" are permissive.

49
50 3. Use of "including", "includes", "such as", "additional", or "supplemental" is illustrative and not
51 intended as an exhaustive listing, unless the context clearly indicates the contrary.

1 **1.10 Conflict with Other Laws and Regulations**

2
3 Where a conflict occurs between this Ordinance and a state statute or another county ordinance or
4 regulation, the more restrictive provision shall control.
5

6 **1.11 Severability**

7
8 If a court of competent jurisdiction holds any portion of this Ordinance invalid or unconstitutional, such
9 portion shall not affect the validity of the remaining portions of this Ordinance.
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1 **ARTICLE 2. ADMINISTRATION**

2
3 **2.1 Board of County Commissioners**

4
5 1. Powers and Duties. In addition to any authority granted by general or special law, the Board of
6 County Commissioners reserves the following powers and duties under the provisions of this
7 Ordinance:

- 8
9 a. To maintain and approve fee schedule(s) for plan review submissions and to ensure the
10 appropriate levels of security are obtained;
11
12 b. To approve the processing of claims against security instruments as may be required or
13 otherwise recommended by the approving authorities;
14
15 c. To suspend, revoke or cancel permits issued by the Department of Public Works &
16 Transportation (hereinafter "DPW&T") or Land Use and Growth Management (hereinafter
17 "LUGM"); and
18
19 d. To review and consider appeals of final administrative decisions made by any official
20 charged with the enforcement of this Ordinance.
21

22 **2.2 Soil Conservation District (SCD)**

- 23
24 a. Erosion and sediment control plans shall be approved by the SCD prior to the County's
25 issuance of grading or building permits;
26
27 b. Stormwater management ponds requiring MD 378 Small Pond approval for Dam Safety
28 shall be reviewed and approved by the SCD as directed by the Maryland Department of
29 the Environment (MDE);
30
31 c. Removal of erosion and sediment control devices shall be approved by the MDE prior to
32 the County releasing grading or building permits; and
33
34 d. To serve as a member of the Technical Evaluation Committee (TEC).
35

36 **2.3 Director of Department of Public Works & Transportation**

37
38 1. Duties and Responsibilities. The Director of the Department of Public Works & Transportation
39 (hereinafter the "Director" or "Director of DPW&T") shall administer the provisions of this
40 Ordinance governing public roads, major subdivisions, site plans (excluding residential single-lot
41 building permit site plans), and drainage/stormwater management approvals that propose limits of
42 disturbances greater than 5,000 square feet or excavations and fills greater than a cumulative 1,000
43 cubic yards, and shall have the following duties and responsibilities:
44

- 45 a. To administer and enforce the applicable provisions of this Ordinance;
46
47 b. To approve or disapprove modifications and written requests for time extensions and
48 waivers from provisions of this Ordinance, where specifically authorized;
49

- 1 c. To confirm that any application for a Grading Permit includes all required approvals from
2 all appropriate agencies before the permit is issued;
3
- 4 d. To provide professional recommendations, technical assistance, and proposed text
5 amendments of this Ordinance to the Board of County Commissioners, Planning
6 Commission, Board of Appeals, SCD, the Department of Land Use and Growth
7 Management or other boards and commissions upon request or as deemed necessary;
8
- 9 e. To provide expertise regarding the adequacy of public facilities (APF) with respect to
10 stormwater management, grading, drainage and adequate outfall;
11
- 12 f. To establish, accept, and release security for the performance of obligations for permitted
13 work and to require that application and inspection fees are paid for implementation of
14 the stormwater management plan, sediment and erosion control measures, and permanent
15 stabilization of all disturbed areas, and to issue and track Grading Permits;
16
- 17 g. To obtain all required documentation, including but not limited to executed Inspection
18 and Maintenance Agreements, Notice of Construction Completion forms, and any
19 approved as-built construction plans, prior to the release of security in connection with
20 Grading Permits;
21
- 22 h. To prepare and issue design standards as may be authorized by the Maryland Department
23 of the Environment;
24
- 25 i. To perform plan reviews, construction inspections, and materials testing in accordance
26 with applicable infrastructure requirements, stormwater management specifications and
27 standards;
28
- 29 j. To ensure compliance with this Ordinance and other laws, ordinances and regulations
30 and:
31
- 32 (1) Issue civil citations to any person, firm or corporation who shall violate the
33 applicable provisions of this Ordinance;
34
- 35 (2) Post "Stop Work" orders on any lot, parcel, site, structure or property which is in
36 violation of this Ordinance or any other code relating to building and
37 development, and:
- 38 (i) Require that all work and activity shall immediately cease on the
39 designated premises;
40
- 41 (ii) Request the Director of LUGM to remove and suspend the Zoning
42 Permit issued for the project until the violation is rectified; and
43
- 44 (iii) Fine, in accordance with the provisions of this or other applicable
45 Codes, any person, firm or corporation who shall violate the stop work
46 order; and
47
- 48 (iv) Investigate inquiries and complaints relating to the subjects of this
49 Ordinance and to take action when appropriate; and
50

1 k. To amend, administer, promulgate, and enforce the standards and specifications of the St.
2 Mary's County Department of Public Works & Transportation's Manual of Design and
3 Construction Standards;

4
5
6 l. To execute right-of-entry agreements for the purpose of entering onto private property for the
7 purpose of constructing public improvements (including necessary and appropriate
8 indemnification and restoration provisions);

9
10 m. To execute easements from and to St. Mary's County concerning the construction of approved
11 County capital improvement projects.
12

13 2. Records of DPW&T Director. The Director of DPW&T shall keep records of all applicable
14 permits reviewed, issued and inspected under this Ordinance, subject to records retention policies
15 adopted by the Board of County Commissioners.
16

17 **2.4 Director of Land Use and Growth Management**
18

19 1. Duties and Responsibilities. The Director of Land Use and Growth Management (hereinafter the
20 "Director of LUGM") shall administer the drainage, overlot grading, and stormwater management
21 provisions of this Ordinance for all residential single lot development and all private drives that do
22 not require grading permits. LUGM shall also administer the drainage, grading, and stormwater
23 management provisions for all minor site plans that propose limits of disturbances less than or
24 equal to 5,000 square feet, or less than or equal to 1,000 cubic yards, which do not require a
25 grading permit, and shall have the following duties:

26 a. To administer and enforce the applicable provisions of this Ordinance;

27
28 b. To confirm that any application for a zoning or building permit includes all required
29 approvals from all appropriate agencies before the permit is issued;

30
31 c. To confirm the site plan includes existing easements, approved driveway entrance pipe
32 schedules, conditions, and other applicable notations on the subdivision plat, site plan or road
33 construction plan;

34
35 d. To approve or disapprove modifications and written requests for time extensions and waivers
36 from provisions of this Ordinance, where specifically authorized;

37
38 e. To require that Single Lot Residential Construction designs be prepared in accordance with
39 applicable provisions of this Ordinance;

40
41 f. To require plan revisions where there is discrepancy between the application and the grading
42 shown on the approved Erosion and Sediment Control plan;

43
44 g. To ensure that all requirements of this Ordinance and other applicable codes and regulations
45 have been met prior to issuance of a zoning permit, building permit or certificate of use and
46 occupancy;

47
48 h. To ensure that construction of all stormwater management facilities incorporated into
49 buildings complies with this Ordinance; and
50
51

- 1 i. To collect plan review fees and to hold adequate instruments of financial security for
2 stormwater management inspection and maintenance and to ensure maintenance
3 responsibilities are fully reimbursable;
- 4
- 5 j. To perform required construction and maintenance inspections and materials testing in
6 accordance with applicable infrastructure requirements, specifications and standards;
- 7
- 8 k. To secure the performance of corrective action(s) if maintenance is not performed by the
9 property owner(s) or developer in accordance with all approved plans and executed Inspection
10 and Maintenance Agreements regardless of the amounts of disturbance or cubic yards of
11 earthwork;
- 12
- 13 l. To make recommendations to the Board of County Commissioners regarding amendments to
14 the Ordinance;
- 15
- 16 m. To submit all required documentation including, but not limited to, Inspection and
17 Maintenance Agreements, Notice of Construction Completion forms, and any approved as-
18 built construction plans to the Department of Public Works & Transportation prior to the
19 release of security for permits issued by LUGM;
- 20
- 21 n. To track the cumulative disturbance of building permits and minor site plans on all Sites that
22 are exempt in accordance with Article 3.3.1.
- 23
- 24 2. Records of the Director of Land Use and Growth Management. The Director of Land Use and
25 Growth Management shall keep records of all permits issued under this Ordinance as well as all
26 information submitted with the application for such permits. The Director of Land Use and
27 Growth Management shall make annual reports to the Board of County Commissioners
28 concerning permits and regulations regarding stormwater management.

30 2.5 General Application Procedures

31
32 All applications required by this Ordinance shall be processed in accordance with the following procedures:

- 33
- 34 1. Determination of Completeness of Application. Applications for development approvals shall be
35 submitted on the appropriate form set forth in this Ordinance. After receipt of an application, the
36 applicable approving authority shall determine whether the application is complete. The time
37 period allowed for review of an application shall not begin until the application is determined to be
38 complete. If the application is not complete, the applicant shall be notified in writing within seven
39 (7) calendar days, specifying the deficiencies of the application, the additional information that
40 must be supplied, and advising the applicant that no further action will be taken by the County on
41 the application until the deficiencies are corrected.
- 42
- 43 2. Remedy of Deficiencies. If the applicant fails to correct the specified deficiencies within ten (10)
44 days of the notification of deficiency, the application for development approval shall be deemed
45 withdrawn and will be returned to the applicant.
- 46
- 47 3. Extensions of Time. The approving authority, upon written request, may, for good cause shown
48 and without any notice or hearing, grant extensions of any time limit imposed on an applicant by
49 this Ordinance. The permit holder shall indicate the reasons and conditions which have delayed
50 completion of the work authorized under the permit. Extensions shall be granted for a period of
51 up to thirty (30) months. Subsequent requests for extension shall require payment of a fee by the
52 applicant in accordance with the current schedule of fees.

1 4. Re-approval of Plans. In the event an approving authority does not grant an extension of time as
2 allowed in Article 2.5.3, the approving authority may re-approve a plan for a specified period of
3 time.
4

5 5. Fees. All applications shall be accompanied by all required fees in accordance with the
6 schedule(s) established by the approving authority.
7

8 **2.6 Waivers**
9

10 a. A person may request the Director for a waiver from the requirements of this Ordinance.
11

12 b. Application. A written request for waiver shall be submitted to the Director by the
13 applicant that states the specific waiver(s) sought, the reasons for the request, and
14 sufficient justification supporting the request. The application shall contain such
15 additional information as the Director or the Maryland Department of the Environment
16 may require. A request for a stormwater management waiver shall be submitted to the
17 approving authority prior to the approval of the stormwater management concept plan.
18

19 c. Standards for Granting a Waiver. The Director may grant the waiver only when strict
20 compliance with the terms of this Ordinance would result in unreasonable hardship
21 because of unusual physical characteristics of the site, and a waiver would not: 1) violate
22 the spirit and intent of the Ordinance; 2) cause or be likely to cause substantial injury to
23 the public health, safety and general welfare; or 3), be injurious to other property or
24 improvements in the neighborhood.
25

26 d. Decision. The Director shall render a decision on the request within fifteen (15) days of
27 receipt of the written request. The decision shall be in writing and provide a brief
28 statement of the applicable law, the standards for waiver, and facts which support the
29 decision. A decision on a request made in connection with an application for subdivision
30 or site plan approval by the St. Mary's County Planning Commission is subject to action
31 by the Planning Commission and is not a final administrative decision for the purpose of
32 Article 2.1.
33

34 e. Notice. The applicant shall send notice of the decision by registered or certified mail to
35 all owners of contiguous property (as shown on the latest published records of the
36 Maryland State Department of Assessments and Taxation), including lands across any
37 public or private rights-of-way adjacent to the land subject to the application within 15
38 days of the decision. Notice shall be given to each individual property owner if an
39 affected property is held in common ownership. Required notice shall also be given to a
40 municipality if the application concerns land adjacent to its municipal boundaries. The
41 applicant shall provide the Director, in an approved form, with the names and addresses
42 of all property owners required to receive notice of the waiver decision pursuant to this
43 Ordinance. The notice shall include either a statement that the decision of the Director is
44 subject to action by the St. Mary's County Planning Commission in connection with an
45 application for subdivision or site plan approval, or notice of a right to appeal the
46 decision of the Director to the Board of County Commissioner, whichever is applicable.
47 The notice shall identify the office and phone number where further information can be
48 obtained.
49
50
51
52

1 **2.7 Appeals**

2
3 a. Generally. An appeal of any final administrative decision of any official charged with the
4 enforcement of this Ordinance, as the result of the disapproval of a properly filed
5 application for a permit, issuance of a written notice of violation, or an alleged failure to
6 properly enforce the Ordinance in regard to a specific application may be filed by any
7 person aggrieved by any order, requirement, decision, or determination made in regard to
8 the administration or the enforcement of this Ordinance as may be amended from time to
9 time.

10 b. Appeals of Administrative Decisions. Any person having a right to appeal a final
11 administrative decision of the Director may appeal that decision to the Board of County
12 Commissioners, or in accordance with procedures established by resolution of the Board
13 of County Commissioners. An appeal must be filed in writing and state all basis for the
14 appeal with clarity and detail. An appeal shall be timely if filed in writing within thirty
15 (30) days of the date the mailing of the notice of the final administrative decision.

16
17 **2.8 Conflict with Other Permits**

18 Except as provided herein, no permit pertaining to the use of land or buildings shall be issued by
19 any cooperating agency, department or employee unless a zoning permit, if required, has been
20 issued by the Director of Land Use and Growth Management. Any permit issued in conflict with
21 the provisions of this Ordinance shall be null and void.
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1 **ARTICLE 3. STORMWATER MANAGEMENT**
2

3 **3.1 Purpose and Applicability**
4

5 1. Purpose. The purpose of this Article is to protect, maintain, and enhance the public health, safety,
6 and general welfare by establishing minimum requirements that control the adverse impacts
7 associated with increased stormwater runoff. The purpose is to manage stormwater by using
8 Environmental Site Design (ESD) to the maximum extent practicable (MEP) to maintain after
9 development, as nearly as possible, the predevelopment runoff characteristics, and to reduce
10 stream channel erosion, pollution, siltation and sedimentation, and local flooding, and use
11 appropriate structural best management practices (BMPs) only when necessary. This will restore,
12 enhance, and maintain the chemical, physical, and biological integrity of streams, minimize
13 damage to public and private property, and reduce the impacts of land development.
14

15 2. Applicability. The provisions of this Ordinance shall apply to development occurring within the
16 unincorporated areas of St. Mary's County, Maryland.
17

18 3. Incorporation by Reference.
19

20 a. *The 2000 Maryland Stormwater Design Manual Volumes I & II (Maryland Department of*
21 *the Environment, April 2000) (hereinafter the "Design Manual"), and all subsequent*
22 *revisions, is incorporated by reference into this Ordinance and shall serve as the official*
23 *guide for stormwater principles, methods, and practices.*
24

25 b. U.S.D.A. Natural Resources Conservation Service *Maryland Conservation Practice*
26 *Standard Pond Code 378 (January 2000) is incorporated by reference into this Ordinance.*
27

28 **3.2 General Provisions.**
29

30 1. No person shall develop or redevelop any land for residential, commercial, industrial, or
31 institutional uses without providing stormwater management measures that control or manage
32 runoff from such development, except as provided within this Article. Stormwater management
33 measures must be designed consistent with the Design Manual and constructed according to an
34 approved plan for new development or the policies stated in **Article 3.5** of this Ordinance for
35 redevelopment.
36

37 2. Unless the particular activity is exempted by this Ordinance, a person may not develop any land
38 without an approved stormwater management plan from the approving authority and an approved
39 sediment control plan from the SCD.
40

41 3. A grading, zoning, or building permit may not be issued for a property until a stormwater
42 management plan has been approved. No grading or clearing permits shall be issued until final
43 site or subdivision approval is granted by LUGM or the Planning Commission.
44

45 4. In the Critical Area, stormwater quality controls in accordance with and consistent with State
46 regulations may be required in addition to any quantity controls necessary to comply with this
47 Ordinance.
48
49
50

1 **3.3 Exemptions and Waivers.**

2
3 1. Exemptions. The following development activities are exempt from the provisions of this
4 Ordinance:

- 5
6 a. Agricultural land management practices;
- 7
8 b. Additions, replacements, or modifications to existing single family detached residential
9 structures that do not have a cumulative disturbance over 5,000 square feet of total land
10 area;
- 11
12 c. Land development activities that do not have a cumulative disturbance over 5,000 square
13 feet of total land area;
- 14
15 d. Land development activities regulated by a State law that requires the permittee to
16 manage stormwater runoff;
- 17
18 e. Shoreline stabilization practices, including revetments, bulkheads, jetties, and living
19 shorelines.

20
21 Land area disturbed for septic system construction or removal of existing impervious area(s) may
22 be subtracted from the total land area disturbed provided the subtracted land area is re-vegetated.

23
24 2. Waivers.

- 25
26 a. The approving authority, upon written request, may grant stormwater management
27 quantitative control waivers only to projects within areas in which watershed
28 management plans have been developed consistent with **Article 3.4** of this Ordinance.
29 Written requests for quantitative stormwater management waivers shall contain sufficient
30 descriptions, drawings, and any other information that is necessary to demonstrate that
31 Environmental Site Design (ESD) has been implemented to the Maximum Extent
32 Practicable (MEP). A separate written waiver request shall be required in accordance
33 with the provisions of this Article for proposed additions, extensions, or modifications to
34 a development for which a waiver has been granted.
- 35
36 b. If a watershed management plan in compliance with **Article 3.4** of this Ordinance has not
37 been developed, a stormwater management quantitative control waiver may be granted
38 for:
- 39
40 (1) Direct discharges to tidally influenced receiving waters; or
- 41
42 (2) Infill development projects located in a Priority Funding Area where the
43 economic feasibility of the project is tied to the planned density, and where
44 implementation of the 2009 regulatory requirements would result in a loss of the
45 planned development density, provided that:
- 46
47 (i) Public water and sewer and stormwater conveyances exist;
- 48
49 (ii) The quantitative waiver applies only to the project for the impervious
50 cover that previously existed on the site;

- 1 (iii) ESD to the MEP is used to meet the full water quality treatment
2 requirements for the entire development; and
3
4 (iv) ESD to the MEP is used to provide full quantity control for all new
5 impervious surfaces; or
6
7 (3) circumstances that prevent the reasonable implementation of quantity control
8 practices.
9
10 c. A quantitative waiver may be granted for solar energy panel and wind turbine
11 installations that have a minimal impact to the receiving channel. These projects shall
12 address ESD to the MEP for all impervious area other than the panels and blades, while
13 the panels and blades shall address water quality volume only.
14
15 d. Stormwater management qualitative control waivers may be granted only for:
16
17 (1) In-fill development projects where ESD has been implemented to the MEP and
18 other BMPs are not feasible;
19
20 (2) Redevelopment projects if the requirements of Article 3.4 of this Ordinance are
21 satisfied; or
22
23 (3) Site development plans where circumstances prevent the reasonable
24 implementation of ESD to the MEP.
25
26 e. Stormwater management quantitative and qualitative control waivers may be granted for
27 phased development projects if a system designed to meet the 2000 regulatory
28 requirements and *St. Mary's County Ordinance 02-12* for multiple phases has been
29 constructed by May 4, 2010. If the 2009 regulatory requirements cannot be met for
30 future phases constructed after May 4, 2010, all reasonable efforts to incorporate ESD in
31 future phases must be demonstrated.
32
33 f. Unless otherwise granted under **Article 3.3.2.d.**, a waiver shall be granted only if it has
34 been demonstrated that ESD has been implemented to the MEP and:
35
36 (1) be on a case-by-case basis;
37 (2) the cumulative effects of waivers does not result in any adverse impacts to
38 downstream properties;
39 (3) the plan addresses Mitigation Measures under **Article 3.3.2.h.**; and
40 (4) the development will not adversely impact stream quality.
41
42 g. If the approving authority has established an overall watershed management plan for a
43 specific watershed, then the approving authority may develop quantitative waivers and
44 redevelopment provisions that differ from **Articles 3.3.2** and **3.5** of this Ordinance.
45
46 h. Mitigating Measures. The approving authority shall require mitigation measures as
47 conditions of granting a waiver. Prioritized steps to mitigate adverse impacts resulting
48 from the granting of a waiver shall include:
49
50 (1) Retrofitting of an existing facility, either upstream or downstream, to satisfy the
51 full requirements of this Ordinance;
52
53 (2) Construction of a new facility on an adjacent site or as close as hydrologically
54 possible, but within the same watershed; or

1 (3) Payment of a fee-in-lieu of construction in an amount equal to the estimated cost
2 submitted to the County, and approved by the approving authority, of full
3 implementation measures for regional storm-water management, watershed
4 protection and restoration studies.
5

6 **3.4 Watershed Management Plans.** Watershed Management Plans developed for the purpose of
7 implementing stormwater management policies for waivers and redevelopment shall:

- 8 1. Include detailed hydrologic and hydraulic analyses to determine hydrograph timing;
- 9
- 10 2. Evaluate both quantity and quality management and opportunities for ESD implementation;
- 11
- 12 3. Include cumulative impact assessment of current and proposed watershed development;
- 13
- 14 4. Identify existing flooding and receiving stream channel conditions; and
- 15
- 16 5. Specify where on-site or off-site quantitative and qualitative stormwater management practices are
17 to be implemented;
- 18
- 19 6. Be conducted at a reasonable scale (1"=200' unless otherwise required);
- 20
- 21 7. Be consistent with the General Performance Standards for Stormwater Management in Maryland
22 found in the Design Manual; and
- 23
- 24 8. Be approved by the Administration.
- 25

26 **3.5 Redevelopment.**

- 27
- 28 1. Stormwater management plans are required for all redevelopment, unless otherwise specified by
29 watershed management plans developed according to Article 3.4 of this Ordinance. Stormwater
30 management measures must be consistent with the Design Manual.
31
- 32 2. All redevelopment designs shall:
 - 33
 - 34 a. Reduce impervious area within the limit of disturbance (LOD) by at least fifty (50) % according
35 to the Design Manual;
 - 36
 - 37 b. Implement ESD to the MEP to provide water quality treatment for at least fifty (50) % of the
38 existing impervious area within the LOD; or
 - 39
 - 40
 - 41 c. Use a combination of Article 3.5.2.a. and Article 3.5.2.b. of this Ordinance for at least fifty (50)
42 % of the existing site impervious area.
 - 43
- 44 3. Alternative stormwater management measures may be used to meet the requirements in Article
45 3.5.2 of this Ordinance if the owner or developer satisfactorily demonstrates to the approving
46 authority that impervious area reduction has been maximized and ESD has been implemented to
47 the MEP. Alternative stormwater management measures include, but are not limited to:
 - 48
 - 49 a. An on-site structural BMP;
 - 50
 - 51 b. An off-site structural BMP or retrofit project to provide water quality treatment for an area
52 equal to or greater than fifty (50)% of the existing impervious area; or
 - 53

1 c. A combination of impervious area reduction, ESD implementation, and an on-site or off-site
2 structural BMP for an area equal to or greater than fifty (50) % of the existing site impervious
3 area within the LOD.
4

5 4. If the requirements of **Article 3.5.1** and **Article 3.5.2** of this Ordinance cannot be met, and the
6 applicant has demonstrated to the approving authority that it would not be feasible to provide on-
7 site stormwater management to address the redevelopment portion of a site, the following may be
8 required:
9

10 a. A combination of ESD and an on-site or off-site structural Best Management Practice (BMP);

11
12 b. Retrofitting including existing BMP upgrades, filtering practices, and off-site ESD
13 implementation;

14 c. Pollution trading inside or outside of the limits of a development;

15
16 d. Participation in a stream restoration project;

17
18 e. Payment of a fee-in-lieu towards a stormwater management project, which project shall be:

19
20
21 f. Seventy five (75) % funded for construction within the current year of the County's Capital
22 Improvement Program;

23
24 g. Located within a watershed listed as impaired according to Maryland's most recent 303(d)
25 listing, and designed to improve the impaired aspects of the waterway; and

26
27 h. Sized for and treat an impervious drainage area equal to the impervious area needing
28 treatment for all participating projects (or remove an equivalent volume of pollutants), in
29 accordance with **Article 3.5.2**; or

30
31 i. Partial waiver of the treatment requirements if ESD is not practicable.
32

33 5. The determination of alternative stormwater management measures will be made by the approving
34 authority prior to final project approval, and shall be based on (1) whether the development project
35 is in an area targeted for development activities, such as a Priority Funding Area, a Transit
36 Oriented Development area, or a designated Base Realignment and Closure Committee
37 Revitalization and Incentive Zone; (2) whether the development project is necessary to
38 accommodate growth consistent with the Comprehensive Plan; and (3) whether bonding and
39 financing has already been secured based on an approved development plan.
40
41

42 **3.6 Permits and Bonding**

43
44 1. Permit Requirements.
45

46 a. A grading, construction, zoning, or building permit may not be issued for any parcel or
47 lot requiring a stormwater management plan until final sediment and erosion control and
48 stormwater management plans have been approved and all the requirements of this
49 Ordinance (and any other applicable State regulation) have been met or waived by the
50 approving authority.
51

52 b. A grading permit, construction permit, zoning permit, or building permit shall not be
53 issued without final approval of subdivision plan or record plat.

- 1 c. A grading, construction, zoning, or building permit shall not be issued without required:
2
3 (1) Recorded easements for the stormwater management facilities and adequate access
4 from a public right-of-way for inspection and maintenance;
5
6 (2) Stormwater Management NOCC Form(s), signed by the engineer;
7
8 (3) Recorded stormwater management inspection and maintenance agreement;
9
10 (4) Performance bond;
11
12 (5) Permission from adjacent property owners where grading, drainage or other off-site
13 improvements or easements are required; and
14
15 (6) A certificate of title signed by an attorney admitted to practice in the State of
16 Maryland certifying that there is good and marketable title, free of encumbrances, to
17 all on-site and off-site easements required under this Ordinance.
18
- 19 d. A grading, construction, zoning, or building permit may not be issued for any parcel or
20 lot in the Critical Area unless an Environmental Permit has been issued by LUGM.
21
- 22 2. Plan Review and Permit Fees. A non-refundable plan review fee is required at the time the
23 stormwater management plan or application for a waiver is submitted. A permit fee is required
24 upon submission of a grading permit application. A fee for inspection(s) of a project subject to
25 **Articles 3 and 4** of this Ordinance is required prior to issuance of a grading permit. A fee schedule
26 shall be established by the Board of County Commissioners.
27
- 28 3. Permit Suspension and Revocation. Any grading or construction permit issued by the approving
29 authority may be suspended or revoked after written notice is given to the permittee for any of the
30 following reasons:
31
- 32 a. Any violation(s) of the conditions of the stormwater management plan approval;
33
34 b. Changes in site runoff characteristics upon which an approval or waiver was granted;
35
36 c. Construction not in accordance with the approved plan;
37
38 d. Noncompliance with correction notice(s) or stop work order(s) issued for the
39 construction of the stormwater management facility; or
40
41 e. An immediate danger in a downstream area in the opinion of the approving authority.
42
- 43 4. Bonding Requirements. The approving authority shall require a surety or cash bond, irrevocable
44 letter of credit, or other means of security acceptable to the County Attorney prior to the issuance
45 of any building or grading permit for development requiring a stormwater management plan
46 facility. The amount of the security shall not be less than the total estimated construction cost of
47 the stormwater management measures (structural and non-structural), erosion and sediment
48 control, and stabilization, plus a ten (10) % contingency.
49
50

- 1 a. The required bond shall provide for:
- 2
- 3 (1) Forfeiture for failure to complete work specified in the approved stormwater
- 4 management plans;
- 5
- 6 (2) Compliance with all of the provisions of this Ordinance, and other applicable
- 7 State laws and regulations; and
- 8
- 9 (3) Time for performance.
- 10
- 11 b. *Bond Release.* The bond shall not be released without approval of as-built plans by the
- 12 approving authority, and final inspection to verify that all work has been completed in
- 13 accordance with the approved plans. Reduction of the surety deposit or amount of the
- 14 bond by the approving authority may be permitted after various stages of construction
- 15 have been completed, inspected and accepted by the approving authority.
- 16
- 17 c. *Bond Deferral.* If authorized by resolution by the Board of County Commissioners, the
- 18 performance bond(s) may be deferred, but must be in place prior to the sale of any lot(s).
- 19

20 **3.7 Stormwater Management Criteria**

21

- 22 1. Minimum Control Requirements. The minimum control requirements established under this
- 23 Ordinance and the Design Manual are as follows:
- 24 a. Planning techniques, non-structural practices, and design methods specified in the Design
- 25 Manual shall be used to implement Environmental Site Design (ESD) to the Maximum
- 26 Extent Practicable (MEP). The use of ESD planning techniques and treatment practices
- 27 must be exhausted before any structural Best Management Practice (BMP) is
- 28 implemented. Stormwater management plans for development projects subject to this
- 29 Ordinance shall be designed using ESD sizing criteria, recharge volume, water quality
- 30 volume, and channel protection storage volume criteria according to the Design Manual.
- 31 The MEP standard is met when channel stability is maintained, pre-development
- 32 groundwater recharge is replicated, non-point source pollution is minimized. Structural
- 33 stormwater management practices are to be used only if no other practices are determined
- 34 to be adequate to address MEP.
- 35
- 36 b. Control of the ten (10)-year overbank flood protection and one hundred (100)-year
- 37 extreme flood volume frequency storm events are required according to the *Design*
- 38 *Manual*. In order for this determination to be made, the applicant must submit a complete
- 39 design in accordance with **Article 3.10**.
- 40
- 41 c. The approving authority may require additional analysis and design if hydrologic or
- 42 topographic conditions warrant or if flooding, stream channel erosion, or water quality
- 43 problems exist downstream from a proposed project.
- 44
- 45 d. Modifications to minimum control requirements may be adopted by the approving
- 46 authority subject to Administration approval. The Administration shall require a
- 47 demonstration that alternative requirements will implement ESD to the MEP. Alternative
- 48 minimum control requirements or modification to minimum control requirements shall
- 49 control flood damages, shall not accelerate stream erosion, shall not reduce water quality,
- 50 and shall not increase the deposition of sedimentation. Comprehensive watershed studies
- 51 may also be required.

1 c. Stormwater management and development plans shall be consistent with applicable
2 watershed management plans or flood management plans approved by the Maryland
3 Department of the Environment in accordance with Title 5, Subtitle 8 of the *Environment*
4 *Article of the Annotated Code of Maryland* (Flood Hazard Management Act of 1976).

5
6 2. Stormwater Management Measures. The ESD planning techniques and practices and structural
7 stormwater management measures established in this Ordinance and the Design Manual shall be
8 used, either alone or in combination, in a stormwater management plan. The applicant shall
9 demonstrate that ESD has been implemented to the MEP before the use of a structural BMP is
10 considered in developing the stormwater management plan.

11
12 a. *ESD Planning Techniques.* The following planning techniques shall be applied according
13 to the Design Manual to satisfy the applicable minimum control requirements established
14 in **Article 3.7.1.** of this Ordinance:

- 15
16 (1) Preserving and protecting natural resources;
17 (2) Conserving natural drainage patterns;
18 (3) Minimizing impervious area;
19 (4) Reducing runoff volume;
20 (5) Using ESD practices to maintain one hundred (100) % of the annual pre-
21 development groundwater recharge volume;
22 (6) Using green roofs, permeable pavement, reinforced turf, and other alternative
23 surfaces;
24 (7) Limiting soil disturbance, mass grading, and compaction;
25 (8) Clustering development; and
26 (9) Any practices approved by the Administration.

27
28
29
30
31 b. *ESD Treatment Practices.* The following ESD treatment practices shall be designed
32 according to the Design Manual to satisfy the applicable minimum control requirements
33 established in **Article 3.7.1.** of this Ordinance:

- 34
35 (1) Disconnection of rooftop runoff;
36 (2) Disconnection of non-rooftop runoff;
37 (3) Sheet flow to conservation areas;
38 (4) Rainwater harvesting;
39 (5) Submerged gravel wetlands;
40 (6) Landscape infiltration;
41 (7) Infiltration berms;
42 (8) Dry wells;
43

- 1 (9) Micro-bioretenion;
- 2 (10) Rain gardens;
- 3 (11) Swales;
- 4 (12) Enhanced filters; and
- 5 (13) Any practices approved by the Administration.

6
7 c. *Structural Stormwater Management Measures.* The following structural stormwater
8 management practices, which include retention and extended detention structures, shall
9 be designed according to the Design Manual to satisfy the applicable minimum control
10 requirements established in **Article 3.7.1.** of this Ordinance:

- 11 (1) Stormwater management ponds;
- 12 (2) Stormwater management wetlands;
- 13 (3) Stormwater management infiltration;
- 14 (4) Stormwater management filtering systems; and
- 15 (5) Stormwater management open channel systems.

16
17
18
19
20
21 d. The performance criteria specified in the *Design Manual* with regard to general
22 feasibility, conveyance, pretreatment, treatment, geometry, environment, landscaping,
23 and maintenance shall be considered when selecting structural stormwater management
24 practices.

25
26
27 e. Structural stormwater management practices shall be selected to accommodate the unique
28 hydrologic or geologic regions of the County.

29
30 3. ESD planning techniques and treatment practices and structural stormwater management measures
31 used to satisfy the minimum requirements in **Article 3.7.1.** of this Ordinance must be recorded in
32 the land records of St. Mary's County, Maryland, as covenants that run with the land, and remain
33 unaltered by subsequent property owners. Prior approval from the approving authority shall be
34 obtained before any stormwater management practice is altered.

35
36 4. Alternative ESD planning techniques and treatment practices and structural stormwater measures
37 may be used for new development runoff control if they meet the performance criteria established
38 in the Design Manual and are approved by the Administration. Alternative stormwater
39 management measures used for redevelopment projects shall be approved by St. Mary's County in
40 accordance with **Article 3.5.**

41 42 43 3.8 Design Requirements

44
45 The design criteria, methodologies, and construction specifications shall be in accordance with the Design
46 Manual and shall include, but not be limited to, the following.

47
48 1. Stormwater management facilities shall not be constructed within the mapped or calculated 100-
49 year flood plain.

- 1 2. Structural stormwater management practices shall be located outside of existing or proposed
2 public road rights-of-way unless approved by the approving authority. These practices shall be
3 located within separate lots/parcels of record within residential subdivisions (not within building
4 lots), and within dedicated stormwater management easements on commercial and other sites.
5
- 6 3. A site may qualify for development density increase, in accordance with the Comprehensive
7 Zoning Ordinance, if at least fifty (50) % of the impervious surfaces are treated with bioretention.
8
- 9 4. The applicant shall compute the Recharge Volume (Re_v), Environmental Site Design Volume
10 (ESD_v), Channel Protection Volume (Cp_v), the Overbank Flood Protection Volume (Q_v), and
11 Extreme Flood Volume (Q_f) in accordance with the Design Manual Computations and shall submit
12 such calculations for review by the approving authority.
 - 13 a. Flow from BMPs shall be at non-erosive velocities in accordance with the Design
14 Manual.
 - 15 b. The design release rates of structures shall be modified if any increase in the flood levels
16 or storm frequency, or downstream channel erosion, would result at a downstream dam,
17 highway, storm drain system, structure, or natural point of restricted stream flow.
18
19
- 20
21 5. Adequate Outfall. For the purposes of modifying the minimum control requirements or design
22 criteria, the applicant shall submit a written analysis of the impacts of stormwater flows
23 downstream in the watershed. The analysis shall include hydrologic and hydraulic calculations
24 necessary to determine the impact of hydrograph timing modifications of the proposed
25 development upon a dam, highway, structure, or natural point of restricted stream flow. The
26 analysis shall be conducted in the area between the point of drainage discharge and a point
27 downstream of the first downstream tributary whose drainage area equals or exceeds the
28 contributing area to the project or to the stormwater management facility. The area of analysis
29 shall be established with the concurrence of the approving authority and may include review and
30 analysis of historical flooding problems, downstream floodplain development, classification of
31 existing public roads, soils condition, maximum permissible tractive forces, and adequacy of
32 existing open and closed conveyance systems as further described in **Article 3.10.2.h**.
33
- 34 6. Retrofit. Permissible velocities for existing unlined outfall channels shall be non-erosive.
35 Stormwater management measures, channel lining(s), and/or additional measures may be required
36 to retrofit inadequate outfall conditions.
37
- 38 7. Safety. Special consideration for safety shall be made during the design of ponds including
39 fencing, slope benching, access roads, and flattened side slopes. Fencing is not preferred. Fencing
40 may be required when a water depth of over two (2) feet continues for over twenty four (24) hours
41 after any design storm event, and safety benching cannot be provided. Where provided, fencing
42 shall be in accordance with the St. Mary's County Format Guidelines for Preparation of
43 Development Plans for Submission to the approving authority ("Format Guidelines") and the
44 following general requirements:
 - 45 a. Fencing material may be PVC (black or dark green) coated galvanized steel, aluminized
46 steel, aluminum or wood. PVC plastic resin finish shall be a minimum seven (7)-mil
47 (0.007 inches) thickness. A chain link fence shall have a maximum mesh size of 2¼
48 inches and a minimum No. 12 gauge measured before any coating application;
49
50

- 1 b. No person shall erect, construct, alter, or maintain fencing containing barbed wire,
2 electricity, or any other material that may injure a person;
3
4 c. The maintenance access gate should be equipped with a self-closing and self-latching
5 device, shall have a lockable release located a minimum distance of forty eight (48)
6 inches from the ground, be mounted to open away from the facility and be a minimum of
7 ten (10) feet in width; and
8
9 d. The maximum acceptable vertical clearance between grade and the bottom of the fence
10 shall be four (4) inches measured on the side of the fence that faces away from the
11 facility. The top of the fence must be between sixty (60) and seventy two (72) inches
12 above grade measured on the outside of the fence.

13
14 8. Maintenance Design Considerations. Applicants shall include maintenance and operation of all
15 stormwater management measures as one of the primary design considerations and shall include
16 the following in the construction plans:
17

18 a. *Access ways.*
19

- 20 (1) All access ways shall remain cleared, graded and passable at locations
21 designated on the approved plans and shall be constructed concurrently with the
22 stormwater management facility.
23
24 (1) Specific access easements shall be recorded separately from drainage easements.
25
26 (3) Construction of fences or other structures within the access easement area(s)
27 shall be prohibited unless a gate is included, and a key is provided to the
28 Department of Land Use and Growth Management.
29
30 (4) In order to facilitate vehicular access and maintenance, grading of the access to
31 and around facilities shall not create slopes with a grade of greater than 3 feet
32 horizontal to 1-foot vertical.
33
34 (5) At least one cleared and passable access way with a minimum width of 10 feet
35 and a cross slope of no more than six (6) % shall be provided.
36
37 (6) Multiple accesses should be provided on major facilities.
38

39 b. *Design features.*
40

- 41 (1) Principal spillways and other devices shall be designed to minimize tampering.
42
43 (2) The minimum dry pond bottom slope shall be designed to promote positive
44 drainage to the outfall structure.
45
46 (3) A minimum of one (1) foot of freeboard above the one hundred (100)-year water
47 surface elevation shall be maintained (MD 378 Pond Standards/Specifications
48 may require additional freeboard in certain cases).
49
50 (4) Where trash racks are provided, they shall be removable as a unit by unbolting,
51 without destroying the structure. Access to the structure shall be provided
52 immediately above the rack in the underground chambers.
53

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- (5) Where pipe storage is permitted, all pipes shall be water tight, with a fifty (50) year minimum design life.
- (6) Seepage considerations shall be addressed and include, but may not be limited to the following: the placement of impervious material or continuation of embankment materials, cut-off trenches, filter diaphragms, drains and anti-seep collars, drainage blankets, differential settlement, local groundwater conditions, and foundation under-seepage.
- (7) In accordance with the Design Manual, non-woven geotextile fabrics shall be utilized wherever filtering and infiltration practices are utilized. For the respective outfall channels, woven fabric is required to prevent erosion of the underlying soil(s).
- (8) To prevent clogging, low-flow discharge pipes with an orifice size less than three (3) inches shall be designed in accordance with the Design Manual Appendix D.8.4. In addition, the riser shall include stone protection around the pipe. If the riser is wrapped with fabric, ¼" or larger hardware cloth shall be utilized.
- (9) Where the water quality volume is split from the total runoff to a stormwater management structure, the invert of the pipe to the water quality facility shall be at least six (6) inches below the bypass weir elevation, and shall have a minimum twelve (12) inches diameter to convey the water quality flow to the BMP. The respective bypass weir elevation/invert shall be designed at the water quality elevation.
- (10) In selecting BMPs the applicant shall consider site suitability and land use within and adjacent to the site, minimize maintenance frequency, and reduce the potential for nuisances.

c. *Underground Chambers.*

- (1) The use of underground chambers is not preferred. If used, underground chambers shall be appurtenant structures to the site. These stormwater management facilities shall not be incorporated as an in-line system, but shall be designed as a parallel or perpendicular appurtenance structure.
- (2) Underground chambers shall provide a smooth contoured bottom to facilitate silt and debris removal.
- (3) Underground chambers shall provide more than one access point each with a 4'-0" x 4'-0" access door for ventilation and cleaning, and shall be large enough to accommodate equipment. Additional access ports shall be provided as necessary (no further than 150 feet apart in each pipe run) to assure the entire structure may be regularly cleaned. The minimum interior height shall be seventy two (72) inches in order to facilitate maintenance.

d. *Trees, Shrubs and Wetland Plantings.*

- (1) Planting shall be prohibited on dam embankment side slopes and within 15 feet of the toe of a dam.

1 (2) Trees and shrubs and other landscaping shall be provided in accordance with the
2 Design Manual and MD 378 Small Pond Specifications. In addition, a dense
3 cover (i.e., for bioretention, a minimum of four hundred (400) plants per acre of
4 each facility with a 3:1 shrub to tree ratio and balance of area with appropriate
5 grasses, and a minimum of two hundred (200) woody plants per acre of facility
6 for wet ponds with sustainable grasses on the aquatic bench) shall be provided
7 for all facilities requiring landscaping.

8
9 (3) Underwater grasses may require training to help assure initial growth.
10

11 **3.9 Drainage System Design**
12

13 1. General Design Standards. In a development where impervious surfaces are limited to fifteen
14 (15) % of the lot area or lot frontage on the roadway is one hundred (100) feet or greater, and
15 where open grassed channels can safely handle storm water runoff, an open drainage system is
16 preferred. Where quantity of flow, topographic, soil or natural channel conditions preclude open
17 systems, then the system may be fully or partially enclosed. The standards of the Road Ordinance
18 shall apply.

19
20 2. Private Development. Private storm drain system materials shall be appropriate for the
21 development conditions. Pipe materials should be designed for a minimum thirty (30)-year life.
22 Where the private system serves runoff from a public system, the materials shall meet public
23 system standards. Soil testing may be necessary to determine the appropriateness of a particular
24 material. Where corrugated metal pipe is specified, aluminized steel pipe is encouraged. Materials
25 used in stormwater management facilities shall be in conformance with MD 378 Specifications
26 (steel pipe is not allowed).
27
28

29 **3.10 STORMWATER MANAGEMENT PLANS**
30

31 1. Preparation of the Stormwater Management Plan.
32

33 a. The design of stormwater management plans shall be prepared by an Design Professional
34 who is licensed by the State of Maryland to prepare such plans.
35

36 b. Geotechnical and structural design components designed under this Ordinance must be
37 designed by a professional engineer licensed in the State of Maryland.
38

39 c. A separate certification shall be submitted with each plan submittal certifying that the plans
40 and computations have been prepared in accordance with this Ordinance, the *St. Mary's*
41 *County DPW&T Format Guidelines for Development Plan Submittals* (hereinafter the
42 "Format Guidelines"), and sound engineering practice, and that the plans have been
43 reviewed for accuracy and completeness prior to submission.
44

45 d. The designer shall consider the condition of site development as of July 1, 2001 (i.e.,
46 amount of impervious coverage and the extent to which the project is single and complete)
47 when preparing the stormwater management plan.
48

49 2. Application Requirements. The design of stormwater management plans shall conform to the
50 following requirements:

- 1 a. For any proposed development, the applicant shall submit phased stormwater
2 management plans to the approving authority for review and approval, unless otherwise
3 exempted by this Ordinance. At a minimum, plans shall be submitted for the concept, site
4 development, and final stormwater management construction phases of project design.
5 Each plan submittal shall include the minimum content specified in **Article 3.10.3.** of this
6 Ordinance and meet the requirements of the Design Manual and **Articles 3.7, 3.8, and**
7 **3.9** of this Ordinance.
8
9 b. New Minor Subdivisions. For all new minor lot residential subdivisions and for any
10 subdivision with devices to be installed as part of home construction (such as dry wells
11 and roof-top disconnect), the following note shall appear on the respective subdivision
12 plats: "*Prior to issuance of a Building Permit for lot(s) _____ shown hereon,*
13 *stormwater management and over-lot grading shall be provided in accordance with the*
14 *Stormwater Management, Grading, Erosion and Sediment Control Ordinance*".
15
16 c. The stormwater management plans shall contain supporting computations, drawings, and
17 sufficient information describing the manner, location, and type of measures in which
18 stormwater runoff will be managed from the entire development.
19
20 d. In addition to an executed Inspection and Maintenance Agreement, an operation and
21 maintenance plan shall be required as a condition of stormwater management plan
22 approval.
23
24 e. If a stormwater management plan involves direction of some or all runoff from the site, it
25 shall be the responsibility of the applicant to obtain from adjacent property owners any
26 easements or other necessary property interests concerning flow of water prior to plan
27 approval. Approval of a stormwater management plan does not create any right to direct
28 runoff onto adjacent property without the property owner's permission.
29
30 f. The applicant shall give consideration to incorporating the use of natural topography and
31 land cover existing prior to development as part of the stormwater management strategy.
32
33 g. A Stormwater Management Notice of Construction Completion (NOCC) Form for each
34 stormwater management device, signed by the Design Professional, is required prior to
35 issuance of the grading permit.
36
37 h. Any existing storm drainage systems that are considered inadequate to accommodate the
38 proposed development must be improved prior to development. Any waiver of
39 stormwater management does not relieve the applicant of providing an adequate storm
40 drainage conveyance system. This provision may be applied to correct an existing
41 inadequate outfall, and to meet the requirement for adequate drainage as described in
42 **Article 3.8.5.**
43
44 i. The visual impact of stormwater management facilities shall be considered in the overall
45 design of the site and specific design of the facilities. The appropriateness of the design,
46 the shape, and form of the structures, excavated material, plantings, and fencing shall be
47 considered and shall be designed to relate to the surroundings and their functions.
48
49 j. If off-site construction is required to obtain adequate outfall, a grading permit will not be
50 issued until necessary easements have been obtained. If the adjacent owner refuses to
51 grant such easement, the owner or developer may request condemnation of the land by

1 the County at the applicant's cost. Condemnation can proceed only if a public need is
2 demonstrated.

3
4 k. Storm drains shall be directed into areas least likely to erode.
5

6 3. Contents of the Plan. The contents of the Stormwater Management Plan shall conform to the
7 Format Guidelines and the following requirements.
8

9 a. *Concept Plan.* The applicant shall submit a concept plan through the TEC process that
10 provides sufficient information for an initial assessment of the proposed project and a
11 determination that stormwater management can be provided according to **Article 3.7.2.**
12 of this Ordinance and the Design Manual. Plans submitted for concept approval shall
13 include, but are not limited to:
14

- 15 (1) A map at a scale specified by the approving authority showing site location,
16 existing natural features, water and other sensitive resources, topography, and
17 natural drainage patterns;
- 18 (2) The anticipated location of all proposed impervious areas, buildings, roadways,
19 parking, sidewalks, utilities, and other site improvements;
- 20 (3) The location of the proposed limit of disturbance, erodible soils, steep slopes,
21 and areas to be protected during construction;
- 22 (4) Preliminary estimates of stormwater management requirements, the selection
23 and location of ESD practices to be used, and the location of all points of
24 discharge from the site;
- 25 (5) Topographic and visual assessment of all existing and proposed outfall channels;
- 26 (6) A narrative that supports the concept design and describes how ESD will be
27 implemented to the MEP; and
- 28 (7) Any other information required by the approving authority.

29 b. *Site Development Plan.* Following concept plan approval by the Director of LUGM or
30 St. Mary's County Planning Commission, the applicant shall submit site development
31 plans that reflect comments received during the previous review phase. Plans submitted
32 for site development approval shall be in sufficient detail to allow site development to be
33 reviewed and include, but not be limited to:
34

- 35 (1) All information provided during the concept plan review phase;
 - 36 (2) Site layout, impervious area locations and acreages, existing and proposed
37 topography, layout of stormwater conveyance measures, preliminary drawings
38 for each structural and non-structural stormwater management device and outfall
39 improvement and stormwater volume computations for ESD practices, and
40 quality/quantity control structures;
 - 41 (3) Full size drainage area maps for each drainage structure, for each ESD and
42 structural device, and for each point of discharge from the site;
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- (4) A proposed erosion and sediment control plan that contains the construction sequence, any phasing necessary to limit earth disturbances and impacts to natural resources, and an overlay plan showing the types and locations of ESD and erosion and sediment control facilities to be used;
- (5) Soil test results;
- (6) A narrative that supports the site development design, describes how ESD will be used to meet the minimum control requirements, and justifies any proposed structural stormwater management measure; and
- (7) Any other information required by the approving authority.

c. *Final Design Plans.* Following site development, the applicant shall submit final erosion and sediment control and final stormwater management plans that reflect the comments received during the previous review phase. Plans submitted for final approval shall be submitted in sufficient detail to allow all approvals and permits to be issued and as follows:

- (1) Final erosion and sediment control plans shall be submitted according to COMAR 26.17.01.05; and
- (2) Final stormwater management plans shall be submitted for approval in the form of construction drawings and be accompanied by a report that includes sufficient information to evaluate the effectiveness of the proposed runoff control design.

d. *Reports.* Reports submitted for final stormwater management plan approval shall include, but are not limited to:

- (1) A narrative that describes the development, supports the site development design, describes how ESD will be used to meet the minimum control requirements, justifies any proposed structural stormwater management measure, and describes existing and proposed outfall conditions;
- (2) Geotechnical investigations including soil maps, borings, water table elevation, site specific recommendations, and any additional information necessary for the final stormwater management design;
- (3) Drainage Area Maps (DAMs) depicting pre-development and post-development runoff flow path segmentation and land use;
- (4) Hydrologic and hydraulic computations of the applicable ESD and structural devices, and unified sizing criteria according to the Design Manual for all points of discharge from the site;
- (5) Drainage and runoff calculations and assumptions shall be provided in an acceptable format for both closed and open systems, including area, size, quantity, velocity, slope, and depth of flows and hydraulic gradient. All closed storm drain systems will be reviewed using the Rational Method. All cross culverts and stormwater management facilities draining more than five (5) acres and facilities designed under MD 378 Pond Standards/Specifications will be reviewed using the TR-20 computer program or the TR-55 tabular Hydrograph Method;

- 1 (6) Hydraulic and structural calculations, including computations for reinforcing,
2 anti-floatation, trash rack, and structure classifications for all structural
3 stormwater management measures to be used; and
4
5 (7) Any other information required by the approving authority.
6
7 e. *Construction Drawings.* The final construction plans shall include, but are not limited to:
8
9 (1) A vicinity map;
10
11 (2) Existing and proposed topography and proposed drainage areas, including areas
12 necessary to determine downstream analysis for proposed stormwater
13 management facilities;
14
15 (3) Any proposed improvements including location of buildings or other structures,
16 impervious surfaces, storm drainage facilities, and all grading;
17
18 (4) The location of existing and proposed structures and utilities;
19
20 (5) Any easements and rights-of-way;
21
22 (6) The delineation, if applicable, of the 100-year floodplain and any on-site
23 wetlands;
24
25 (7) Structural and construction details including representative cross sections for all
26 components of the proposed drainage system or systems, and stormwater
27 management facilities;
28
29 (8) All necessary construction specifications;
30
31 (9) A sequence of construction;
32
33 (10) Data for total site area, disturbed area, new impervious area, and total impervious
34 area;
35
36 (11) Summary Table. A stormwater management summary table showing the ESD
37 and structural devices, listing acreage of impervious areas (including pre-
38 development and post-development), method of quality control, unified sizing
39 volume criteria per the Design Manual, required and provided ESD volume,
40 water recharge volume, channel protection volume, overbank flood protection
41 volume, and extreme flood volume for the overall development, each drainage
42 area by phase of development, pre-development and post-development runoff
43 rates for the 1, 2, 10, 25, and 100- year storm events, where applicable, as well
44 as cumulative acreage and weighted runoff curve number for incremental
45 development of a watershed for a regional stormwater management facility,
46 where applicable;
47
48 (12) Hydraulic Gradient. The hydraulic gradient must be calculated and shown on the
49 storm drain and open channel profiles in accordance with the current State
50 Highway Administration methodology. The hydraulic gradient is a line
51 connecting points to which water will rise in manholes and inlets during the ten
52 (10) year recurrent interval storm;
53
54 (13) A table of materials to be used for stormwater management facility planting;

- 1 (14) All soil boring logs and locations;
- 2
- 3 (15) An inspection and maintenance schedule;
- 4
- 5 (16) Certification by the owner/developer that all stormwater management
- 6 construction will be done according to this plan;
- 7
- 8 (17) An as-built certification signature block to be executed after project completion
- 9 in accordance with Articles 3.14.6. and 4.13.2.;
- 10
- 11 (18) Hydrologic Information. Descriptions of all water courses, impoundments, and
- 12 wetlands on or adjacent to the site;
- 13
- 14 (19) Adequate Outfall. The approving authority shall have the right to require further
- 15 downstream analysis where the submitted narrative and all related plans and
- 16 plats are insufficient to show the impact of the development on other
- 17 downstream properties as further described in Articles 3.8 and 3.10. SCD may
- 18 also require additional analysis to address potential erosion issues;
- 19
- 20 (20) Additional Data. Any other information required by this Ordinance, the Director
- 21 of LUGM, DPW&T, or the SCD shall also be provided by the applicant;
- 22
- 23 (21) Construction drawings submitted for stormwater management plan approval
- 24 shall be folded and prepared in accordance with the Format Guidelines; and
- 25
- 26 (22) As-built submission requirements shall be prepared in accordance with the
- 27 provisions in this Ordinance and the Format Guidelines. After submitted, all as-
- 28 built drawings shall be reviewed by the approving authority, and scheduled for
- 29 final inspection.
- 30

31 4. Review and Approval of Stormwater Management Plans.

- 32
- 33 a. The approving authority shall review the application package to determine completeness
- 34 prior to acceptance of the package for processing. Incomplete applications shall be
- 35 returned to the applicant. Complete applications shall be reviewed to determine
- 36 compliance with the requirements of this Ordinance. The approved plan shall serve as
- 37 the basis for all subsequent construction.
- 38
- 39 b. The approving authority shall perform a comprehensive review of the stormwater
- 40 management plans for each phase of site design. Coordinated comments will be provided
- 41 for each plan phase that reflects input from all appropriate agencies including, but not
- 42 limited to, SCD. All comments from all review agencies shall be addressed and approval
- 43 received at each phase of project design before subsequent submissions.
- 44
- 45 c. SCD shall review the stormwater management plans for compliance with the NRCS-MD
- 46 Code No. 378 Pond Standards and Specifications, Sediment and Erosion Control
- 47 Standards and Specifications, and Sediment and Erosion Control requirements of
- 48 Article 4 of this Ordinance.
- 49
- 50 d. Notification of approval or reasons for disapproval or modification shall be given to the
- 51 applicant within thirty (30) days after submission of the completed stormwater

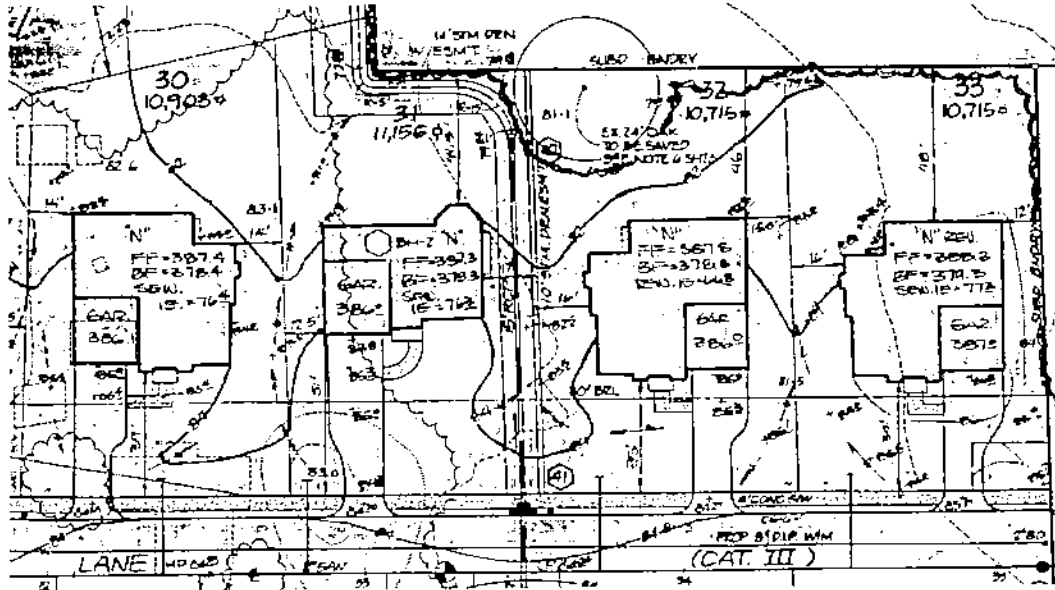
1 management plan. If a decision is not made within thirty (30) days, the applicant shall be
2 informed of the status of the review process and the anticipated completion date. The
3 stormwater management plan shall not be considered approved without the inclusion of
4 the signature and date of signature of the approving authority on the plan.
5

6 **3.11 Drainage Easements**
7

- 8 1. Where a natural drainage course or stream traverses a development, a drainage easement, a
9 minimum of fifty(50) feet in width, shall be provided conforming substantially to the line of such
10 watercourse for the purpose of maintaining, improving and protecting such drainage course or
11 stream. This easement area shall be designed to the one hundred (100)-year flood plain level.
12
- 13 2. Drainage easements shall be provided for the ten (10)-year design storm, unless otherwise
14 specified.
15
- 16 3. Required storm drainage easements and surface drainage easements should be identified and
17 recorded as a part of the record plat. Stormwater management facility easements shall be
18 identified and recorded as a part of the record plat or site plan. Maintenance for surface drainage
19 and stormwater management easements shall be identified as the responsibilities of the landowner
20 or homeowners association.
21
- 22 4. Where topography or other conditions make impractical the inclusion of drainage facilities within
23 road rights-of-way, perpetual unobstructed easements, a minimum of twenty (20) feet in width, for
24 such drainage facilities shall be provided across property outside the road right-of-way and with
25 satisfactory access to the road. Easements shall be indicated on the record plat or site plan.
26 Drainage easements shall be carried from the road to a natural watercourse or to other drainage
27 facilities.
28
- 29 5. When a proposed drainage system will carry water across private land outside the subdivision or
30 where off-site construction is required to obtain adequate outfall, in accordance with
31 **Article 3.10.2.c.**, appropriate drainage and access easements must be secured and indicated on the
32 recorded plat or site plan. Maintenance responsibility for drainage-ways and swales shall be
33 clearly designated on the recorded plat or site plan.
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1 3.12 Over-lot Grading

- 2
- 3 1. Grading plans for construction of all buildings and dwelling units shall be provided and approved
- 4 prior to issuance of a building permit by LUGM. The plans shall show existing and proposed
- 5 easements and lot contours, on-site drainage swales, minimum first floor/basement/walk-out
- 6 elevations, spot shots around the building perimeter to demonstrate accommodations of the ten
- 7 (10)-year and one hundred (100)-year flows and elevations, delineation of soil types, and retention
- 8 and infiltration areas to assure that adequate drainage is provided. An example of such detail is set
- 9 forth at Figure 3.11.



12 Figure 3.11 Sample Detail Required For Overlot Grading Plans

- 13
- 14 2. All residential and accessory structures shall be located at least twelve (12) inches above the one
- 15 hundred (100)-year storm elevation. All drainage easements shall be shown on the plan. Where
- 16 the on-site construction raises the water surface elevation on upstream properties, the applicant
- 17 shall provide or obtain a drainage easement for the ten (10)-year storm elevation, and provide
- 18 calculations that establish that the one hundred (100)-year water surface elevation does not
- 19 encroach on any existing structures.
- 20
- 21 3. Compliance with the grading plan shall be required. Over-lot grading plans shall include the
- 22 approved septic field location(s) and well location(s).
- 23
- 24 4. Design of surface runoff across lots shall not result in erosive velocities. If a storm sewer is
- 25 provided, it shall not outfall in the front yard, but shall extend to a point to the rear of the house or
- 26 lot. The building shall not be located so as to allow culvert outfalls to direct flow toward the
- 27 structure. The existing and finished grades at all driveway/street intersections and on adjacent lots
- 28 may be required to ensure that drainage will not be directed towards a building or dwelling unit.
- 29
- 30 5. Lots shall be graded so that surface runoff does not cross more than three (3) lots before it is
- 31 collected into a retention and infiltration area or a storm drain system. The storm drain system
- 32 may be an open channel, closed conduit or a combination of both. The approving authority may
- 33 approve an open channel where the preservation of a natural drainage-way is desirable or the use
- 34 of the open channel will not interfere with the use of the property.

- 1 6. In areas that are susceptible to a high water table (permanent, perched, or seasonal) the engineer
2 shall provide pavement design criteria and measures to assure dry basements and to preclude wet
3 yards.
- 4
- 5 7. Over-bank flood protection measures shall be incorporated into the design plans.
- 6
- 7 8. Adequate compaction of fill embankments at ninety five (95) % density shall be required to ensure
8 proper stability of the slopes, which shall be no steeper than two feet horizontal to one vertical.
9 Use of retaining walls in connection with site plan or subdivision developments shall be shown at
10 the time of building permit application.
- 11
- 12 9. In general, two-foot contour intervals shall be utilized. However, for subdivisions with lots greater
13 than one acre, topographic data with five-foot contour intervals at a scale no greater than one (1)
14 inch equals one hundred (100) feet shall be acceptable. Scale shall be large enough to ensure that
15 an accurate representation is shown on the plans.
- 16
- 17 10. If lot sizes are greater than one (1) acre, and the disturbance on each lot is less than one-half (½)
18 acre, and contiguous lots are not being developed concurrently by the same owner, builder, or
19 developer, a Standard Erosion and Sediment Control plan will be required by SCD. If lot sizes are
20 one (1) acre or less, or contiguous lots of any size are being developed concurrently by the same
21 owner, builder, or developer, an Engineered Erosion and Sediment Control Plan for the single lot
22 development shall be required by SCD and shall contain the provisions of this Article. Building
23 permit applications shall demonstrate conformance with the approved erosion and sediment
24 control plan. The Director of LUGM shall compare building permit applications with the approved
25 plan and shall disapprove building permit applications if significant deviations are noted unless
26 revisions have been otherwise approved by SCD.
- 27
- 28 11. All building permit applications subject to this **Article 3.12** shall state and show calculations of
29 the chosen method of addressing the provisions of this Article. This may be accomplished with an
30 attached sketch or specific reference (page/appendix number, etc.) from the Design Manual and
31 the results of simple design calculations shown in the "notes" section of the building permit
32 applications.
- 33
- 34 12. Designs with walk-out basements shall be prohibited where sump conditions are created and
35 adequate drainage cannot be properly demonstrated by the applicant.
- 36
- 37
- 38 13. Lots shall be generally graded so that surface runoff is directed along property lines and shall
39 preclude the ponding of water on adjacent lots unless specifically approved otherwise. In
40 accordance with **Article 3.10.2.f.**, contours of the finished surfaces are to be blended with adjacent
41 natural terrain to achieve a consistent grade and natural appearance.
- 42
- 43 14. A building permit may not be issued by LUGM for any parcel of land, parcel of record or lot
44 unless a stormwater management plan and erosion and sediment control plan has been approved or
45 the requirements therefore waived by the approving authority. The issuance of a permit shall also
46 require:
 - 47
 - 48 a. Recorded easements for the stormwater management facility and easements to provide
49 adequate access for inspection and maintenance from a public right-of-way; and
 - 50

1 b. A recorded stormwater management inspection and maintenance agreement and
2 performance bond.
3

4 15. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of
5 collection so as not to create a hazard. Lots shall be graded so as to drain surface water away from
6 foundation walls. The grade away from foundation walls shall fall a minimum of six (6) inches
7 within the first ten (10) feet.
8

9 16. If warranted by site conditions, reasonable restrictions may be placed on the number of lots or
10 grading units area (square footage) that may be disturbed/graded at any point in time, and on mass
11 grading operations through phasing and sequencing of construction activity to minimize
12 disturbed/graded areas.
13
14

15 **3.13 Inspection and Maintenance Agreement**
16

17 1. Maintenance Responsibility. Prior to the issuance of any grading permit for which stormwater
18 management is required, the approving authority shall require the applicant or owner to execute an
19 Inspection and Maintenance Agreement binding on the owner and all subsequent owners of land
20 served by the private stormwater facility.
21

22 a. *Reasonable Access.* The agreement shall provide for access to the facility at reasonable
23 times for regular inspection by LUGM and DPW&T and for regular or special
24 assessments of property owners to ensure that the facility is maintained in proper working
25 condition to meet design standards and any provisions made part of the approval. A
26 minimum 20-foot access easement shall be shown on the plan and on the record plat for
27 all structural practices.
28

29 b. *Maintenance.* The agreement shall require the owner, and all its successors and assigns,
30 of the property served by any private stormwater management facilities (structural and/or
31 non-structural), to maintain in good condition and promptly repair and restore all grade
32 surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control
33 measures, and other protective devices. Such repairs, restoration and maintenance shall
34 be in accordance with approved plans.
35

36 (1) Annual mowing is required only along maintenance rights-of-way and
37 embankment.
38

39 (2) Sediment removed from ponds should be disposed of per sediment and erosion
40 control regulations in effect from time to time.
41

42 c. *Maintenance Schedule.* A maintenance schedule shall be developed for the life of any
43 stormwater management facility/measure (structural and non-structural). The
44 maintenance schedule shall state the maintenance to be completed, the time period for
45 completion, and the party shall perform the maintenance. This maintenance schedule
46 shall be printed on the stormwater management plan and shall conform to the Design
47 Manual.
48

49 d. *Inspections.* The schedule for inspection shall be one (1) year following final approval of
50 construction completion and every three (3) years thereafter. If repairs, restoration and
51 maintenance are needed to assure proper operation of the facility, the owner shall be

1 notified and shall have ninety (90) days to complete the required work. Extensions may
2 be granted due to weather or other extenuating circumstances.

3
4 e. *Failure to correct violations.* The agreement shall provide that if, after notice of a failure
5 to perform repairs, restoration and maintenance, satisfactory corrections are not made by
6 the responsible party within thirty (30) days, LUGM or DPW&T may perform all
7 necessary repairs, restoration and maintenance. The party responsible for the facility
8 shall be liable for the cost of the work. The agreement shall provide that a court of
9 competent jurisdiction, after due notice, shall order a lien for the cost of the work be
10 placed on each property served by the stormwater management facility.

11
12 f. *Recording.* The agreement shall be recorded by the applicant in the Land Records of St.
13 Mary's County.

14
15 g. *Transfer of Maintenance Responsibility.* Prior to transfer of maintenance responsibility, a
16 new Inspection and Maintenance Agreement must be recorded in the Land Records of St.
17 Mary's County.

18
19 **3.14 Construction Inspection**

20
21 The permittee shall be responsible for the work to be performed in accordance with the approved plans and
22 specifications and in conformance with the provisions of this Ordinance. The permittee shall engage
23 consultants, if required, to provide professional inspections and materials testing on a timely basis. In the
24 event of changed conditions, the permittee shall be responsible for informing the approving authority of
25 such change and shall provide revised plans for approval.

26
27 **1. General.**

28
29 a. The permittee shall provide:

30
31 (1) Written notification to the approving authority that is received at least two (2)
32 working days prior to commencing any work in conjunction with the stormwater
33 management system construction;

34
35 (2) Any necessary third party inspection reports and data; and

36
37 (3) A certified as-built plan, prior to final acceptance of the work authorized under
38 the permit, documenting the adherence to construction requirements contained
39 in approved plans.

40
41 b. Each ESD practice and structural BMP shall be separately documented upon completion
42 of final grading, establishment of permanent stabilization, and before issuance of use and
43 occupancy approval.

44
45 **2. Inspection Reports.**

46
47 a. Inspections of each ESD practice and structural BMP shall be conducted during
48 construction by the approving authority.

- 1 (1) Periodic inspections shall be documented and reports shall be provided to the
2 approving authority.
- 3
- 4 (2) Written reports shall be prepared after every inspection and include:
 - 5
 - 6 (i) The date and location of the inspection; and
 - 7
 - 8 (ii) Whether construction was in compliance with the approved stormwater
9 management plan; and
 - 10
 - 11 (iii) Any variations from the approved construction specifications; and
 - 12
 - 13 (iv) Any violations that exist and the type of enforcement action taken.
 - 14
- 15 (3) The applicant and on-site personnel shall be notified in writing when violations
16 are observed. Written notification shall describe the nature of the violation and
17 the required corrective action.
- 18
- 19 (4) No additional work shall proceed until the County inspects and approves the
20 work previously completed and furnishes the applicant with the results of the
21 inspection reports.
- 22
- 23 3. Inspection Requirements During Construction. The Developer or its representative shall assure
24 that inspections are made and documented, and that approvals are obtained, at the following
25 specified stages of construction:
 - 26
 - 27 a *Ponds.* Inspections shall be made at each of the following stages of construction:
 - 28 (1) Upon completion of temporary sediment and erosion control measures;
 - 29
 - 30 (2) Upon completion of excavation to sub-foundation and, when required,
31 installation of structural supports or reinforcement for structures, including but
32 not limited to:
 - 33 (i) Core trenches for structural embankments;
 - 34
 - 35 (ii) Inlet and outlet structures, anti-seep collars or diaphragms, and
36 watertight connectors on pipes;
 - 37
 - 38 (iii) Trenches and compaction for enclosed storm drainage facilities; and
 - 39
 - 40 (iv) Filter fabric, observation wells, and base aggregate material;
 - 41
 - 42 (3) During placement of structural fill, concrete, and installation of piping and catch
43 basins;
 - 44
 - 45 (4) During backfill of foundations and cut-off trenches;
 - 46
 - 47 (5) During embankment construction, final excavation, placement of surface layers;
48 and

- 1 (6) Upon completion of final grading and establishment of permanent stabilization.
2
3 b. *Wetlands.* At the stages specified for pond construction in this Ordinance, during and
4 after wetland reservoir area planting.
5
6 c. *Infiltration Trenches.* Inspections shall be made at each of the following stages of
7 construction:
8
9 (1) During excavation to sub-grade;
10
11 (2) During placement and backfill of under-drain systems and observation wells;
12
13 (3) During placement of geo-textiles and all storage/filter media;
14
15 (4) During construction of appurtenant conveyance systems such as diversion
16 structures, pre-filters and filters, inlets, outlets, and flow distribution structures;
17 and
18
19 (5) Upon completion of final grading and establishment of permanent stabilization.
20
21
22 d. *Infiltration Basins.* At the stages specified for pond construction in this Ordinance and
23 during placement and backfill of under-drain systems.
24
25 e. *Filtering Systems.* Inspections shall be made at each of the following stages of
26 construction:
27
28 (1) During excavation to sub-grade;
29
30 (2) During placement and backfill of under-drain systems;
31
32 (3) During placement of geo-textiles and all filter media;
33
34 (4) During construction of appurtenant conveyance systems such as flow diversion
35 structures, pre-filters and filters, inlets, outlets, orifices, check dams,
36 diaphragms, and flow distribution structures; and
37
38 (5) Upon completion of final grading and establishment of permanent stabilization.
39
40 f. *Open Channel Systems.* Inspections shall be made at each of the following stages of
41 construction:
42
43 (1) During excavation to sub-grade;
44
45 (2) During placement and backfill of under-drain systems for dry swales;
46
47 (3) During installation of diaphragms, check dams, or weirs; and
48
49 (4) Upon completion of final grading and establishment of permanent stabilization.
50
51 g. *ESD Practices.* Rooftop and non-rooftop runoff disconnects, sheet flow to conservation
52 areas, and rainwater harvesting shall be inspected. Submerged gravel wetlands shall be
53 inspected as both an infiltration trench and wetlands. Landscape infiltration, infiltration

berms, and dry wells shall be inspected as an infiltration trench. Micro-bioretenion, rain gardens, and enhanced filters will be inspected as a filtering system.

h. The Developer or his representative shall provide additional inspection, testing, and/or reports as field conditions may warrant, as determined by the Inspector.

4. Inspection Staff. The permittee shall pay the cost of any third party inspector utilized by the County. If an as-built certification is not provided by the permittee, the County, at its option, may perform destructive or non-destructive testing at the expense of the permittee.

5. Materials Testing Requirements. The Developer shall be responsible for making all necessary arrangements for the testing of materials required at specific stages of construction of stormwater management facilities. Materials tests are required, and shall be performed by a licensed professional. A report by the licensed professional shall be provided to the Inspector, and shall be accompanied by supplier certifications for all materials. The following materials tests and certifications shall be required:

a. Classification and compaction ratio of core trench materials and fill material for embankments;

b. Certification of all topsoil and filter media specifications (i.e., percentage of organic material, pH, salt content, nutrients, gradation);

c. Certification that all geo-textile meets specifications;

d. Certification that all plant materials are disease and pest free;

e. Void ratio of gravel used for storage of runoff, and

f. Any other test the inspector requires.

6. As-Built Certifications. Once construction is complete, an as-built certification shall be submitted to the approving authority for approval. The as-built certification shall be prepared and sealed by a Registered Professional Engineer or Professional Land Surveyor licensed to practice in Maryland. Design plan drawings, computations, and reports shall be submitted to ensure that constructed stormwater management practices and conveyance systems comply with the specifications contained in the approved plans. As-built certification shall include a set of drawings, in accordance with the *Format Guidelines*, comparing the approved stormwater management plan with the facilities as constructed. The as-built plan certification shall contain a statement that the stormwater management devices have been constructed, inspected, and completed in accordance with the approved plans, and that the as-built drainage areas to each stormwater management device are substantially in compliance with the approved drainage area maps. The approving authority may require additional information.

7. Notice of Construction Completion. The approving authority shall submit a NOCC Form to the Administration for each stormwater management practice within forty-five (45) days of construction completion and final as-built certification. If BMPs requiring SCD approval are constructed, notice of construction completion shall also be submitted to the SCD.

1 **3.15 Inspections**

2
3 1. Inspections During Construction. The approving authority is responsible for inspections during
4 construction.

5
6 2. Inspections After Construction. LUGM shall inspect all ESD treatment systems and structural
7 stormwater management measures.

8
9 a. The party responsible for the stormwater management facility shall perform or cause to
10 be performed preventive repairs, restoration and maintenance of all completed
11 stormwater management facilities to insure proper operation. Stormwater management
12 facilities and structural and non-structural BMPs shall be visually inspected by the party
13 responsible for the stormwater management facility at least twice a year and after major
14 storms.

15
16 b. LUGM shall perform inspections, or cause to be performed, inspections of private
17 stormwater management facilities one (1) year following final approval of construction
18 completion and every three (3) years thereafter. A fee may be charged for this service in
19 accordance with the adopted Fee Schedule. LUGM shall maintain all inspection reports
20 for all ESD treatment systems and all structural stormwater management measures and
21 shall provide the Director of DPW&T with a copy of the inspection reports shall contain
22 the following information:

23
24 (1) The date of inspection;

25
26 (2) Name of inspector; and

27
28 (3) An assessment of the quality of the stormwater management system related to
29 ESD treatment system efficiency and the control of runoff to the MEP; and

30 (4) Description of needed repairs, restoration and maintenance; and

31
32 (5) The condition of:

33 (i) maintenance access and landscaping;

34 (ii) vegetation and filter media;

35 (iii) fences and other safety devices including safety benches and trash
36 racks;

37 (iv) spillways, valves, and other control structures including low orifices,
38 risers, and forebays; and

39 (v) embankments, slopes, and safety benches;

40 (vi) reservoir and treatment areas;

41 (vii) inlet and outlet channels and structures;

42 (viii) underground drainage;

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- (ix) sediment and debris accumulation in storage and forebay areas;
 - (x) differential settlement of the structures;
 - (xi) any other item that could affect the proper function of the stormwater management system including non-structural facilities and BMPs to the extent practicable.
- c. Inspection reports shall be maintained by the Director of LUGM.
- d. If repairs, restoration and maintenance are needed to assure proper operation of the facility, the owner shall be notified and shall have ninety (90) days to complete the required work. Extensions may be granted due to weather or other extenuating circumstances. The approving authority shall conduct a subsequent inspection to ensure completion of the repairs.
- (1) *Wetlands*. Inspections shall be conducted during the second growing season to verify a vegetation survival rate of at least fifty (50) %.
 - (2) *ESDs*. All landscaping materials shall be inspected one (1) year after final approval of construction to assure a survival rate of at least seventy five (75) %.
- e. If, after notice of a failure to perform repairs, restoration and maintenance, satisfactory corrections are not made by the responsible party within thirty (30) days, LUGM or DPW&T may perform all necessary repairs, restoration and maintenance. The party responsible for the facility shall be assessed the cost of the work. The County may petition a court of competent jurisdiction, after due notice, to order a lien for the cost of the work be placed on each property served by the stormwater management facility.
3. Re-inspections and Special Inspections. Re-inspections for acceptance of permitted work and special inspections for a reduction in surety as requested by the permittee are subject to fees in accordance with the established Fee Schedule.

1 **ARTICLE 4. EROSION, SEDIMENT CONTROL & GRADING**
2

3 **4.1 Purpose and Authority**
4

- 5 1. Purpose. The purpose of this Article is to protect, maintain, and enhance the public health, safety,
6 and general welfare by establishing minimum requirements and procedures to control the adverse
7 impacts associated with land disturbances. The purpose is to minimize soil erosion and prevent
8 off-site sedimentation by using soil erosion and sediment control practices designed in accordance
9 with the *Code of Maryland Regulations* (COMAR) 26.17.01, the 2011 Maryland Standards and
10 Specifications (hereinafter the "Standards and Specifications") and the Stormwater Management
11 Act of 2007 (hereinafter the "Act"). Implementation of this Ordinance will reduce the negative
12 impacts of land development on water resources, maintain the chemical, physical, and biological
13 integrity of streams, and minimize damage to public and private property.
14
- 15 2. Authority. The provisions of this Article are authorized pursuant to Title 4, Subtitle 1 of the
16 *Environment Article* of the *Annotated Code of Maryland*. The application of this Ordinance and
17 the provisions herein shall be the minimum erosion and sediment control requirements and shall
18 not be deemed a limitation or repeal of any other powers granted to the County by law.
19

20 **4.2 Applicability and Validity**
21

- 22 1. No person shall disturb land without implementing an approved soil erosion and sediment control
23 plan in accordance with the requirements of this Article and the Standards and Specifications
24 except as otherwise provided within this Ordinance.
25
- 26 2. The approving authority for review and approval of sediment and erosion control plans is the St.
27 Mary's Soil Conservation District (hereinafter the "SCD").
28
- 29 3. A grading or building permit may not be issued for a property unless an erosion and sediment
30 control plan has been approved that is consistent with State law, State regulations, and this
31 Ordinance.
32

33 **4.3 Sediment and Erosion Control Plan Exemptions**
34

35 The following activities are exempt from the requirement to prepare a sediment and erosion
36 control plan:
37

- 38 1. Agricultural land management practices and the construction of agricultural structures, including
39 those regulated under *COMAR 26.17.03*;
40
- 41 2. Clearing or grading activities that disturb less than five thousand (5,000) square feet of land area
42 and disturb less than one hundred (100) cubic yards of earth; and
43
- 44 3. Clearing or grading activities subject exclusively to State approval and enforcement.
45

46 **4.4 General Design, Review, and Approval of Sediment Control Plans**
47

- 48 1. The approving authority shall review erosion and sediment control plans to determine compliance
49 with this Ordinance and the Standards and Specifications prior to approval. In approving the plan,
50 the approving authority may impose such conditions that may be deemed necessary to ensure

1 compliance with the provisions of this Ordinance, *COMAR 26.17.01*, the Standards and
2 Specifications, and the preservation of public health and safety.

3 2. The review and approval process shall be in accordance with the comprehensive and integrated
4 plan approval process described in the Standards and Specifications, this Ordinance, and the Act.

5
6 3. The final erosion and sediment control plan shall not be considered approved without the inclusion
7 of the signature and date of signature of the approving authority on the plan.

8
9 4. Approved plans remain valid for two (2) years from the date of approval unless extended or
10 renewed by the approving authority.

11
12 5. Transitional Provisions.

13
14 a. Any plans that receive final approval after January 9, 2013 must be in compliance with
15 the requirements of this Ordinance and the Standards and Specifications.

16
17 b. A plan that received final approval on or before January 9, 2013 may be re-approved
18 pursuant to provisions in effect at the time of original approval if grading activities have
19 begun on the site on or before January 9, 2015, with the exception of stabilization
20 requirements.

21
22 c. Stabilization practices on all sites must be in compliance with the requirements of this
23 Ordinance and the Standards and Specifications on and after January 9, 2013, regardless
24 of when an erosion and sediment control plan was approved.

25
26 6. Modifications of Sediment and Erosion Control Plans.

27
28 a. The approving authority may revise approved plans as necessary. Modifications may be
29 requested by the owner/developer, the inspection agency, or DPW&T in accordance with
30 *COMAR 26.17.01.09(H)* Plan Modifications.

31
32 b. The approving authority may develop a list of minor modifications that may be approved
33 as field revisions by the inspection agency. Any list of minor modifications must be
34 approved by the Administration prior to its implementation.

35
36 7. Standard Erosion and Sediment Control Plan.

37
38 a. The approving authority may adopt a standard erosion and sediment control plan for activities
39 involving minor earth disturbances, such as single-family residences, small commercial and
40 other similar building sites, minor maintenance grading, and minor utility construction.

41
42 b. A standard erosion and sediment control plan must meet the requirements of this Ordinance
and the Standards and Specifications and be approved by MDE prior to its adoption.

43 4.5 Grading Provisions

44
45 1. No person shall grade, strip, excavate, clear or fill land, or create borrow pits, spoil areas, quarries,
46 material processing facilities or any other facility without first obtaining a grading or building
47 permit from the respective approving authority unless exempt from the requirement to prepare a
48 sediment and erosion control plan pursuant to **Article 4.3** of this Ordinance.

49
50 2. The approving authority for issuance of a Grading Permit is the St. Mary's County Department of
51 Public Works & Transportation.

52

1 3. Exceptions.
2

3 A grading permit shall not be required for the following:
4

5 a. Any road construction for which St. Mary's County has issued a road construction permit.
6 A road construction permit may not be issued unless an erosion and sediment control plan
7 has been approved by SCD.
8

9 b. Excavations below finished grades for basements, retaining walls, and footings of
10 individual dwellings authorized by a valid building permit. Requirements for a building
11 permit shall include an erosion and sediment control plan approved by SCD.
12

13 c. Any surface mining operation and the affected land covered by a surface mining permit
14 issued by MDE.
15

16 d. Any other excavation that:
17

18 (1) Does not impair existing surface drainage, constitute a potential erosion hazard,
19 or act as a source of sedimentation to any adjacent land or water course; and
20

21 (2) Does not result in a cumulative quantity (sum of cut and fill) more than one
22 thousand (1,000) cubic yards of material within any site; and
23

24 (3) Is less than four (4) feet in vertical depth at its deepest point as measured from
25 the natural ground surface; and
26

27 (4) Has no final slopes steeper than three (3) feet horizontal to one (1) foot vertical;
28 and
29

30 (5) Has all disturbed areas promptly seeded or sodded within seven (7) days of the
31 last disturbance; and
32

33 (6) Includes appropriate stormwater management measures in accordance with this
34 Ordinance, each such measure having a drainage area less than or equal to five
35 thousand (5,000) square feet (except grass channels, which shall have a drainage
36 area of less than one (1) acre to qualify).
37

38 e. A fill that:
39

40 (1) Does not impair existing surface drainage, constitute a potential erosion hazard
41 or act as a source of sedimentation to any adjacent land or water course, and
42

43 (2) Is placed on a surface having a slope not steeper than five (5) feet horizontal to
44 one (1) foot vertical; and
45

46 (3) Does not result in a cumulative quantity (sum of cut and fill) more than one
47 thousand (1,000) cubic yards of material within any site; and
48

49 (4) Is less than four (4) feet in vertical height at its deepest point as measured from
50 the natural ground surface; and
51

52 (5) Has no final slope steeper than three (3) feet horizontal to one (1) foot vertical;
53 and
54

- 1 (6) Has all disturbed areas seeded or sodded within seven (7) days of the last
2 disturbance; and
3 (7) Includes appropriate stormwater management measures in accordance with this
4 Ordinance.
5
6 f. Construction of agriculture structures; accepted agricultural land management practices
7 such as plowing; and nursery operations such as the removal and/or transplanting of
8 cultivated sod, shrubs and trees and tree cuttings at or above the existing ground, leaving
9 the stump, ground cover and root mat intact, if the cumulative sum of cut and fill does not
10 exceed one thousand (1,000) cubic yards. Agricultural activities that do not require an
11 erosion and sediment control plan shall require an approved Soil Conservation and Water
12 Quality Plan.
13
14 g. Stockpiling, of raw or processed sand, stone or gravel with slopes at a natural angle of
15 repose at concrete and asphalt processing plants and storage yards, provided an approved
16 erosion and sediment control plan has been implemented to protect against offsite
17 damages.
18
19 h. Refuse disposal areas or sanitary landfills operated and conducted in accordance with the
20 requirements, rules and ordinances adopted by St. Mary's County and the State of
21 Maryland.
22
23 i. Grading and trenching for utility installation within:
24
25 (1) County or State rights-of-way; or
26
27 (2) Utility easements immediately adjacent to road or street rights-of-way or the
28 area on an abutting lot to accommodate the house connections provided no
29 grading or trenching permanently alters the existing grade and the utility
30 company restores to its original condition any previously existing erosion and
31 sediment control measure disturbed or destroyed during the course of utility
32 operations.
33
34 j. Individual private septic system which does not permanently alter the existing grade.
35
36 k. Grading on existing developed lots or parcels for maintenance or landscaping purposes,
37 provided:
38
39 (1) The aggregate of area so affected, or bared at any one time, does not exceed 0.5
40 acre (21,780 square feet); and
41
42 (2) The grade change does not exceed twelve (12) inches at any point and does not
43 alter the drainage pattern; and
44
45 (3) All bare earth is seeded, sodded or otherwise effectively protected from erosive
46 actions within seven (7) days; and
47
48 (4) The grading does not involve a quantity of material in excess of one thousand
49 (1,000) cubic yards; and
50
51 (5) Grading does not result in increased runoff to highly erodible soils; and
52

- 1 (6) Slopes do not exceed twenty five (25) % or fifteen (15) % on highly erodible
2 soils.
3

4 **4.6 Grading Permit Requirements**
5

- 6 1. A grading, zoning, or building permit may not be issued for a property unless (a) an erosion and
7 sediment control plan has been approved by SCD, and (b) any grading within the one hundred
8 (100)-year floodplain of any stream or water course has been approved by MDE, unless exempt
9 from the requirement to prepare a sediment and erosion control plan pursuant to **Section 4.3** of
10 this Ordinance.
11

- 12 2. No grading or clearing permits shall be issued on a site until:
13

14 a. The final site plan approval is granted by LUGM; or
15

16 b. The subdivision plat is approved by the St. Mary's County Planning Commission or
17 Director of LUGM and recorded in the Land Records of the County.
18

- 19 3. A permit may cover the grading and other site work on a single lot, or on a combination of
20 contiguous lots in a single block, or on continuous blocks.
21

- 22 4. Application Requirements. Prior to the issuance of a grading permit, the applicant shall submit to
23 the approving authority the following:
24

25 a. An application form.
26

27 (1) A separate application shall be required for each grading permit;
28

29 b. Specifications, construction sequencing and timing schedules;
30

31 c. A copy of the approved MDE Waterway Permit(s), where applicable, and evidence of
32 any other required wetlands permits or approvals.
33

34 (1) Any proposed disturbance of a wetland requires review by MDE and any
35 disturbance exceeding five thousand (5,000) square feet requires a joint permit.
36 Any disturbance or development in the Chesapeake Bay Critical Area requires
37 review by LUGM.
38

39 d. Any bond required under this Article;
40

41 e. The fee(s) for administration and inspection; and
42

43 a. A copy of the most current deed for the property.
44

- 45 5. Plan Requirements. The grading plan and erosion and sediment control plan shall address site
46 activities during all phases of construction and shall include the following:
47

48 a. The proposed area of development and limits of disturbance;
49

50 b. Delineation of grading units;
51

52 c. The volume of proposed grading;

1 d. The necessary drainage, erosion and sediment control, vegetative establishments and
2 stormwater management facilities;

3
4 e. The "Standard Stabilization Note" stating:

5
6 "Following the initial soil disturbance or re-disturbance, permanent or temporary
7 stabilization must be completed within:

8
9 (1) Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches,
10 perimeter slopes, and all slopes steeper than three (3) feet horizontal to one (1)
11 foot vertical (3:1); and

12
13 (2) Seven (7) calendar days as to all other disturbed or graded areas on the project
14 site not under active grading";

15
16 f. A statement requiring the owner/developer or representative to contact the Maryland
17 Department of the Environment or its agent at the following stages of the project or in
18 accordance with the approved erosion and sediment control plan, grading permit, or
19 building permit:

20
21 (1) Prior to the start of earth disturbance;

22
23 (2) Upon completion of the installation of perimeter erosion and sediment controls,
24 but before proceeding with any other earth disturbance or grading;

25
26 (3) Prior to the start of another phase of construction or opening of another grading
27 unit; and

28
29 (4) Prior to the removal of sediment control practices;

30
31 g. Certification by the owner/developer that any clearing, grading, construction, or
32 development will be done pursuant to the approved erosion and sediment control plan.
33 The certification must also require that the responsible personnel involved in the
34 construction project have a Certificate of Training at an MDE approved training program
35 for the control of erosion and sediment prior to beginning the project. The Certificate of
36 Training for Responsible Personnel may be waived by the approving authority on any
37 project involving four or fewer residential lots. Additionally, the owner/developer shall
38 allow right of entry for periodic on-site evaluation by SCD, LUGM, DPW&T, and MDE;

39
40 h. Certification by a professional engineer, land surveyor, landscape architect, architect, or
41 forester (for forest harvest operations only) registered in the State that the plans have
42 been designed in accordance with erosion and sediment control laws, regulations, and
43 standards, if required by the approving authority or the Administration;

44
45 i. Sequence of Construction narrative providing that:

46
47 (1) All disturbed areas shall be included in the Sequence of Construction narrative;

48
49 (2) All limits of disturbance shall provide adequate control of erosion and sediment
50 during all phases of construction ;
51
52

- 1 (3) Erosion and sediment control measures must be coordinated with the stages of
2 construction; and
3
4 (4) The installation of erosion and sediment control measures must occur prior to
5 the commencement of construction or development;
6
7 j. A schedule for sequentially phased controls of erosion and sediment;
8
9 k. The staging of operations to ensure that an area being developed will not be exposed for
10 an extended period of time without stabilization, and that any disturbed area is
11 completely stabilized before another area is open; and
12
13 l. Other information as required by:
14
15 (1) St. Mary's County Format Guidelines for Preparation of Development Plans for
16 Submission to the approving authority ("Format Guidelines");
17
18 (3) SCD Submittal requirements; and
19
20 (4) Any other state or federal permits or requirements;
21
22 6. Conditions of Approval or Denial. The approving authority shall have the right to deny issuance
23 of a grading permit if the proposed grading would create conditions adverse to the public safety
24 and welfare. In granting any grading permit, the approving authority may impose conditions
25 reasonably necessary to prevent a nuisance or unreasonable hazard to person or to public or
26 private property. Such conditions may include, but need not be limited to the following:
27
28 a. Improvement of any existing grading to meet the standards required under this Ordinance
29 for new grading and for erosion and sediment control;
30
31 b. Designation of easements for drainage facilities and for the maintenance of slopes; and
32
33 b. Adequate control of dust by watering or other control methods acceptable to the
34 approving authority and in conformance with applicable air pollution regulations.
35

36 **4.7 Site Development Standards**

- 37
38 1. Standards. All grading plans and specifications shall be in accordance with the 2011 Maryland
39 Standards and Specifications for Soil Erosion and Sediment Control and any subsequent revisions,
40 and shall meet the following standards:
41
42 a. *Topography.* The development shall be fitted to the topography and soils so as to create
43 the least erosion potential;
44
45 b. *Natural Vegetation.* The natural vegetation shall be retained and protected
46 wherever possible;
47
48 c. *Stabilizations.* The smallest practical area shall be exposed for the shortest practical
49 period of time. Earth disturbances must be temporarily or permanently stabilized as soon
50 as possible and as dictated by the approved plan;

- 1 d. *Natural Resources.* Protection of natural resources such as wetlands, springheads,
2 floodplains, Tier II watersheds, steep slopes and highly erodible soils;
3
4 e. *Perimeter Controls.* Erosion control practices, such as earth dikes, perimeter
5 dikes/swales, sediment traps and silt fences shall be installed to minimize soil and water
6 losses;
7
8 f. *Sensitive Areas.* Temporary vegetation or mulching shall be used to protect sensitive areas
9 exposed during the time of development;
10
11 g. *Runoff Control.* During and after development, provisions shall be made to effectively
12 accommodate the increased runoff caused by changeable soil and surface conditions and
13 to prevent siltation of the receiving stream;
14
15 h. *Inspection.* Provisions for inspecting and maintaining sediment controls; and
16
17 i. *Steep Slopes.* In accordance with the Standards set forth in the Comprehensive Zoning
18 Ordinance, in order to prevent abnormal or excessive grading, the following additional
19 requirements shall pertain to those areas where steep slopes exist:
20
21 (1) The extent of cutting and filling that will be permitted on any lot will be based
22 on the soil condition of the site, as determined by the approving authority and
23 SCD;
24
25 (2) All roads and streets shall be placed as close to the contour as possible to
26 minimize cutting or filling;
27
28 (3) The construction of all structures shall be preceded by the installation of storm
29 drainage system(s) and stabilization measures; and
30
31 (4) Runoff directed to steep slopes and highly erodible soils shall be conveyed to an
32 acceptable outlet after being treated by ESD's to the MEP. Such outlets shall be
33 designed to protect the receiving slopes and channel from erosion.
34

35 2. Vegetative Erosion and Sediment Control Measures. The 2011 Maryland Standards and
36 Specifications for Soil Erosion and Sediment Control and any subsequent revisions are
37 incorporated herein.
38

- 39 a. *Temporary Vegetative Stabilization.* Where soil is subject to erosion or consecutive days of
40 inactivity as a result of grading or filling operations, temporary stabilization by seeding shall
41 be provided in accordance with **Article 4.6.5.e.** The requirements for temporary seeding are
42 as follows:
43
44 (1) Seedbed preparation;
45
46 (2) Lime and fertilizer as required;
47
48 (3) Seeding; and
49
50 (4) Mulching and mulch anchoring as required.
51

1 b. *Temporary Mulch Stabilization.* Temporary mulch stabilization is acceptable only when
2 seeding is not feasible. The requirements for temporary mulch stabilization are as
3 follows:

- 4
5 (1) Straw mulch applied at a rate of two (2) tons per acre, with a loose depth of one
6 (1) to two (2) inches, or wood cellulose fiber applied at a dry weight of one
7 thousand five hundred (1,500) pounds per acre. Mulch shall be placed on a
8 friable soil; and
9
10 (2) Mulch anchoring as required.

11
12 c. *Mulching Final Grade.* Where permanent seeding after final grading is delayed until the
13 next season, protection of soil from erosion is required as follows:

- 14
15 (1) A minimum of four (4) inches of top soil, or approved equivalent;
16
17 (2) Application of required lime and fertilizer;
18
19 (3) Preparation of final seedbed;
20
21 (4) Temporary seeding;
22
23 (5) Mulching as required; and
24
25 (6) Mulch anchoring as required.

26
27 d. *Permanent Vegetative Stabilization.* Permanent seeding shall be established where soil is
28 subject to erosion or consecutive days of inactivity as a result of grading or filling
29 operations in accordance with Article 4.6.5.e. Adapted grasses, legumes, and other
30 plants shall be utilized to stabilize exposed areas. The final choice of species should be
31 determined by considering such factors as adaptability to climate, soils and terrain and
32 degree of maintenance. The requirements to establish permanent vegetative stabilization
33 are as follows:

- 34
35 (1) Install required erosion control practices;
36
37 (2) Apply required lime and fertilizer;
38
39 (3) Prepare adequate seedbed;
40
41 (4) Seed or sod; and
42
43 (5) Apply mulch and anchor.

44
45 1. Structural Erosion and Sediment Control Measures. All erosion and sediment control measures
46 shall be in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and
47 Sediment Control and any subsequent revisions, and any additional controls SCD deems necessary
48 to achieve the purposes of this Article including the following:

- 49
50 a. Private driveways serving multiple lots shall be designed and shown on the approved
51 erosion and sediment control plans; and
52 b. Private driveways shall require an improved surface material on intermittent slopes in
53 excess of twelve (12) %. The surface material shall be crushed concrete, asphalt, CR-6,
54 blue-chip or an equivalent surface treatment acceptable to SCD.
55

1 2. Fills and Classification. The grading plans and specifications shall specify and delineate the use
2 and extent of fills in accordance with the following classifications:

- 3
4 a. *Type 1 Fill.* Load bearing fills proposed for support of buildings, walls, and other
5 structures, which would be especially impaired by settlement.
6
7 b. *Type 2 Fill.* Load bearing fills proposed for support of roadways, pavements, utility lines,
8 and structures, which would not be significantly impaired by moderate settlement.
9
10 c. *Type 3 Fill.* Common fills proposed for landscaping or for other non-land bearing usage.

11
12 3. Materials. All load bearing fills shall meet the following requirements:

- 13
14 a. No inclusions of organic or other deleterious materials which may be subject to decay
15 shall be permitted;
16
17 b. All fills shall be free of inclusions of ice or snow; and
18
19 c. No rock or similar irreducible material with a maximum dimension greater than eight (8)
20 inches shall be buried or placed in any load bearing fill within two (2) feet of finished
21 grade or within two (2) feet of foundation base elevation. When rock or similar
22 irreducible material is placed in other fill areas, it shall be performed under the direction
23 and supervision of a Professional Engineer.

24
25 8. Preparation of Ground.

- 26
27 a. The natural ground surface shall be prepared to receive fill by removing all organic
28 surface materials, non-complying fill and unsuitable soils in accordance with the
29 following provisions, except as otherwise permitted by the approving authority based on
30 the recommendation of the Professional Engineer.
31
32 b. Prior to placing Type 1 and Type 2 Fills, the ground surface, if within 5 feet of finished
33 grade or foundation base elevation, shall be compacted to achieve at least 90% of
34 maximum density. The top six (6) inches shall be compacted to achieve at least 90% of maximum density as determined in
35 the laboratory by ASTM Proctor Test. Type 3 fill shall be compacted sufficiently so as to
36 be stable and to prevent an erosion hazard. In place (field) density shall be determined by
37 ASTM Test or AASHTO equivalent tests methods, or by an equivalent test approved by a
38 licensed geo-technical or structural engineer. All Fills shall be placed in approximately
39 horizontal layers, each layer having a loose thickness of not more than eight (8) inches.
40
41 c. No fill shall be placed on frozen ground.

42
43
44 9. Compaction. All fill will be compacted in accordance with the following provisions:

- 45
46 a. All Type 1 and Type 2 Fills shall be compacted to a minimum of 95% and 90%,
47 respectively, of maximum density as determined in the laboratory by ASTM Test Method
48 D1557 - 66%, also known as the Proctor Test. Type 3 fill shall be compacted sufficiently
49 so as to be stable and to prevent an erosion hazard.

50

- 1 b. In place (field) density shall be determined by ASTM Test or American Society of
2 Highway Officials equivalent tests method DI 156-64T method or by an equivalent test
3 approved by LUGM.
4
- 5 c. Fills shall be placed in approximately horizontal layers, each layer having a loose
6 thickness of not more than eight (8) inches.
7
- 8 10. Structural Rock Fills. Fills constructed predominately of large rock (such as sandstone and iron
9 concretions) will be permitted only if the specifications for such fill are prepared by, and
10 construction for such fill is certified to be in compliance by, a licensed Professional Engineer.
11
- 12 11. Maximum Slope for Fills.
13
14 a. No fill shall be made which creates an exposed surface steeper than a slope of three
15 (3) feet horizontal to one (1) foot vertical without prior approval.
16
17 b. The approving authority may require that the fill be constructed with an exposed surface
18 with a grade less steep than three (3) feet horizontal to one (1) foot vertical.
19
20 c. Fills toeing out on natural slopes at a grade steeper than three (3) feet horizontal to one
21 (1) foot vertical shall not be made without prior approval.
22
- 23 12. Maximum Slope for Cut. Finish cuts shall not be made steeper than a slope of two (2) feet
24 horizontal to one (1) foot vertical without prior approval.
25
- 26 13. Cut and Fills Slopes - Bench Terraces.
27
28 a. Cut and fill slopes in excess of twenty (20) feet in height or depth shall be benched or
29 terraced according to the Maryland Standards and Specifications for Erosion and
30 Sediment Control.
31
32 b. Cuts and fills shall be set back from property lines, and buildings shall be set back from
33 cut or fill slopes, at a minimum distance of six (6) feet.
34
35 c. All benches shall be a minimum width of six (6) feet and shall drain to a stable outlet.
36
37 d. The setbacks established by this Section may be increased by the approving authority
38 based on recommendations by a licensed Professional Engineer if necessary for safety or
39 stability or to prevent possible damage from water, soil or debris.
40
- 41 14. Drainage. The following provisions apply to the conveyance and disposal of surface water runoff:
42
43 a. *Disposal.* All drainage facilities shall be designed to convey surface water in such a
44 manner as to prevent erosion, overflow or ponding. Said water shall be conveyed
45 according to an approved design criteria, standards and procedures as required by this
46 Ordinance. The ponding of water shall not be permitted above the cut or fill slopes or on
47 drainage terraces. Adequate drainage facilities shall be provided to prevent such ponding.
48
49 b. *Erosion Prevention.* The applicant and the owner shall make adequate provision to
50 prevent any surface or ground waters from materially damaging the face of any cut or fill.
51 All slopes shall be protected from surface runoff from above by berms or swales.
52

- 1 c. *Grading Around Buildings.* All areas around buildings shall be graded to provide for
2 positive drainage in accordance with the building code and shall provide a minimum fall
3 of six (6) inches within the first ten (10) feet away from structures.
4
5 d. Stormwater management shall be performed on each site in accordance with this
6 Ordinance and regulations of the State of Maryland.
7
8

9 **4.8 Erodible Soils Standards**

- 10
11 1. In areas where the erodible soil types, as set forth in the Comprehensive Zoning Ordinance, are
12 present, the applicant shall submit an engineered erosion and sediment control plan to SCD which
13 provides for long-term management of the runoff and erosion in the vicinity.
14 2. Where highly erodible soil types, as defined in the Comprehensive Zoning Ordinance,
15 predominate on-site or in off-site areas that will receive runoff from proposed impervious surfaces,
16 proposed grading, or other activity, applicants for a grading permit shall:
17
18 a. Identify and locate all highly erodible soil type map units within and down slope of the
19 area of proposed grading or other activity;
20
21 b. Identify and locate existing gully areas, active and inactive, within proposed development
22 and areas down slope of proposed grading or other activity;
23
24 c. Map all proposed stormwater discharges downstream from proposed development,
25 identifying the presence of existing gullies, steep slopes, and areas of increased
26 concentrated flow;
27
28 d. Document flow paths on-site from discharge source to existing blue line stream channels;
29 and
30
31 e. Determine and document all stormwater runoff discharges from areas proposed for
32 development, including but not limited to roads, any impervious area, any area
33 designated for land use change, or areas proposed for mass grading. Discharge shall be
34 determined in each sub-watershed exiting the development area based on runoff
35 generated from a 10-year frequency storm.
36
37 3. Designs shall use low impact stormwater management practices to simulate runoff rates,
38 infiltration and flow patterns of forest cover for the site, whether or not the site is currently
39 forested.
40
41 4. Design plans that result in concentrated runoff shall include measures necessary to safely convey
42 10-year frequency storm peak flows from discharge points within proposed development areas
43 downstream to existing on- or off-site blue line stream(s) or tidal waters. Particular attention shall
44 be paid to avoid stormwater conveyance through existing gullies, across steep slopes, and through
45 areas where concentrated storm flow did not previously occur.
46
47

48 **4.9 Permits and Bonding**

- 49
50 1. Permit. The issuance of a grading permit shall constitute an authorization to do only the work set
51 forth in the application for the permit, or in the site plans and specifications submitted and
52 approved as part of the application. All work performed by the person to whom the permit is

1 issued or by his successor shall be in accordance with the requirements of this Ordinance.
2 Application for permits shall authorize the County to enter upon the land for restoration of the site
3 upon default by the landowner or applicant. All inspection, application and plan review fees must
4 be paid to the appropriate agencies in accordance with the current fee schedules prior to issuance
5 of permits or authorization for additional work.
6

7 2. Time Limitations. A grading permit expires two (2) years from the date of issuance. The applicant
8 shall fully complete all of the work required pursuant to the grading permit prior to expiration of
9 the permit. At least thirty (30) days prior to the expiration of a grading permit, the permittee may
10 request in writing an extension of the permit setting forth the reasons for the requested extension.
11 Where, in the discretion of the approving authority and SCD, such an extension is warranted, an
12 extension may be granted if the permit has not yet expired. If the permit expires, the grading and
13 erosion and sediment control plan must be resubmitted for review and approval, and a new permit
14 issued, prior to any additional work being undertaken.

15
16 3. Bonding. A grading permit shall not be issued for grading involving the movement of more than
17 five thousand (5,000) cubic yards of soil (total cut and fill) unless the applicant shall first post with
18 the approving authority a performance bond executed by the owner and a corporate surety with
19 authority to do business in this State as a surety. The bond shall be in a form approved by the
20 County Attorney and in an amount not less than the estimate by the approving authority of the
21 total cost of the erosion and sediment control, stabilization work, and construction of stormwater
22 management facilities authorized by the permit.
23

24 a. The bond shall include the following provisions:

25
26 (1) The applicant shall comply with all of the terms and conditions of the grading
27 permit and this Ordinance;

28
29 (2) Any extension of time for completion time shall not release the applicant's
30 surety on the bond;

31
32 (3) Failure to complete the erosion and sediment control, stabilization, or
33 stormwater management work required by the grading permit shall constitute a
34 default under the grading permit and grounds for forfeiture of the bond; and

35
36 (4) Upon default, the application and surety shall continue to be firmly bound under
37 a continuing obligation, to the extent of the amount of the bond, for the payment
38 of all necessary costs and expenses or liabilities which may be incurred or
39 expended by the approving authority on behalf of St. Mary's County to meet the
40 minimum requirements of this Ordinance with particular emphasis on stability,
41 safety and erosion control.
42

43 b. The bond shall remain in full force and effect until the completion of the work to the
44 specifications required and submission of the as-built plan. If all work under the permit
45 is not completed prior to expiration of the permit, or violates any other term or condition,
46 forfeiture of the bond to St. Mary's County will be sought.

47
48 c. In lieu of a surety bond, the applicant may deposit with the approving authority cash or
49 letter of credit or other security approved by the County Attorney in the amount estimated
50 pursuant to Article 4.9.3.

- 1 d. In the event that the posted bond or collateral is insufficient to cover the cost of
2 restoration of the site or damage caused by a default, the County shall be entitled to
3 damages.
- 4 e. Upon the satisfactory completion of the work specified in the grading permit, any
5 remaining portion of a cash deposit shall be refunded to the applicant.
- 6
7
8 f. In addition to the maintenance bond requirements in Article 3.14.7., security to provide
9 for long term maintenance of installed BMPs and performance bonding to correct
10 problems arising from the development may be required as a condition of approval for
11 the grading permit.
12

13 **4.10 Waivers**

14
15 The approving authority may only grant a waiver from the requirements of the Standards and Specifications
16 when strict adherence will result in exceptional hardship and a waiver is consistent with the intent of this
17 Ordinance. The owner/developer shall submit a written request for a waiver to the approving authority.
18
19

20 **4.11 Plan Referrals, Modifications and Revisions**

- 21
22 1. Referrals. Prior to issuance of a grading permit, three (3) copies of the approved Erosion and
23 Sediment Control Plan shall be forwarded by SCD to the approving authority for issuance of
24 appropriate permits.
25
- 26 2. Modifications. Major modifications of the approved grading plans shall be submitted to the
27 approving authority and SCD and reprocessed in the same manner as the original plan and referred
28 in accordance with Article 4.11.3 of this Ordinance. Field modifications of a minor nature may be
29 authorized by the approving authority, provided that written authorization is given to the person
30 performing the work with copies forwarded within fifteen (15) days to the applicant and SCD.
31 Minor field modifications for erosion and sediment control are the responsibility of the Maryland
32 Department of the Environment.
33
- 34 3. Revisions. Any proposed revision to approved plans and profiles shall be submitted to and
35 approved by the approving authority. The following procedures shall be required for the
36 submission and approval of a revision:
37
- 38 a. A letter of transmittal shall accompany each revision submitted for review and approval,
39 describing the revision in detail and its general location;
40
- 41 b. The submitting engineer shall seal, date and certify all revisions to ensure that no other
42 changes have been made on the plan or profile except those previously approved;
43
- 44 c. All revisions under this Article 4.11, shall be clearly shown and circled in red;
45
- 46 d. A revision block shall be incorporated as part of the title block for a plan or profile sheet.
47 Revisions shall be indicated by a numbered "delta" in the vicinity of the change on the
48 plan and described in the revision block beside the corresponding number;
49
- 50 e. Where significant construction deviation is noted and no plan revision was approved, the
51 County, at its option, may accept in lieu of an approved plan revision an "as-built" plan

1 and survey, prepared and certified by a Design Professional at the same scale as the
2 original plan and showing all improvements and final grades .
3
4

5 **4.12 Construction Responsibilities**
6

- 7 1. Responsibility of Permittee. During grading operations, the permittee shall be responsible for the
8 prevention of damage to any public utilities or services within the limits of grading and along any
9 routes of travel of equipment. No person shall grade on land so close to the property line as to
10 endanger any adjoining public street, sidewalk, alley or any other public or private property
11 without supporting and protecting such property from settling, cracking or other damage which
12 might result. Grading may take place on adjacent property if an easement is secured from the
13 property owner. Storm drains must terminate in an acceptable outfall.
14
- 15 2. Removal of Debris. No debris shall be deposited in floodplains, watercourses, public streets,
16 highway, sidewalks, or other public thoroughfares; and the permittee shall promptly remove all
17 soil, miscellaneous debris or other materials spilled, dumped or otherwise deposited in floodplains,
18 watercourses, public streets, highways, sidewalks, or other thoroughfares during transit or
19 operation.
20
- 21 3. Maintenance of Protective Measures. The owner of any property on which grading or other work
22 has been done pursuant to the provisions of this Article shall maintain and promptly repair or
23 restore all graded surfaces, erosion control measures, vegetative covers or other protective
24 measures if disturbed or destroyed during construction. Such repair or restoration shall be in
25 accordance with the approved plans and specifications as required by this Ordinance unless
26 alternative permanent measures are approved by the approving authority.
27
- 28 4. Erosion & Sediment Control. A permittee shall implement the measures contained in the approved
29 erosion and sediment control plan, conduct the construction as specified in the sequence of
30 construction and implement any sediment control measures reasonably necessary to control
31 sediment run-off.
32

33 **4.13 Inspections and Notices**
34

- 35 1. Inspection Schedule. The inspection schedule shall be as established and published by the
36 approving authority.
37
- 38 2. Documentation of Completion. Upon completion of permitted work authorized under this
39 Ordinance, the approving authority may require the following:
40
- 41 a. An "as-built" plan and survey, meeting the requirements of the Format Guidelines,
42 prepared and certified by a Professional Land Surveyor or Professional Engineer at the
43 same scale as the original plan and showing all improvements and final grades for
44 stormwater management; and
45
- 46 b. Certification by the permittee that all grading, drainage, erosion control measures and
47 facilities and vegetative measures have been completed in conformance with the
48 approved plans and specifications; and
49
- 50 c. A report summarizing the inspection reports, field and laboratory tests and locations of
51 tests.
52

1 d. Maintenance bonding in accordance with **Article 4.9.4.d.**

2
3 3. Final Inspection. The permittee shall notify the approving authority when the grading operation is
4 ready for final inspection. Final inspection requires completion of all work (including installation
5 of all drainage structures and erosion protective devices) as well as the required vegetative
6 stabilization and the submission of all required reports.

7
8 4. Notice to Comply. If at any stage the work does not conform to the grading permit, or to any
9 requirements of the approving authority or MDE, a written notice to comply shall be given to the
10 applicant. Such notice shall set forth the corrections required and the time within which
11 corrections shall be made. Upon the failure to comply with the notice, the permittee shall be
12 considered in violation of this Ordinance, in which case the bond, or other security, may be
13 forfeited.
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1 **ARTICLE 5. ENFORCEMENT**

2
3 It shall be the duty of the Directors of Public Works & Transportation and Land Use and Growth
4 Management to enforce this Ordinance and to bring to the attention of the Planning Commission, Board of
5 County Commissioners, or County Attorney any violations or lack of compliance herewith.
6

7 **5.1 Violation of Ordinance**

8
9 a. It shall be unlawful for any person, whether or not acting as owner, lessee, principal,
10 agent, or employee of another, to violate any provisions of this Ordinance, to permit any
11 such violation, or to fail to comply with the requirements of this Ordinance, including but
12 not limited to the following:
13

- 14 (1) failure to obtain approval or permits as required by laws or ordinances;
15
16 (2) failure to give proper notice of initiation of work;
17
18 (3) performance of work without authorization;
19
20 (4) failure to adhere to approved plans;
21
22 (5) failure to take corrective action after notice; or
23
24 (6) failure to complete work for which a permit was issued prior to expiration of a
25 permit, including any extension thereof.
26

27 **5.2 Notice of Violation**

28
29 a. A notice of violation shall be issued for noncompliance with the requirements of this
30 Ordinance specifying the required corrective action and the time for compliance.
31

32 b. If satisfactory action specified in a notice of violation is not completed within the time for
33 compliance:
34

- 35 (1) a stop work order may be issued for the site by the approving authority;
36
37 (2) the permit may be suspended for an indefinite period;
38
39 (3) the permit may be revoked; and
40
41 (4) demand upon a surety or resort to other security may be made.
42

43 **5.3 Prosecution of Violations**

44
45 a. The Departments of Public Works & Transportation and Land Use and Growth Management are
46 responsible for the enforcement of this section.
47

48 b. No citation for a municipal infraction shall be issued until the expiration of thirty (30) days after
49 the issuance of a Notice of Violation.
50

1 c. After the expiration of thirty (30) days after the issuance of a Notice of Violation, the Department
2 may issue a citation for a municipal infraction. The citation for a municipal infraction shall be
3 prosecuted in the same manner and to the same extent as set forth in Article 23A, §3(b) of the
4 *Annotated Code of Maryland*.

5
6 d. Each day in which any such violation occurs, or in which such person fails to perform the duties
7 required of him or to comply with the provisions of this Ordinance or the Notice of Violation,
8 shall constitute a separate offense.

9
10 e. Each violation of this Ordinance shall be a municipal infraction punishable by a fine not to exceed
11 One Thousand Dollars (\$1,000.00).
12

13 **5.4 Actions to Remedy Violations**

14
15 In addition to the imposition of any penalties provided in this Ordinance, the County may initiate an action
16 for injunction, mandamus, abatement or any other appropriate judicial action to compel compliance with
17 the provisions of this Ordinance.
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1 **ARTICLE 6. DEFINITIONS**

2
3 For the purpose of this Ordinance, the following terms have the following meanings:

4
5 **Acceptable Outfall** means the tidewater or that point where stormwater can be released to a
6 channel without causing scouring, erosion, or resulting sedimentation to the receiving channel or
7 its floodplain.

8
9 **Administration** means the Maryland Department of the Environment (MDE), Water Management
10 Administration.

11
12 **Administrative Waiver** means a waiver that allows the construction of the development to be
13 governed by the stormwater management ordinance in effect as of May 4, 2010.

14
15 **Adverse Impact** means any deleterious effect on waters or wetlands, including their quality,
16 quantity, surface area, species composition, aesthetics or suitability for human or natural uses
17 which is or may be potentially harmful or injurious to, or which may unreasonably interfere with
18 health, welfare, safety, outdoor recreation or property, or to biological productivity, diversity, or
19 stability.

20
21 **Agricultural Land Management Practices** means those methods and procedures used in the
22 cultivation of land in order to further crop and livestock production and conservation of related
23 soil and water resources. Logging and timber removal operations are not to be considered a part
24 of this definition.

25
26 **Applicant** means any person (including an engineer, developer or owner), firm, or governmental
27 agency that executes the necessary forms to procure official approval of a project or a permit to
28 carry out construction of a project

29
30 **Approval** means a documented action by the approving agency following a review indicating
31 compliance with requirements or standards. "Approval" does not mean an acknowledgement by
32 the approving authority that submitted materials have been received for review.

33
34 **Approving Authority** means the department or agency to which approval authority is delegated
35 by law.

36
37 **Aquifer** means a porous water bearing geologic formation generally restricted to materials capable
38 of yielding an appreciable supply of water.

39
40 **Bench Terraces** means an area (less than a three (3) % grade) constructed on sloping land
41 according to designed dimensions and grades. Bench terraces are applied along the contour with
42 the length and width controlled by the natural terrain and required erosion and sediment controls.

43
44 **Best Management Practice (BMP)** means an approved structural device or non-structural
45 practice designed to temporarily store or treat stormwater runoff in order to mitigate flooding,
46 reduce pollution, and provide other amenities.

47
48 **Channel Protection Storage Volume (Cp_v)** means the volume used to design structural
49 management practices to control stream channel erosion. Methods for calculating the channel
50 protection storage volume are specified in the 2000 Maryland Stormwater Design Manual,
51 Volumes I & II.

1 CIP means Capital Improvement Program for St. Mary's County.
2

3 **Clear and Clearing** mean any activity that removes vegetative ground cover while leaving the
4 root mat intact but shall not include the ordinary mowing of grass.

5
6 **COMAR** means the Code of Maryland Regulations.
7

8 **Concept Plan** means the first of three required plan approvals that are described in COMAR
9 26.17.02, and that includes the information necessary to allow an initial evaluation of a proposed
10 project.
11

12 **Construction** means land clearing, grubbing, topsoil stripping, soil movement, grading, cutting
13 and filling, transporting or otherwise disturbing land for any purpose.
14

15 **Cumulative Disturbance** means the sum of successive occurrences of development related soil
16 disturbance on a Site since July 1, 2001.
17

18 **Design Professional** means a professional registered and authorized by the State of Maryland
19 responsible for the preparation and submission of plans and plats on behalf of a developer.
20

21 **Design Manual** means the 2000 Maryland Stormwater Design Manual, Volumes I & II, and all
22 subsequent revisions, that serves as the official guide for stormwater management principles,
23 methods, and practices.
24

25 **Detention Structure** means a permanent structure for the temporary storage of runoff designed so
26 as not to create a permanent pool of water.
27

28 **Developer** means a person with freehold, possessory or contractual interest in land proposed for
29 development.
30

31 **Direct Discharge** means the concentrated release of stormwater to tidal waters or vegetated tidal
32 wetlands from new development or redevelopment projects in the Critical Area.
33

34 **Drainage Area** means the area contributing runoff to a single point measured in a horizontal plane
35 which is enclosed by a ridgeline.
36

37 **Easement** means a grant or reservation of a non-possessory right in land.
38

39 **Environmental Permit** means a permit issued, or to be issued, by the County after approval by
40 the Environmental Planner, authorizing work of any type in resource protection areas, sensitive
41 areas, the Critical Area or tidal waters.
42

43 **Environmental Site Design (ESD)** means small-scale stormwater management practices, non-
44 structural techniques, and site planning to replicate natural hydrologic runoff characteristics and
45 minimize the impact of land development on water resources. Methods for designing ESD
46 practices are specified in the Design Manual.
47

48 **Erosion** means the process by which the ground surface is degraded or worn away by the action of
49 wind, water, ice, or gravity.
50

51 **Erosion and Sediment Control** means a system of structural and vegetative measures that
52 minimizes soil erosion and off-site sedimentation.

1 **Erosion and Sediment Control Plan** means a strategy or plan designed to minimize erosion and
2 prevent off-site sedimentation.

3
4 **Excavation** means any act by which soil or rock is cut into, dug, quarried, uncovered, removed,
5 displaced, or relocated and includes the conditions resulting therefrom.

6
7 **Existing Grade** means the vertical location of the existing ground surface prior to excavating or
8 filling.

9
10 **Extended Detention** means a stormwater design feature that provides gradual release of a volume
11 of water in order to increase settling of pollutants and protect downstream channels from frequent
12 storm events. Methods for designing extended detention BMPs are specified in the Design
13 Manual.

14
15 **Extreme Flood Volume (Q_t)** means the storage volume required to control infrequent large storm
16 events in which overbank flows reach or exceed the boundaries of the 100-year floodplain.

17
18 **Fill** means a deposit of materials of any kind placed by artificial means.

19
20 **Final Project Approval** means approval of the final stormwater management, grading, and
21 erosion and sediment control plan required to construct a project's stormwater management and
22 erosion and sediment control facilities, and includes payment of fees and approval of security
23 instruments for construction.

24
25 **Final Sediment and Erosion Control Plan** means, along with the final stormwater management
26 plan, the last of three plans submitted under the comprehensive review and approval process
27 required by this Ordinance and described in COMAR 26.17.09. Final erosion and sediment
28 control plans shall be prepared and approved in accordance with the requirements of the approving
29 authority and this Ordinance and designed in accordance with the Standards and Specifications.

30
31 **Final Stormwater Management Plan** means the last of three required plan approvals that
32 includes the information necessary to allow all approvals and permits to be issued by the
33 approving authority.

34
35 **Finished Grade** means the final grade or elevation of the ground surface conforming to the
36 proposed design.

37
38 **Format Guidelines** means the St. Mary's County DPW&T Format Guidelines for Development
39 Plan Submittals.

40
41 **Grade and Grading** means disturbance of earth by, including but not limited to, excavating,
42 filling, stockpiling, grubbing, removing root mat or topsoil, or any combination thereof.

43
44 **Grading Unit** means the maximum contiguous area allowed to be graded at a given time. For the
45 purposes of this Ordinance, a grading unit is twenty (20) acres or less.

46
47 **Highly Erodible Soils** means those soils with a slope greater than fifteen (15) %, or those soils
48 with a K (erosivity) value greater than 0.35 and on slopes greater than five (5) %.

49
50 **Impervious Surfaces** means all buildings, roads, parking and driveways, paving, patios, decks,
51 sidewalks, stoops, porches, steps, walkways, piers, swimming pools constructed on a lot which
52 reduce the infiltration capacity of the land or result in increased storm water runoff.
53

1 **Inspection Agency** means the Administration or St. Mary's County.
2

3 **Infiltration** means the passage or movement of water into the soil surface.
4

5 **Maximum Extent Practicable (MEP)** means a stormwater management system design that
6 utilizes all reasonable ESD planning techniques and treatment practices and implements a
7 structural BMP only when necessary
8

9 **Off-Site Stormwater Management** means the design and construction of a facility necessary to
10 control stormwater from more than one development.

11 **One (1) -Year Design Storm** means, in St. Mary's County, a rainfall event that produces 2.8
12 inches of rain in a twenty four (24)-hour period, causing a one-year flood. The rainfall depth is
13 termed the one (1)-year design storm.
14

15 **One Hundred (100) -Year Design Storm** means a flood that has a one (1) % chance of occurring
16 in any given year. In St. Mary's County, 7.7 inches of rain in a twenty four (24)-hour period
17 produces a one hundred-year flood. The rainfall depth is termed the 100-year design storm.
18
19

20 **On-Site Stormwater Management** means the design and construction of systems necessary to
21 control stormwater within a single development.
22

23 **Owner/Developer** means a person or entity who is an applicant or permittee.
24

25 **Overbank Flood Protection Volume (Q_p)** means the volume controlled by structural practices to
26 prevent an increase in the frequency of out of bank flooding generated by development. Methods
27 for calculating the overbank flood protection volume are specified in the Design Manual.
28

29 **Permittee** means any person to whom a permit is issued pursuant to the provisions of this
30 Ordinance.
31

32 **Person** means the federal government, the State of Maryland, a municipal corporation, or a
33 political subdivision of the State, or an individual, agent, receiver, trustee, guardian, executor,
34 administrator, fiduciary, partnership, firm, association, public or private corporation, or any other
35 entity.
36

37 **Pollution Trading** means equivalent reductions in nutrients, and other pollutants at a location
38 other than where the pollutants are generated.
39

40 **Preliminary Project Approval** means an approval as part of the preliminary development or
41 planning review process of a plan that includes: 1) the number of planned dwelling units or lots
42 and proposed density; 2) the proposed size and location of all land uses in the project; 3) a plan
43 that identifies the proposed drainage patterns, locations of all points of discharge from the site, and
44 the type, location, and size of all stormwater management controls based upon site-specific
45 computations of stormwater management requirements; 4) the proposed alignment, location and
46 construction type and standard for all proposed roads, access ways, and areas of vehicular travel;
47 5) a demonstration that the methods by which the development will be supplied with water and
48 wastewater services are adequate; 6) the size type, and location of all proposed wastewater and
49 water system infrastructure; and 7) any other information deemed necessary by the approving
50 authority to adequately review the proposal.
51

1 **Principal Spillway** means the primary outlet device for a stormwater impoundment BMP,
2 including retention, extended-detention, and detention facilities. The principal spillway is designed
3 and sized to regulate the allowable discharge from the impoundment facility.

4
5 **Recharge Volume (Re_v)** means that portion of the water quality volume used to maintain
6 groundwater recharge rates at development sites. Methods for calculating the recharge volume are
7 specified in the Design Manual.

8
9 **Redevelopment** means any construction, alteration, or improvement performed on sites where
10 existing land use is commercial, industrial, institutional, or multi-family residential and existing
11 impervious area exceeds forty (40) %.

12
13 **Retention Structure** means a permanent structure that provides for the storage of runoff by means
14 of a permanent pool of water.

15
16 **Retrofitting** means the construction of a structural BMP in a previously developed area, the
17 modification of an existing structural BMP, or the implementation of a non-structural practice to
18 improve water quality over current conditions.

19
20 **SCD** means the St. Mary's Soil Conservation District.

21
22 **Sediment** means soils or other surficial materials transported or deposited by the action of wind,
23 water, ice, gravity, or artificial means.

24
25 **Site** means any tract, lot or parcel of land or combination of tracts, lots, or parcels of land, which
26 are in one ownership, or are contiguous and in diverse ownership where development is to occur.

27
28 **Site Development Plan** means the second of three plans submitted under the comprehensive
29 review and approval process required by this Ordinance and described in COMAR 26.17.02. A site
30 development plan shall include the information necessary to allow a detailed evaluation of a
31 proposed project.

32
33 **Soil Conservation and Water Quality Plans** means land use plans for farms that show farmers
34 how to make the best possible use of their soil and water resources while protecting and
35 conserving those resources for the future.

36
37 **Stabilization** means the protection of exposed soils from erosion by the application of seed and
38 mulch, seed and matting, sod, other vegetative measures, and/or structural means

39
40 **Standard Erosion and Sediment Control Plan** means an erosion and sediment control plan that
41 may be used for single family development when the proposed disturbed area exceeds five
42 thousand (5,000) square feet or one hundred (100) cubic yards of material but does not exceed 0.5
43 acres (21,780 square feet) and
44 contiguous lots are not being developed by the same owner, builder or developer.

45
46 **Standards and Specifications** means the "2011 Maryland Standards and Specifications for Soil
47 Erosion and Sediment Control" or any subsequent revisions.

48
49 **Steep Slope** means a slope, which is characterized by increased runoff, erosion and sediment
50 hazards for slopes as defined in the St. Mary's County Comprehensive Zoning Ordinance.
51

1 **Stormwater** means water that originates from a precipitation event.
2

3 **Stormwater Management Plan** means a set of drawings or other documents submitted by a
4 person as a prerequisite to obtaining a stormwater management approval, which contain all of the
5 required information and specifications pertaining to stormwater management.
6

7 **Stormwater Management System** means natural areas, ESD practices, stormwater management
8 measures, and any other structure through which stormwater flows, infiltrates, or discharges from
9 a site.
10

11 **Structure** means anything constructed or erected, other than a fence or retaining wall, which
12 requires location on the ground or is attached to something having a location on the ground.
13

14 **Ten (10) -Year Design Storm** means a flood that has a ten (10) % chance of occurring in any
15 given year. In St. Mary's County, 5.4 inches of rain in a twenty four (24)-hour period produces a
16 ten-year flood. The rainfall depth is termed the ten (10)-year design storm.
17

18 **Topography** means the existing configuration of the earth's surface including the relative relief,
19 elevation, and position of land features.
20

21 **Two (2) -Year Design Storm** means a flood that has a fifty (50) % chance of occurring in any
22 given year. In St. Mary's County, 3.4 inches of rain in a twenty four (24)-hour period produces a
23 ten (10)-year flood. The rainfall depth is termed the two (2)-year design storm.
24

25 **Waiver** means the modification of the minimum stormwater management requirements of this
26 Ordinance.
27

28 **Watercourse** means any natural or artificial stream, river, creek, ditch, channel, canal, conduit,
29 culvert, drain, waterway, gully, ravine, or wash, including any adjacent area that is subject to
30 inundation from overflow or flood water.
31

32 **Watershed** means the total drainage area contributing runoff to a single point.
33

34 **Water Quality Volume (WQ_v)** means the volume needed to capture and treat the runoff from
35 ninety % (90%) of the average annual rainfall at a development site. Methods for calculating the
36 water quality volume are specified in the Design Manual.
37
38

Subject: Stormwater & Erosion Control - To Repeal and Re-Enact, and Codify as Chapter 261 of the Code of St. Mary's County, Maryland, the St. Mary's County Stormwater Management, Grading, Erosion & Sediment Control Ordinance

SECTION II. This Ordinance shall be effective upon the date written below.

Those voting Aye: 5

Those voting Nay: 0


Those Abstaining: 0

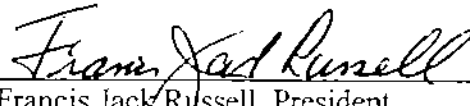
Date of Adoption: 5/14/13

Effective Date: 5/28/13

ATTEST:

COMMISSIONERS OF ST. MARY'S COUNTY



 Rebecca Bridgett
 County Administrator


 Francis Jack Russell, President


 Lawrence D. Jarboe, Commissioner

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:


 Cynthia L. Jones, Commissioner


 George R. Sparling
 County Attorney


 Todd B. Morgan, Commissioner


 Daniel L. Morris, Commissioner