

STORMWATER MANAGEMENT ORDINANCE

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ENVIRONMENTAL PROTECTION

Subtitle 4. Stormwater Management

Part I. Definitions and General Provisions

14:4-1. Definitions

- (a) In general.

In this Subtitle, the following words have the meaning indicated.

- (b) Administration.

“Administration” means the Maryland Department of the Environment (MDE) Water Management Administration (WMA).

- (c) Adverse Impact.

“Adverse Impact” means any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses which are, or may potentially be harmful, or injurious to human health, welfare, safety or property, to biological productivity, diversity, or stability or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

- (d) Agricultural Land Management Activities.

"Agricultural Land Management Activities" means those methods and procedures used in the cultivation of land in order to further crop and livestock production and conservation of related soil and water resources.

- (e) Applicant.

"Applicant" means any person, firm, or governmental agency who executes the necessary forms to procure official approval of a project or a permit to carry out construction of a project.

- (f) Best Management Practice (BMP).

“Best Management Practice (BMP)” means a structural device or non-structural practice designed to temporarily store or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities. The various types of BMPs are

comprehensively included in the 2000 Maryland Stormwater Design Manual.

(g) Concept Plan.

"Concept Plan" means the first required plan that includes the information necessary to allow an initial evaluation of a proposed project.

(h) Department.

“Department” means the Queen Anne’s County Department of Public Works.

(i) Design Manual.

"Design Manual" means the 2000 Maryland Stormwater Design Manual, and all subsequent revisions, that serve as the official guide for stormwater management principles, methods, and practices.

(j) Direct Discharge.

“Direct Discharge” means the concentrated release of stormwater to tidal waters or vegetated tidal wetlands from new development or redevelopment projects in the Critical Area.

(k) District.

“District” means the Queen Anne’s Soil Conservation District

(l) Easement.

"Easement" means a grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and, which must be included in the conveyance of land affected by such easement.

(m) Environmental Site Design (ESD).

"Environmental Site Design (ESD)" means using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. Methods for designing ESD practices are specified in the Design Manual.

(n) Exemption.

"Exemption" means those land development activities that are not subject to the stormwater management requirements contained in this Subtitle.

(o) Final Stormwater Management Plan.

"Final Stormwater Management Plan" means the documents submitted for the last required plan reviews that includes the information necessary to allow all approvals and permits to be issued by the approving agency.

(p) Grading.

"Grading" means any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled, or any combination thereof.

(q) Hydrograph.

"Hydrograph" means a graph showing variation in stage (depth) or discharge of a stream of water over a period of time.

(r) Impervious Area.

"Impervious Area" means any surface that does not allow stormwater to infiltrate into the ground.

(s) In-Fill Development.

"In-fill Development" means development that occurs on vacant lands within areas of existing development that does not require subdivision approval.

(t) Infiltration.

"Infiltration" means the passage or movement of water into the soil surface.

(u) Limit of Disturbance (LOD).

"Limit of Disturbance" means a boundary depicted on the approved plan within which a contractor has to confine his construction activities.

(v) Maximum Extent Practicable (MEP).

"Maximum Extent Practicable (MEP)" means designing stormwater management systems so that all reasonable opportunities for using ESD planning techniques and treatment practices are evaluated and only where absolutely necessary, a structural best management practice (BMP) is implemented.

(w) Off-site Stormwater Management.

"Off-site Stormwater Management" means the design and construction of a facility necessary to control stormwater from more than one development.

(x) On-site Stormwater Management.

"On-site Stormwater Management" means the design and construction of systems necessary to control stormwater within a development.

(y) Planning Techniques.

"Planning Techniques" means a combination of strategies employed early in project design to reduce the impact from development and to incorporate natural features into a stormwater management plan.

(z) Redevelopment.

"Redevelopment" means any construction, alteration, or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and existing site impervious area exceeds 40 percent.

(aa) Retrofitting.

"Retrofitting" means the implementation of ESD practices, the construction of a structural BMP, or the modification of an existing structural BMP in a previously developed area to improve water quality over current conditions.

(bb) Site.

"Site" means any tract, lot, or parcel of land, or combination of tracts, lots, parcels of land that are in one ownership, or are contiguous and in diverse ownership, where development is to be performed as part of a unit, subdivision, or project.

(cc) Site Development Plan.

"Site Development Plan" means the documents submitted for the second of three required plan reviews that include the information necessary to allow a detailed evaluation of a proposed project.

(dd) State.

öStateö means the State of Maryland.

(ee) Standard Stormwater Management Plan.

öStandard Stormwater Management Planö means a plan that is developed by the Department to be used by the applicants with single family residential lot projects to meet the intent of this Subtitle.

(ff) Stormwater.

"Stormwater" means water that originates from a precipitation event.

(gg) Stormwater Management Plan.

öStormwater Management Planö means a set of drawings or other documents submitted by an applicant as a prerequisite to obtaining a stormwater management approval, which contains all of the information and specifications pertaining to a proposed stormwater management system.

(hh) Stormwater Management System.

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

(ii) Variance.

"Variance" means the modification of the minimum stormwater management requirements for specific circumstances such that strict adherence to the requirements would not fulfill the intent of this Subtitle.

(jj) Waiver.

"Waiver" means the reduction of stormwater management requirements for a specific development on a case-by-case review basis.

(kk) Watershed.

öWatershedö means the total drainage area contributing runoff to a single point.

(ll) Watershed Management Plan.

öWatershed Management Planö means a plan, prepared by the Department and approved by the Administration, developed to identify and address specific concerns of a watershed.

14:4-2. Purpose and Authority.

The purpose of this Subtitle is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures that control the impacts associated with increased stormwater runoff. The goal is to manage stormwater to maintain after development, as nearly as possible, the predevelopment runoff characteristics. It shall also reduce stream channel erosion, pollution, siltation and sedimentation, and local flooding. The Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) shall be used to meet the above goals, and appropriate structural Best Management Practices (BMPs) shall be used only when necessary. This will restore, enhance, and maintain the chemical, physical, and biological integrity of streams, minimize damage to public and private property, and reduce the impacts of land development.

The provisions of this Subtitle are adopted under the authority of Title 4, Subtitle 2 of the Environment Article of the Annotated Code of Maryland, 2009 replacement volume. The application of this Subtitle and provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other restrictions or requirements imposed by State or Federal law. It applies to all new and redevelopment projects that have not received final approval for erosion and sediment control and stormwater management plans by the effective date of this Subtitle.

14:4-3. Coordination/Enforcement by Department of Public Works.

The Department shall be responsible for the coordination and enforcement of the provisions of this Subtitle.

14:4-4. Incorporation by Reference.

For the purpose of this Subtitle, the following documents are incorporated by reference:

A. The 2000 Maryland Stormwater Design Manual, Volumes I & II (Maryland

Department of the Environment, April 2000), and all subsequent revisions, are incorporated by reference and shall serve as the official guide for stormwater management principles, methods, and practices.

B. USDA Natural Resources Conservation Practice Standard Pond Code 378 (January 2000).

14:4-5. Grandfathering.

A. In this section, the following terms have the meanings indicated:

(1) Administrative waiver.

(a) "Administrative waiver" means a decision by the Department pursuant to this Subtitle to allow the construction of a development to be governed by the stormwater management ordinance (Subtitle 4, Chapter 14 of the Code of Public Local Laws of Queen Anne's County) in effect as of May 4, 2010.

(b) "Administrative waiver" is distinct from a waiver granted pursuant to Section 14:4-9 of this Subtitle.

(2) Approval.

(a) "Approval" means a documented action by the Department following a review to determine and acknowledge the sufficiency of submitted material to meet the requirements of a specified stage in Queen Anne's County's development review process.

(b) "Approval" does not mean an acknowledgement by the Department that submitted material has been received for review.

(3) Final project approval.

(a) "Final project approval" means an approval of the final stormwater management plan and erosion and sediment control plan required to construct a project's stormwater management facilities.

(4) "Preliminary project approval" means an approval as part of the Department's preliminary development or planning review process that includes, at a minimum:

(a) The number of planned dwelling units or lots;

(b) The proposed project density;

(c) The proposed size and location of all land uses for the project;

(d) A plan that identifies:

(i) The proposed drainage patterns;

(ii) The location of all points of discharge from the site; and

(iii) The type, location, and size of all stormwater management measures based on site-specific stormwater management requirement computations; and

(e) Any other information required by the Department including, but not limited to:

(i) The proposed alignment, location, and construction type and standard for all roads, access ways, and areas of vehicular traffic;

(ii) A demonstration that the methods by which the development will be supplied with water and wastewater service are adequate; and

(iii) The size, type, and general location of all proposed wastewater and water system infrastructure.

B. The Department may grant an administrative waiver to a development that received a preliminary project approval prior to May 4, 2010. Administrative waivers expire according to Section 14:4-5 C. of this Subtitle and may be extended according to Section 14:4-5 D. of this Subtitle.

C. Expiration of Administrative Waivers.

(1) Except as provided in Section 14:4-5 D. of this Subtitle, an administrative waiver shall expire on:

(a) May 4, 2013, if the development does not receive final project approval prior to that date; or

(b) May 4, 2017, if the development receives final project approval prior to May 4, 2013.

(2) All construction authorized pursuant to an administrative waiver must be completed by May 4, 2017 or, if the waiver is extended as provided in Section 14:4-5 D. of this Subtitle, by the expiration date of the waiver extension.

D. Extension of Administrative Waivers.

(1) Except as provided in Section 14:4-5 D. (2) of this Subtitle, an administrative waiver shall not be extended.

(2) An administrative waiver may only be extended if on the effective date of this Subtitle the development:

(a) Has received a preliminary project approval; and

(b) Was subject to a Development Rights and Responsibilities Agreement, a Tax Increment Financing approval, or an Annexation Agreement.

(3) Administrative waivers extended according to Section 14:4-5 D. (2) of this Subtitle shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval, or the Annexation Agreement expires.

14:4-6. Reserved.

Part II. Applicability.

14:4-7. Scope.

No person shall develop any land for residential, commercial, industrial, or institutional uses without providing stormwater management measures that control or manage runoff from such developments, except as henceforth provided. Stormwater management measures must be designed consistent with the Design Manual and constructed according to an approved stormwater management plan.

14:4-8. Exemptions.

The following development activities are exempt from the provisions of this Subtitle and the requirements of providing stormwater management:

- A. Agricultural land management activities;
- B. Additions or modifications to existing single family detached residential structures if they comply with Section 14:4-8 C. of this Subtitle;
- C. Any development that does not disturb over 5,000 square feet of land area; and
- D. Land development activities that the Administration determines will be regulated under specific State laws, which provide for managing stormwater runoff.

14:4-9. Waivers/Watershed Management Plans.

- A. Except as provided in Section 14:4-9 B. and D, of this Subtitle, the Department shall grant stormwater management quantitative control waivers only to those projects within areas where watershed management plans have been developed consistent with Section 14:4-9 G. of this Subtitle. Written requests for quantitative stormwater management waivers shall be submitted that contain sufficient descriptions, drawings and

any other information that is necessary to demonstrate that ESD has been implemented to the MEP. A separate written waiver request shall be required in accordance with the provisions of this Article if there are subsequent additions, extensions, or modifications to a development receiving a waiver.

B. Except as provided in Section 14:4-9 D. of this Subtitle, if watershed management plans consistent with Section 14:4-9 G. of this Subtitle have not been developed, stormwater management quantitative control waivers related to Channel Protection Volume (Cpv) may be granted to the following projects provided that it has been demonstrated that ESD has been implemented to the MEP:

- (1) That have direct discharges to tidally influenced receiving waters;
- (2) That are in-fill development located in a Priority Funding Area where the economic feasibility of the project is tied to the planned density, and where implementation of the 2009 regulatory requirements would result in a loss of the planned development density provided that:
 - (a) Public water and sewer and stormwater conveyance exist;
 - (b) The quantitative waiver is applied to the project for the impervious cover that previously existed on the site only;
 - (c) ESD to the MEP is used to meet the full water quality treatment requirements for the entire development; and
 - (d) ESD to the MEP is used to provide full quantity control for all new impervious surfaces; or
- (3) When the Department determines that circumstances exist that prevent the reasonable implementation of quantity control practices.

C. Except as provided in Section 14:4-9 D. of this Subtitle, stormwater management qualitative control waivers may be granted only to:

- (1) In-fill development projects where ESD has been implemented to the MEP and it has been demonstrated that other BMPs are not feasible;
- (2) Redevelopment projects if the requirements of Section 14:4-11 of this Subtitle are satisfied, and
- (3) Sites where the Department determines that circumstances exist that prevent the reasonable implementation of ESD to the MEP.

D. Stormwater management quantitative and qualitative control waivers may be granted for phased development projects if a system designed to meet the 2000 Maryland Stormwater Design Manual and all applicable County requirements for multiple phases has been constructed by May 4, 2010.

E. Waivers shall only be granted when it has been demonstrated that ESD has been implemented to the MEP and must:

- (1) Be on a case-by-case basis;
- (2) Consider the cumulative effects of the Queen Anne's County waiver policy; and
- (3) Reasonably ensure the development will not adversely impact stream quality.

F. If Queen Anne's County has established an overall watershed management plan for a specific watershed, then the Department may develop a quantitative waiver and redevelopment provisions that differ from sections 14:4-9 B. and 14:4-11 of this Subtitle.

G. A watershed management plan developed for the purpose of implementing different stormwater management policies for waivers and redevelopment shall:

- (1) Include detailed hydrologic and hydraulic analyses to determine hydrograph timing;
- (2) Evaluate both quantity and quality management and opportunities for ESD implementation;
- (3) Include a cumulative impact assessment of current and proposed watershed development;
- (4) Identify existing flooding and receiving stream channel conditions;
- (5) Be conducted at a reasonable scale;
- (6) Specify where on-site or off-site quantitative and qualitative stormwater management practices are to be implemented;
- (7) Be consistent with the General Performance Standards for Stormwater Management in Maryland found in the Design Manual; and
- (8) Be approved by the Administration.

14:4-10. Standard Stormwater Management Plan.

A. In accordance with this Subtitle no applicant, unless exempted shall develop any land for residential use without having provided stormwater measures to control or manage runoff from such development. In order to simplify this process, the Department shall promulgate a Standard Stormwater Management Plan to address the stormwater

requirements using ESD practices for residential development that disturbs over 5,000 square feet.

B. Any existing in-fill single family residential lot for which stormwater management has not been previously addressed and which does not involve construction of a new public or private road may use the Standard Stormwater Management Plan to address the stormwater management requirements outlined in this Subtitle.

C. The Standard Stormwater Management Plan must be approved by the Administration.

14:4-11. Redevelopment.

A. Stormwater management in accordance with this Subtitle is required for all redevelopment projects, unless specified by Watershed Management Plans developed according to this Subtitle, or unless stormwater management requirements have already been met by an existing BMP or can be met by minor modifications to the existing BMP. Stormwater management measures must be consistent with the Design Manual.

B. All redevelopment designs shall:

- (1) Reduce impervious area within the limit of disturbance (LOD) by at least 50 percent according to the Design Manual;
- (2) Implement ESD to the MEP to provide water quality treatment for at least 50 percent of the existing impervious area within the LOD; or
- (3) Use a combination of Section 14:4-11 B. (1) and (2) of this Subtitle for at least 50 percent of the existing site impervious area.

C. Alternative stormwater management measures may be used to meet the requirements in Section 14:4-11 B. of this Subtitle if the applicant satisfactorily demonstrates to the Department that impervious area reduction has been maximized and ESD has been implemented to the MEP. Alternative stormwater management measures include, but are not limited to:

- (1) An on-site structural BMP;
- (2) An off-site structural BMP to provide water quality treatment for an area equal to or greater than 50 percent of the existing impervious area; or
- (3) A combination of impervious area reduction, ESD implementation, and an on-site or off-site structural BMP for an area equal to or greater than 50 percent of the existing site impervious area within the LOD.

D. The Department may develop separate policies for providing water quality treatment for redevelopment projects if the requirements of Sections 14:4-11 B. and C. of

this Subtitle cannot be met. Any separate redevelopment policy shall be reviewed and approved by the Administration and may include, but not limited to:

- (1) A combination of ESD and an on-site or off-site structural BMP;
- (2) Retrofitting including existing BMP upgrades, filtering practices, and off-site ESD implementation;
- (3) Participation in a stream restoration project;
- (4) Pollution trading with another entity;
- (5) Payment of a fee-in-lieu; or
- (6) A partial waiver of the treatment requirements if ESD is not practicable.

E. The determination of what alternatives will be available may be made by the Department at the appropriate point in the development review process. The Department shall consider the prioritization of alternatives in 14:4-11 D. of this Subtitle after it has been determined that it is not practicable to meet the 2009 regulatory requirements using ESD. In deciding what alternatives may be required, the Department may consider factors including, but not limited to:

- (1) Whether the project is in an area targeted for development incentives such as a Priority Funding Area, a designated Transit Oriented Development area, or a designated Base Realignment and Closure Revitalization and Incentive Zone;
- (2) Whether the project is necessary to accommodate growth consistent with comprehensive plans; or
- (3) Whether bonding and financing have already been secured based on an approved development plan.

F. Stormwater management shall be addressed according to the new development requirements in the Design Manual for any net increase in impervious area.

14:4-12. Variance.

The Department may grant a written variance from any requirement of Part III, Stormwater Management Criteria of this Subtitle, if there are exceptional circumstances applicable to the site such that strict adherence will not fulfill the intent of this Subtitle. A written request for variance shall be provided to the Department and shall state the specific variances sought and reasons for their granting. The Department shall not grant a variance unless and until sufficient justification is provided by the person developing land that the implementation of ESD to the MEP has been investigated thoroughly.

14:4-13. Reserved.

Part III. Stormwater Management Criteria.

14:4-14. Minimum Control Requirements.

A. The minimum control requirements established in this section and the Design Manual are as follows:

(1) The planning techniques, non-structural practices, and design methods specified in the Design Manual shall be used to implement ESD to the MEP. All reasonable opportunities for using ESD planning techniques and treatment practices must be evaluated before any structural BMP is proposed. Stormwater management plans for development projects subject to this Subtitle shall be designed using ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability is maintained, predevelopment groundwater recharge is replicated, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be necessary.

(2) The Department may require more than the minimum control requirements specified in this Subtitle including quantity control, if hydrologic or topographic conditions warrant it or if flooding or stream channel erosion exists downstream from a proposed project.

B. Stormwater management and development plans, where applicable, shall be consistent with adopted and approved Watershed Management Plans or Flood Management Plans as approved by MDE in accordance with the Flood Hazard Management Act of 1976, and any subsequent revisions thereof.

14:4-15. Stormwater Management Measures.

The ESD planning techniques and practices and structural stormwater management measures established in this Subtitle and the Design Manual shall be used, either alone or in combination with a stormwater management plan. The applicant shall demonstrate that ESD has been implemented to the MEP before the use of a structural BMP is considered in developing the stormwater management plan.

A. ESD Planning Techniques and Practices.

(1) The following planning techniques shall be applied according to the Design Manual to satisfy the applicable minimum control requirements established in Section 14:4-14 of this Subtitle:

- (a) Preserving and protecting natural resources;
- (b) Conserving natural drainage patterns;
- (c) Minimizing impervious area;
- (d) Reducing runoff volume;
- (e) Using ESD practices to maintain 100 percent of the annual predevelopment groundwater recharge volume;
- (f) Using permeable pavement, reinforced turf, and other alternative surfaces;
- (g) Limiting soil disturbance, mass grading, and compaction;
- (h) Clustering development; and
- (i) Other practices approved by the Administration.

(2) The following ESD treatment practices shall be evaluated according to the Design Manual to satisfy the applicable minimum control requirements established in Section 14:4-14 of this Subtitle:

- (a) Disconnection of rooftop runoff;
- (b) Disconnection of non-rooftop runoff;
- (c) Sheet flow to conservation areas;
- (d) Permeable pavement;
- (e) Reinforced turf
- (f) Rainwater harvesting;
- (g) Submerged gravel wetlands;
- (h) Landscape infiltration;
- (i) Infiltration berms;
- (j) Dry wells;
- (k) Micro-bioretenion;
- (l) Rain gardens;
- (m) Swales;
- (n) Enhanced filters; and
- (o) Any practices approved by the Administration.

B. Structural Stormwater Management Measures.

(1) The following structural stormwater management practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in this Subtitle:

- (a) Stormwater management ponds;
- (b) Stormwater management wetlands;
- (c) Stormwater management infiltration;
- (d) Stormwater management filtering systems; and
- (e) Stormwater management open channel systems.

(2) The performance criteria specified in the Design Manual with regard to general feasibility, conveyance, pretreatment, treatment and geometry, environment and landscaping, and maintenance shall be considered when selecting structural stormwater management practices.

(3) Structural stormwater management practices shall be selected to accommodate the unique hydrologic or geologic character of the site.

C. ESD planning techniques and treatment practices and structural stormwater management measures used to satisfy minimum control requirements of this Subtitle must be recorded in the land records of Queen Anne's County and remain unaltered by subsequent property owners. Prior approval from the Department shall be obtained before any stormwater management practice is altered.

D. Alternative ESD treatment practices and structural stormwater measures may be used for new development runoff control if they meet the performance criteria established in the Design Manual and all subsequent revisions and are approved by the Administration. Practices used for redevelopment projects shall be approved by the Department.

E. For the purposes of modifying the minimum control requirements or design criteria, the applicant shall submit to the Department an analysis of the impacts of stormwater flows downstream in the watershed. The analysis shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing modifications of the proposed development upon a dam, highway, structure, or natural point of restricted stream flow. The point of investigation shall be established with the concurrence of the Department.

14:4-16. Reserved.

14:4-17. Reserved.

14:4-18. Reserved.

Part IV. Stormwater Management Plans.

14:4-19. Review and Approval of Stormwater Management Plans.

A. For any proposed development, the applicant shall submit a concept plan, a site development plan, and a final plan for stormwater management. The submittals shall include the minimum content specified in Section 14:4-20 of this Subtitle and meet the requirements of the Design Manual and Part III, Stormwater Management Criteria of this Subtitle.

B. The Department shall review the stormwater management plans. Coordinated comments will be provided that reflects input from all appropriate agencies including, but not limited to, the District and the Department of Land Use, Growth Management and Environment (LGE). All comments shall be addressed and approval received at each submittal, if applicable, before subsequent submissions.

14:4-20. Contents and Submission of Stormwater Management Plans.

A. The applicant shall submit a concept plan that provides sufficient information for an initial assessment of the proposed project and whether stormwater management can be provided according to this Subtitle and the Design Manual. Plans submitted for concept review shall include, but are not limited to:

- (1) A map at a scale specified by the Department showing site location, existing natural features, water and other sensitive resources, topography, and natural drainage patterns;
- (2) The anticipated location of all proposed impervious areas, buildings, roadways, parking, sidewalks, utilities, and other site improvements;
- (3) The location of the proposed limit of disturbance, erodible soils, steep slopes, and areas to be protected during construction;
- (4) Preliminary estimates of stormwater management requirements, the selection and location of ESD practices to be used, and the location of all points of discharge from the site;
- (5) A narrative that supports the concept design and describes how ESD will be implemented to the MEP; and
- (6) Any other information required by the Department.

B. Following concept plan approval, the applicant shall submit a site development plan that reflects comments received during the previous review phase. Plans submitted for site development review shall be of sufficient detail for a comprehensive evaluation of the proposed stormwater management system and site grading and shall include:

- (1) All information provided during the concept plan review phase;
- (2) Any geotechnical investigations including soil maps, borings, site specific recommendations, and any additional information necessary for the preliminary stormwater management design;
- (3) Final site layout, exact impervious area locations and coverage areas, proposed topography, delineated drainage areas at all points of discharge from the site and stormwater volume computations for ESD practices and/or other stormwater management systems;
- (4) A proposed sediment and erosion 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 practices to be used;
- (5) 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
- (6) Any other information required by the Department.

C. Following site development plan approval, the applicant shall submit final erosion and sediment control and stormwater management plans that reflect the comments received during the previous review phase. Plans submitted for final review shall be of sufficient detail to allow all approvals and permits to be issued according to the following:

- (1) Final sediment and erosion 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.

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

- (1) Any geotechnical investigations including soil maps, borings, site specific recommendations, and any additional information necessary for the final stormwater management design;
- (2) Drainage area maps depicting predevelopment and post development runoff flow path segmentation and land use;
- (3) Hydrologic computations of the applicable ESD and unified sizing criteria according to the Design Manual for all points of discharge from the site;
- (4) Hydraulic and structural computations for all ESD practices and structural stormwater management measures to be used;
- (5) A narrative that supports the final stormwater management design; and
- (6) Any other information required by the Department.

b. Construction drawings submitted for final stormwater management plan approval shall include, but are not limited to:

- (1) A vicinity map;
- (2) Existing and proposed topography and proposed drainage areas, including areas necessary to determine downstream analysis for proposed stormwater management facilities;
- (3) Any proposed improvements including location of buildings or other structures, impervious surfaces, storm drainage facilities, and all grading;
- (4) The location of existing and proposed structures and utilities;
- (5) Any easements and rights-of-way;
- (6) The delineation, if applicable, of the 100-year floodplain and any on-site wetlands;
- (7) Structural and construction details including representative cross sections for all components of the proposed drainage system or systems, and stormwater management facilities;
- (8) All necessary construction specifications;
- (9) A sequence of construction;
- (10) Data for total site area, disturbed area, new impervious area, and total impervious area;
- (11) A table showing the ESD and unified sizing criteria volumes required in the Design Manual;

- (12) A table of materials to be used for stormwater management facility planting;
- (13) All soil boring logs and locations;
- (14) A maintenance and inspection schedule;
- (15) Certification by the owner/developer that all stormwater management construction will be done according to this plan;
- (16) An as-built certification signature block to be executed after project completion; and
- (17) Any other information required by the Department.

D. It is the responsibility of the applicant to obtain from adjacent property owners any required easements or other necessary property interests concerning flow of water. Approval of a stormwater management plan does not create or affect any right to direct runoff onto adjacent property without that property owner's permission.

14:4-21. Preparation of Stormwater Management Plans.

A. Stormwater management plans shall be prepared by a licensed professional engineer, a licensed professional land surveyor, or a licensed landscape architect in Maryland.

B. If a stormwater BMP requires either a dam safety permit from the Administration or small pond approval from the District, the design shall be prepared by a licensed professional engineer in Maryland.

14:4-22. Reserved.

14:4-23. Reserved.

Part V. Permits.

14:4-24. Permit Requirement.

A grading or building permit may not be issued for any parcel or lot unless final erosion and sediment control and stormwater management plans have been approved as meeting all the requirements of the Design Manual and this Subtitle. Where appropriate, a grading or building permit may not be issued without:

A. Recorded easements for the stormwater management facilities and easements to provide adequate access for inspection and maintenance from a public right-of-way;

B. A recorded stormwater management Maintenance and Inspection Agreement; and

C. A surety and inspection fee.

14:4-25. Fees.

Non-refundable permit fees may be collected for each stormwater management plan submittal. Permit fees will provide for the cost of plan review, administration, and management of the permitting process, and inspection of all projects subject to this Subtitle. A permit fee schedule shall be established by resolution by the County Commissioners of Queen Anne's County and may be amended from time to time.

14:4-26. Permit Suspension and Revocation.

Any grading or building permit issued by Queen Anne's County may be suspended or revoked after written notice is given to the permittee for any of the following reasons:

- A. Any violation(s) of the conditions of the stormwater management plan approval;
- B. Changes in site runoff characteristics upon which an approval or waiver was granted;
- C. Construction is not in accordance with the approved plan;
- D. Noncompliance with correction notice(s) or stop work order(s) issued for the construction of any stormwater management practice; and
- E. An immediate danger exists in a downstream area.

14:4-27. Permit Conditions.

In granting an approval for any phase of site development, the Department may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Subtitle and the preservation of public health and safety.

14:4-28. Reserved.

14:4-29. Reserved.

Part VI. Surety.

14:4-30. Surety Requirements from Developer.

The owner/developer shall post a bond, irrevocable letter of credit, or other surety acceptable to the Department prior to the issuance of any building and/or grading permit for the construction of a development requiring stormwater management. The amount of the surety shall be 125% of the total estimated construction cost of all stormwater management facilities for the project approved by the Department. The surety required in this section shall include provisions relative to forfeiture for failure to complete work specified in the approved stormwater management plan, compliance with all of the provisions of this Subtitle, and other applicable laws and regulations, and any time limitations. The surety shall not be fully released without a final inspection of the completed work by the Department, submission of "as-built" plans if required,

and certification of completion by the Department that all stormwater management facilities comply with the approved plan and the provisions of this Subtitle. A procedure may be used to release or reduce the surety held by Queen Anne's County after various stages of construction have been completed and accepted by the Department.

14:4-31. Reserved.

14:4-32. Reserved.

Part VII. Inspection.

14:4-33. Inspection, Schedule and Reports.

- A. The applicant shall notify the Department at least 48 hours before commencing any stormwater management related work at the site.
- B. Regular inspections shall be made and documented for each ESD planning technique and practice, and each stormwater management practice at stages of construction specified in the Design Manual. At a minimum, all the practices shall be inspected upon completion of final grading and the establishment of permanent stabilization, and before issuance of certificate of occupancy.
- C. Written inspection reports shall include:
 - (1) The date and location of the inspection;
 - (2) Whether construction was in compliance with the approved stormwater management plan;
 - (3) Any variations from the approved construction specifications; and
 - (4) Any violations that exist.
- D. The applicant and on-site personnel shall be notified in writing when violations are observed. Written notification shall describe the nature of the violation and the required corrective action.
- E. No stormwater management work shall proceed on to the next phase of development until the Department inspects and approves the work previously completed.

14:4-34. Inspection Requirements During Construction.

- A. At a minimum, the following inspections shall be made and documented at the following specified stages of construction:
 - (1) For ponds:
 - (a) Upon completion of excavation to sub-foundation and when required, installation of structural supports or reinforcement for structures,

including but not limited to:

- (1) Core trenches for structural embankments;
 - (2) Inlet and outlet structures, anti-seep collars or diaphragms, and watertight connectors on pipes; and
 - (3) Trenches for enclosed storm drainage facilities.
- (b) During placement of structural fill, concrete, and installation of piping and catch basins;
- (c) During backfill of foundations and trenches;
- (d) During embankment construction; and
- (e) Upon completion of final grading and establishment of permanent stabilization.
- (2) Wetlands ó at the stages specified for pond construction in Section 14:4-34 A (1) of this Subtitle, during and after wetland reservoir area planting, and during the second growing season to verify a vegetation survival rate of at least 50 percent.
- (3) For infiltration trenches:
- (a) During excavation to subgrade;
 - (b) During placement and backfill of under drain systems and observation wells;
 - (c) During placement of geotextiles and all filter media;
 - (d) During construction of appurtenant conveyance systems such as diversion structures, pre-filters and filters, inlets, outlets, and flow distribution structures; and
 - (e) Upon completion of final grading and establishment of permanent stabilization.
- (4) For infiltration basins ó at the stages specified for pond construction in Section 14:4-34 A. (1) of this Subtitle and during placement and backfill of under drain systems.
- (5) For filtering systems:
- (a) During excavation to subgrade;
 - (b) During placement and backfill of under drain systems;
 - (c) During placement of geotextiles and all filter media;
 - (d) During construction of appurtenant conveyance systems such as flow distribution structures; and
 - (e) Upon completion of final grading and establishment of permanent stabilization.
- (6) For open channel systems:

- (a) During excavation to subgrade;
- (b) During placement and backfill of under drain systems for dry swales;
and
- (c) During installation of diaphragms, check dams, or weirs.

(7) For ESD practices:

- (a) Inspection should be conducted as specified in the Design Manual.

B. Queen Anne's County may, for enforcement purposes, use any one or a combination of the following actions:

- (1) A notice of violation shall be issued specifying the need for corrective action if stormwater management plan noncompliance is identified;
- (2) A stop work order shall be issued for the site by the Department if a violation persists or imminent danger to public safety exists.
- (3) Securities shall be withheld or the case may be referred for legal action if reasonable efforts to correct the violation have not been undertaken;
- (4) In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of the Stormwater Management Subtitle, the Design Manual, or this Subtitle.

C. Any step in the enforcement process may be taken at any time, depending upon the severity of the violation.

D. Once construction is complete, "as-built" certification, if deemed necessary, shall be submitted by either a professional engineer or professional land surveyor licensed in Maryland to ensure that the ESD planning techniques, treatment practices, structural practices, and conveyance systems comply with the specifications contained in the approved plans. At a minimum, "as-built" certification shall include a set of drawings comparing the approved stormwater management system that was constructed.

E. The Department shall submit notice of construction completion to the Administration on a form supplied by the Administration for each structural stormwater management practice within 45 days of construction completion. The type, number, total drainage area, and total impervious area treated by all ESD techniques and practices shall be reported to the Administration on a site by site basis. If BMPs requiring the District approval are constructed, notice of construction completion shall also be submitted to the District.

14:4-35. Reserved.

14:4-36. Reserved.

Part VIII. Maintenance.

14:4-37. Maintenance Inspection.

A. The Department shall ensure that preventative maintenance is performed by inspecting all ESD and other stormwater management systems. Inspection shall occur during the first year of operation and at least once every 3 years thereafter. In addition, a Maintenance and Inspection Agreement between the owner and Queen Anne's County shall be executed as described in this Subtitle.

B. Inspection reports shall be maintained by the Department for all ESD and other stormwater management systems.

C. Inspection reports for ESD and other stormwater management systems shall include the following:

- (1) The date of inspection;
- (2) Name of inspector;
- (3) An assessment of the quality of the stormwater management system related to ESD treatment practice efficiency and the control of runoff to the MEP;
- (4) The condition of:
 - (a) Vegetation or filter media;
 - (b) Fences or other safety devices;
 - (c) Spillways, valves, or other control structures;
 - (d) Embankments, slopes, and safety benches;
 - (e) Reservoir or treatment areas;
 - (f) Inlet and outlet channels or structures;
 - (g) Underground drainage;
 - (h) Sediment and debris accumulation in storage and forebay areas;
 - (i) Any nonstructural practices to the extent practicable; and
 - (j) Any other item that could affect the proper function of the stormwater management system.
- (5) Description of needed maintenance.

D. Upon notifying an owner of the inspection results, the owner shall have 30 days (unless additional time is granted) to correct the deficiencies discovered. A subsequent inspection shall be conducted to ensure completion of the repairs.

E. If repairs are not properly undertaken and completed, enforcement procedures following Section 14:4-38 C. of this Subtitle shall be followed by Queen Anne's County.

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

14:4-38. Maintenance Agreement.

A. Prior to the issuance of any building permit for which stormwater management is required, the applicant or owner shall execute an Maintenance and Inspection Agreement binding on all subsequent owners of land served by a private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the Department or its authorized representative to ensure that the facility is maintained in proper working condition to meet design standards.

B. The agreement shall be recorded by the applicant or owner in the land records office of the County. The original recorded Maintenance and Inspection Agreement shall be returned to the Department.

C. The agreement shall also provide that, if after notice by Queen Anne's County to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) within a reasonable period of time, Queen Anne's County may perform all necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties, which shall be a lien against the property benefitted and shall be collected in the same manner as County real estate taxes.

14:4-39. Maintenance Responsibility.

A. The owner of a property that contains private stormwater management facilities installed pursuant to this Subtitle, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all stormwater management systems, grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices in perpetuity. Such repairs or restoration and maintenance shall be in accordance with previously approved or newly submitted plans.

B. A maintenance schedule shall be developed for the life of any stormwater management system and shall state the maintenance to be completed, the time period for completion, and the responsible party that will perform the maintenance. This maintenance schedule shall be printed on the approved stormwater management plan.

14:4-40. Reserved.

14:4-41. Reserved.

Part IX. Appeals.

14:4-42. Appeals.

Any person aggrieved by the action of any official charged with the enforcement of this Subtitle, as the result of the disapproval of a properly filed application for a permit, issuance of a written notice of violation, or an alleged failure to properly enforce the Subtitle in regard to a

specific application, shall have the right to appeal the action to the Queen Anne's County Board of Appeals. The appeal shall be filed in writing within thirty days of the date of official transmittal of the final decision or determination to the applicant and state clearly the grounds on which the appeal is based. The Board of Appeals shall proceed in accordance with Title 10, Subtitle 2 of the State Government Article of the Annotated Code of Maryland.

14:4-43. Reserved.

14:4-44. Reserved.

Part X. Penalties.

14:4-45 Criminal Violation Penalties.

A. Violation of Subtitle: penalties.

Any person convicted of violating the provisions of this Subtitle shall be guilty of a misdemeanor, and upon conviction thereof, shall be subject to:

- (1) a fine of not more than Five Thousand Dollars (\$5,000.00), or
- (2) imprisonment not exceeding one year, or
- (3) both for each violation with costs imposed at the discretion of the court.

B. Each day a separate offense.

Each day that a violation continues shall be a separate offense.

C. Other actions.

In addition, Queen Anne's County may institute injunctive, mandamus or other appropriate action or proceedings of law to correct violations of this Subtitle.

D. Courts.

Any court of competent jurisdiction shall have the right to issue temporary or permanent restraining orders, injunctions, or mandamus, or other appropriate forms of relief.