GARRETT COUNTY

STORMWATER MANAGEMENT ORDINANCE

2010

Table of Contents

Page

1.0 Purpose and Authority 3
1.1 Incorporation by Reference
1.2 Grandfathering

2.0 Definitions 4

3.0 Applicability 7
3.1 Scope
3.2 Plan Classifications
3.3 Exemptions
3.4 Waivers/Watershed Management Plans
3.5 Redevelopment
3.6 Variance

4.0 Stormwater Management Criteria 11
4.1 Minimum Control Requirements
4.2 Stormwater Management Measures
4.3 Specific Design Criteria

5.0 Stormwater Management Plans 13
5.1 Review and Approval of Stormwater Management Plans
5.2 Contents of the Stormwater Management Plan
5.3 Preparation of the Stormwater Management Plan

6.0 Permits 16
6.1 Permit Requirement
6.2 Permit Fee
6.3 Permit Suspension and Revocation
6.4 Permit Conditions

7.0 Performance Bond 17

8.0 Inspection 17
8.1 Inspection Schedule and Reports
8.2 Inspection Requirements During Construction

9.0 Maintenance 19
9.1 Inspection for Prevention Maintenance
9.2 Maintenance Agreement
9.3 Maintenance Responsibility

10.0 Appeals 20

11.0 Severability 21

12.0 Penalties 21

13.0 Effective Date 21

1.0 PURPOSE AND AUTHORITY

The purpose of this Ordinance is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with increased stormwater runoff. The goal is to manage stormwater by using environmental site design (ESD) to the maximum extent practicable (MEP) to maintain after development as nearly as possible, the predevelopment runoff characteristics, and to reduce stream channel erosion, pollution, siltation and sedimentation, and local flooding, and use appropriate structural best management practices (BMPs) 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 Ordinance, pursuant to the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland, 2009 replacement volume, are adopted under the authority of the Code of Public Local Laws for Garrett County, Maryland, the same being Article 1 of the Public Local Laws of the State of Maryland (the "County Code) and shall apply to all development occurring within the incorporated and unincorporated areas of Garrett County. The application of this Ordinance and provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other powers granted by State statute. The Stormwater Management Office under the direction of Planning and Land Development, Permits and Inspections shall be responsible for the coordination and enforcement of the provisions of this Ordinance.

1.1 INCORPORATION BY REFERENCE

For the purpose of this Ordinance, 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, is incorporated by reference and shall serve as the official guide for stormwater principles, methods, and practices.

B. USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000) and all subsequent revisions.

1.2 GRANDFATHERING

A. In this section, the following terms have the meanings indicated:
   1. Administrative waiver.
      (a) "Administrative waiver" means a decision by the Stormwater Management Office pursuant to this Ordinance to allow the construction of a development to be governed by the stormwater management ordinance in effect as of May 4, 2009 in the local jurisdiction where the project will be located.
      (b) "Administrative waiver" is distinct from a waiver granted pursuant to section 3.4 of this Ordinance.
   2. Approval.
      (a) "Approval" means a documented action by the Stormwater Management Office following a review to determine and acknowledge the sufficiency of submitted material to meet the requirements of a specified stage in a local development review process.
      (b) "Approval" does not mean an acknowledgement by the Stormwater Management Office that submitted material has been received for review.
   3. Final project approval.
      (a) "Final project approval" means approval of the final stormwater management plan and erosion and sediment control plan required to construct a project's stormwater management facilities.
      (b) "Final project approval" also includes securing bonding or financing for final development plans if either is required as a prerequisite for approval.

4. "Preliminary project approval" means an approval as part of a local 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 Stormwater Management Office 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 Stormwater Management Office may grant an administrative waiver to a development that received a preliminary project approval prior to May 4, 2010. Administrative waivers expire according to 1.2 C. of this Ordinance and may be extended according to 1.2 D. of this Ordinance.

C. Expiration of Administrative Waivers.
1. Except as provided for in 1.2 D. of this Ordinance, 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 1.2 D. of this Ordinance, by the expiration date of the waiver extension.

D. Extension of Administrative Waivers.
1. Except as provided in 1.2 D. (2) of this Ordinance, an administrative waiver shall not be extended.
2. An administrative waiver may only be extended if, by May 4, 2010 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 1.2 D. (2) of this Ordinance shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval, or the Annexation Agreement expires.

2.0 DEFINITIONS

A. For the purpose of this Ordinance, the following definitions describe the meaning of the terms used in this Ordinance:

1. "Administration" means the Maryland Department of the Environment (MDE) Water Management Administration (WMA).

2. "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.

3. "Agricultural land management practices" 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.

4. "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.

5. "Aquifer" means a porous water bearing geologic formation generally restricted to materials capable of yielding an appreciable supply of water.

6. "Best Management Practice (BMP)" means a structural device or nonstructural practice designed to temporarily store or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities.

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

8. "Clearing" means the removal of trees and brush from the land but shall not include the ordinary mowing of grass.

9. "Commercial Plan" is a plan for any institutional, industrial, or commercial structure or its related appurtenances including both public and private which is not included in the definition of Residential Plan. For purposes of the ordinance, roadways, parks, parking lots, fire stations, fire halls, businesses, manufacturing complexes, distribution centers, churches, and other such facilities shall be considered commercial.

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

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

12. "Detention structure" means a permanent structure for the temporary storage of runoff, which is designed so as not to create a permanent pool of water.

13. "Develop land" means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration.

14. "Drainage area" means that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridge line.

15. "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.

16. "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.

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

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

19. "Extreme flood volume (Q_f)" means the storage volume required to control those infrequent but large storm events in which overbank flows reach or exceed the boundaries of the 100- year floodplain.

20. "Final stormwater management plan" means the last of three required plan approvals that includes the information necessary to allow all approvals and permits to be issued by the approving agency.

21. "Flow attenuation" means prolonging the flow time of runoff to reduce the peak discharge.

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

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

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

25. "Maximum extent practicable (MEP)" means designing stormwater management systems so that all reasonable opportunities for using ESD planning techniques and treatment practices are exhausted and only where absolutely necessary, a structural BMP is implemented.

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

27. "On-site stormwater management" means the design and construction of systems necessary to control stormwater within an immediate development.

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

29. "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.

30. "Recharge volume (Re_v)" means that portion of the water quality volume used to maintain groundwater recharge rates at development sites. Methods for calculating the recharge volume are specified in the Design Manual.

31. "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.

32. "Residential ESD" means an environmental site design selected for use in a residential application as approved by Garrett County. The compositions of Residential ESD's are subject to the Design Manual.

33. "Residential Plan" is a plan for a single structure occupied by only one or two families (as in a duplex) or its related structures located on the same lot as a single-family residential structure. Related structures include detached garages not used for commercial use, pools, decks and storage sheds. By definition, a Residential Plan will use ESD to the MEP for stormwater management. Any plan meeting the criteria for single family, but using alternative form of stormwater management will be considered a Commercial Plan.

34. "Residential Structure" is a single structure occupied by only one or two families or its related structures located on the same lot as a single-family residential structure. Related structures include detached garages not used for commercial use, pools, decks, and storage sheds.

35. "Retention structure" means a permanent structure that provides for the storage of runoff by means of a permanent pool of water.

36. "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.

37. "Sediment" means soils or other surficial materials transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.

38. "Site" means any tract, lot or parcel of land or combination of tracts, lots, or parcels of land, which 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.

39. "Site development plan" means the second of three required plan approvals that includes the information necessary to allow a detailed evaluation of a proposed project.

40. "Stabilization" means the prevention of soil movement by any of various vegetative and/or structural means.

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

42. "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.

43. "Stripping" means any activity, which removes the vegetative surface cover including tree removal, clearing, grubbing and storage or removal of topsoil.

44. "Variance" means the modification of the minimum stormwater management requirements for specific circumstances such that strict adherence to the requirements would result in unnecessary hardship and not fulfill the intent of the Ordinance.

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

46. "Watercourse" means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine or wash, in and including any adjacent area that is subject to inundation from overflow or flood water.

47. "Watershed" means the total drainage area contributing runoff to a single point.

48. "Water quality volume (WQ_v)" means the volume needed to capture and treat 90 percent of the average annual rainfall events at a development site. Methods for calculating the water quality volume are specified in the Design Manual.

3.0 APPLICABILITY

3.1 Scope

No person shall develop any land for residential, commercial, industrial, or institutional uses without having provided stormwater management measures that control or manage runoff from such developments, except as provided within this section. The stormwater management measures must be designed consistent with the Design Manual and constructed according to an approved plan for new development or the policies stated in section 3.5 for redevelopment.

3.2 Plan Classifications

Two plan classifications for permit issuance shall be used in accordance with this ordinance as follows:

A. Residential Plan: The purpose of a residential plan is to facilitate the issuance of a permit for residential construction. A residential plan shall apply to developments, which meet all of the following criteria:

1. Area of disturbance shall be less than 30,000 square feet, not including areas disturbed for septic fields.

2. Structures shall meet the definition of a Residential Structure as defined in Section 2.

3. Plan must utilize acceptable ESD practices to the MEP as approved by the Garrett County Stormwater Management Office.

4. Project does not exceed the limitations as outlined in the Garrett Soil Conservation District's Standard Erosion and Sediment Control Plan.

B. Commercial Plan: shall apply to developments which meet one or more of the following criteria:

1. Area of disturbance shall be equal to or more than 30,000 square feet, not including areas disturbed for septic fields.

2. Plan which is classified as Commercial Plan as defined in Section 2.

3.3 Exemptions

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

A. Agricultural land management activities;

B. Additions or modifications to existing single family detached residential structures that do not disturb over 5,000 square feet of land area;

C. Developments that do 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.

3.4 Waivers / Watershed Management Plans

A. Except as provided in 3.4 B. and D. of this ordinance, stormwater management quantitative control waivers shall be granted only to those projects within areas where watershed management plans have been developed consistent with section 3.4 G. of this Ordinance. 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 section if there are subsequent additions, extensions, or modifications to a development receiving a waiver.

B. Except as provided in 3.4 D. of this ordinance, if watershed management plans consistent with Section 3.4 G of this Ordinance have not been developed, stormwater management quantitative control waivers may be granted to the following projects provided that it has been demonstrated that ESD has been implemented to the MEP:

1. That can safely convey discharges to flood control or controlled impoundment that have been proven to handle the increased volume; or

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 Stormwater Management Office determines that circumstances exist that prevent the reasonable implementation of quantity control practices.

C. Except as provided in 3.4 D. of this ordinance, stormwater management qualitative control waivers only apply 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 §3.5 of this ordinance are satisfied; or

3. Sites where the approving agency 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 regulatory requirements of the Garrett County Stormwater Management Ordinance for multiple phases has been constructed by May 4, 2010. If the 2009 regulatory requirements cannot be met for future phases constructed after May 4, 2010, all reasonable efforts to incorporate ESD in future phases must be demonstrated.

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 Stormwater Management Office's waiver policy; and

3. Reasonably ensure the development will not adversely impact stream quality.

F. If the Stormwater Management Office has established an overall watershed management plan for a specific watershed, then the Stormwater Management Office may develop quantitative waiver and redevelopment provisions that differ from sections 3.4B and 3.5.

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 cumulative impact assessment of 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 Section 1.2 of the Design Manual; and

8. Be approved by the Administration.

H. Timber harvest projects are waived provided the owner obtained an approved Erosion and Sediment Control Plan for Forest Harvest Operations from the Garrett Soil Conservation District and a grading permit from the Garrett County Permits and Inspections Office.

3.5 Redevelopment

A. Stormwater management plans are required by Garrett County for all redevelopment, unless otherwise specified by watershed management plans developed according to section 3.4 F. of this Ordinance. 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 3.5 B. (1) and (2) of this Ordinance 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 3.5 B. of this Ordinance if the owner/developer satisfactorily demonstrates to Garrett County 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. Garrett County may consider separate policies for providing water quality treatment for redevelopment projects if the requirements of sections 3.5 A and B. of this ordinance cannot be met. The following redevelopment policies may be considered:

1. Retrofitting an existing stormwater system within the same watershed of the proposed redevelopment project that will equal or exceed the requirements of section 3.5 B of this ordinance; or

2. With the Administrations approval, implement a stream restoration project within the same watershed of the proposed redevelopment project that will provide equivalent water quality benefits ; or

3. Design criteria based on watershed management plans developed according to section 3.4 F. of this Ordinance.

Any separate redevelopment policy proposed by the County shall be subject to review and approval of the Administration.

E. The determination of what alternatives will be available may be made by the Stormwater Management Office at the appropriate point in the development review process. The Stormwater Management Office shall consider the prioritization of alternatives in 3.5 D of this ordinance after it has been determined that it is not practicable to meet the 2009 regulatory requirements using ESD. In deciding what alternatives maybe required, the Stormwater Management Office 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. LIBER 0806 PAGE 0608

3.6 Variance

The Stormwater Management Office may grant a written variance from any requirement of Section 4.0, Stormwater Management Criteria, of this Ordinance if there are exceptional circumstances applicable to the site such that strict adherence will result in unnecessary hardship and not fulfill the intent of the Ordinance. A written request for variance shall be provided to the Stormwater Management Office and shall state the specific variances sought and reasons for their granting. The Stormwater Management Office shall not granted 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. Financial considerations solely are not just cause for the granting of a variance.

4.0 STORMWATER MANAGEMENT CRITERIA

4.1 Minimum Control Requirements

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

1. Garrett County and its incorporated Municipalities shall require that the planning techniques, nonstructural practices, and design methods specified in the Design Manual be used to implement ESD to the MEP. The use of ESD planning techniques and treatment practices must be exhausted before any structural BMP is implemented. Stormwater management plans for development projects subject to this Ordinance 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 absolutely necessary.

2. Control of the 2-year and 10-year frequency storm event is required according to the Design Manual and all subsequent revisions if Garrett County determines that additional stormwater management is necessary because historical flooding problems exist and downstream floodplain development and conveyance system design cannot be controlled.

3. The Stormwater Management Office may require more than the minimum control requirements specified in this Ordinance if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from a proposed project.

B. Alternate minimum control requirements may be adopted subject to Administration approval. The Administration shall require a demonstration that alternative requirements will implement ESD to the MEP and control flood damages, accelerated stream erosion, water quality, and sedimentation. Comprehensive watershed studies may also be required.

C. Stormwater management and development plans where applicable, shall be consistent with adopted and approved watershed management plans or flood management plans as approved by the Maryland Department of the Environment in accordance with the Flood Hazard Management Act of 1976.

4.2 Stormwater Management Measures

The ESD planning techniques and practices and structural stormwater management measures established in this Ordinance and the Design Manual shall be used, either alone or in combination in a stormwater management plan. A developer 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 4.1 of this Ordinance:

(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 green roofs, permeable pavement, reinforced turf, and other alternative surfaces;

(g) Limiting soil disturbance, mass grading, and compaction;

(h) Clustering development; and

(i) Any practices approved by the Administration.

2. The following ESD treatment practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in section 4.1 of this Ordinance:

(a) Disconnection of rooftop runoff;

(b) Disconnection of non-rooftop runoff;

(c) Sheetflow to conservation areas;

(d) Rainwater harvesting;

(e) Submerged gravel wetlands;

(f) Landscape infiltration;

(g) Infiltration berms;

(h) Dry wells;

(i) Micro-bioretention;

(j) Rain gardens;

(k) Swales;

(l) Enhanced filters; and

(m) Any practices approved by the Administration.

3. The use of ESD planning techniques and treatment practices specified in this section shall not conflict with existing State law or local ordinances, regulations, or policies. Garrett County and its municipalities shall modify planning and zoning ordinances and public works codes to eliminate any impediments to implementing ESD to the MEP according to the Design Manual.

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 Section 4.1 of this Ordinance.

(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 regions of the state and county.

C. ESD planning techniques and treatment practices and structural stormwater management measures used to satisfy Section 3.2B and the minimum requirements in section 4.1 of this Ordinance must be recorded in the land records of Garrett County and remain unaltered by subsequent property owners (see Section 9.2). Prior approval from the Garrett County Stormwater Management Office shall be obtained before any stormwater management practice or structural stormwater management measure is altered.

D. Alternative ESD planning techniques and 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 Stormwater Management Office.

E. For the purposes of modifying the minimum control requirements or design criteria, the owner/developer shall submit to Stormwater Management Office 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 due to the proposed development upon a dam, highway, structure, or natural point of restricted stream flow. The point of investigation is to be established with the concurrence of Stormwater Management Office, downstream of the first downstream tributary whose drainage area equals or exceeds the contributing area to the project or stormwater management facility.

4.3 Specific Design Criteria

The basic design criteria, methodologies, and construction specifications, subject to the approval of the Stormwater Management Office and the Administration, shall be those of the Design Manual.

5.0 STORMWATER MANAGEMENT PLANS

5.1 Review and Approval of Stormwater Management Plans

A. For any proposed development, the owner/developer shall submit phased stormwater management plans to Stormwater Management Office for review and approval. At a minimum, plans shall be submitted for the concept, site development, and final stormwater management construction phases of project design. Each plan submittal shall include the minimum content specified in section 5.2 of this Ordinance and meet the requirements of the Design Manual and section 4.0 of this Ordinance.

B. The Stormwater Management Office shall perform a comprehensive review of the stormwater management plans for each phase of site design. Coordinated comments will be provided for each plan phase that reflects input from all appropriate agencies. All comments from the Stormwater Management Office and other appropriate agencies shall be addressed and approval received at each phase of project design before subsequent submissions.

C. Appropriate agencies shall include the Garrett Soil Conservation District, Garrett County Planning and Land Development, Environmental Health Department, the Department of Public Utilities and the Garrett County

Roads Department. The Stormwater Management Office shall determine appropriate agency involvement and coordinate the comment and approval process.

5.2 Contents and Submission of Stormwater Management Plans

A. The owner/developer shall submit six copies of a concept plan that provides sufficient information for an initial assessment of the proposed project and whether stormwater management can be provided according to section 4.2 of this Ordinance and the Design Manual. Plans submitted for concept approval shall include, but are not limited to:

1. A map at a legible scale specified by the Stormwater Management Office showing site location, existing natural features, water and other sensitive resources, topography, and natural drainage patterns;

2. The existing and 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 approving agency.

B. Following concept plan approval by the Stormwater Management Office, the owner/developer shall submit site development plans at a scale of 1" = 50' that reflect comments received during the previous review phase. Plans submitted for site development approval shall be of sufficient detail to allow site development to be reviewed and include but not be limited to:

1. All information provided during the concept plan review phase;

2. Final site layout, exact impervious area locations and acreages, proposed topography, delineated drainage areas at all points of discharge from the site and stormwater volume computations for ESD practices and quantity control structures;

3. 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 practices to be used;

4. 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

5. Any other information required by the Stormwater Management Office.

C. Following site development approval by the Stormwater Management Office, the owner/developer 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 approval shall be of sufficient detail to allow all approvals and permits to be issued according to the following:

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

1. 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 Stormwater Management Office.

E. 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. An inspection and maintenance 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;

17. Any other information required by the Stormwater Management Office.

F. If a stormwater management plan involves direction of some or all runoff off of the site, it is the responsibility of the developer to obtain from adjacent property owners any easements or other necessary property interests concerning flowage 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.

5.3 Preparation of the Stormwater Management Plan

A. The Stormwater Management Office requires that the design of a commercial plan be prepared by either a professional engineer, professional land surveyor, or registered landscape architect licensed in the State, as necessary to protect the public or the environment.

B. Design of a residential plan may be submitted by the property owner or contractor. A residential plan may only be submitted if one of the selected ESD's is used for stormwater management. If ESD to the MEP cannot be achieved in a residential plan, then the plan by definition will become a commercial plan.

C. If a stormwater BMP requires either a dam safety permit from MDE or small pond approval from the Garrett Soil Conservation District (SCD), the Stormwater Management Office shall require that the design be prepared by a professional engineer licensed in the State.

6.0 PERMITS

6.1 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 or waived by the Grading Permit Office as meeting all the requirements of this Ordinance. Where appropriate, a grading or building permit may not be issued without:

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

B. A recorded stormwater management maintenance agreement;

C. A performance bond is required by the developer and/or his designated representative for all non-single family residential structures and for all commercial, institutional and/or public occupancy development as described in section 7.0 of this ordinance. This performance bond, prepared by the developer, consultant and/or contractor, shall be in the form of a line item estimate for all proposed work indicated on the project documents plus preparation of the design certification and as-built drawings. The proposed work prices shall consider all labor, materials and equipment at a publicly bid rate;

D. A signature from the Stormwater Management Office on the Garrett County Building Construction Release Form.

6.2 Permit Fee

A non-refundable permit fee will be collected at the time the stormwater management plan or application for waiver is submitted. The permit fee will provide for the cost of plan review, administration, and management of the permitting process, and inspection of all projects subject to this Ordinance. The permit fee established by the Garrett County Commissioners may be amended from time to time.

6.3 Permit Suspension and Revocation

Any grading permit issued by the Grading Permit Office 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 the stormwater management facility.

E. An immediate danger exists in a downstream area in the opinion of the Stormwater Management Office.

6.4 Permit Conditions

In granting the plan approval, the Stormwater Management Office may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Ordinance and the preservation of the public health and safety.

7.0 PERFORMANCE BOND

The Stormwater Management Office shall require from the developer a non-expiring or auto-renewing surety or other means of security acceptable to the Stormwater Management Office prior to the issuance of any building and/or grading permit for the construction of a development requiring a stormwater management facility. The amount of the security shall not be less than the total estimated construction cost of the stormwater management facility. The bond 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 Ordinance, and other applicable laws and regulations, and any time limitations. The bond shall not be fully released without a final inspection of the completed work by the Stormwater Management Office, submission of "As-built" plans, and certification of completion by the Stormwater Management Office that all stormwater management facilities comply with the approved plan and the provisions of this Ordinance. A procedure may be used to release parts of the bond held by Stormwater Management Office after various stages of construction have been completed and accepted by Stormwater Management Office. The procedure used for partially releasing performance bonds must be specified by the Stormwater Management Office in writing prior to stormwater management plan approval.

8.0 INSPECTION

8.1 Inspection Schedule and Reports

A. The developer shall notify the Stormwater Management Office at least 48 hours before commencing any work in conjunction with site development, the stormwater management plan and upon completion of the project when a final inspection will be conducted.

B. Regular inspections shall be made and documented for each ESD planning technique and practice at the stages of construction specified in the Design Manual by the Stormwater Management Office, its authorized representative, or certified by a professional engineer licensed in the State of Maryland. At a minimum, all ESD and other nonstructural practices shall be inspected upon completion of final grading, the establishment of permanent stabilization, and before issuance of use and occupancy approval.

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 existing violations.

D. The owner/developer, The Garrett County Commissioners, and on-site personnel shall be notified in writing when violations are observed. Written notification by the inspector identifying the violation shall describe the nature of the violation and the required corrective action.

E. No work shall proceed until the Stormwater Management Office or designated representative inspects and approves the work previously completed and furnishes the developer with the results of the inspection reports as soon as possible after completion of each required inspection.

8.2 Inspection Requirements During Construction

A. At a minimum regular 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:
(i) Core trenches for structural embankments;
(ii) Inlet and outlet structures, anti-seep collars or diaphragms; and watertight connectors on pipes; and
(iii) Trenches for enclosed storm drainage facilities;
(b) Dur ing 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: at the stages specified for pond construction in 8.2 A (1) of this section, 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: at the stages specified for pond construction in 8.2 A (1) of this section and during placement and backfill of underdrain systems.

5. For filtering systems:

(a) During excavation to subgrade;
(b) During placement and backfill of underdrain systems;
(c) During placement of geotextiles and all filter media;
(d) Durin g construction of appurtenant conveyance systems such as flow diversion structures, pre-filters and filters, inlets, outlets, orifices, and 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;
(c) During installation of diaphragms, check dams, or weirs; and
(d) Upon completion of final grading and establishment of permanent stabilization.

B. The Stormwater Management Office 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 a violation to be corrected if stormwater management plan noncompliance is identified;

2. A stop work order shall be issued for the site by the Stormwater Management Office if a violation persists;

3. Claims may be made against the securities posted or the case may be referred for legal action if reasonable efforts to correct the violation have not been undertaken; or

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 Ordinance.

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

D. Once construction is complete, as-built plan certification shall be submitted by either a professional engineer or professional land surveyor licensed in the State to ensure that ESD planning techniques, treatment practices, and structural stormwater management measures and conveyance systems comply with the specifications contained in the approved plans. At a minimum, as-built certification shall include a set of drawings comparing the approved stormwater management plan with the constructed. The Stormwater Management Office may require additional information.

E. The Stormwater Management Office shall submit notice of construction 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 SCD approval are constructed, notice of construction completion shall also be submitted to the appropriate SCD.

9.0 MAINTENANCE

9.1 Maintenance Inspection

A. The Stormwater Management Office shall ensure that preventative maintenance is performed by inspecting all ESD treatment systems and structural stormwater management measures. Inspection shall occur during the first year of operation and at least once every 3 years thereafter. In addition, a maintenance agreement between the owner and Garrett County Commissioners shall be executed for privately-owned ESD treatment practices and structural stormwater management measures as described in 9.2 of this section.

B. Inspection reports shall be maintained by the Stormwater Management Office for all ESD treatment systems and structural stormwater management measures.

C. Inspection reports for ESD treatment systems and structural stormwater management measures 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. After notification is provided to the owner of any deficiencies discovered from an inspection, the owner shall have 30 days or a mutually agreed time frame between the Stormwater Management Office and the owner. The Stormwater Management Office shall then conduct a subsequent inspection to ensure completion of the repairs.

E. If repairs are not undertaken or are not found to be done properly, then enforcement procedures following 9.2 C of this section shall be followed by Stormwater Management Office.

F. If, after an inspection by the Stormwater Management Office, the condition of a stormwater management facility presents an imminent danger to the public health or safety, because of an unsafe condition or improper maintenance, the Stormwater Management Office shall take such action as may be necessary to protect the public and make the facility safe. Any cost incurred by the County/Municipality shall be assessed against the owner(s), as provided in section 9.2 C.

9.2 Maintenance Agreement

A. Prior to the issuance of any building permit for which stormwater management is required, the Stormwater Management Office shall require the applicant or owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by a private stormwater management facility. The agreement shall describe the ESD practices and structural stormwater management measures used to satisfy Section 4 of this ordinance and shall clearly identify the approved permit number. Additional development, redevelopment, or amendment to the approved stormwater management plan shall require subsequent execution of the agreement. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the Stormwater Management Office 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 and/or owner in the Land Records of the County.

C. The agreement shall also provide that, if after notice by the Stormwater Management Office to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) within a reasonable period of time (30 days maximum), the Stormwater Management Office may perform all necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties. This may be accomplished by placing a lien on the property, which may be placed on the tax bill and collected as ordinary taxes by the County/Municipality.

9.3 Maintenance Responsibility

A. The owner of the property on which work has been done pursuant to this Ordinance for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all 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 approved plans.

B. A maintenance schedule shall be developed for the life of any structural stormwater management facility or system of ESD practices and shall state the maintenance to be completed, the time period for completion, and who shall perform the maintenance. This maintenance schedule shall be printed on the approved stormwater management plan.

10.0 APPEALS

Any person aggrieved by the action of any official charged with the enforcement of this Ordinance, 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 Ordinance in regard to a specific application, shall have the right to appeal the action to a court of competent jurisdiction. The appeal shall be filed in writing within 30 days of the date of official transmittal of the final decision or determination to the applicant, shall state clearly the grounds on which the appeal is based, and shall be processed in the manner prescribed for hearing administrative appeals under the Maryland Rules of Procedure.

11.0 SEVERABILITY

If any portion of this Ordinance is held invalid or unconstitutional by a court of competent jurisdiction, such portion shall not affect the validity of the remaining portions of this Ordinance. It is the intent of the Board of County Commissioners that this Ordinance shall stand, even if a section, subsection, sentence, clause, phrase, or portion may be found invalid.

12.0 PENALTIES

Any person convicted of violating the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction thereof, shall be subject to a fine of not more than Five Thousand Dollars ($5,000.00) or imprisonment not exceeding one (1) year or both for each violation with costs imposed at the discretion of the court and not to exceed Fifty Thousand Dollars ($50,000.00). Each day that a violation continues shall be a separate offense. In addition, the Board of County Commissioners may institute injunctive, mandamus or other appropriate action or proceedings of law to correct violations of this Ordinance. 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.

13.0 EFFECTIVE DATE

And be it further enacted that this Ordinance shall take effect June 15, 2010. A project with an approved stormwater management plan within 2 years of the effective date will be recognized as long as the project has a valid County Grading Permit. If the grading permit has expired and no phase of the stormwater management plan has been implemented, then the project shall be required to meet all of the requirements of this Ordinance and be approved under this Ordinance.

DULY ADOPTED by vote of the Board of County Commissioners this 15th day of June 2010.

BOARD OF COUNTY COMMISSIONERS
OF GARRETT COUNTY, MARYLAND

Ernest J. Gregg, Chairman

Dennis G. Glotfelty, Commissioner

Frederick A. Holliday, Commissioner

Attest:

R. Lamont Pagenhardt
County Administrator