



The Mayor and Commissioners  
of the Town of Elkton

Ordinance 6-2010

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BY: Mayor and Commissioners  
INTRODUCTION: June 16, 2010  
ADOPTED: July 7, 2010

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**AN ORDINANCE CONCERNING**

**Code of the Town of Elkton  
Title 13  
Chapter 13.16  
STORMWATER MANAGEMENT**

**FOR THE PURPOSE** of amending provisions under Chapter 13.16 affecting stormwater management and incorporating the 2000 Maryland Stormwater Design Manual, Volume I & II [Maryland Department of the Environment (hereinafter "MDE"), April 2000] and the USDA Natural Resources Conservation Service, Maryland Conservation Practice, Standard Pond Code 378 (January 2000), as amended.

**WHEREAS**, the Town of Elkton adopted a stormwater management ordinance on July 11, 2001, consistent with regulations under State law, which amended the Town's previous stormwater management regulations; and

**WHEREAS**, the Town of Elkton was notified by the Maryland Department of the Environment that stormwater management revisions, required under the Code of Maryland Regulations (COMAR) 26.14.02.04 require each county and municipality to submit to MDE proposed stormwater management ordinance revisions on or before November 11, 2009, and implement the policies and practices established in the 2000 Maryland Stormwater Design Manual, Volumes I & II, by May 4, 2010.

**NOW, THEREFORE**, the Mayor and Board of Commissioners of the Town of Elkton hereby ordain that:

Section I: Title 13, Chapter 13.16, Stormwater Management, is hereby repealed.

Section II: Title 13, Chapter 13.16, Stormwater Management, is re-enacted and to read as follows:

CODE OF THE TOWN OF ELKTON  
TITLE 13  
CHAPTER 13.16  
STORMWATER MANAGEMENT

Sections:

13.16.010	Purpose and Authority
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13.16.280	Effective Date

**§13.16.010 Purpose and Authority**

- A. The purpose of this chapter is to protect, maintain and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures that 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.

- B. The provisions of this chapter, 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 the Town of Elkton and shall apply to all development occurring within the incorporated area of the Town of Elkton. The application of this chapter 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 the State statute. The Town of Elkton shall be responsible for the coordination and enforcement of the provisions of this chapter. This chapter applies to all new and redevelopment projects that have not received final approval for erosion and sediment control and stormwater management plans by May 4, 2010.
- C. The 2000 Maryland Stormwater Design Manual, Volumes I & II (Maryland Department of the Environment, April 2000), and all subsequent revisions, is incorporated by reference by the Town of Elkton and shall serve as the official guide for stormwater management principles, methods, and practices.
- D. USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000).

### **§13.16.020 Definitions**

For the purpose of this chapter, the following definitions describe the meaning of the terms in this chapter:

- A. “Administration” means the Maryland Department of the Environment (MDE) Water Management Administration (WMA).
- B. “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, including outdoor recreation.
- C. “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.
- D. “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.
- E. “Approving Agency” means the entity responsible for the review and approval of stormwater management plans.

- F. “Aquifer” means a porous water bearing geologic formation generally restricted to materials capable of yielding an appreciable supply of water.
- G. “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.
- H. “Channel protection storage volume ( $C_{p_v}$ )” 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.
- I. “Clearing” means the removal of trees and brush from the land but shall not include the ordinary mowing of grass.
- J. “Concept Plan” means the first of three required plan approvals that includes the information necessary to allow an initial evaluation of a proposed project.
- K. “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.
- L. “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.
- M. “Develop land” means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration.
- N. “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.
- O. “Drainage area” means that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridge line.
- P. “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.
- Q. “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 the land development on water resources. Methods for designing ESD practices are specified in the Design Manual.

- R. “Exemption” means those land development activities that are not subject to the stormwater management requirements contained in this Section.
- S. “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.
- T. “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.
- U. “Final stormwater management plan” means the last of the three required plan approvals that includes the information necessary to allow approvals and permits to be issued by the approving agency.
- V. “Flow attenuation” means prolonging the flow time of runoff to reduce the peak discharge.
- W. “Grading” means any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled, or any combination thereof.
- X. “Impervious area” means any surface that does not allow stormwater to infiltrate into the ground.
- Y. “In-fill development” means a vacant lot or parcel in a developed area.
- Z. “Infiltration” means the passage or movement of water into the soil surface.
- AA. “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.
- BB. “Off-site stormwater management” means the design and construction of a facility necessary to control stormwater from more than one development.
- CC. “On-site stormwater management” means the design and construction of systems necessary to control stormwater within immediate development.
- DD. “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.
- EE. “Person” means the federal government, the State, any county, municipal corporation, or

other political subdivision of the State, or any of their units, or an individual receive, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, or any partnership, firm, association, public or private corporation, or any other entity.

- FF. “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.
- GG. “Preliminary 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.
- HH. “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.
- II. “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.
- JJ. “Retention structure” means a permanent structure that provides for the storage of runoff by means of a permanent pool of water.
- KK. “Retrofitting” means the implementation of ESD practices, the construction of a structural BMP, or the modification of an existing structural BMP in a previously development area to improve water quality over current conditions.
- LL. “Sediment” means soils or other surficial materials transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.
- MM. “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.
- NN. “Stabilization” means the prevention of soil movement by any various vegetative and/or structural means.
- OO. “Stormwater” means water that originates from a precipitation event.
- PP. “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.
- QQ. “Stripping” means any activity that removes the vegetative surface cover including tree removal, clearing, grubbing, and storage or removal of topsoil.

- RR. “Town” means the Town of Elkton.
- SS. “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 this chapter.
- TT. “Waiver” means the reduction of stormwater management requirements by the Town for a specific development on a case-by-case review basis.
- UU. “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.
- VV. “Water quality volume (WQ<sub>v</sub>)” 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.
- WW. “Watershed” means the total drainage area contributing runoff to a single point.

### **§13.16.030 Grandfathering**

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

(1) Administrative Waiver

(a) “Administrative Waiver” means a decision by the Town pursuant to this chapter 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 §13.16.060 of this chapter.

(2) Approval

(a) "Approval" means a documented action by the Town 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 Town 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 for stormwater management 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 Town 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 Town may grant an administrative waiver to a development that received a preliminary project approval prior to May 4, 2010. Administrative waivers expire according to §13.16.030(C.) of this chapter.

C. Expiration of Administrative Waivers

- (1) 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.

**§13.16.040 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 provided within this section. Stormwater management measures must be designed consistent with the Design Manual and constructed according to an approved plan for new development or redevelopment.

**§13.16.050 Exemptions**

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



- A. Agricultural land management practices;
- B. Additions or modifications to existing single family detached residential structures if they comply with §13.16.050(C.) of this chapter;
- C. Any 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.

**§13.16.060 Waivers**

- A. Except as provided in §13.16.060(B.)and(D.) of this chapter, the Mayor and Commissioners shall grant stormwater management quantitative control waivers only to those projects within areas where watershed management plans have been developed consistent with §13.16.060(F.). 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 §13.16.060(D.) of this chapter, if watershed management plans consistent with §13.16.060(F.) 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 have direct discharges to tidally influenced receiving waters; 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 approving agency determines that circumstances exist that prevent the reasonable implementation of quantity control practices.
- C. Stormwater management qualitative control waivers apply 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 §13.16.070 of this chapter are satisfied.
  - (3) Site 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 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 Town waiver policy; and
  - (3) Reasonably ensure the development will not adversely impact stream quality which includes down stream properties.
- F. If the Town has established an overall watershed management plan for a specific watershed, then the Town may develop quantitative waiver and redevelopment provisions that differ from §13.16.060(B.) and §13.16.070 of this chapter.
- 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.

### **§13.16.070 Redevelopment**

- A. Stormwater management plans are required by the Town for all redevelopment, unless otherwise specified by watershed management plans developed according to §13.16.060(F.). 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; or
  - (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 §13.16.070(B.)(1)and(2) of this chapter for at least 50 percent of the existing site impervious area.
- C. Alternative stormwater management measures may be used to meet the requirements in §13.16.070(B.) if the owner/developer satisfactorily demonstrates to the Town 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 determination of what alternatives will be available may be made by the Town at the appropriate point in the development review process. The Town shall consider the prioritization of alternatives in §13.16.070(C.) of this chapter 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 Town 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.
- E. The Mayor and Commissioners may consider separate policies for providing water quality treatment for redevelopment projects if the owner/developer demonstrates with the approval of the Town's engineer that the requirements of §13.16.070(A.)and(B.) of this chapter cannot be met. The following alternative redevelopment policies shall be considered:
- (1) Retrofitting an existing off-site stormwater management system within the watershed of the proposed redevelopment to provide water quality treatment for an area equal to

- or greater than 40% of the existing and 100% of new impervious area.
- (2) If the owner/developer demonstrates with the approval of the Town's engineer that the requirements of §13.16.070(A.)and(B.) of this chapter cannot be met, a fee in lieu of \$2.25 per square foot for 40% of existing and 100% of new impervious area.
  - (3) Funds collected as fees in lieu under this subsection shall be specified to be used only to fund the analysis, design, construction and/or maintenance of stormwater management facilities and/or stream restoration projects within the town; and shall not exceed the cost of constructing an effective on-site stormwater management facility.
  - (4) Design criteria based on watershed management plans developed according to §13.16.060(F.).

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

### **§13.16.080 Variance**

The Mayor and Commissioners may grant a written variance from any requirement of §13.16.090, Stormwater Management Criteria, if there are exceptional circumstances applicable to the site such that strict adherence will result in unnecessary hardship and not fulfill the intent of this chapter. A written request for variance shall be provided to the Mayor and Commissioners and shall state the specific variances sought and reasons for their granting. The Mayor and Commissioners 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.

### **§13.16.090 Minimum Control Requirements.**

- A. The minimum control requirements established in this section and the Design Manual are as follows:
- (1) The Town 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 chapter 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 the Town 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 Town may require more than the minimum control requirements specified in this chapter 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.

#### **§13.16.100 Stormwater Management Measures**

- A. 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.
- B. 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 §13.16.090(A.) of this chapter:
    - (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 §13.16.090(A.) of this chapter:
    - (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-bioretenention;
  - (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. The Town 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.

C. 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 §13.16.090(A.) of this chapter:
- (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.

D. ESD planning techniques and treatment practices and structural stormwater management measures used to satisfy the minimum requirements in §13.16.090(A.) of this chapter must be recorded in the land records of the Town and remain unaltered by subsequent property owners. Prior approval from the Town shall be obtained before any stormwater management practice is altered.

E. 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 the Town.

- F. For the purposes of modifying the minimum control requirements or design criteria, the owner/developer shall submit to the Town 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 streamflow. The point of investigation is to be established with the concurrence of the Town, downstream of the first downstream tributary whose drainage area equals or exceeds the contributing area to the project or stormwater management facility.

#### **§13.16.110 Specific Design Criteria**

- A. The basic design criteria, methodologies, and construction specifications, subject to the approval of the Town and the Administration, shall be those of the Design Manual.
- B. The town shall require permanent safety fencing surrounding all retention and detention facilities in accordance with the standards and specifications developed and approved by the Town.
- C. Infiltration systems shall be designed in accordance with standards and specifications that are developed or approved by the Administration and shall meet the following requirements:
  - (1) Infiltration systems greater than three feet deep shall be located at least ten feet from basement walls;
  - (2) Infiltration systems designed to handle runoff from commercial or industrial impervious parking area shall be minimum of one hundred (100) feet from any water supply well;

#### **§13.16.120 Review and Approval of Stormwater Management Plans**

- A. For any proposed development, the owner/developer shall submit phased stormwater management plans to the Town for review and approval. At a minimum, plans shall be submitted for the concept, preliminary site development, and final stormwater management construction phases of project design. Each plan submittal shall include the minimum content specified in §13.16.130 of this chapter and meet the requirements of the Design Manual and §13.16.090; §13.16.100; and §13.16.110 of this chapter.
- B. The Town 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 reflect input from all appropriate agencies including, but not limited to the soil conservation district and the departments of planning, zoning, and public works. All comments from the Town and other appropriate agencies shall be addressed and approval received at each phase of project design before subsequent submissions.

### **§13.16.130 Contents and Submission of Stormwater Management Plans**

- A. Concept Plan. The owner/developer 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 §13.16.100 of this chapter and the Design Manual. Plans submitted for concept approval shall include, but are not limited to:
- (1) A map at a scale specified by the Town showing site location, existing natural features, water and other sensitive resources as defined by critical area in the Town of Elkton Zoning Ordinance, 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 approving agency.
- B. Preliminary Site Development Plan. Following concept plan approval by the Town, the owner/developer shall submit preliminary site development plans 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;
  - (5) Geotechnical investigations including soil maps, borings, site specific recommendations, and any additional information necessary for the final stormwater management design;
  - (6) Drainage area maps depicting predevelopment and post development runoff flow path segmentation and land use;
  - (7) Hydrologic computations of the applicable ESD and unified sizing criteria according to the Design Manual for all points of discharge from the site;



- (8) Hydraulic and structural computations for all ESD practices and structural stormwater management measures to be used;
  - (9) A narrative that supports the final stormwater management design; and
  - (10) Any other information required by the Town.
- C. Final Stormwater Management Plan. Following preliminary site development approval by the Town, 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. 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; and
  - (17) Any other information required by the Town.

- E. 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.
- F. Final approval on stormwater management plans will expire two (2) years after the date final approval is given by the Town.

#### **§13.16.140 Preparation of Stormwater Management Plans**

- A. The design of stormwater management plans shall be prepared by any individual whose qualifications are acceptable to the Town. The Town may require that the design be prepared by either a professional engineer, professional land surveyor, or landscape architect licensed in the State, as necessary to protect the public or the environment.
- B. If a stormwater BMP requires either a dam safety permit from MDE or small pond approval from the soil conservation district, the Town shall require that the design be prepared by a professional engineer licensed in the State.

#### **§13.16.150 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 the Town as meeting all the requirements of the Design Manual and this Ordinance. Where appropriate, a 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 as described in §13.16.180 of this chapter; and
- C. A performance bond as described in §13.16.190 of this chapter.

#### **§13.16.160 Permit Fee**

Non-refundable permit fees will be collected at each phase of 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 chapter. A permit fee schedule shall be established by resolution by the Mayor and Commissioners based upon the relative complexity of the project and may be amended from time to time.

### **§13.16.170 Permit Suspension and Revocation**

Any grading or building permit issued by the Town 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 in the opinion of the Town.

### **§13.16.180 Permit Conditions**

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

### **§13.16.190 Performance Bond**

The Town shall require from the developer a surety or cash bond, irrevocable letter of credit, or other means of security acceptable to the Town prior to the issuance of any building and/or grading permit for the construction of a development requiring stormwater management. The amount of the security shall not be less than the total estimated construction cost of all stormwater management facilities. 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 chapter, 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 Town, submission of "as-built" plans, and certification of completion by the Town that all stormwater management facilities comply with the approved plan and the provisions of this chapter. A procedure may be used to release parts of the bond held by the Town after various stages of construction have been completed and accepted by the Town. The procedures used for partially releasing performance bonds must be specified by the Town in writing prior to stormwater management plan approval.

### **§13.16.200 Inspection Schedule and Reports**

- A. The developer shall notify the Town at least 48 hours before commencing any work in conjunction with site development, the stormwater management plan, and upon completion of the project.
- 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 Town, 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 violations that exist.
- D. The owner/developer and on-site personnel shall be notified in writing when violations are observed. Written notification shall describe the nature of the violation and the required corrective action.
- E. No work shall proceed on the next phase of development until the Town 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.

### **§13.16.210 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) 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 – at the stages specified for pond construction in §13.16.210 (A.)(1) of this chapter, 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 §13.16.210 (A.)(1) of this chapter 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 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 Town 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 Town if a violation persists;

- (3) Bonds or securities shall be withheld or the case may be referred for legal action if reasonable efforts to correct the violation have not been undertaken; or
  - (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 chapter.
- 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 of Maryland 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 what was constructed. The Town may require additional information.
  - E. The Town 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 SCD approval are constructed, notice of construction completion shall also be submitted to the appropriate SCD.

### **§13.16.220 Maintenance Inspection**

- A. The Town 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 the Town shall be executed for privately-owned ESD treatment systems and structural stormwater management measures as described in §13.16.230 of this chapter.
- B. Inspection reports shall be maintained by the Town 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. Upon notifying an owner of the inspection results, the owner shall have 30 days, or other time frame mutually agreed to between the Town and the owner, to correct the deficiencies discovered. The Town shall conduct a subsequent inspection to ensure completion of the repairs.
- E. If repairs are not properly undertaken and completed, enforcement procedures following §13.16.220(C.) of this chapter shall be followed by the Town.
- F. If, after an inspection by the Town, the condition of a stormwater management facility is determined to present an immediate danger to public health or safety because of an unsafe condition, improper construction, or poor maintenance, the Town shall take such action as may be necessary to protect the public and make the facility safe. Any cost incurred by the Town shall be assessed against the owner(s), as provided in §13.16.230 (C.) of this chapter.

**§13.16.230 Maintenance Agreement**

- A. Prior to the issuance of any building permit for which stormwater management is required, the Town shall require the applicant or owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by a private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the Town 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 of the Town.
- C. The agreement shall also provide that, if after notice by the Town 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 Town 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 Town.

**§13.16.240 Maintenance Responsibility**

- A. The owner of a property that contains private stormwater management facilities installed pursuant to this chapter, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all ESD practices, grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices in perpetuity. Such repairs or restoration and maintenance shall be in accordance with previously approved or newly submitted plans. All documentation relating to the repair shall be sent to the Town of Elkton Public Works Department.
- 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 the responsible party what will perform the maintenance. This maintenance schedule shall be printed on the approved stormwater management plan.
- C. It is the responsibility of the property owner to keep a maintenance log for the life of the facility which includes “as-builts.”

**§13.16.250 Appeals**

Any person aggrieved by the action of the Town, with respect to the enforcement of this chapter, as the result of the disapproval of the properly filed application for a permit, issuance of a written notice of violation, or an alleged failure to properly enforce this chapter in regard to the specific application, shall have the right to appeal the action to the Circuit Court for Cecil County.

**§13.16.260 Severability**

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

**§13.16.270 Penalties**

- A. 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



One Thousand Dollars (\$1,000.00) or imprisonment not exceeding six (6) months or both such fine and imprisonment for each violation with costs imposed in the discretion of the court. Each day that a violation continues shall be a separate offense.

- B. In addition, the Town may institute injunctive, mandamus or other appropriate action or proceedings of law to correct violations of this chapter. 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.

**§13.16.280 Effective Date**

Be it further enacted that this chapter should take effect twenty (20) days from the date it becomes adopted.

**\*\*END OF SECTION\*\***

**DATE OF EFFECT**

**THIS ORDINANCE** shall be effective on the 27<sup>th</sup> day of July, 2010.

**IN WITNESS WHEREOF**, we have set our hands and seals, and adopted Ordinance 6-2010, attached hereto, this 7<sup>th</sup> day of July 2010.

**AFFIRMING**

Mayor Joseph L. Fisona  
Commissioner Charles H. Givens, Sr.  
Commissioner Charles E. Hicks, V  
Commissioner Mary Jo Jablonski  
Commissioner Earl M. Piner, Sr.