EXHIBIT NO. 1

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6-12-04

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6-9-04

Introduction and first reading:	6/09/04
Public hearing:	6/12/04
Second reading and enactment:	6/12/04

INFORMATION ON PROPOSED SUBSTITUTE ORDINANCE

Title

AN ORDINANCE to repeal Article XIII (ENVIRONMENTAL MANAGEMENT) of the City of Alexandria Zoning Ordinance, and adopt in lieu thereof Revised Article XIII (CHESAPEAKE BAY ENVIRONMENTAL MANAGEMENT) (TA No. 2004-0006)

Summary

The proposed ordinance accomplishes the final adoption of Text Amendment No. 2004-0006, to implement required and other changes to the City's Chesapeake Bay Protection Ordinance.

Sponsor

Staff

Rich Baier, Director of transportation and Environmental Services
Ignacio B. Pessoa, City Attorney

Authority

§ 10.1-2100, *et seq.*, Code of Virginia (1950), as amended
§ 9.09, Alexandria City Charter

Estimated Costs of Implementation

None

Attachments in Addition to Proposed Ordinance and its Attachments (if any)

None

ORDINANCE NO. _____

AN ORDINANCE to repeal Article XIII (ENVIRONMENTAL MANAGEMENT) of the City of Alexandria Zoning Ordinance, and adopt in lieu thereof Revised Article XIII (CHESAPEAKE BAY ENVIRONMENTAL MANAGEMENT) (TA No. 2004-0006).

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Article XIII (Environmental Management) of the City of Alexandria Zoning Ordinance be, and the same hereby is, repealed.

Section 2. That Revised Article XIII (Chesapeake Bay Environmental Management), attached hereto and incorporated herein fully by reference, be, and the same hereby is, adopted as part of the City of Alexandria Zoning Ordinance.

Section 3. That this ordinance shall become effective upon the date and at the time of its final passage, and shall apply to all applications for land use or land development approval provided for under the City of Alexandria Zoning Ordinance which are filed on and after February 24, 2004, and are pending on and after the effective date before any city department, agency or board, or before city council, or on judicial review, and shall apply to all other facts and circumstances subject to the provisions of the City of Alexandria Zoning Ordinance, as provided in Section 13-118 of Revised Article XIII.

WILLIAM D. EUILLE
Mayor

Introduction: 6/9/04
First Reading: 6/9/04
Publication:
Public Hearing:
Second Reading:
Final Passage:

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Revised Article XIII
Chesapeake Bay Environmental Management

[Underlined text indicates substantive changes from prior law. In addition, text that has been changed subsequent to the February 23rd public release draft is designated by a dashed underline.]

Article XIII. CHESAPEAKEKE BAY ENVIRONMENTAL MANAGEMENT

Section 13-100 General findings.

The Chesapeake Bay is one of the most productive estuaries in the world, providing substantial economic and social benefits to the people of the Commonwealth of Virginia. Healthy state and local economies are integrally related to and dependent upon the health of the Chesapeake Bay. The general welfare of the people of the Commonwealth depends upon the health of the Bay.

The waters of the Chesapeake Bay and its tributaries, including the Potomac River and Alexandria's local streams, have been degraded significantly by point source and nonpoint source pollution, which threatens public health and safety and the general welfare.

Appropriate land use regulations and construction and maintenance practices have proven ability to reduce pollution that damages water quality of the Chesapeake Bay and its tributaries.

13-101 Purpose.

(A) It is the policy of the City of Alexandria, Virginia to protect the quality of water in the Chesapeake Bay and its tributaries and, to that end, to require all land uses and land development in the City to:

(1) Safeguard the waters of the Commonwealth from pollution;

(2) Prevent any increase in pollution of state waters;

(3) Reduce existing pollution of state waters; and,

(4) Promote water resource conservation.

(B) To fulfill this policy, this Article XIII is adopted to minimize potential pollution from stormwater runoff, minimize potential erosion and sedimentation, reduce the introduction of harmful nutrients and toxins into state waters, maximize rainwater infiltration while protecting groundwater, and ensure the long-term performance of the measures employed to accomplish the statutory purpose.

13-102 Authority. This Article XIII is issued under the authority of Sec. 10.1-2108 of Chapter 21, Title 10.1 of the Code of Virginia (the Chesapeake Bay Preservation Act, hereinafter "the Act"), the regulations promulgated thereunder by the Chesapeake Bay Local Assistance Board, and Sec. 10.1-603.3 of the Code of Virginia, which authorizes the City to adopt a local stormwater management program. Authority to protect water quality is also provided by Sec. 15.2-2283 of the Code of Virginia.

13-103 Definitions. The following words and terms used in this Article XIII have the following meanings, unless the context clearly indicates otherwise.

(A) *Applicant.* Means a person who has submitted, or plans to submit, a plan of development or an exception request to the City.

(B) *Best management practice (BMP).* A practice, or combination of practices, that is determined by the Director of Transportation and Environmental

Services to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with the purpose of this Article XIII.

(C) *Buffer area.* An area of natural or established vegetation managed to protect other components of a Resource Protection Area and state waters from significant degradation due to land disturbances. To effectively perform this function, the buffer area will achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. A 100 foot wide buffer area shall be considered to meet this standard.

(D) *Development.* The construction or substantial alteration of residential, commercial, industrial, institutional, recreational, transportation, or utility facilities or structures.

(E) *Director of T&ES/Director of P&Z.* Director of T&ES means the Director of Transportation and Environmental Services of the City of Alexandria. Director of P&Z means the Director of Planning and Zoning of the City of Alexandria.

(F) *Floodway.* All lands as defined in Sec. 6-303(K) of this ordinance.

(G) *Highly erodible soils.* Soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The erodibility index for any soil is defined as the product of the formula RKLS/T, where K is the soil susceptibility to water erosion in the surface layer; R is the rainfall and runoff; LS is the combined effects of slope length and steepness; and T is the soil loss tolerance.

(H) *Highly permeable soils.* Soils with a given potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 72 inches (permeability groups "rapid" and "very rapid"), as found in the "National Soil Survey Handbook" of November 1996 in the "Field Office Technical Guide" of the U.S. Dept. of Agriculture Natural Resources Conversation Service.

(I) *Impervious cover.* A surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

(J) *Intermittent stream.* Any natural or engineered channel with flowing water during certain times of the year, when groundwater provides for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. Acceptable methodologies for establishing the presence of an intermittent stream will be provided by the Director of T&ES pursuant to Sec. 13-104(C).

(K) *Isolated wetlands of minimal ecological value.* Those wetlands, as defined in 9VAC25-210-10, that: (i) do not have a surface water connection to other state waters; (ii) are less than one-tenth of an acre in size; (iii) are not located in a Federal Emergency Management Agency designated 100-year floodplain; (iv) are not identified by the Virginia Natural Heritage Program as a rare or state significant natural community; (v) are not forested; and (vi) do not contain listed federal or state threatened or endangered species.

(L) *Land disturbance.* Any land change that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting, and filling of land.

(M) *Natural channel.* Means a nontidal waterway that is part of the natural topography and is generally characterized as being irregular in cross section with a meandering course.

(N) *Nonpoint source pollution.* Contamination from diffuse sources that is not regulated as point source pollution under Sec. 402 of the Clean Water Act.

(O) *Nontidal wetlands.* Those wetlands, other than tidal wetlands, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to Sec. 404 of the Federal Clean Water Act, in 33 CFR 328.3b.

(P) *Pre-development.* The land use that exists at the time that plans for the development are submitted to the City. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the land use at the time the first item is submitted shall establish pre-development conditions.

(Q) *Post-development.* Conditions that reasonably may be expected or anticipated to exist after completion of the development activity on a specific site or tract of land.

(R) *Public road.* For the purpose of this Article XIII, public road means a publicly owned road designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to (i) the Erosion and Sediment Control Law (Sec. 10.1-560 *et seq.* of the Code of Virginia) and (ii) the Virginia Stormwater Management Act (Sec. 10.1-603.1 *et seq.* of the Code of Virginia). This definition includes those roads where the Virginia Department of Transportation exercises direct supervision over the design or construction activities, or both, and cases where roads are constructed or maintained, or both, by the City of Alexandria.

(S) *Redevelopment.* The process of developing land that is or has been previously developed.

(T) *Shoreline.* Land contiguous to a body of water.

(U) *State waters.* All waters on the surface or in the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.

(V) *Stormwater management facility.* A device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.

(W) *Stormwater runoff.* That portion of precipitation that is discharged across the land surfaces or through conveyances to one or more waterways.

(X) *Substantial alteration.* Means expansion or modification of a building or development that would result in land disturbance exceeding an area of 2,500 square feet in the Resource Management Area only.

(Y) *Tidal shore.* Land contiguous to a tidal body of water between the mean low water level and the mean high water level.

(Z) *Tidal wetlands.* Vegetated and nonvegetated wetlands as defined in Sec. 28.2-1300 of the Code of Virginia.

(AA) *Use.* Any activity on the land other than development, including, but not limited to agriculture, horticulture, and silviculture.

(BB) *Water body with perennial flow.* A body of water that flows in a natural or engineered channel year-round during a year of normal precipitation. This includes, but is not limited to streams, estuaries, and tidal embayments and may include drainage ditches or channels constructed in wetlands or from former natural drainage ways that convey perennial flow. Lakes and ponds, through which a perennial stream flows, are a part of the perennial stream. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow. The width of the perennial stream extends from top-of-bank to top-of-bank of the channel or to the limits of the normal water level for a pond or lake when there is no definable top-of-bank. Acceptable methodologies for establishing the presence of a water body with perennial flow will be provided by the Director of T&ES pursuant to Sec. 13-104(C).

(CC) *Water-dependent facility.* A development of land that cannot exist outside of the Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to: (i) ports; (ii) the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers; (iii) marinas and other boat docking facilities; (iv) beaches and other public water-oriented recreation areas; and, (v) fisheries or other marine resources facilities.

(DD) *Water quality volume.* The volume equal to the first 0.5 inch of runoff multiplied by the total impervious area of the tax map parcel.

(EE) *Watershed.* The total drainage area contributing runoff to a single point.

(FF) *Wetlands.* Tidal and nontidal wetlands.

13-104 Administration.

(A) *Responsibility for administration.* The Director is charged with responsibility for the administration of this Article XIII.

(B) *Duties and authority.* In the administration of this Article XIII the duties and authority of the Director of T&ES shall include, without limitation:

(1) Receiving applications for plan of development approval;

(2) Reviewing applications to determine if they contain all information required and necessary for a determination of their merit;

(3) Reviewing applications to determine their compliance with the provisions and intent of this Article XIII and their merit;

(4) Docketing items for hearing before the Planning Commission and conferring with the City Manager to schedule public hearings before the City Council as necessary on applications;

(5) Preparing a staff report for each application; and,

(6) Interpreting the provisions of this Article XIII to ensure that its intent is carried out.

(C) *Rules, regulations, and procedures.* The Director of T&ES shall promulgate rules, regulations, and procedures for the administration and enforcement of this Article XIII and shall promulgate rules, regulations, and procedures for the processing of applications that ensure full review, comment, and recommendations on each application by the Department of Transportation and Environmental Services. The City Manager shall promulgate rules and procedures for review by other departments of applications, where such review is determined to be necessary or desirable and such procedures may

include the establishment of a development review committee composed of departments of the City whose expertise is necessary or desirable in the review of applications. All such rules, regulations, and procedures shall be transmitted to the City Council at the time of issuance.

(D) *Establishment of fees.* The Director of T&ES shall by general rule approved by City Council establish a schedule of fees required for each application under this Article XIII to be paid at the time an application is submitted.

(E) *Responsibility for enforcement.* The Director of T&ES shall have the authority and the responsibility of Sec. 11-200 and Sec. 13-120 to ensure that all buildings and structures and the use of all land complies with the provisions of this Article XIII.

(F) The Director of T&ES shall review, approve, disapprove, or approve with modifications or conditions or both the following elements of the plan of development:

(1) The environmental site assessment, required pursuant to Sec. 13-112.

(2) The stormwater management plan, required pursuant to Sec. 13-113.

(3) The water quality impact assessment, if required, pursuant to Sec. 13-114.

(4) Compliance of the plan of development with Sec. 13-106 through Sec. 13-110.

(G) Review and decision on applications for exceptions shall be as provided in Sec. 13-116.

(H) Review and decision on applications for modifications to noncomplying land uses and structures shall be as provided in Sec. 13-118.

(I) Review and decision on applications for exemptions shall be as provided in Sec. 13-119.

(J) Review and decision on the remaining elements of the plan of development shall be as provided in the regulations of this ordinance and the City Code applicable to each such element.

13-105 Designation of Chesapeake Bay Preservation Area Overlay District.

(A) All land within the corporate limits of the City is designated as a Chesapeake Bay Preservation Area (CBPA). The CBPA is divided into Resource Protection Areas and Resource Management Areas. The regulations set forth in this Article XIII shall apply as an overlay district, and shall supersede any zoning, land use, or land development regulation of the City Code that is inconsistent with the provisions of this Article XIII.

(B) Resource Protection Areas (RPAs) consist of sensitive land that has either an intrinsic water quality value due to the ecological and biological processes such land performs or that is sensitive to uses or activities such that the use results in significant degradation to the quality of state waters. In their natural condition, these lands provide for the removal, reduction, or assimilation of nonpoint source pollution entering the bay and its tributaries. An area of land that includes any one of the following land types shall be considered to be within the RPA:

(1) Tidal wetlands;

(2) Tidal shores;

(3) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;

(4) A buffer area of 100 feet located adjacent to and landward of the components listed in paragraphs (1) through (3) above and along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the RPA notwithstanding the presence of permitted uses, encroachments, and vegetation clearing in compliance with this Article XIII.

(C) Resource Management Areas (RMAs) include land that, if improperly used or developed, has a potential for causing significant water quality degradation or for diminishing the functional value of the RPA. Therefore, all lands in the City, not included in the RPA, shall constitute the RMA since all such land drains through natural or manmade conveyances to the Potomac River and Chesapeake Bay.

13-106 *Establishment of CBPA boundaries.*

(A) Chesapeake Bay Preservation Area boundaries are established by text, as provided in Sec. 13-105. The City shall publish and update in a manner established by the Director of T&ES pursuant to Sec. 13-104(C) a general map depicting the location of identified CBPA features. However, in all cases it is the burden of the applicant to identify CBPA features and to delineate the appropriate RPA boundaries in accordance with the development review process required pursuant to Sec. 13-111, or if no development review process is required, then through the environmental site assessment pursuant to Sec. 13-112.

(B) Any property owner wishing to change the depiction of an RPA feature on the general map may conduct an environmental site assessment in Sec. 13-112 and submit it to the Director of T&ES. The Director of T&ES may accept, modify, or reject the RPA delineation based on the evidence presented by the property owner and in consideration of all other available information.

(C) In the event that a site-specific RPA boundary delineation is contested by an applicant or property owner, the applicant or property owner may request a meeting with the Director of T&ES to review the decision. Requests for the meeting shall be made no more than 30 calendar days after notification of a modification or rejection of a proposed RPA delineation. The Director of T&ES will preside over the meeting of the involved parties and reconsider the decision. The meeting participants will be notified by the Director of T&ES within 30 calendar days after the meeting of the result of the reconsideration.

13-107 *Development, redevelopment, and uses permitted in RPAs.* The following criteria shall apply in RPAs unless the development, redevelopment, use, or land disturbing activity is exempted under Sec. 13-119 or granted an exception pursuant to Sec. 13-116. All development, redevelopment, and uses within the RPA must comply with the general performance criteria for CBPAs provided in Sec. 13-109.

(A) The following are permitted within the RPA provided they do not require development, redevelopment, structures, grading, fill, draining, or dredging:

(1) Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife;

(2) Passive recreational activities, including but not limited to fishing, bird watching, hiking, boating, horseback riding, swimming, and canoeing; and,

(3) Educational activities and scientific research.

(B) The following are permitted within the RPA if approved by the Director of T&ES. A water quality impact assessment may be required by the Director of T&ES in accordance with Sec. 13-114 if the project is located within an environmentally sensitive area, or is of sufficient scale to affect water quality.

(1) Repair and maintenance of existing piers, walkways, observation decks, wildlife management shelters, boathouses, and other similar water-related structures provided that there is no increase in structure footprint and that any required excavating and filling results in a land disturbing activity of 2,500 square feet or less;

(2) Boardwalks, trails, and pathways;

(3) Historic preservation and archeological activities; and,

(4) Repair and maintenance of existing flood control and stormwater management facilities.

(C) The following, if permitted in the underlying zone, are allowed within the RPA if approved by the Director of T&ES and provided that a water quality impact assessment is performed and accepted by the Director of T&ES as complete in accordance with Sec. 13-114.

(1) A new or expanded water-dependant facility may be allowed provided that the following criteria are met:

(a) It does not conflict with the City Master Plan;

(b) Any non water-dependent component is located outside of the RPA; and,

(c) Access to the water-dependent facility is provided with the minimum disturbance necessary, and where practical, a single point of access is provided.

(2) Redevelopment may be allowed provided that the following criteria are met:

(a) There is no increase in impervious surface cover;

(b) There is no further encroachment within the RPA;

(c) The proposed redevelopment is consistent with the City Master Plan; and,

(d) The proposed redevelopment complies with Sec. 5-4-1 et seq of the City Code (Erosion and Sediment Control) and applicable stormwater management requirements contained in Sec. 13-109(E), as well as all applicable stormwater management requirements of state and federal agencies.

(3) Public flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed, may be allowed provided that:

(a) The Director of T&ES has conclusively established that the location of the facility within the RPA is the optimum location;

(b) The size of the facility is the minimum necessary for flood control or stormwater quality treatment, or both;

(c) All applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies, such as the Army Corps or Engineers, the

Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission; and,

(d) The facility is consistent with a City stormwater management program approved by the Chesapeake Bay Local Assistance Board.

(4) Stream restoration projects and shoreline erosion control and stabilization projects, including the removal of trees and woody vegetation, employment of necessary restoration, control, and stabilization techniques, and establishment of appropriate vegetation, may be allowed in accordance with the best available technical advice and applicable permit conditions or requirements if approved by the City Arborist.

(D) In order to maintain the functional value of the RPA buffer area, existing vegetation may be removed if approved by the Director of T&ES and only to provide for reasonable sight lines, access paths, general woodlot management, and best management practices to prevent upland erosion and concentrated flows of stormwater, as follows:

(1) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff. Replacement vegetation shall require the approval of the Director of T&ES, in consultation with the Department of Recreation, Parks, and Cultural Activities and the Department of Planning and Zoning.

(2) Any path shall be constructed and surfaced so as to effectively control erosion.

(3) Dead, diseased, or dying trees or shrubbery and noxious weeds (such as Johnson grass, kudzu, and multiflora rose) may be removed and thinning of trees may be conducted. The Director of T&ES may approve a long term management plan for a specific RPA that complies with professionally recognized management practices.

(E) The following encroachments, if permitted in the underlying zone, are allowed to the RPA buffer area if approved by the Director of T&ES and provided that a water quality impact assessment is performed and accepted by the Director of T&ES as complete in accordance with Sec. 13-114.

(1) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be approved by the Director of T&ES in accordance with the following criteria:

(a) Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;

(b) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot; and,

(c) The encroachment may not extend into the seaward 50 feet of the buffer area.

(2) When the application of the buffer area would result in the loss of buildable area on a lot or parcel recorded between October 1, 1989 and March 1, 2002, encroachments into the buffer area may be approved by the Director of T&ES in accordance with the following criteria:

(a) The lot or parcel was created as a result of a legal process conducted in conformity with the City's subdivision regulations;

(b) Any conditions or mitigation measures imposed through previously approved exceptions must be met;

(c) If a stormwater BMP was previously required, the BMP shall be evaluated to determine if it continues to function effectively, and, if necessary, the BMP shall be reestablished or repaired and maintained as required; and,

(d) The criteria in (1) above of this section shall be met.

13-108 *Development and uses permitted in RMAs.* Development, redevelopment, and uses authorized by the underlying zone are permitted in the RMA provided such activity is carried out in accordance with all applicable criteria in this Article XIII. The Director of T&ES may, due to the unique characteristics of a site or the intensity of the proposed development, redevelopment, or use require a water quality impact assessment as provided in Sec. 13-114 (C) and (D).

13-109 *General performance requirements for CBPAs.* The Director of T&ES shall approve development, redevelopment, uses, or land disturbing activities in the CBPA only if it is found that the activity is in compliance with this Article XIII and that the applicant has demonstrated, by a preponderance of the evidence, that the proposed development, redevelopment, use, or land disturbing activity meets or exceeds the following standards.

(A) No more land shall be disturbed than is necessary to provide for the proposed use, development, or redevelopment.

(B) Indigenous vegetation shall be preserved to the maximum extent practicable consistent with the use, development, or redevelopment proposed.

(C) Development or redevelopment shall minimize impervious cover consistent with the proposed use or development.

(D) The proposed development or redevelopment shall comply with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

(E) All development, redevelopment, and uses shall meet the following storm water quality management performance requirements:

(1) The entire water quality volume from the site shall be treated. When the development, redevelopment, or use constitutes disturbing only a small portion of a large tax map parcel, the Director of T&ES may establish criteria for allowing the parcel to be divided into sub-basins.

(2) Where the existing percent impervious cover is less than or equal to the average land cover condition, and the proposed improvements will create a total percent impervious cover that is greater than the average land cover condition, then the post-development pollutant discharge must not exceed the existing pollutant discharge based on the average land cover condition.

(3) Where the existing percent impervious cover is greater than the average land cover condition, the following shall apply:

(a) If currently served by a stormwater quality BMP, the regulated activity shall not exceed the existing pollutant discharge based on the existing percent impervious cover while served by the existing BMP. The existing BMP will be shown to have been designed and constructed in accordance with proper design standards and specifications, and to be in proper functioning condition.

(b) If not currently served by a stormwater quality BMP, the regulated activity shall not exceed the pollutant discharge based on existing conditions less ten percent (10%) or the pollutant discharge based on the average land cover condition, whichever is greater.

(4) For the purpose of this section, average land cover condition is defined as the City-wide impervious cover existing at the original adoption of this Article XIII, and is hereby established at 41%.

(5) Water quality management performance criteria shall be met by employing one or a combination of the following, subject to the discretion and approval of the Director of T&ES. All pollutant removal calculation procedures and pollutant removal efficiencies shall be consistent with good engineering practices, established by the Director of T&ES pursuant to section 13-104(C).

(a) Incorporation of onsite treatment by a BMP approved by the Director of T&ES. The site may include multiple projects or properties that are adjacent to each other or lie within the same drainage area where a single BMP is utilized by those projects to satisfy water quality protection requirements.

(b) Compliance with the provisions for alternative stormwater management equivalency options presented in Sec. 13-110.

(c) Compliance with a site-specific VPDES permit issued by the Virginia Department of Environmental Quality may be considered to meet the stormwater quality performance criteria requirements if equivalency in pollutant removal can be established by the applicant.

(6) Notwithstanding the above requirements, any site with (a) an intermittent stream contained within an existing natural channel, or (b) a non-tidal wetland that does not meet the criteria for designation as a Resource Protection Area in Sec. 13-105(B), must meet the following additional water quality performance criteria:

(a) Measures must be taken to protect these features from direct stormwater runoff from impervious surfaces and to preserve their water quality functions.

(b) A 50 foot wide vegetated area preserved where present, or established where not present, on the outward edge of these features shall be considered a sufficient BMP to meet this standard if the vegetated area is designed to prevent erosion and scouring.

(c) The BMP requirement in (b) above may alternatively be met through the use of a smaller vegetated area in combination with equivalent on-site stormwater treatment and/or

equivalent off-site options presented in Sec. 13-110 if approved by the Director of T&ES.

(d) Development, redevelopment, uses, and land disturbing activities allowed in the vegetated area shall be the same as those allowed in RPAs as described in Sec. 13-107. Delineation of the vegetated area shall be accomplished in the manner prescribed in Sec. 13-106.

(e) The Director of T&ES may waive the requirements of (b) above if the non-tidal wetland is demonstrated to the Director of T&ES's satisfaction that it qualifies as an isolated wetland of minimal ecological value defined in Sec. 13-103(K).

(F) All development and redevelopment shall meet the following stormwater volume performance requirements:

(1) Post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If multiple outfalls exist on the site, the post-development peak runoff rates shall not exceed their respective pre-development rates at each outfall. This peak flow rate requirement shall not apply to single-family residences separately built and not part of a subdivision, including additions or modifications to existing single-family detached residential structures.

(2) When the requirements of Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control) are otherwise complied with, the Director of T&ES may waive this peak flow rate requirement for other development not exceeding one-half acre of land disturbance.

(3) The Director of T&ES may also waive this requirement in cases where stormwater detention would conflict with the City's flood management programs.

(4) Post-development concentrated surface waters shall not be discharged on adjoining property, unless an easement expressly authorizing such discharge has been granted by the owner of the affected land.

(5) The owner or developer may continue to discharge stormwater that has not been concentrated (sheet flow) into lower lying property if:

(a) The peak flow rate for a 10-year storm after development does not exceed the predevelopment peak flow rate;

(b) The increase in total volume of runoff caused by the development will not have an adverse impact on the lower-lying property; and,

(c) There will be no exacerbation of existing drainage problems on the lower-lying property, or other downstream property

(G) It shall be the responsibility of the owner of any stormwater quality or quantity management facility established to meet the requirements of (E) and (F) above to provide adequate maintenance for proper functioning of the system. The following requirements apply to all existing and future facilities constructed in the City:

(1) The owner shall enter into a maintenance agreement with the City. Facility-specific maintenance requirements shall be described as

required in Sec. 13-113(E). Maintenance agreement forms will be provided by the Director of T&ES in accordance with Sec. 13-104(C).

(2) The owner shall prepare and submit a certification of maintenance to the City on a schedule determined adequate by the Director of T&ES for the specific facility. Certification shall be made by a Registered Engineer or Licensed Surveyor using forms provided by the Director of T&ES. Such certification shall state that the facility is functioning properly.

(3) The owner shall provide the City with access to the facility to perform quality assurance inspections. If inadequate maintenance is observed by the City, the owner will be notified and an adequate period specified for corrective action. If the corrective action is not performed within the specified time, the City may perform the necessary corrections and bill the property owner. In cases of repeated instances of failure to perform required maintenance, sanctions may be imposed as provided in Sec. 13-120.

13-110 *Alternative stormwater management equivalency options and establishment of the Alexandria Water Quality Improvement Fund.*

(A) The Director of T&ES, in consultation with Director of Planning and Zoning and the Director of Recreation, Parks, and Cultural Activities, shall establish equivalent stormwater management options that may be used to comply with the requirements of Sec. 13-109(E)(5). Options shall include the following:

(1) Specific onsite and offsite improvements that have been determined by the Director of T&ES to achieve a pollutant removal equal to or greater than what would have been achieved had a traditional BMP been required; and,

(2) Monetary contributions to the Alexandria Water Quality Improvement Fund provided for in (C) below.

(B) Improvements may include, but not necessarily be limited to, stream restoration, stream daylighting, removal of existing RPA encroachments, RPA enhancement, street cleaning, combined sewer system separation, and permanent preservation of open space areas.

(C) Monetary contributions to the Alexandria Water Quality Improvement Fund shall be calculated by the Director of T&ES based on estimates of the cost of actually installing and maintaining onsite BMPs through their life cycle. These costs will be updated on a periodic basis by the Director of T&ES as required.

(D) In determining whether to permit equivalent stormwater options, as well as the appropriate combination of onsite and offsite controls, the Director of T&ES shall take into consideration the following:

(1) Whether there is an opportunity to control impervious surface cover that comes into routine contact with vehicles, including but not limited to parking areas, streets and roadways except for public roads exempt under Sec. 13-109; loading docks; equipment, material, and waste storage areas; and vehicle fueling, washing, storage, maintenance, and repair areas.

(2) Whether other environmental and public benefits such as site design, open space, tree preservation, and landscaping can be achieved.

(3) Whether onsite stormwater detention would conflict with the City's flood management programs.

(4) Whether site-specific constraints would make onsite treatment difficult or impractical, especially when the site consists of a single-family residence separately built and not part of a subdivision.

(5) Whether there are opportunities readily available for offsite improvements within the general vicinity of the site that will provide greater water quality benefits than onsite improvements;

(6) Whether there are opportunities to control specific pollutants of concern identified within the watershed or subwatershed, including but not limited to those identified by the Department of Environmental Quality in its most recent 303(d) Total Maximum Daily Load (TMDL) Priority List;

(7) Whether there are opportunities to implement the Water Quality Management Supplement to the City Master Plan and the City's VPDES permit for its municipally owned separate storm sewer system discharges as issued by the Department of Environmental Quality; and,

(8) Whether the cost of implementing available offsite improvements is reasonably equivalent to that of a monetary contribution.

(E) Final approval of equivalency options used for a particular site shall be made at the sole discretion of the Director of T&ES.

(F) The City hereby establishes a dedicated fund known as the Alexandria Water Quality Improvement Fund to be used in conjunction with this Article XIII, the Water Quality Management Supplement to the City Master Plan, and the City's VPDES permit for its municipally owned separate storm sewer system discharges as issued by the Department of Environmental Quality. The purpose of the fund is to reduce nonpoint source pollution and improve stream quality and habitat through appropriate activities including, but not limited to: BMP retrofits, stream bank stabilization and/or restoration, public education and outreach, demonstration projects, and water quality monitoring and analysis.

13-111 Development review process.

(A) Any development, redevelopment, or use exceeding 2,500 square feet of land disturbance within the CBPA shall be subject to the development review process outlined in (C) below prior to any clearing of the site or the issuance of any building, land use, or land development permit.

(B) Notwithstanding (A) above, all development, redevelopment, or use in the RPA, or in the vegetated area established under Sec. 13-109(E)(6), regardless of the amount of land disturbance, shall be subject to the review criteria established in Sec. 13-107 prior to any clearing of the site or the issuance of any building, land use, or land development permit.

(C) The development review process application shall consist of the plans and studies identified below, such application forms as the Director of T&ES shall require and the appropriate fees, which together shall constitute the plan of development. The plans and studies identified in this section may be coordinated or combined with other required submission materials, as deemed appropriate by the Director of T&ES. The plan of development shall contain the following elements:

(1) A site plan in accordance with the provisions of Sec. 11-400 of this ordinance or other applicable law and, if applicable, a subdivision

plat in accordance with the provisions of Chapter 5, Title 7 of the City Code;

(2) An environmental site assessment as detailed in Sec. 13-112;

(3) A landscape plan in accordance with the provisions of Sec. 11-410(CC) of this ordinance certified by qualified design professionals practicing within their areas of competence;

(4) A stormwater management plan as detailed in Sec. 13-113;

(5) An erosion and sediment control plan in accordance with the provisions of Chapter 4, Title 5 of the City Code; and,

(6) For all land disturbance, development, or redevelopment within an RPA, or within an environmentally sensitive area as determined by the Director of T&ES pursuant to Sec. 13-114(C) or Sec. 13-114(D), or for an exception under Sec. 13-116, a water quality impact assessment as detailed in Sec. 13-114.

13-112 Environmental site assessment.

(A) The environmental site assessment shall clearly delineate the individual components of the RPA as well as the total geographic extent of the RPA as defined in Sec. 13-105(B) through a methodology approved by the Director of T&ES under the authority of Sec. 13-104(C).

(B) The environmental site assessment shall also clearly describe, map, or explain the following:

(1) Intermittent streams contained within a natural channel through a methodology approved by the Director of T&ES under the authority of Sec. 13-104(C).

(2) Highly erodible and highly permeable soils if available from existing public documents or documents available to the applicant;

(3) Steep slopes greater than 15 percent in grade;

(4) Known areas of contamination;

(5) Springs, seeps, and related features; and,

(6) A listing of all wetlands permits required by law (evidence that such permits have been obtained shall be presented to the Director of T&ES before permits will be issued to allow commencement of grading or other on-site activity).

(C) Wetlands delineations shall be performed consistent with current procedures promulgated by the U.S. Army Corps of Engineers and the Environmental Protection Agency.

(D) Site-specific evaluations or delineations of RPA boundaries shall be certified by a professional engineer, land surveyor, landscape architect, soil scientist, or wetland delineator certified or licensed to practice in the Commonwealth of Virginia.

(E) In the event that no part of the site plan area contains any elements described in (A) or (B) above, the applicant and the party responsible for the evaluation may, in lieu of providing an environmental site assessment plan, so certify the finding, in writing and under oath, to the Director of T&ES. Any permit issued in reliance upon such a certification where said certification is factually inaccurate or incorrect shall be void *ab initio*. Such invalidity shall

be in addition to any other penalties which may be imposed upon the makers of such certification.

(F) The environmental site assessment shall be drawn at the same scale as the preliminary site plan or subdivision plat, and shall be certified as complete and accurate by a professional engineer or a certified land surveyor. This requirement may be waived by the Director of T&ES when the proposed use or development would result in less than 5,000 square feet of disturbed area.

13-113 Stormwater management plan.

(A) The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, calculations, and citations to supporting references as appropriate to communicate the information required by this Article XIII. At a minimum, the stormwater management plan must contain the following:

(1) Location and design of all planned stormwater control devices;

(2) Procedures for implementing non-structural stormwater control practices and techniques;

(3) Plans for implementing any equivalent stormwater management options proposed by the applicant;

(4) Pre- and post-development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations;

(5) Pre- and post-development peak runoff rates from the site for both a two-year storm and ten year storm, considered individually, with supporting documentation of all utilized coefficients and calculations; and,

(6) For facilities, verification of structural soundness, including a professional engineer certification as applicable.

(B) Site specific facilities for phased projects shall be designed for the ultimate development of the contributing project watershed based on zoning, comprehensive plans, local public facility master plans, or other similar planning documents.

(C) All engineering calculations must be certified by a professional engineer or a licensed class IIIB surveyor and performed in accordance with procedures, consistent with good engineering practice, established by the Director of T&ES pursuant to Sec. 13-104(C).

(D) All stormwater designs that require analysis of pressure hydraulic systems and/or inclusion and design of flow control structures must be sealed by a professional engineer registered in the Commonwealth of Virginia.

(E) The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than the City of Alexandria, then a maintenance agreement shall be executed between the responsible party and the City.

13-114 Water quality impact assessment.

(A) The purpose of the water quality impact assessment is to:

(1) Identify the impacts of a proposed use, development, or redevelopment on water quality and lands within an RPA;

(2) Ensure that, where a use, development, or redevelopment does take place within an RPA, it will be located on those portions of the site and in a manner that will be least disruptive to the natural functions of the RPA;

(3) Identify the impacts of a proposed use, development, or redevelopment within an RMA where the Director of T&ES has determined that the proximity to an RPA, the environmentally sensitive characteristics of the site, or the proposed scale and intensity has the potential to affect water quality.

(4) Specify mitigation that will address water quality protection under the foregoing circumstances or under an exception under Sec. 13-116.

(B) A water quality impact assessment is required for any proposed development or redevelopment in the RPA, except that at the discretion of the Director of T&ES a water quality impact assessment may not be required if the activity is addressed under Sec. 13-107(A), Sec. 13-107(B), or Sec. 13-107(D). There are two types of water quality impact assessments: water quality minor impact assessments and water quality major impact assessments.

(C) A water quality minor impact assessment is required for development or redevelopment within RPAs or under an exception which involves 5,000 or less square feet of land disturbance; or for any development or redevelopment within the RMA that involves 5,000 or less square feet of land disturbance adjacent to an RPA, if required by the Director of T&ES due to the presence or proximity of wetlands, potential for harmful discharge of contaminants from the property, or slopes greater that 15 percent which are proposed to be disturbed. A minor assessment must demonstrate that the undisturbed buffer area, enhanced vegetative plantings, and any required BMPs will result in the removal of no less than 75 percent of sediments and 40 percent of nutrients from post-development stormwater runoff and that will retard runoff, prevent erosion, and filter nonpoint source pollution the equivalent of the full undisturbed buffer area. Such an assessment shall include a site plan that shows the following:

(1) Location and description of the existing characteristics and conditions of the components of the RPA as identified in Sec. 13-105(B) and delineated in the environmental site assessment required by Sec. 13-112;

(2) Location and nature of the proposed encroachment into the buffer area, including: type of paving material; areas of clearing or grading; location of any structures, drives, or other impervious cover; and sewage disposal systems or reserve drainfield sites; and,

(3) Type and location of enhanced vegetation and/or proposed BMPs to mitigate the proposed encroachment.

(4) Location of existing vegetation onsite, including the number and types of trees and other vegetation to be removed in the buffer to accommodate the encroachment or modification.

(5) Revegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal, erosion, and runoff control. The revegetation plan will incorporate native vegetation to the extent practicable.

(D) A water quality major impact assessment is required for development or redevelopment within RPAs or under an exception that involves more than 5,000 square feet of land disturbance; or for any development or

redevelopment within the RMA which involves more than 5,000 square feet of land disturbance adjacent to an RPA, if required by the Director of T&ES due to the presence or proximity of wetlands, potential for harmful discharge of contaminants from the property, or slopes greater than 15 percent which are proposed to be disturbed. The following elements shall be included in a water quality major impact assessment:

(1) All of the information required in a water quality minor impact assessment as specified in (C) above;

(2) A hydrogeological element that:

(a) Describes the existing topography, soils, hydrology, and geology of the site;

(b) Describes the impacts of the proposed development or redevelopment on topography, soils, hydrology, and geology on the site;

(c) Indicates the following:

(i) Disturbance or reduction of wetlands and justification for such action;

(ii) Disruption or reductions in the supply of water to wetlands, streams, lakes, rivers, or other water bodies;

(iii) Disruptions to existing hydrology, including wetland and stream circulation patterns;

(iv) Source location and description of proposed fill material (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(v) Location of dredge materials and location of dumping area for such materials (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(vi) Locations of and impacts on adjacent shellfish beds, submerged aquatic vegetation, and fish spawning areas (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(vii) The estimated pre- and post-development pollutant loads in runoff as delineated in the stormwater management plan required by Sec. 13-113;

(viii) Estimation of percent increase in impervious surface on the site and identification of the type(s) of surfacing materials to be used;

(ix) Percent of the site to be cleared for the project;

(x) Anticipated duration and phasing schedule of the construction period; and,

(xi) Listing of all requisite permits from all applicable agencies necessary to develop the project.

(d) Describes the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures include:

(i) Proposed erosion and sediment control measures, which may include minimizing the extent of the cleared area, perimeter controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;

(ii) Proposed stormwater management system;

(iii) Creation of wetlands to replace those lost; and,

(iv) Minimizing cut and fill.

(3) A supplement to the landscape plan that:

(a) Identifies and delineates the location of all significant plant material, including all trees on site six inches or greater diameter breast height. Where there are groups of trees, stands shall be outlined.

(b) Describes the impacts the development or use will have on the existing vegetation. Information should include:

(i) General limits of clearing based on all anticipated improvements, including buildings, drives, and utilities;

(ii) Clear delineation of all trees which will be removed; and,

(iii) Description of plant species to be disturbed or removed.

(c) Describes the potential measures for mitigation. Possible mitigation measures include:

(i) Replanting schedule for trees and other significant vegetation removed for construction, including a list of possible plants and trees to be used;

(ii) Demonstration that the proposed plan will preserve to the greatest extent possible any significant trees and vegetation on the site and will provide maximum erosion and overland flow benefits from such vegetation;

(iii) Demonstration that indigenous plants are to be used to the greatest extent possible; and,

(iv) Identification of the natural processes and ecological relationships inherent at the site, and an assessment of the impact of the proposed use and development of the land, including mitigating measures proposed in the water quality impact assessment, on these processes and relationships.

(E) A water quality minor impact assessment shall be certified as complete and accurate by a professional engineer or a certified land surveyor. The additional elements required in a water quality major impact assessment

shall be certified as complete and accurate by a professional engineer and by a qualified environmental scientist.

(F) For any water quality impact assessment to proceed, the Director of T&ES must first approve it for completeness and compliance with this Article XIII. Upon receipt of any water quality major impact assessment application, the Director of T&ES may determine if review by the Chesapeake Bay Local Assistance Department (CBLAD) is warranted and may request CBLAD to review the assessment and respond with written comments. Any comments by CBLAD will be incorporated into the final review by the Director of T&ES provided that such comments are provided by CBLAD within 90 days of the request.

(1) For a water quality minor impact assessment, the Director of T&ES shall base this finding on the following criteria:

(a) The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;

(b) Impervious surface is minimized;

(c) Proposed BMPs, where required achieve the requisite reductions in pollutant loadings;

(d) The development, as proposed, meets the purpose and intent of these regulations;

(e) The cumulative impact of the proposed development when considered in relation to other development within the RPA in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.

(2) For a water quality major impact assessment, the Director of T&ES shall base this finding on the following criteria:

(a) Within any RPA, the proposed development is water-dependent or constitutes redevelopment;

(b) The disturbance of wetlands shall comply with state and federal regulations;

(c) The development will not result in significant disruption of the hydrology of the site;

(d) The development will not result in significant degradation of water quality that could adversely affect aquatic vegetation or life;

(e) The development will not result in unnecessary destruction of plant material on site;

(f) Proposed erosion and sediment control measures are adequate to achieve the required reductions in runoff, and prevent off-site transport of sediment during and after construction;

(g) Proposed stormwater management measures are adequate to control the stormwater runoff to achieve the required standard for pollutant control; and,

(h) Proposed revegetation of disturbed areas will provide adequate erosion and sediment control benefits, as determined by the Director of T&ES.

13-115 Final plans.

(A) Final site plans and subdivision plats subject to this Article XIII for all lands within the CBPA shall include the following additional information:

(1) A copy showing issuance of all wetlands permits required by law; and,

(2) A maintenance agreement between the City and applicant as deemed necessary and appropriate by the Director of T&ES to ensure proper maintenance of best management practices in order to assure their continued performance.

(B) The following installation and bonding requirements shall me met.

(1) Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved site plan.

(2) When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the applicant provides to the city a surety bond or equivalent satisfactory to the Director of T&ES in amount equal to the remaining plant materials, related materials, and installation costs of the required landscaping or facilities and/or maintenance costs for any required stormwater management facilities during the construction period.

(3) Unless otherwise approved by the Director of T&ES for a phased project, all required landscaping shall be installed and approved by the first planting season following issuance of a certificate of occupancy or the surety bond may be forfeited to the City.

(4) Unless otherwise approved by the Director of T&ES for a phased project, all required stormwater management facilities or other specifications shall be installed and approved within 18 months of project commencement. Should the applicant fail, after proper notice, to initiate, complete or maintain appropriate actions required by the approved plan, the surety bond may be forfeited to the City. The City may collect from the applicant the amount by which the reasonable cost of required actions exceeds the amount of surety held.

(5) After all required actions of the approved site plan have been completed, the applicant must submit a written request for a final inspection. If the requirements of the approved plan have been completed to the satisfaction of the Director of T&ES, such unexpended or unobligated portion of the surety bond held shall be refunded to the applicant or terminated within 60 days following the receipt of the applicant's request for final inspection. The Director of T&ES may require a certificate of substantial completion from a professional engineer or licensed surveyor before making a final inspection.

13-116 Exceptions.

(A) Unless otherwise provided in this Article XIII, a request for an exception to the requirements of this Article XIII shall be made pursuant to this section in

writing to the Director of T&ES. The request shall identify the impacts of the proposed exception on water quality and on lands within the RMA and RPA through the performance of a water quality impact assessment that complies with the provisions of Sec. 13-114 to the extent applicable.

(B) The Director of T&ES shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this Article XIII if the Director of T&ES finds that the applicant has demonstrated by a preponderance of the evidence that:

(1) Granting the exception will not confer upon the applicant any special privileges that are denied to other property owners in the CBPA overlay district;

(2) The exception is not based upon conditions or circumstances that are self-created or self-imposed, nor does the exception arise from conditions or circumstances either permitted or noncomplying that are related to adjacent parcels;

(3) The exception is the minimum necessary to afford relief;

(4) The exception will be consistent with the purpose and intent of the overlay district, and not injurious to water quality, the neighborhood or otherwise detrimental to the public welfare;

(5) Reasonable and appropriate conditions are imposed, as warranted, to prevent the allowed activity from causing degradation of water quality.

(C) Notwithstanding the above, exceptions to Sec. 13-107 shall be heard and determined by the Planning Commission after hearing and notice pursuant to Sec. 11-300. The schedule for reviewing the exception shall be made by the Director of T&ES and the Director of Planning and Zoning. The schedule shall provide, in a manner approved by the City Manager, reasonable opportunity for review and action by the Environmental Policy Commission prior to any formal action by the Planning Commission so that any recommendation of support, denial, or modification can be considered as part of the Planning Commission's deliberations.

(D) Any person aggrieved by a decision of the Director of T&ES or Planning Commission under this section may appeal as provided in section 13-117.

13-117 Appeals.

(A) Any person aggrieved by a final case decision of the Director of T&ES in the administration, interpretation or enforcement of this Article XIII or on any application hereunder may appeal such decision to the Planning Commission, by filing a notice of appeal, in writing, stating the grounds of appeal, with the Secretary of the Planning Commission within 14 days of the issuance of such decision; provided, that any person aggrieved, who had no actual knowledge of the issuance of such decision, may file an appeal within 14 days of the last day on which notice provided in Sec. 11-300 or Sec. 11-408 of this ordinance is given for any element of the plan of development. A notice of appeal shall be accompanied by a filing fee of $100.00.

(B) The Planning Commission shall conduct a public hearing on any appeal filed pursuant to Sec. 13-117(A), notice for which shall be provided in accordance with the applicable provisions of Sec. 11-300 of this ordinance. Following the conclusion of the hearing, the Planning Commission may affirm, reverse or

modify the decision of the Director of T&ES, or vacate the decision and remand the matter to the Director of T&ES for further consideration.

(C) Any person aggrieved by a decision of the Planning Commission issued pursuant to Sec 13-116(D) or Sec. 13-117(B), or the City Manager, may appeal the decision to the City Council, by filing a notice of appeal, in writing, stating the grounds of appeal, with the City Clerk within 14 days of the issuance of the decision.

(D) The City Council shall conduct a public hearing on any appeal filed pursuant to subsection (C), notice for which shall be provided in accordance with the applicable provisions of Sec. 11-300 of this ordinance. Following the conclusion of the hearing, the Council may affirm, reverse or modify the decision of the commission, or vacate the decision and remand the matter to the Planning Commission or the Director of T&ES for further consideration.

(E) Notwithstanding the provisions of subsections (A) through (D) above, an applicant or any aggrieved party who elects to appeal shall appeal the Director of T&ES's decision of approval or disapproval of a stormwater management plan application by filing a notice of appeal with the Director of T&ES within 30 days after service of such decision. The filing of such notice, and proceedings thereafter, shall be governed by Part 2A of the Rules of the Supreme Court of Virginia, and judicial review shall be had in the Circuit Court of the City of Alexandria on the record previously established, and shall otherwise be in accordance with the Administrative Process Act, Virginia Code sections 9-6.14:1 *et seq*.

13-118 Noncomplying land uses and structures.

(A) Any land use or structure lawfully existing on January 28, 1992, or any land use or structure that exists at the time of any amendment to this Article XIII that does not comply as a result of the amendment, shall be deemed noncomplying.

(B) Any proposed land use or structure for which an applicant has filed a complete application for a preliminary site plan, building permit, subdivision plan, plot plan, or special use permit on or before February 23, 2004 that would not comply under proposed amendments to Article XIII pursuant to the December 10, 2001 amendments to 9VAC10-20-10 *et seq* may be constructed in accordance with the provisions of this Article XIII in effect at the time of submittal, except that the proposed land use or structure shall comply with any new requirements to the maximum extent practicable. Upon completion, the land use or structure shall be deemed noncomplying.

(C) Any application for a proposed land use or structure that is not exempt pursuant to (A) or (B) above shall comply with amendments to Article XIII adopted pursuant to the December 10, 2001 amendments to 9VAC10-20-10 et seq.

(D) Nothing in this Article XIII shall prevent the reconstruction of noncomplying structures destroyed by any casualty unless the reconstruction is otherwise restricted by this ordinance or other portions of the City Code. Such reconstruction shall occur within two years after the destruction or damage and there shall be no increase in the amount of impervious area and no further encroachment in the RPA, to the extent possible by sound engineering practices.

(E) Any noncomplying land use or structure may continue and be maintained, including renovation, remodeling, and other cosmetic alterations provided

that the activity does not result in land disturbance and that there is no net increase in nonpoint source pollutant load.

(F) A request to enlarge or expand a principal noncomplying structure within an RPA buffer area may be approved by the Director of T&ES through an administrative process provided that:

(a) The principal structure remains intact and the modification is compatible in bulk and scale to those in the surrounding neighborhood area, as determined by the Director of Planning and Zoning. If these criteria are not met, the modification shall be subject to the exception request process requirements of Sec. 13-116.

(b) There will be no increase in nonpoint source pollution load.

(c) Any development or land disturbance exceeding and area of 2,500 square fee complies with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

(d) The Director of T&ES finds that the request is consistent with the criteria provided in Sec. 13-116(B).

(G) A request to construct or modify a non-attached noncomplying accessory structure, or a request to modify or expand a noncomplying land use (e.g., a parking area, boat storage area, active recreation fields, etc.), shall only be approved through the exceptions process outlined in Sec. 13-116.

13-119 Exemptions.

(A) The following uses, which may involve structures, fill, flooding, draining, dredging, or excavating, shall be exempted from this Article XIII, to the extent specifically enumerated in these regulations and not prohibited by any other provision of the City Code or applicable law and subject to the Director of T&ES review and approval of design and construction plans for compliance with this Article XIII:

(1) Construction, installation, operation and maintenance of electric, natural gas, fiber-optic, and telephone lines, railroads and public roads constructed by VDOT or by or for the City of Alexandria in accordance with VDOT standards (built separately from development projects regulated under section 13-106), and their appurtenant structures, in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law (Sec. 10.1-560 *et seq* of the Code of Virginia and the Stormwater Management Act (Sec. 10.1-603.1 *et seq* of the Code of Virginia); (ii) an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or (iii) by the City of Alexandria under local water quality protection criteria at least as stringent as the above state requirements shall be deemed to constitute compliance with these regulations. The exemption of public roads is further conditioned on the alignments being designed to prevent or otherwise minimize the encroachment in the RPA buffer and to minimize adverse effects on water quality.

(2) Construction, installation, and maintenance of water, sewer, natural gas, underground telecommunications and cable television lines owned or permitted by the City of Alexandria or a service authority shall be exempt from the requirements of Article XIII provided that:

(a) To the degree possible, the location of such utilities and facilities shall be outside RPAs;

(b) No more land shall be disturbed than is necessary to provide for the proposed utility installation;

(c) All such construction, installation, and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal requirements and permits, and designed and conducted in a manner that protects water quality;

(d) Any land disturbance exceeding an area of 2,500 square feet shall comply with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

13-120 *Penalties.* Under the authority of section 10.1-2109.E of the Code of Virginia, and in addition to the enforcement provisions available to the Director of T&ES in Sec. 11-200 of this ordinance, the Director of T&ES may promulgate rules, regulations, and procedures in accordance with 13-104(C) to implement the following civil penalties:

(A) Any person who: (i) violates any provision of this ordinance or (ii) violates or fails, neglects, or refuses to obey any final notice, order, rule, regulation, or variance or permit condition authorized under this ordinance shall, upon such finding by an appropriate circuit court, be assessed a civil penalty not to exceed $5,000 for each day of violation. Such civil penalties may, at the discretion of the court assessing them, be directed to be paid into the Alexandria Water Quality Improvement Fund for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas therein, in such a manner as the court may direct by order, except that where the violator is the City itself or its agent, the court shall direct the penalty to be paid into the state treasury.

(B) With the consent of any person who: (i) violates any provision of this ordinance related to the protection of water quality in Chesapeake Bay Preservation Areas or (ii) violates or fails, neglects, or refuses to obey any notice, order, rule, regulation, or variance or permit condition authorized under this ordinance, the City may provide for the issuance of an order against such person for the one-time payment of civil charges for each violation in specific sums, not to exceed $10,000 for each violation. Such civil charges shall be paid into the City Water Quality Improvement Fund for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas therein, except that where the violator is the City itself or its agent, the civil charges shall be paid into the state treasury. Civil charges shall be in lieu of any appropriate civil penalty that could be imposed under (A) above. Civil charges may be in addition to the cost of any restoration required or ordered by the City.

ORDINANCE NO. 4358

AN ORDINANCE to repeal Article XIII (ENVIRONMENTAL MANAGEMENT) of the City of Alexandria Zoning Ordinance, and adopt in lieu thereof Revised Article XIII (CHESAPEAKE BAY ENVIRONMENTAL MANAGEMENT) (TA No. 2004-0006).

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Article XIII (Environmental Management) of the City of Alexandria Zoning Ordinance be, and the same hereby is, repealed.

Section 2. That Revised Article XIII (Chesapeake Bay Environmental Management), attached hereto and incorporated herein fully by reference, be, and the same hereby is, adopted as part of the City of Alexandria Zoning Ordinance.

Section 3. That this ordinance shall become effective upon the date and at the time of its final passage, and shall apply to all applications for land use or land development approval provided for under the City of Alexandria Zoning Ordinance which are filed on and after February 24, 2004, and are pending on and after the effective date before any city department, agency or board, or before city council, or on judicial review, and shall apply to all other facts and circumstances subject to the provisions of the City of Alexandria Zoning Ordinance, as provided in Section 13-118 of Revised Article XIII.

WILLIAM D. EUILLE
Mayor

Final Passage: June 12, 2004

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Revised Article XIII
Chesapeake Bay Environmental Management

Article XIII. CHESAPEAKE BAY ENVIRONMENTAL MANAGEMENT

Section 13-100 General findings.

The Chesapeake Bay is one of the most productive estuaries in the world, providing substantial economic and social benefits to the people of the Commonwealth of Virginia. Healthy state and local economies are integrally related to and dependent upon the health of the Chesapeake Bay. The general welfare of the people of the Commonwealth depends upon the health of the Bay.

The waters of the Chesapeake Bay and its tributaries, including the Potomac River and Alexandria's local streams, have been degraded significantly by point source and nonpoint source pollution, which threatens public health and safety and the general welfare.

Appropriate land use regulations and construction and maintenance practices have proven ability to reduce pollution that damages water quality of the Chesapeake Bay and its tributaries.

13-101 Purpose.

(A) It is the policy of the City of Alexandria, Virginia to protect the quality of water in the Chesapeake Bay and its tributaries and, to that end, to require all land uses and land development in the City to:

(1) Safeguard the waters of the Commonwealth from pollution;

(2) Prevent any increase in pollution of state waters;

(3) Reduce existing pollution of state waters; and,

(4) Promote water resource conservation.

(B) To fulfill this policy, this Article XIII is adopted to minimize potential pollution from stormwater runoff, minimize potential erosion and sedimentation, reduce the introduction of harmful nutrients and toxins into state waters, maximize rainwater infiltration while protecting groundwater, and ensure the long-term performance of the measures employed to accomplish the statutory purpose.

13-102 *Authority.* This Article XIII is issued under the authority of Sec. 10.1-2108 of Chapter 21, Title 10.1 of the Code of Virginia (the Chesapeake Bay Preservation Act, hereinafter "the Act"), the regulations promulgated thereunder by the Chesapeake Bay Local Assistance Board, and Sec. 10.1-603.3 of the Code of Virginia, which authorizes the City to adopt a local stormwater management program. Authority to protect water quality is also provided by Sec. 15.2-2283 of the Code of Virginia.

13-103 *Definitions.* The following words and terms used in this Article XIII have the following meanings, unless the context clearly indicates otherwise.

(A) *Applicant.* Means a person who has submitted, or plans to submit, a plan of development or an exception request to the City.

(B) *Best management practice (BMP).* A practice, or combination of practices, that is determined by the Director of Transportation and Environmental Services to be the most effective, practicable means of preventing or

reducing the amount of pollution generated by nonpoint sources to a level compatible with the purpose of this Article XIII.

(C) *Buffer area.* An area of natural or established vegetation managed to protect other components of a Resource Protection Area and state waters from significant degradation due to land disturbances. To effectively perform this function, the buffer area will achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. A 100 foot wide buffer area shall be considered to meet this standard.

(D) *Development.* The construction or substantial alteration of residential, commercial, industrial, institutional, recreational, transportation, or utility facilities or structures.

(E) *Director of T&ES/Director of P&Z.* Director of T&ES means the Director of Transportation and Environmental Services of the City of Alexandria. Director of P&Z means the Director of Planning and Zoning of the City of Alexandria.

(F) *Floodway.* All lands as defined in Sec. 6-303(K) of this ordinance.

(G) *Highly erodible soils.* Soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The erodibility index for any soil is defined as the product of the formula RKLS/T, where K is the soil susceptibility to water erosion in the surface layer; R is the rainfall and runoff; LS is the combined effects of slope length and steepness; and T is the soil loss tolerance.

(H) *Highly permeable soils.* Soils with a given potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 72 inches (permeability groups "rapid" and "very rapid"), as found in the "National Soil Survey Handbook" of November 1996 in the "Field Office Technical Guide" of the U.S. Dept. of Agriculture Natural Resources Conversation Service.

(I) *Impervious cover.* A surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

(J) *Intermittent stream.* Any natural or engineered channel with flowing water during certain times of the year, when groundwater provides for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. Acceptable methodologies for establishing the presence of an intermittent stream will be provided by the Director of T&ES pursuant to Sec. 13-104(C).

(K) *Isolated wetlands of minimal ecological value*. Those wetlands, as defined in 9VAC25-210-10, that: (i) do not have a surface water connection to other state waters; (ii) are less than one-tenth of an acre in size; (iii) are not located in a Federal Emergency Management Agency designated 100-year floodplain; (iv) are not identified by the Virginia Natural Heritage Program as a rare or state significant natural community; (v) are not forested; and (vi) do not contain listed federal or state threatened or endangered species.

(L) *Land disturbance.* Any land change that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting, and filling of land.

(M) *Natural channel.* Means a nontidal waterway that is part of the natural topography and is generally characterized as being irregular in cross section with a meandering course.

(N) *Nonpoint source pollution*. Contamination from diffuse sources that is not regulated as point source pollution under Sec. 402 of the Clean Water Act.

(O) *Nontidal wetlands.* Those wetlands, other than tidal wetlands, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to Sec. 404 of the Federal Clean Water Act, in 33 CFR 328.3b.

(P) *Pre-development.* The land use that exists at the time that plans for the development are submitted to the City. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the land use at the time the first item is submitted shall establish pre-development conditions.

(Q) *Post-development.* Conditions that reasonably may be expected or anticipated to exist after completion of the development activity on a specific site or tract of land.

(R) *Public road.* For the purpose of this Article XIII, public road means a publicly owned road designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to (i) the Erosion and Sediment Control Law (Sec. 10.1-560 *et seq.* of the Code of Virginia) and (ii) the Virginia Stormwater Management Act (Sec. 10.1-603.1 *et seq.* of the Code of Virginia). This definition includes those roads where the Virginia Department of Transportation exercises direct supervision over the design or construction activities, or both, and cases where roads are constructed or maintained, or both, by the City of Alexandria.

(S) *Redevelopment.* The process of developing land that is or has been previously developed.

(T) *Shoreline.* Land contiguous to a body of water.

(U) *State waters.* All waters on the surface or in the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.

(V) *Stormwater management facility.* A device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.

(W) *Stormwater runoff.* That portion of precipitation that is discharged across the land surfaces or through conveyances to one or more waterways.

(X) *Substantial alteration.* Means expansion or modification of a building or development that would result in land disturbance exceeding an area of 2,500 square feet in the Resource Management Area only.

(Y) *Tidal shore.* Land contiguous to a tidal body of water between the mean low water level and the mean high water level.

(Z) *Tidal wetlands.* Vegetated and nonvegetated wetlands as defined in Sec. 28.2-1300 of the Code of Virginia.

(AA) *Use.* Any activity on the land other than development, including, but not limited to agriculture, horticulture, and silviculture.

(BB) *Water body with perennial flow.* A body of water that flows in a natural or engineered channel year-round during a year of normal precipitation. This includes, but is not limited to streams, estuaries, and tidal embayments and may include drainage ditches or channels constructed in wetlands or from former natural drainage ways that convey perennial flow. Lakes and ponds, through which a perennial stream flows, are a part of the perennial stream. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow. The width of the perennial stream extends from top-of-bank to top-of-bank of the channel or to the limits of the normal water level for a pond or lake when there is no definable top-of-bank. Acceptable methodologies for establishing the presence of a water body with perennial flow will be provided by the Director of T&ES pursuant to Sec. 13-104(C).

(CC) *Water-dependent facility.* A development of land that cannot exist outside of the Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to: (i) ports; (ii) the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers; (iii) marinas and other boat docking facilities; (iv) beaches and other public water-oriented recreation areas; and, (v) fisheries or other marine resources facilities.

(DD) *Water quality volume.* The volume equal to the first 0.5 inch of runoff multiplied by the total impervious area of the tax map parcel.

(EE) *Watershed.* The total drainage area contributing runoff to a single point.

(FF) *Wetlands.* Tidal and nontidal wetlands.

13-104 Administration.

(A) *Responsibility for administration.* The Director is charged with responsibility for the administration of this Article XIII.

(B) *Duties and authority.* In the administration of this Article XIII the duties and authority of the Director of T&ES shall include, without limitation:

(1) Receiving applications for plan of development approval;

(2) Reviewing applications to determine if they contain all information required and necessary for a determination of their merit;

(3) Reviewing applications to determine their compliance with the provisions and intent of this Article XIII and their merit;

(4) Docketing items for hearing before the Planning Commission and conferring with the City Manager to schedule public hearings before the City Council as necessary on applications;

(5) Preparing a staff report for each application; and,

(6) Interpreting the provisions of this Article XIII to ensure that its intent is carried out.

(C) *Rules, regulations, and procedures.* The Director of T&ES shall promulgate rules, regulations, and procedures for the administration and enforcement of this Article XIII and shall promulgate rules, regulations, and procedures for the processing of applications that ensure full review, comment, and recommendations on each application by the Department of Transportation and Environmental Services. The City Manager shall promulgate rules and procedures for review by other departments of applications, where such review is determined to be necessary or desirable and such procedures may

include the establishment of a development review committee composed of departments of the City whose expertise is necessary or desirable in the review of applications. All such rules, regulations, and procedures shall be transmitted to the City Council at the time of issuance.

(D) *Establishment of fees.* The Director of T&ES shall by general rule approved by City Council establish a schedule of fees required for each application under this Article XIII to be paid at the time an application is submitted.

(E) *Responsibility for enforcement.* The Director of T&ES shall have the authority and the responsibility of Sec. 11-200 and Sec. 13-120 to ensure that all buildings and structures and the use of all land complies with the provisions of this Article XIII.

(F) The Director of T&ES shall review, approve, disapprove, or approve with modifications or conditions or both the following elements of the plan of development:

(1) The environmental site assessment, required pursuant to Sec. 13-112.

(2) The stormwater management plan, required pursuant to Sec. 13-113.

(3) The water quality impact assessment, if required, pursuant to Sec. 13-114.

(4) Compliance of the plan of development with Sec. 13-106 through Sec. 13-110.

(G) Review and decision on applications for exceptions shall be as provided in Sec. 13-116.

(H) Review and decision on applications for modifications to noncomplying land uses and structures shall be as provided in Sec. 13-118.

(I) Review and decision on applications for exemptions shall be as provided in Sec. 13-119.

(J) Review and decision on the remaining elements of the plan of development shall be as provided in the regulations of this ordinance and the City Code applicable to each such element.

13-105 Designation of Chesapeake Bay Preservation Area Overlay District.

(A) All land within the corporate limits of the City is designated as a Chesapeake Bay Preservation Area (CBPA). The CBPA is divided into Resource Protection Areas and Resource Management Areas. The regulations set forth in this Article XIII shall apply as an overlay district, and shall supersede any zoning, land use, or land development regulation of the City Code that is inconsistent with the provisions of this Article XIII.

(B) Resource Protection Areas (RPAs) consist of sensitive land that has either an intrinsic water quality value due to the ecological and biological processes such land performs or that is sensitive to uses or activities such that the use results in significant degradation to the quality of state waters. In their natural condition, these lands provide for the removal, reduction, or assimilation of nonpoint source pollution entering the bay and its tributaries. An area of land that includes any one of the following land types shall be considered to be within the RPA:

(1) Tidal wetlands;

(2) Tidal shores;

(3) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;

(4) A buffer area of 100 feet located adjacent to and landward of the components listed in paragraphs (1) through (3) above and along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the RPA notwithstanding the presence of permitted uses, encroachments, and vegetation clearing in compliance with this Article XIII.

(C) Resource Management Areas (RMAs) include land that, if improperly used or developed, has a potential for causing significant water quality degradation or for diminishing the functional value of the RPA. Therefore, all lands in the City, not included in the RPA, shall constitute the RMA since all such land drains through natural or manmade conveyances to the Potomac River and Chesapeake Bay.

13-106 Establishment of CBPA boundaries.

(A) Chesapeake Bay Preservation Area boundaries are established by text, as provided in Sec. 13-105. The City shall publish and update in a manner established by the Director of T&ES pursuant to Sec. 13-104(C) a general map depicting the location of identified CBPA features. However, in all cases it is the burden of the applicant to identify CBPA features and to delineate the appropriate RPA boundaries in accordance with the development review process required pursuant to Sec. 13-111, or if no development review process is required, then through the environmental site assessment pursuant to Sec. 13-112.

(B) Any property owner wishing to change the depiction of an RPA feature on the general map may conduct an environmental site assessment in Sec. 13-112 and submit it to the Director of T&ES. The Director of T&ES may accept, modify, or reject the RPA delineation based on the evidence presented by the property owner and in consideration of all other available information.

(C) In the event that a site-specific RPA boundary delineation is contested by an applicant or property owner, the applicant or property owner may request a meeting with the Director of T&ES to review the decision. Requests for the meeting shall be made no more than 30 calendar days after notification of a modification or rejection of a proposed RPA delineation. The Director of T&ES will preside over the meeting of the involved parties and reconsider the decision. The meeting participants will be notified by the Director of T&ES within 30 calendar days after the meeting of the result of the reconsideration.

13-107 Development, redevelopment, and uses permitted in RPAs. The following criteria shall apply in RPAs unless the development, redevelopment, use, or land disturbing activity is exempted under Sec. 13-119 or granted an exception pursuant to Sec. 13-116. All development, redevelopment, and uses within the RPA must comply with the general performance criteria for CBPAs provided in Sec. 13-109.

(A) The following are permitted within the RPA provided they do not require development, redevelopment, structures, grading, fill, draining, or dredging:

(1) Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife;

(2) Passive recreational activities, including but not limited to fishing, bird watching, hiking, boating, horseback riding, swimming, and canoeing; and,

(3) Educational activities and scientific research.

(B) The following are permitted within the RPA if approved by the Director of T&ES. A water quality impact assessment may be required by the Director of T&ES in accordance with Sec. 13-114 if the project is located within an environmentally sensitive area, or is of sufficient scale to affect water quality.

(1) Repair and maintenance of existing piers, walkways, observation decks, wildlife management shelters, boathouses, and other similar water-related structures provided that there is no increase in structure footprint and that any required excavating and filling results in a land disturbing activity of 2,500 square feet or less;

(2) Boardwalks, trails, and pathways;

(3) Historic preservation and archeological activities; and,

(4) Repair and maintenance of existing flood control and stormwater management facilities.

(C) The following, if permitted in the underlying zone, are allowed within the RPA if approved by the Director of T&ES and provided that a water quality impact assessment is performed and accepted by the Director of T&ES as complete in accordance with Sec. 13-114.

(1) A new or expanded water-dependant facility may be allowed provided that the following criteria are met:

(a) It does not conflict with the City Master Plan;

(b) Any non water-dependent component is located outside of the RPA; and,

(c) Access to the water-dependent facility is provided with the minimum disturbance necessary, and where practical, a single point of access is provided.

(2) Redevelopment may be allowed provided that the following criteria are met:

(a) There is no increase in impervious surface cover;

(b) There is no further encroachment within the RPA;

(c) The proposed redevelopment is consistent with the City Master Plan; and,

(d) The proposed redevelopment complies with Sec. 5-4-1 et seq of the City Code (Erosion and Sediment Control) and applicable stormwater management requirements contained in Sec. 13-109(E), as well as all applicable stormwater management requirements of state and federal agencies.

(3) Public flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed, may be allowed provided that:

(a) The Director of T&ES has conclusively established that the location of the facility within the RPA is the optimum location;

(b) The size of the facility is the minimum necessary for flood control or stormwater quality treatment, or both;

(c) All applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies, such as the Army Corps or Engineers, the

Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission; and,

(d) The facility is consistent with a City stormwater management program approved by the Chesapeake Bay Local Assistance Board.

(4) Stream restoration projects and shoreline erosion control and stabilization projects, including the removal of trees and woody vegetation, employment of necessary restoration, control, and stabilization techniques, and establishment of appropriate vegetation, may be allowed in accordance with the best available technical advice and applicable permit conditions or requirements if approved by the City Arborist.

(D) In order to maintain the functional value of the RPA buffer area, existing vegetation may be removed if approved by the Director of T&ES and only to provide for reasonable sight lines, access paths, general woodlot management, and best management practices to prevent upland erosion and concentrated flows of stormwater, as follows:

(1) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff. Replacement vegetation shall require the approval of the Director of T&ES, in consultation with the Department of Recreation, Parks, and Cultural Activities and the Department of Planning and Zoning.

(2) Any path shall be constructed and surfaced so as to effectively control erosion.

(3) Dead, diseased, or dying trees or shrubbery and noxious weeds (such as Johnson grass, kudzu, and multiflora rose) may be removed and thinning of trees may be conducted. The Director of T&ES may approve a long term management plan for a specific RPA that complies with professionally recognized management practices.

(E) The following encroachments, if permitted in the underlying zone, are allowed to the RPA buffer area if approved by the Director of T&ES and provided that a water quality impact assessment is performed and accepted by the Director of T&ES as complete in accordance with Sec. 13-114.

(1) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be approved by the Director of T&ES in accordance with the following criteria:

(a) Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;

(b) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot; and,

(c) The encroachment may not extend into the seaward 50 feet of the buffer area.

(2) When the application of the buffer area would result in the loss of buildable area on a lot or parcel recorded between October 1, 1989 and March 1, 2002, encroachments into the buffer area may be approved by the Director of T&ES in accordance with the following criteria:

(a) The lot or parcel was created as a result of a legal process conducted in conformity with the City's subdivision regulations;

(b) Any conditions or mitigation measures imposed through previously approved exceptions must be met;

(c) If a stormwater BMP was previously required, the BMP shall be evaluated to determine if it continues to function effectively, and, if necessary, the BMP shall be reestablished or repaired and maintained as required; and,

(d) The criteria in (1) above of this section shall be met.

13-108 *Development and uses permitted in RMAs.* Development, redevelopment, and uses authorized by the underlying zone are permitted in the RMA provided such activity is carried out in accordance with all applicable criteria in this Article XIII. The Director of T&ES may, due to the unique characteristics of a site or the intensity of the proposed development, redevelopment, or use require a water quality impact assessment as provided in Sec. 13-114 (C) and (D).

13-109 *General performance requirements for CBPAs.* The Director of T&ES shall approve development, redevelopment, uses, or land disturbing activities in the CBPA only if it is found that the activity is in compliance with this Article XIII and that the applicant has demonstrated, by a preponderance of the evidence, that the proposed development, redevelopment, use, or land disturbing activity meets or exceeds the following standards.

(A) No more land shall be disturbed than is necessary to provide for the proposed use, development, or redevelopment.

(B) Indigenous vegetation shall be preserved to the maximum extent practicable consistent with the use, development, or redevelopment proposed.

(C) Development or redevelopment shall minimize impervious cover consistent with the proposed use or development.

(D) The proposed development or redevelopment shall comply with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

(E) All development, redevelopment, and uses shall meet the following storm water quality management performance requirements:

(1) The entire water quality volume from the site shall be treated. When the development, redevelopment, or use constitutes disturbing only a small portion of a large tax map parcel, the Director of T&ES may establish criteria for allowing the parcel to be divided into sub-basins.

(2) Where the existing percent impervious cover is less than or equal to the average land cover condition, and the proposed improvements will create a total percent impervious cover that is greater than the average land cover condition, then the post-development pollutant discharge must not exceed the existing pollutant discharge based on the average land cover condition.

(3) Where the existing percent impervious cover is greater than the average land cover condition, the following shall apply:

(a) If currently served by a stormwater quality BMP, the regulated activity shall not exceed the existing pollutant discharge based on the existing percent impervious cover while served by the existing BMP. The existing BMP will be shown to have been designed and constructed in accordance with proper design standards and specifications, and to be in proper functioning condition.

(b) If not currently served by a stormwater quality BMP, the regulated activity shall not exceed the pollutant discharge based on existing conditions less ten percent (10%) or the pollutant discharge based on the average land cover condition, whichever is greater.

(4) For the purpose of this section, average land cover condition is defined as the City-wide impervious cover existing at the original adoption of this Article XIII, and is hereby established at 41%.

(5) Water quality management performance criteria shall be met by employing one or a combination of the following, subject to the discretion and approval of the Director of T&ES. All pollutant removal calculation procedures and pollutant removal efficiencies shall be consistent with good engineering practices, established by the Director of T&ES pursuant to section 13-104(C).

(a) Incorporation of onsite treatment by a BMP approved by the Director of T&ES. The site may include multiple projects or properties that are adjacent to each other or lie within the same drainage area where a single BMP is utilized by those projects to satisfy water quality protection requirements.

(b) Compliance with the provisions for alternative stormwater management equivalency options presented in Sec. 13-110.

(c) Compliance with a site-specific VPDES permit issued by the Virginia Department of Environmental Quality may be considered to meet the stormwater quality performance criteria requirements if equivalency in pollutant removal can be established by the applicant.

(6) Notwithstanding the above requirements, any site with (a) an intermittent stream contained within an existing natural channel, or (b) a non-tidal wetland that does not meet the criteria for designation as a Resource Protection Area in Sec. 13-105(B), must meet the following additional water quality performance criteria:

(a) Measures must be taken to protect these features from direct stormwater runoff from impervious surfaces and to preserve their water quality functions.

(b) A 50 foot wide vegetated area preserved where present, or established where not present, on the outward edge of these features shall be considered a sufficient BMP to meet this standard if the vegetated area is designed to prevent erosion and scouring.

(c) The BMP requirement in (b) above may alternatively be met through the use of a smaller vegetated area in combination with equivalent on-site stormwater treatment and/or equivalent off-site options presented in Sec. 13-110 if approved by the Director of T&ES.

(d) Development, redevelopment, uses, and land disturbing activities allowed in the vegetated area shall be the same as those allowed in RPAs as described in Sec. 13-107. Delineation of the vegetated area shall be accomplished in the manner prescribed in Sec. 13-106.

(e) The Director of T&ES may waive the requirements of (b) above if the non-tidal wetland is demonstrated to the Director of T&ES's satisfaction that it qualifies as an isolated wetland of minimal ecological value defined in Sec. 13-103(K).

(F) All development and redevelopment shall meet the following stormwater volume performance requirements:

(1) Post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If multiple outfalls exist on the site, the post-development peak runoff rates shall not exceed their respective pre-development rates at each outfall. This peak flow rate requirement shall not apply to single-family residences separately built and not part of a subdivision, including additions or modifications to existing single-family detached residential structures.

(2) When the requirements of Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control) are otherwise complied with, the Director of T&ES may waive this peak flow rate requirement for other development not exceeding one-half acre of land disturbance.

(3) The Director of T&ES may also waive this requirement in cases where stormwater detention would conflict with the City's flood management programs.

(4) Post-development concentrated surface waters shall not be discharged on adjoining property, unless an easement expressly authorizing such discharge has been granted by the owner of the affected land.

(5) The owner or developer may continue to discharge stormwater that has not been concentrated (sheet flow) into lower lying property if:

(a) The peak flow rate for a 10-year storm after development does not exceed the predevelopment peak flow rate;

(b) The increase in total volume of runoff caused by the development will not have an adverse impact on the lower-lying property; and,

(c) There will be no exacerbation of existing drainage problems on the lower-lying property, or other downstream property

(G) It shall be the responsibility of the owner of any stormwater quality or quantity management facility established to meet the requirements of (E) and (F) above to provide adequate maintenance for proper functioning of the system. The following requirements apply to all existing and future facilities constructed in the City:

(1) The owner shall enter into a maintenance agreement with the City. Facility-specific maintenance requirements shall be described as required in Sec. 13-113(E). Maintenance agreement forms will be provided by the Director of T&ES in accordance with Sec. 13-104(C).

(2) The owner shall prepare and submit a certification of maintenance to the City on a schedule determined adequate by the Director of T&ES for the specific facility. Certification shall be made by a Registered Engineer or Licensed Surveyor using forms provided by the Director of T&ES. Such certification shall state that the facility is functioning properly.

(3) The owner shall provide the City with access to the facility to perform quality assurance inspections. If inadequate maintenance is observed by the City, the owner will be notified and an adequate period specified for corrective action. If the corrective action is not performed within the specified time, the City may perform the necessary corrections and bill the property owner. In cases of repeated instances of failure to perform required maintenance, sanctions may be imposed as provided in Sec. 13-120.

13-110 Alternative stormwater management equivalency options and establishment of the Alexandria Water Quality Improvement Fund.

(A) The Director of T&ES, in consultation with Director of Planning and Zoning and the Director of Recreation, Parks, and Cultural Activities, shall establish equivalent stormwater management options that may be used to comply with the requirements of Sec. 13-109(E)(5). Options shall include the following:

(1) Specific onsite and offsite improvements that have been determined by the Director of T&ES to achieve a pollutant removal equal to or greater than what would have been achieved had a traditional BMP been required; and,

(2) Monetary contributions to the Alexandria Water Quality Improvement Fund provided for in (C) below.

(B) Improvements may include, but not necessarily be limited to, stream restoration, stream daylighting, removal of existing RPA encroachments, RPA enhancement, street cleaning, combined sewer system separation, and permanent preservation of open space areas.

(C) Monetary contributions to the Alexandria Water Quality Improvement Fund shall be calculated by the Director of T&ES based on estimates of the cost of actually installing and maintaining onsite BMPs through their life cycle. These costs will be updated on a periodic basis by the Director of T&ES as required.

(D) In determining whether to permit equivalent stormwater options, as well as the appropriate combination of onsite and offsite controls, the Director of T&ES shall take into consideration the following:

(1) Whether there is an opportunity to control impervious surface cover that comes into routine contact with vehicles, including but not limited to parking areas, streets and roadways except for public roads exempt under Sec. 13-109; loading docks; equipment, material, and waste storage areas; and vehicle fueling, washing, storage, maintenance, and repair areas.

(2) Whether other environmental and public benefits such as site design, open space, tree preservation, and landscaping can be achieved.

(3) Whether onsite stormwater detention would conflict with the City's flood management programs.

(4) Whether site-specific constraints would make onsite treatment difficult or impractical, especially when the site consists of a single-family residence separately built and not part of a subdivision.

(5) Whether there are opportunities readily available for offsite improvements within the general vicinity of the site that will provide greater water quality benefits than onsite improvements;

(6) Whether there are opportunities to control specific pollutants of concern identified within the watershed or subwatershed, including but not limited to those identified by the Department of Environmental Quality in its most recent 303(d) Total Maximum Daily Load (TMDL) Priority List;

(7) Whether there are opportunities to implement the Water Quality Management Supplement to the City Master Plan and the City's VPDES permit for its municipally owned separate storm sewer system discharges as issued by the Department of Environmental Quality; and,

(8) Whether the cost of implementing available offsite improvements is reasonably equivalent to that of a monetary contribution.

(E) Final approval of equivalency options used for a particular site shall be made at the sole discretion of the Director of T&ES.

(F) The City hereby establishes a dedicated fund known as the Alexandria Water Quality Improvement Fund to be used in conjunction with this Article XIII, the Water Quality Management Supplement to the City Master Plan, and the City's VPDES permit for its municipally owned separate storm sewer system discharges as issued by the Department of Environmental Quality. The purpose of the fund is to reduce nonpoint source pollution and improve stream quality and habitat through appropriate activities including, but not limited to: BMP retrofits, stream bank stabilization and/or restoration, public education and outreach, demonstration projects, and water quality monitoring and analysis.

13-111 Development review process.

(A) Any development, redevelopment, or use exceeding 2,500 square feet of land disturbance within the CBPA shall be subject to the development review process outlined in (C) below prior to any clearing of the site or the issuance of any building, land use, or land development permit.

(B) Notwithstanding (A) above, all development, redevelopment, or use in the RPA, or in the vegetated area established under Sec. 13-109(E)(6), regardless of the amount of land disturbance, shall be subject to the review criteria established in Sec. 13-107 prior to any clearing of the site or the issuance of any building, land use, or land development permit.

(C) The development review process application shall consist of the plans and studies identified below, such application forms as the Director of T&ES shall require and the appropriate fees, which together shall constitute the plan of development. The plans and studies identified in this section may be coordinated or combined with other required submission materials, as deemed appropriate by the Director of T&ES. The plan of development shall contain the following elements:

(1) A site plan in accordance with the provisions of Sec. 11-400 of this ordinance or other applicable law and, if applicable, a subdivision

plat in accordance with the provisions of Chapter 5, Title 7 of the City Code;

(2) An environmental site assessment as detailed in Sec. 13-112;

(3) A landscape plan in accordance with the provisions of Sec. 11-410(CC) of this ordinance certified by qualified design professionals practicing within their areas of competence;

(4) A stormwater management plan as detailed in Sec. 13-113;

(5) An erosion and sediment control plan in accordance with the provisions of Chapter 4, Title 5 of the City Code; and,

(6) For all land disturbance, development, or redevelopment within an RPA, or within an environmentally sensitive area as determined by the Director of T&ES pursuant to Sec. 13-114(C) or Sec. 13-114(D), or for an exception under Sec. 13-116, a water quality impact assessment as detailed in Sec. 13-114.

13-112 Environmental site assessment.

(A) The environmental site assessment shall clearly delineate the individual components of the RPA as well as the total geographic extent of the RPA as defined in Sec. 13-105(B) through a methodology approved by the Director of T&ES under the authority of Sec. 13-104(C).

(B) The environmental site assessment shall also clearly describe, map, or explain the following:

(1) Intermittent streams contained within a natural channel through a methodology approved by the Director of T&ES under the authority of Sec. 13-104(C).

(2) Highly erodible and highly permeable soils if available from existing public documents or documents available to the applicant;

(3) Steep slopes greater than 15 percent in grade;

(4) Known areas of contamination;

(5) Springs, seeps, and related features; and,

(6) A listing of all wetlands permits required by law (evidence that such permits have been obtained shall be presented to the Director of T&ES before permits will be issued to allow commencement of grading or other on-site activity).

(C) Wetlands delineations shall be performed consistent with current procedures promulgated by the U.S. Army Corps of Engineers and the Environmental Protection Agency.

(D) Site-specific evaluations or delineations of RPA boundaries shall be certified by a professional engineer, land surveyor, landscape architect, soil scientist, or wetland delineator certified or licensed to practice in the Commonwealth of Virginia.

(E) In the event that no part of the site plan area contains any elements described in (A) or (B) above, the applicant and the party responsible for the evaluation may, in lieu of providing an environmental site assessment plan, so certify the finding, in writing and under oath, to the Director of T&ES. Any permit issued in reliance upon such a certification where said certification is factually inaccurate or incorrect shall be void *ab initio*. Such invalidity shall

be in addition to any other penalties which may be imposed upon the makers of such certification.

(F) The environmental site assessment shall be drawn at the same scale as the preliminary site plan or subdivision plat, and shall be certified as complete and accurate by a professional engineer or a certified land surveyor. This requirement may be waived by the Director of T&ES when the proposed use or development would result in less than 5,000 square feet of disturbed area.

13-113 Stormwater management plan.

(A) The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, calculations, and citations to supporting references as appropriate to communicate the information required by this Article XIII. At a minimum, the stormwater management plan must contain the following:

(1) Location and design of all planned stormwater control devices;

(2) Procedures for implementing non-structural stormwater control practices and techniques;

(3) Plans for implementing any equivalent stormwater management options proposed by the applicant;

(4) Pre- and post-development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations;

(5) Pre- and post-development peak runoff rates from the site for both a two-year storm and ten year storm, considered individually, with supporting documentation of all utilized coefficients and calculations; and,

(6) For facilities, verification of structural soundness, including a professional engineer certification as applicable.

(B) Site specific facilities for phased projects shall be designed for the ultimate development of the contributing project watershed based on zoning, comprehensive plans, local public facility master plans, or other similar planning documents.

(C) All engineering calculations must be certified by a professional engineer or a licensed class IIIB surveyor and performed in accordance with procedures, consistent with good engineering practice, established by the Director of T&ES pursuant to Sec. 13-104(C).

(D) All stormwater designs that require analysis of pressure hydraulic systems and/or inclusion and design of flow control structures must be sealed by a professional engineer registered in the Commonwealth of Virginia.

(E) The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than the City of Alexandria, then a maintenance agreement shall be executed between the responsible party and the City.

13-114 Water quality impact assessment.

(A) The purpose of the water quality impact assessment is to:

(1) Identify the impacts of a proposed use, development, or redevelopment on water quality and lands within an RPA;

(2) Ensure that, where a use, development, or redevelopment does take place within an RPA, it will be located on those portions of the site and in a manner that will be least disruptive to the natural functions of the RPA;

(3) Identify the impacts of a proposed use, development, or redevelopment within an RMA where the Director of T&ES has determined that the proximity to an RPA, the environmentally sensitive characteristics of the site, or the proposed scale and intensity has the potential to affect water quality.

(4) Specify mitigation that will address water quality protection under the foregoing circumstances or under an exception under Sec. 13-116.

(B) A water quality impact assessment is required for any proposed development or redevelopment in the RPA, except that at the discretion of the Director of T&ES a water quality impact assessment may not be required if the activity is addressed under Sec. 13-107(A), Sec. 13-107(B), or Sec. 13-107(D). There are two types of water quality impact assessments: water quality minor impact assessments and water quality major impact assessments.

(C) A water quality minor impact assessment is required for development or redevelopment within RPAs or under an exception which involves 5,000 or less square feet of land disturbance; or for any development or redevelopment within the RMA that involves 5,000 or less square feet of land disturbance adjacent to an RPA, if required by the Director of T&ES due to the presence or proximity of wetlands, potential for harmful discharge of contaminants from the property, or slopes greater that 15 percent which are proposed to be disturbed. A minor assessment must demonstrate that the undisturbed buffer area, enhanced vegetative plantings, and any required BMPs will result in the removal of no less than 75 percent of sediments and 40 percent of nutrients from post-development stormwater runoff and that will retard runoff, prevent erosion, and filter nonpoint source pollution the equivalent of the full undisturbed buffer area. Such an assessment shall include a site plan that shows the following:

(1) Location and description of the existing characteristics and conditions of the components of the RPA as identified in Sec. 13-105(B) and delineated in the environmental site assessment required by Sec. 13-112;

(2) Location and nature of the proposed encroachment into the buffer area, including: type of paving material; areas of clearing or grading; location of any structures, drives, or other impervious cover; and sewage disposal systems or reserve drainfield sites; and,

(3) Type and location of enhanced vegetation and/or proposed BMPs to mitigate the proposed encroachment.

(4) Location of existing vegetation onsite, including the number and types of trees and other vegetation to be removed in the buffer to accommodate the encroachment or modification.

(5) Revegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal, erosion, and runoff control. The revegetation plan will incorporate native vegetation to the extent practicable.

(D) A water quality major impact assessment is required for development or redevelopment within RPAs or under an exception that involves more than 5,000 square feet of land disturbance; or for any development or

redevelopment within the RMA which involves more than 5,000 square feet of land disturbance adjacent to an RPA, if required by the Director of T&ES due to the presence or proximity of wetlands, potential for harmful discharge of contaminants from the property, or slopes greater than 15 percent which are proposed to be disturbed. The following elements shall be included in a water quality major impact assessment:

(1) All of the information required in a water quality minor impact assessment as specified in (C) above;

(2) A hydrogeological element that:

(a) Describes the existing topography, soils, hydrology, and geology of the site;

(b) Describes the impacts of the proposed development or redevelopment on topography, soils, hydrology, and geology on the site;

(c) Indicates the following:

(i) Disturbance or reduction of wetlands and justification for such action;

(ii) Disruption or reductions in the supply of water to wetlands, streams, lakes, rivers, or other water bodies;

(iii) Disruptions to existing hydrology, including wetland and stream circulation patterns;

(iv) Source location and description of proposed fill material (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(v) Location of dredge materials and location of dumping area for such materials (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(vi) Locations of and impacts on adjacent shellfish beds, submerged aquatic vegetation, and fish spawning areas (may, at applicant's risk, be provided when the U.S. Army Corps of Engineers permit application is submitted);

(vii) The estimated pre- and post-development pollutant loads in runoff as delineated in the stormwater management plan required by Sec. 13-113;

(viii) Estimation of percent increase in impervious surface on the site and identification of the type(s) of surfacing materials to be used;

(ix) Percent of the site to be cleared for the project;

(x) Anticipated duration and phasing schedule of the construction period; and,

(xi) Listing of all requisite permits from all applicable agencies necessary to develop the project.

(d) Describes the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures include:

(i) Proposed erosion and sediment control measures, which may include minimizing the extent of the cleared area, perimeter controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;

(ii) Proposed stormwater management system;

(iii) Creation of wetlands to replace those lost; and,

(iv) Minimizing cut and fill.

(3) A supplement to the landscape plan that:

(a) Identifies and delineates the location of all significant plant material, including all trees on site six inches or greater diameter breast height. Where there are groups of trees, stands shall be outlined.

(b) Describes the impacts the development or use will have on the existing vegetation. Information should include:

(i) General limits of clearing based on all anticipated improvements, including buildings, drives, and utilities;

(ii) Clear delineation of all trees which will be removed; and,

(iii) Description of plant species to be disturbed or removed.

(c) Describes the potential measures for mitigation. Possible mitigation measures include:

(i) Replanting schedule for trees and other significant vegetation removed for construction, including a list of possible plants and trees to be used;

(ii) Demonstration that the proposed plan will preserve to the greatest extent possible any significant trees and vegetation on the site and will provide maximum erosion and overland flow benefits from such vegetation;

(iii) Demonstration that indigenous plants are to be used to the greatest extent possible; and,

(iv) Identification of the natural processes and ecological relationships inherent at the site, and an assessment of the impact of the proposed use and development of the land, including mitigating measures proposed in the water quality impact assessment, on these processes and relationships.

(E) A water quality minor impact assessment shall be certified as complete and accurate by a professional engineer or a certified land surveyor. The additional elements required in a water quality major impact assessment

shall be certified as complete and accurate by a professional engineer and by a qualified environmental scientist.

(F) For any water quality impact assessment to proceed, the Director of T&ES must first approve it for completeness and compliance with this Article XIII. Upon receipt of any water quality major impact assessment application, the Director of T&ES may determine if review by the Chesapeake Bay Local Assistance Department (CBLAD) is warranted and may request CBLAD to review the assessment and respond with written comments. Any comments by CBLAD will be incorporated into the final review by the Director of T&ES provided that such comments are provided by CBLAD within 90 days of the request.

(1) For a water quality minor impact assessment, the Director of T&ES shall base this finding on the following criteria:

(a) The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;

(b) Impervious surface is minimized;

(c) Proposed BMPs, where required achieve the requisite reductions in pollutant loadings;

(d) The development, as proposed, meets the purpose and intent of these regulations;

(e) The cumulative impact of the proposed development when considered in relation to other development within the RPA in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.

(2) For a water quality major impact assessment, the Director of T&ES shall base this finding on the following criteria:

(a) Within any RPA, the proposed development is water-dependent or constitutes redevelopment;

(b) The disturbance of wetlands shall comply with state and federal regulations;

(c) The development will not result in significant disruption of the hydrology of the site;

(d) The development will not result in significant degradation of water quality that could adversely affect aquatic vegetation or life;

(e) The development will not result in unnecessary destruction of plant material on site;

(f) Proposed erosion and sediment control measures are adequate to achieve the required reductions in runoff, and prevent off-site transport of sediment during and after construction;

(g) Proposed stormwater management measures are adequate to control the stormwater runoff to achieve the required standard for pollutant control; and,

(h) Proposed revegetation of disturbed areas will provide adequate erosion and sediment control benefits, as determined by the Director of T&ES.

13-115 Final plans.

(A) Final site plans and subdivision plats subject to this Article XIII for all lands within the CBPA shall include the following additional information:

(1) A copy showing issuance of all wetlands permits required by law; and,

(2) A maintenance agreement between the City and applicant as deemed necessary and appropriate by the Director of T&ES to ensure proper maintenance of best management practices in order to assure their continued performance.

(B) The following installation and bonding requirements shall me met.

(1) Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved site plan.

(2) When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the applicant provides to the city a surety bond or equivalent satisfactory to the Director of T&ES in amount equal to the remaining plant materials, related materials, and installation costs of the required landscaping or facilities and/or maintenance costs for any required stormwater management facilities during the construction period.

(3) Unless otherwise approved by the Director of T&ES for a phased project, all required landscaping shall be installed and approved by the first planting season following issuance of a certificate of occupancy or the surety bond may be forfeited to the City.

(4) Unless otherwise approved by the Director of T&ES for a phased project, all required stormwater management facilities or other specifications shall be installed and approved within 18 months of project commencement. Should the applicant fail, after proper notice, to initiate, complete or maintain appropriate actions required by the approved plan, the surety bond may be forfeited to the City. The City may collect from the applicant the amount by which the reasonable cost of required actions exceeds the amount of surety held.

(5) After all required actions of the approved site plan have been completed, the applicant must submit a written request for a final inspection. If the requirements of the approved plan have been completed to the satisfaction of the Director of T&ES, such unexpended or unobligated portion of the surety bond held shall be refunded to the applicant or terminated within 60 days following the receipt of the applicant's request for final inspection. The Director of T&ES may require a certificate of substantial completion from a professional engineer or licensed surveyor before making a final inspection.

13-116 Exceptions.

(A) Unless otherwise provided in this Article XIII, a request for an exception to the requirements of this Article XIII shall be made pursuant to this section in

writing to the Director of T&ES. The request shall identify the impacts of the proposed exception on water quality and on lands within the RMA and RPA through the performance of a water quality impact assessment that complies with the provisions of Sec. 13-114 to the extent applicable.

(B) The Director of T&ES shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this Article XIII if the Director of T&ES finds that the applicant has demonstrated by a preponderance of the evidence that:

(1) Granting the exception will not confer upon the applicant any special privileges that are denied to other property owners in the CBPA overlay district;

(2) The exception is not based upon conditions or circumstances that are self-created or self-imposed, nor does the exception arise from conditions or circumstances either permitted or noncomplying that are related to adjacent parcels;

(3) The exception is the minimum necessary to afford relief;

(4) The exception will be consistent with the purpose and intent of the overlay district, and not injurious to water quality, the neighborhood or otherwise detrimental to the public welfare;

(5) Reasonable and appropriate conditions are imposed, as warranted, to prevent the allowed activity from causing degradation of water quality.

(C) Notwithstanding the above, exceptions to Sec. 13-107 shall be heard and determined by the Planning Commission after hearing and notice pursuant to Sec. 11-300. The schedule for reviewing the exception shall be made by the Director of T&ES and the Director of Planning and Zoning. The schedule shall provide, in a manner approved by the City Manager, reasonable opportunity for review and action by the Environmental Policy Commission prior to any formal action by the Planning Commission so that any recommendation of support, denial, or modification can be considered as part of the Planning Commission's deliberations.

(D) Any person aggrieved by a decision of the Director of T&ES or Planning Commission under this section may appeal as provided in section 13-117.

13-117 Appeals.

(A) Any person aggrieved by a final case decision of the Director of T&ES in the administration, interpretation or enforcement of this Article XIII or on any application hereunder may appeal such decision to the Planning Commission, by filing a notice of appeal, in writing, stating the grounds of appeal, with the Secretary of the Planning Commission within 14 days of the issuance of such decision; provided, that any person aggrieved, who had no actual knowledge of the issuance of such decision, may file an appeal within 14 days of the last day on which notice provided in Sec. 11-300 or Sec. 11-408 of this ordinance is given for any element of the plan of development. A notice of appeal shall be accompanied by a filing fee of $100.00.

(B) The Planning Commission shall conduct a public hearing on any appeal filed pursuant to Sec. 13-117(A), notice for which shall be provided in accordance with the applicable provisions of Sec. 11-300 of this ordinance. Following the conclusion of the hearing, the Planning Commission may affirm, reverse or

modify the decision of the Director of T&ES, or vacate the decision and remand the matter to the Director of T&ES for further consideration.

(C) Any person aggrieved by a decision of the Planning Commission issued pursuant to Sec 13-116(D) or Sec. 13-117(B), or the City Manager, may appeal the decision to the City Council, by filing a notice of appeal, in writing, stating the grounds of appeal, with the City Clerk within 14 days of the issuance of the decision.

(D) The City Council shall conduct a public hearing on any appeal filed pursuant to subsection (C), notice for which shall be provided in accordance with the applicable provisions of Sec. 11-300 of this ordinance. Following the conclusion of the hearing, the Council may affirm, reverse or modify the decision of the commission, or vacate the decision and remand the matter to the Planning Commission or the Director of T&ES for further consideration.

(E) Notwithstanding the provisions of subsections (A) through (D) above, an applicant or any aggrieved party who elects to appeal shall appeal the Director of T&ES's decision of approval or disapproval of a stormwater management plan application by filing a notice of appeal with the Director of T&ES within 30 days after service of such decision. The filing of such notice, and proceedings thereafter, shall be governed by Part 2A of the Rules of the Supreme Court of Virginia, and judicial review shall be had in the Circuit Court of the City of Alexandria on the record previously established, and shall otherwise be in accordance with the Administrative Process Act, Virginia Code sections 9-6.14:1 *et seq*.

13-118 Noncomplying land uses and structures.

(A) Any land use or structure lawfully existing on January 28, 1992, or any land use or structure that exists at the time of any amendment to this Article XIII that does not comply as a result of the amendment, shall be deemed noncomplying.

(B) Any proposed land use or structure for which an applicant has filed a complete application for a preliminary site plan, building permit, subdivision plan, plot plan, or special use permit on or before February 23, 2004 that would not comply under proposed amendments to Article XIII pursuant to the December 10, 2001 amendments to 9VAC10-20-10 *et seq* may be constructed in accordance with the provisions of this Article XIII in effect at the time of submittal, except that the proposed land use or structure shall comply with any new requirements to the maximum extent practicable. Upon completion, the land use or structure shall be deemed noncomplying.

(C) Any application for a proposed land use or structure that is not exempt pursuant to (A) or (B) above shall comply with amendments to Article XIII adopted pursuant to the December 10, 2001 amendments to 9VAC10-20-10 et seq.

(D) Nothing in this Article XIII shall prevent the reconstruction of noncomplying structures destroyed by any casualty unless the reconstruction is otherwise restricted by this ordinance or other portions of the City Code. Such reconstruction shall occur within two years after the destruction or damage and there shall be no increase in the amount of impervious area and no further encroachment in the RPA, to the extent possible by sound engineering practices.

(E) Any noncomplying land use or structure may continue and be maintained, including renovation, remodeling, and other cosmetic alterations provided

that the activity does not result in land disturbance and that there is no net increase in nonpoint source pollutant load.

(F) A request to enlarge or expand a principal noncomplying structure within an RPA buffer area may be approved by the Director of T&ES through an administrative process provided that:

(a) The principal structure remains intact and the modification is compatible in bulk and scale to those in the surrounding neighborhood area, as determined by the Director of Planning and Zoning. If these criteria are not met, the modification shall be subject to the exception request process requirements of Sec. 13-116.

(b) There will be no increase in nonpoint source pollution load.

(c) Any development or land disturbance exceeding and area of 2,500 square fee complies with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

(d) The Director of T&ES finds that the request is consistent with the criteria provided in Sec. 13-116(B).

(G) A request to construct or modify a non-attached noncomplying accessory structure, or a request to modify or expand a noncomplying land use (e.g., a parking area, boat storage area, active recreation fields, etc.), shall only be approved through the exceptions process outlined in Sec. 13-116.

13-119 Exemptions.

(A) The following uses, which may involve structures, fill, flooding, draining, dredging, or excavating, shall be exempted from this Article XIII, to the extent specifically enumerated in these regulations and not prohibited by any other provision of the City Code or applicable law and subject to the Director of T&ES review and approval of design and construction plans for compliance with this Article XIII:

(1) Construction, installation, operation and maintenance of electric, natural gas, fiber-optic, and telephone lines, railroads and public roads constructed by VDOT or by or for the City of Alexandria in accordance with VDOT standards (built separately from development projects regulated under section 13-106), and their appurtenant structures, in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law (Sec. 10.1-560 *et seq* of the Code of Virginia and the Stormwater Management Act (Sec. 10.1-603.1 *et seq* of the Code of Virginia); (ii) an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or (iii) by the City of Alexandria under local water quality protection criteria at least as stringent as the above state requirements shall be deemed to constitute compliance with these regulations. The exemption of public roads is further conditioned on the alignments being designed to prevent or otherwise minimize the encroachment in the RPA buffer and to minimize adverse effects on water quality.

(2) Construction, installation, and maintenance of water, sewer, natural gas, underground telecommunications and cable television lines owned or permitted by the City of Alexandria or a service authority shall be exempt from the requirements of Article XIII provided that:

(a) To the degree possible, the location of such utilities and facilities shall be outside RPAs;

(b) No more land shall be disturbed than is necessary to provide for the proposed utility installation;

(c) All such construction, installation, and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal requirements and permits, and designed and conducted in a manner that protects water quality;

(d) Any land disturbance exceeding an area of 2,500 square feet shall comply with Sec. 5-4-1 *et seq* of the City Code (Erosion and Sediment Control).

13-120 *Penalties.* Under the authority of section 10.1-2109.E of the Code of Virginia, and in addition to the enforcement provisions available to the Director of T&ES in Sec. 11-200 of this ordinance, the Director of T&ES may promulgate rules, regulations, and procedures in accordance with 13-104(C) to implement the following civil penalties:

(A) Any person who: (i) violates any provision of this ordinance or (ii) violates or fails, neglects, or refuses to obey any final notice, order, rule, regulation, or variance or permit condition authorized under this ordinance shall, upon such finding by an appropriate circuit court, be assessed a civil penalty not to exceed $5,000 for each day of violation. Such civil penalties may, at the discretion of the court assessing them, be directed to be paid into the Alexandria Water Quality Improvement Fund for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas therein, in such a manner as the court may direct by order, except that where the violator is the City itself or its agent, the court shall direct the penalty to be paid into the state treasury.

(B) With the consent of any person who: (i) violates any provision of this ordinance related to the protection of water quality in Chesapeake Bay Preservation Areas or (ii) violates or fails, neglects, or refuses to obey any notice, order, rule, regulation, or variance or permit condition authorized under this ordinance, the City may provide for the issuance of an order against such person for the one-time payment of civil charges for each violation in specific sums, not to exceed $10,000 for each violation. Such civil charges shall be paid into the City Water Quality Improvement Fund for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas therein, except that where the violator is the City itself or its agent, the civil charges shall be paid into the state treasury. Civil charges shall be in lieu of any appropriate civil penalty that could be imposed under (A) above. Civil charges may be in addition to the cost of any restoration required or ordered by the City.