EXHIBIT NO.

6-16-07

16-12-87

City of Alexandria, Virginia

MEMORANDUM

DATE:

JUNE 6, 2007

TO:

THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM:

JAMES K. HARTMANN, CITY MANAGER

SUBJECT:

CONSIDERATION OF AN AMENDMENT TO THE EROSION AND

SEDIMENT CONTROL REGULATIONS

ISSUE: Amendment of the City of Alexandria's Erosion and Sediment Control Ordinance

RECOMMENDATION: That Council approve this ordinance amendment (Attached) on first reading and schedule it for public hearing, second reading and final passage on Saturday, June 16, 2007.

DISCUSSION: On September November 15, 2006, the Virginia Department of Conservation and Recreation (DCR) reviewed the City of Alexandria's Erosion and Sediment Control Program. At that time the program was deemed "Provisionally Consistent" with the requirement to update the Alexandria Erosion and Sediment Control Ordinance such that it was consistent with the Virginia Erosion and Sediment Control Law. The majority of the changes are very minor and reflect those required by DCR.

However, two additional changes have been included. City staff, in consultation with the City Attorney's Office, has decided that it is in the best interest of the program to shift from criminal to civil penalties (as has been accomplished in other ordinances, such as the Noise Ordinance). This change is more in keeping with the types of infractions that have occurred, or have the potential to occur. The second additional change is to institute fees for review of sediment and erosion control plans. This is in keeping with, and encouraged by, the Virginia Erosion and Sediment Control Law.

In order to assist in covering City costs of reviewing and inspecting erosion and sediment control plans, a new fee of \$500 per application is proposed for projects where the ground area to be disturbed would be 2,500 square feet or greater. This fee would be similar to those in Arlington County and Fairfax County.

FISCAL IMPACT: Existing staff and organizational structure will implement the collection of fees. Funds generated from the new fees are estimated to be less that \$20,000 per year.

ATTACHMENT: Proposed Erosion and Sediment Control Ordinance

STAFF:

Richard Baier, P.E., Director, Transportation and Environmental Services William Skrabak, Chief, Division of Environmental Quality, T&ES Christopher Spera, Assistant City Attorney Claudia Hamblin-Katnik, Ph.D., Watershed Program Administrator, DEQ, T&ES EXHIBIT NO. 2

Introduction and first reading: Public hearing:

6/12/2007 6/16/2007

Second reading and enactment:

6/16/2007

INFORMATION ON PROPOSED ORDINANCE

Title

AN ORDINANCE to amend and reordain Chapter 4 (EROSION AND SEDIMENT CONTROL) of Title 5 (TRANSPORTATION AND ENVIRONMENTAL SERVICES), of the Code of the City of Alexandria, Virginia, 1981, as amended.

Summary

The proposed ordinance revises the City's erosion and sediment control regulations to conform to recent changes in state law.

Sponsor

Staff

Richard Baier, Director of Transportation and Environmental Services

Christopher Spera, Assistantnt City Attorney

Authority

Virginia Code § 10.1-560, et seq.

Estimated Costs of Implementation

None

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

None

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ORDINANCE NO. _____

 AN ORDINANCE to amend and reordain Chapter 4 (EROSION AND SEDIMENT CONTROL) of Title 5 (TRANSPORTATION AND ENVIRONMENTAL SERVICES), of the Code of the City of Alexandria, Virginia, 1981, as amended.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Chapter 4 of Title 5 of the Code of the City of Alexandria, Virginia, 1981, as amended, be, and the same hereby is, amended and reordained to read as follows:

Sec. 5-4-1 Definitions.

As used in this chapter, the following terms shall have the meanings set forth below, unless the context requires a different meaning:

- (a) "Agreement in lieu of a plan" means a contract between the city and the owner which specifies conservation measures which must be implemented in the construction or modification of a single-family residence; this contract may be executed by the Director in lieu of an erosion and sediment control plan.
- (b) "Applicant" shall mean any person submitting an erosion and sediment control plan or an agreement in lieu of a plan for approval or requesting the issuance of a permit, when required, authorizing land-disturbing activities to commence.
- (c) "Erosion and sediment control plan," "conservation plan" or "plan," shall mean a document containing material for the conservation of soil and water resources of an unit or group of units of land. It may include appropriate maps, an appropriate soil and water plan, inventory and management information with needed interpretations, and a record of decisions contributing to conservation treatments. The plan shall contain all major conservation decisions to assure that the entire unit or units of land will be so treated to achieve the conservation objectives.
- (d) "Director" shall mean the director of transportation and environmental services, his designee or his duly authorized agent.
- (e) "Erosion impact source area" shall mean an area of land not associated with current land-disturbing activity but subject to persistent erosion resulting in the delivery of sediment onto neighboring properties or into state waters. This definition shall not apply to any lot or parcel of land of 10,000 square feet or less used for residential purposes or to shorelines where the erosion results from wave action or other coastal processes.
- (f) "Land-disturbing activity" shall mean any land change which 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.
- (g) "Natural channel design concepts" means the utilization of engineering analysis and fluvial geomorphic processes to create, rehabilitate, restore, or stabilize an open conveyance system for the purpose of creating or recreating a stream that conveys its bankfull storm event within its banks and allows larger flows to access its bankfull bench and its floodplain.

- (h) "Owner" shall mean the owner or owners of the freehold of the premises or of a lesser estate therein, a mortgagee or vendee in possession, an assignee of rents, a receiver, an executor, a trustee, a lessee or another person, firm or corporation in control of a property.
- (i) "Peak flow rate" means the maximum instantaneous flow from a given storm condition at a particular location.
- (j) "Permittee" shall mean the person to whom the permit authorizing land-disturbing activities is issued or the person who certifies that the approved erosion and sediment control plan will be followed.
- (k) "Person" shall mean any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town, or other political subdivision of the commonwealth, interstate body, or other legal entity.
- (1) "Plan-approving authority" shall mean the department of transportation and environmental services which shall be responsible for determining the adequacy of a plan submitted for land-disturbing activities on an unit or group of units of lands and for approving plans.
- (m) "Runoff volume" means the volume of water that runs off the land development project from a prescribed storm event.
- (n) "State waters" shall mean all waters on the surface and or wholly or partially underground that is within or bordering the commonwealth or that is within the jurisdiction of the commonwealth.
- (o) "Water Quality Volume" means the volume equal to the first one-half inch of runoff multiplied by the impervious surface of the land development project.
- Sec. 5-4-1.1 Approved erosion and sediment control plan required--construction of buildings.

Except as provided in section 5-4-5 of this code, it shall be unlawful for any persons to construct or erect any building or structure on any land within the city unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter.

Sec. 5-4-2 Same--enlargement of buildings.

Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to alter any building or structure on any land within the city in such manner as to change the land area covered by the building or structure unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter.

Sec. 5-4-3 Same--change or disturb terrain.

(a) Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to clear, grade, excavate, fill, remove topsoil from or change the contour of any land in the city unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter.

(b) Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to remove or destroy trees, shrubs, grass, weeds, vegetation, ground cover or other plant life on any land in the city unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter

Sec. 5-4-3.1 Same--erosion impact source area.

Notwithstanding any contrary provision of this chapter, it shall be unlawful for any property owner to fail, neglect or refuse to implement a conservation plan, approved by the director, and within such reasonable time as the director shall specify, for any land designated by the director as an erosion impact source area

Sec. 5-4-3.2 Wetlands Mitigation Banks

In accordance with the procedure set forth by § 10.1-563(E) of the Code of Virginia which is herein incorporated, any person engaging in the creation and operation of wetland mitigation banks in multiple jurisdictions, which have been approved and are operated in accordance with applicable federal and state guidance, laws, or regulations for the establishment, use, and operation of mitigation banks, pursuant to a permit issued by the Department of Environmental Quality, the Marine Resources Commission, or the U.S. Army Corps of Engineers, may, at the option of that person, file general erosion and sediment control specification for wetland mitigation banks annually with the Virginia Soil and Water Conservation Board (Board) for review and approval consistent with guidelines established by the Board.

- Sec. 5-4-4 Compliance with approved plan.
- (a) It shall be unlawful for any person to construct, erect or alter any building or structure for which an approved erosion and sedimentation control plan is required by this chapter, except in accordance with the approved plan.
- (b) It shall be unlawful for any person to clear, grade, excavate, fill, remove topsoil from or change the contour of any land in the city for which an approved erosion and sedimentation control plan is required by this chapter except in accordance with the approved plan.
- (c) It shall be unlawful for any person to remove or destroy trees, shrubs, grass, weeds, vegetation, ground cover or other plant life on any land in the city for which an approved erosion and sedimentation control plan is required by this chapter except in accordance with the approved plan.

Sec. 5-4-5 Exceptions.

The provisions of this chapter shall not apply to any construction, reconstruction, repair or alteration of any building or structure when no land is disturbed and no trees, shrubs, grass or vegetation is destroyed or removed, nor to any of the following:

(a) The construction or erection of any building or structure when the disturbed land area of the site is less than 2,500 square feet in size, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.

- (b) The alteration of any building or structure when the disturbed land area of the site will be less than 2,500 square feet, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (c) The clearing, grading, excavating, filling or changing the contour of, or removing topsoil from, less than 2,500 square feet of land, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (d) The clearing, grading, excavating, filling or changing the contour of, or removing topsoil from, less than 2,500 square feet of land, provided there is no natural or manmade drainage ditch, swale draining in excess of 2,500 square feet or storm sewer on the disturbed land, and further provided the disturbance of the land does not cause sedimentation on land outside the exterior boundaries of the land disturbed.
- (e) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover, or other plant life which cover less than 2,500 square feet of land, provided there is no natural or manmade drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (f) The planting, trimming, pruning or removal of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life pursuant to chapter 2 of title 6 of this code.
- (g) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life which is dead, poisonous or infected with disease or injurious insects or pests.
 - (h) The gardening and care of lawns.
- (i) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life from lots of less than 2,500 square feet on which there now exists a dwelling.
- (j) The exploration or drilling for oil and gas including the well site, roads, feeder lines and off-site disposal areas.
- (k) The repair or rebuilding of the tracts, right-of-way, bridges, communication facilities and other related structures and facilities of a railroad company.
- (l) Shore erosion control projects on tidal waters when the projects are approved by local wetlands boards, the Marine Resources Commission or the U.S. Army Corps of Engineers and located on tidal waters and within nonvegetated or vegetated wetlands as defined in Title 28.2 of the Code of Virginia. However, any associated land that is disturbed outside of this exempted area shall remain subject to the article and the regulations adopted pursuant thereto.
- (m) Emergency work to protect life, limb or property, and emergency repairs; provided, that, if the land-disturbing activity would have required an approved erosion and sediment control plan if the activity were not an emergency, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan-approving authority.
 - (n) Individual utility service connections.
- (o) Installation, maintenance, or repair of any underground public utility when such activity occurs on an existing hard surfaced road, street, or sidewalk provided the land-disturbing activity is confined to the area of the road, street, or sidewalk which is hard surfaced.

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- (p) Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system.
 - (a) Surface or deep mining.
- (r) Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, or livestock feedlot operations; including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation. However, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is forested artificially or naturally in accordance with the provisions of Chapter 11(§ 10.1-1100 et seq.) of this title or is converted to bona fide agricultural or improved pasture use as described in subsection B of § 10.1-1163.
- (s) Agricultural engineering operations including, but not limited, to the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the provisions of the Dam Safety Act, Article 2 (10.1-604 et seq.) of Chapter 6 of the Erosion and Sediment Control Law, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and irrigation.
- (t) Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles.
- Sec. 5-4-6 Permits not to be issued without approved erosion and sedimentation control plan when plan required by chapter.
- (a) No permit shall be issued to construct, erect, or alter any building or structure on any land within the city until a plan has been submitted and approved in accordance with the provisions of this chapter and the applicant has certified in writing that the plan will be followed. The person responsible for carrying out the plan shall provide the name of an individual holding a certificate of competence to the program authority, as provided by § 10.1-561, who will be in charge of and responsible for carrying out the land disturbing activity. However, any plan-approving authority may waive the certificate of competence requirement for an agreement in lieu of a plan for construction of a single family residence. If a violation occurs during the land-disturbing activity, then the person responsible for carrying out the agreement in lieu of a plan shall correct the violation and provide the name of an individual holding a certificate of competence, as provided by § 10.1-561. Failure to provide the name of an individual holding a certificate of competence prior to engaging in landdisturbing activities may result in revocation of the approval of the plan and the person responsible for carrying out the plan shall be subject to the penalties provided in this article.
- (b) No permit shall be issued to clear, grade, excavate, fill, remove topsoil from or change the contour of any land within the city until a plan has been submitted and approved in accordance with the provisions of this chapter and the applicant has certified in writing that the plan will be followed.
- Sec. 5-4-7 Minimum criteria; city handbook.

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(b) This chapter, the erosion and sediment control regulations of the Department of Conservation and Recreation Division of Soil and Water Conservation (VR 625-02-00) effective March 22, 1995, [4 VAC 50-30-10 et seq.], and the "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, which are incorporated herein by reference, shall be an integral part of the city's erosion and sediment control program and shall comprise the city's "Erosion and Sediment Control Handbook." The text of these regulations is on file in the office of the director.

(a) The director shall administer and enforce the provisions of this chapter.

- (c) In addition to the minimum requirements for controlling erosion and sedimentation for land-disturbing activities which are contained in VR 625-02-00 '4 [4 VAC 50-30-40], the following additional minimum requirements shall apply:
 - (1) Protection of adjacent properties.
- a. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance, by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins or by a combination of such measures.
- b. Vegetated buffer strips may be used alone only where runoff in sheet flow is expected. Buffer strips should be at least 20 feet in width. If at any time it is found that a vegetated buffer strip alone is ineffective in stopping sediment movement onto adjacent property, additional perimeter controls must be provided.
- (2) The director may require sediment basins or traps for smaller disturbed areas where deemed necessary. The sediment basin requirement may also be waived if the director agrees that site conditions do not warrant its construction.
- (3) Cut and fill slopes. Cut and fill slopes must be designed and constructed in a manner which will minimize erosion. Consideration must be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions and other applicable factors. Slopes which are found to be eroding excessively within one year of construction must be provided with additional slope-stabilizing measures until the problem is corrected. The following guidelines are provided to aid site planners and plan reviewers in developing an adequate design.
 - a. Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
- b. Diversions should be constructed at the top of long, steep slopes which have significant drainage areas above the slope. Diversions or terraces may also be used to reduce slope length.
 - (4) The following additional stormwater management criteria shall apply:
- a. A stormwater management plan shall be developed so that, from the site, the postdevelopment peak runoff rate from a two-year and a 10-year storm, considered individually, shall not exceed their respective predevelopment rates. The predevelopment and postdevelopment peak runoff rates must be verified by engineering calculations. Within the Four Mile Run Watershed, postdevelopment peak runoff during a 100-year frequency storm shall not increase the peak runoff of the Four Mile Run Flood Control Channel as required by the city's contract with the United States Army Corp of Engineers.

- b. 1. Concentrated stormwater runoff leaving a development site must be discharged directly into an adequate channel. If there is no adequate channel one must be constructed to convey stormwater to the nearest adequate channel. Newly constructed channels and conduits carrying a flow of 1,000 or more cubic feet per second shall be designed for a 100-year storm frequency and newly constructed channels and conduits carrying a flow of less than 1,000 cubic feet per second shall be designed for a 10-year storm frequency.
- 2. An "adequate channel" shall be defined as a natural or man-made channel or pipe which is capable of conveying the runoff from a two-year storm or a 10-year storm, considered individually, without overtopping its banks or eroding after development of the site in question. A receiving channel may also be considered adequate at any point where the total contributing drainage area is at least 100 times greater than the drainage area of the development site in question or, where it can be shown that the peak rate of runoff from the site for a two-year and a 10-year storm, considered individually, will not be increased after development.
- 3. In accordance with, §10.1-561 of the Code of Virginia, stream restoration and relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels.
- 4. In accordance with §10.1-561 of the Code of Virginia, any land disturbing activity that provides for stormwater management intended to address any flow rate capacity and velocity requirements for natural or manmade channels shall satisfy the flow rate capacity and velocity requirements for natural or manmade channels if the practices are designed to (i) detain the water quality volume and to release it over 48 hours; (ii) detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and (iii) reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels.
- ____5. Runoff rate and channel adequacy must be verified with engineering calculations to the satisfaction of the director.
- c. All channel improvements or modifications must comply with all applicable laws and regulations.
- d. If the applicant chooses an option which includes stormwater detention, he must provide the city with a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the party responsible for performing the maintenance. The responsible party may be an individual, organization or the city, whichever has consented to carry out the maintenance. If the designated maintenance responsibility is with an individual or organization other than the city, a maintenance agreement should be executed between the responsible party and the city.
- e. The owner or developer may continue to discharge stormwater that has not been concentrated (sheet flow) onto lower-lying property if:
 - 1. the peak flow rate for a 10-year frequency storm after development does not exceed the

- 2. the increase in total volumes of runoff caused by the development will not have an adverse impact on the lower-lying property; and
- 3. there will be no exacerbation of existing drainage problems on the lower-lying or other downhill property.
- (5) Stabilization of waterways and outlets. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year frequency storm without erosion. Stabilization adequate to prevent erosion must also be provided at the outlets of all pipes and paved channels. Energy dissipators shall be installed as required by the director.
- (6) Working in or crossing watercourses. Construction vehicles should be kept out of watercourses to the extent possible. Where in-channel work is necessary, precautions must be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and banks) must always be restabilized immediately after in-channel work is completed.
- (7) Underground utility lines shall be installed in accordance with the following standard in addition to other applicable criteria: no more than 100 feet of trench are to be opened at one time.
- (8) Maintenance. All temporary and permanent erosion and sediment control practices must be maintained and repaired as specified in VR 625-02-00 § 6 [4 VAC 50-30-60].
- (9) Submission of an Erosion and Sediment Control Plan to the city is a grant of unlimited right of entry to the property to officials or agents of the city for the purposes of determining adequacy of the proposed plan and inspection of land-disturbing activities for compliance with the approved plan.
- (d) The "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" and the tree planting and preservation regulations authorized by § 11-410(CC)(1) of the Zoning Ordinance of the City of Alexandria, and known as the city's Landscape Guidelines, shall be used by any applicant making a submittal under this chapter and by the director in his or her review and consideration of the adequacy of any erosion and sediment control plan submitted.

Sec. 5-4-8 Erosion and sediment control plans.

(a) Applications for approved erosion and sediment control plans shall be submitted to and filed with the director, on forms prepared by the city, prior to the time any work subject to this chapter is begun on land. Fees for reviewing erosion and sediment control plans, plot plans and performing field inspections for all new structures, exterior alteration, plumbing, electrical, or mechanical building permits where more than two thousand five hundred (2,500) square feet are disturbed shall be required, the fee to be determined by the Director of Transportation and Environmental Services. Four (4)Five (5) copies of an erosion and sediment control plan or plot plan must accompany any application, parts of which shall also be on forms prepared by the city. Upon receipt of an application and plans, the director shall consider the plan in light of the provisions of this chapter and promptly approve the plan, disapprove the plan or approve

the plan with modifications, noting thereon any changes that will be required. The director shall promptly notify the applicant of his or her decision on a plan. Any approved plan shall be issued,

dated, and bear the manual signature of the director of the department of transportation and environmental services or his or her deputy.

(b) An application shall show the following:

- (1) The name, address and telephone number of the applicant.
- (2) The name, address and telephone number of the owner of record.
- (3) The name, address and telephone number of the person preparing the plan.
- (4) The location of the site, including lot number and tax map page number.
- (5) The total land area, area being disturbed and proposed amount of previous and impervious area.
- (6) Soil types by AASHO classification (or other classifications used by soil engineers), if available.
 - (7) Method for collecting and depositing stormwater.
 - (8) Test boring and soil test results when:
- a. the site is in an area of the city known or suspected by the director to have soil problems or unstable soil;
 - b. any proposed slope on the site exceeds a grade of 20 percent;
- c. the presence of ground water in substantial amounts is known or suspected by the director to be on the site; or
 - d. unstable soil is known or suspected by the director to be on the site.
- (9) Methods for control of contamination of land when the site is in an area found by the director to be contaminated by a toxic substance and hazardous to the public health, safety and welfare. Said methods shall comply and be in accordance with the "Administrative Procedures for Control of Contaminated Land, Alexandria, Virginia," dated October 30, 1976, that were promulgated by the city manager and adopted by the city council on November 23, 1976, by ordinance number 2145. These administrative procedures may be amended or revised from time to time by the city manager with the approval of the city council by motion.
- (10) A general description of existing trees, shrubs, grass, weeds, vegetation, ground cover and other plant life.
 - (11) Any other pertinent information the director may require.
- (c) An erosion and sediment control plan shall follow the format of map number 4, plate 6-4 of chapter 6 of the city's erosion and sediment control handbook. The plan shall also include appropriate title blocks, scales and a vicinity map.
- (d) Where land-disturbing activities involve lands under the jurisdiction of more than one local control program an erosion and sediment control plan may, at the option of the applicant, be submitted to the Virginia Soil and Water Conservation Board for review and approval rather than to each jurisdiction concerned.
- (e) When land-disturbing activity will be required of a contractor performing construction work pursuant to a construction contract, the preparation, submission and approval of an erosion control plan shall be the responsibility of the owner.

Sec. 5-4-9 Regulations and restrictions generally.

All erosion and sediment control practices shall be in accordance with the city's erosion and sediment control handbook.

Sec. 5-4-10 Failure of director of transportation and environmental services to act.

Failure of the director to act on any erosion and sedimentation control plan within 45 days after it has been properly filed, unless otherwise agreed with the applicant, should be deemed to constitute approval of the plan.

Sec. 5-4-11 Inspections and amendments of plans.

- (a) Periodic inspections are required on all projects by the program authority. The program authority shall either: Provide for an inspection during or immediately following initial installation of erosion and sediment controls, at lease once in every two-week period, within 48 hours following any runoff producing storm event, and at the completion of the project prior to the release of any performance bonds; or establish an alternative inspection program which ensures compliance with the approved erosion and sediment control plan. Any alternative inspection program shall be:
 - (1) Approved by the Board prior to implementation;
 - (2) Established in writing;
 - (3) Based upon a system of priorities that, at a minimum, address the amount of disturbed project area, site conditions and stage of construction; and
 - (4) Documented by inspection records.

The plan-approving authority or, where a grading, building or other permit is issued in connection with land-disturbing activities, the permit-issuing authority, shall provide for periodic inspections of the authorized land-disturbing activity or activities and may, in addition, require monitoring and reports from the person responsible for carrying out the approved plan to ensure compliance with the plan and to enable the authority to determine whether the measures required in the plan are effective in controlling erosion and sediment.

The owner, occupier or operator shall be notified of the inspection. If the plan-approving or permit-issuing authority determines that there is a failure to comply with the plan, notice shall be served upon the permittee or person responsible for carrying out the plan by registered or certified mail to the address specified in the permit application or in the plan certification, or by delivery at the site of the land-disturbing activities to the agent or employee supervising such activities. Where the plan-approving authority serves such a notice, a copy of the notice shall be sent to the permitissuing authority. The notice shall specify the measures needed to comply with the plan and shall specify the time within which such measures shall be completed. Upon receipt of a sworn complaint of a substantial violation of this chapter from the designated enforcement officer, or if land-disturbing activities have commenced without an approved plan, the director may issue an order requiring that all or part of the land-disturbing activity on the site be stopped until the specified corrective measures have been taken. Where the identified non-compliance is causing or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the commonwealth, drainage systems discharging into such waters, or lower-lying

property, or where the land-disturbing activities have commenced without an approved plan or any required permits, a stop-work order may be issued whether or not the permittee has been issued a notice to comply. Otherwise, such an order may be issued only after the permittee has failed to comply with a notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for seven days from the date of service pending application by the enforcing authority or alleged violator for appropriate relief to the circuit court. If the alleged violator has not obtained an approved plan or all of the required permits within seven days from the date of service of the order, the director may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Upon completion and acceptance of the corrective action, or obtaining an approved plan or any required permits the order shall be immediately lifted. Upon failure to comply with such measures within the time specified, the permit may be revoked, and the permittee or person responsible for carrying out the plan shall be deemed to be in violation of this chapter and upon conviction shall be subject to the penalties provided in section 5-4-18.

(b) The director may authorize amendments consistent with the requirements of this chapter to an approved plan when inspection has revealed that the plan is inadequate to satisfy applicable regulations or when the person responsible for carrying out the plan finds that because of changed circumstances or changed conditions the plan cannot be carried out effectively.

Sec. 5-4-12 Guarantee of performance of plans.

A corporate surety bond, letter of credit, certificate of deposit or similar financial guarantee approved by the city attorney, conditioned upon carrying out all and every part of an approved erosion and sedimentation control plan and upon satisfaction of the guarantee required by section 5-4-13 of this chapter for at least the sum estimated to be the full costs of carrying out the plan and a reasonable allowance for estimated administrative costs and inflation which shall not exceed twenty-five percent of the estimated cost of the conservation action, or a cash escrow, upon the same conditions and in the same amount, shall be furnished the city whenever such costs exceed \$500.

Sec. 5-4-13 Acceptance of performance.

Upon completion of adequate stabilization of an approved erosion and sedimentation control plan, the permittee shall notify the director of such completion. The director shall then inspect the work and planting and, upon his determination that they are in compliance with the approved plan, he shall issue a letter of preliminary acceptance. A condition of any such preliminary acceptance shall be that the permittee guarantee all erosion and sedimentation control work for a period of one year from the date of its preliminary acceptance, or for a period of one year from any repair or replanting ordered by the director, or until such time that all control structures and a minimum of 90 percent of all plantings shall have survived for a year without need of further replanting or repair. During the one year period of the guarantee, the director may order in writing such replanting or repair work as shall be deemed necessary to enforce compliance with the approved plan or the guarantee. Such an order shall serve to revoke the preliminary acceptance and shall cause the

Sec. 5-4-14 Noncompliance and corrective actions.

cleaning of silt basins alone shall not be construed to be repair work.

(a) In the course of making on-site inspections, should the director determine that active erosion and sediment control measures are not in compliance with the approved plan, he shall verbally notify the responsible contractor to take appropriate corrective measures.

permittee to renew the guarantee for an additional one year from the date of replanting or repair.

Final acceptance shall occur when preliminary acceptance has remained unrevoked for a period of

one year, or when all control structures and a minimum of 90 percent of all plants have survived for

a period of one year without need of further replanting or repair. For purposes of this section, normal

- (b) Written confirmation of this notice to comply shall be sent, by certified mail, to the applicant for the erosion and sediment control permit or hand-delivered at the site of the land-disturbing activities to the agent or employee supervising such activities, citing a detailed description of the conservation measures necessary for compliance.
- (c) When no action is taken within 48 hours of delivery of notice to comply, the director shall send the applicant, by certified mail, a letter of intent to utilize the performance bond or cash escrow to apply the conservation measures to correct the deficiency if it has not otherwise been corrected by a specified time.
- (d) If no action has been taken by the time specified, the director shall proceed to have the deficiency corrected and he shall keep a close account of all related expenses which shall be charged to and paid from the applicant's performance bond or escrow account. If the director takes such conservation action upon such failure by the permittee, the director may collect from the permittee the difference, should the amount of reasonable cost of such action exceed the amount of the security held

Sec. 5-4-14.1 Civil Penalties

(a)A violation of any section or provision of this article may, in addition to and not withstanding the penalty provided for in subsection (b), be a civil violation that shall be enforced through the levying of a civil penalty, pursuant to section 1-1-11 of this code, of \$500 for a person's first violation and of \$1,000 for each subsequent violation of the same section or provision. However, the civil penalty for commencement of land disturbing activities without an approved plan shall be \$1,000. Each day during which a violation exists shall constitute a separate violation. However, a series of violations arising from the same operative set of facts shall not give rise to the levying of a civil penalty more frequently than once in any 10-day period, and shall not result in civil penalties exceeding a total of \$3,000.

(b) A violation of any section or provision of this article may, in addition to and not withstanding the penalty provided for in subsection (a), be restrained, prohibited or enjoined by appropriate proceedings in a court of competent jurisdiction.

Sec. 5-4-15 Time of validity of erosion and sediment control plans.

3 Sec. 5-4-20.1 <u>19.1</u> reserved.

Sec. 5-4-20 19 reserved.

- (a) Any approved erosion and sedimentation control plan shall become null and void 180 days after the date of approval and no further work subject to this chapter shall be allowed unless and until an additional or updated erosion and sediment control plan has been submitted and approved in accordance with the provisions of this chapter or unless all requirements of the approved control plan have been completed in less than 180 days in accord with said plan and verified by an on-site inspection by the director.
- (b) When no change in conditions has occurred since the date of approval, an update plan shall be approved in accordance with the provisions of this chapter with no additional requirements.

Sec. 5-4-16 Waiver.

The city manager may, for good cause shown, waive the provisions of chapter 4 of this title that require an approved erosion and sediment control plan, provided:

- (1) written application is made, and
- (2) the director states in writing that such a waiver will not result in increased erosion or sedimentation or violate the general principles of good erosion and sediment control management.

Sec. 5-4-17 Relation of chapter to other laws.

The provisions contained in this chapter shall be considered separate from, supplemental to and additional to the provisions contained in chapter 1 of title 8, elsewhere in this code, in the Zoning Ordinance of the City of Alexandria, or in other city ordinances. Nothing contained in this chapter shall excuse any person from compliance with all other applicable provisions of this code the Zoning Ordinance of the City of Alexandria, or other city ordinances.

Sec. 5-4-18 Penalty.

Any person violating the provisions of this chapter shall, upon conviction, be guilty of a Class 1 misdemeanor. Each day's violation shall constitute a separate offense. Violations of the provisions of this chapter may also be restrained, prohibited or enjoined by appropriate proceedings.

Sec. 5-4-19 18 Administrative appeal.

Final decisions to disapprove an erosion and sedimentation control plan by the director shall be in writing and subject to review by the city manager, provided the applicant or his duty authorized agent files a written notice of appeal with the city manager within 30 days from the date of the written final decision of disapproval.

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3	final passage.	That this ordinance sha	in occome effective upon the date and at the time of its
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5			
6			WILLIAM D. EUILLE
7			Mayor
8			Mayor
9	Introduction:	6/12/07	
10	First Reading:	6/12/07	
11	Publication:	0/12/0/	
12	Public Hearing:		
13	Second Reading:		
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ORDINANCE NO. 4489

AN ORDINANCE to amend and reordain Chapter 4 (EROSION AND SEDIMENT CONTROL) of Title 5 (TRANSPORTATION AND ENVIRONMENTAL SERVICES), of the Code of the City of Alexandria, Virginia, 1981, as amended.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Chapter 4 of Title 5 of the Code of the City of Alexandria, Virginia, 1981, as amended, be, and the same hereby is, amended and reordained to read as follows:

Sec. 5-4-1 Definitions.

As used in this chapter, the following terms shall have the meanings set forth below, unless the context requires a different meaning:

- (a) "Agreement in lieu of a plan" means a contract between the city and the owner which specifies conservation measures which must be implemented in the construction or modification of a single-family residence; this contract may be executed by the Director in lieu of an erosion and sediment control plan.
- (b) "Applicant" shall mean any person submitting an erosion and sediment control plan or an agreement in lieu of a plan for approval or requesting the issuance of a permit, when required, authorizing land-disturbing activities to commence.
- (c) "Erosion and sediment control plan," "conservation plan" or "plan," shall mean a document containing material for the conservation of soil and water resources of an unit or group of units of land. It may include appropriate maps, an appropriate soil and water plan, inventory and management information with needed interpretations, and a record of decisions contributing to conservation treatments. The plan shall contain all major conservation decisions to assure that the entire unit or units of land will be so treated to achieve the conservation objectives.
- (d) "Director" shall mean the director of transportation and environmental services, his designee or his duly authorized agent.
- (e) "Erosion impact source area" shall mean an area of land not associated with current land-disturbing activity but subject to persistent erosion resulting in the delivery of sediment onto neighboring properties or into state waters. This definition shall not apply to any lot or parcel of land of 10,000 square feet or less used for residential purposes or to shorelines where the erosion results from wave action or other coastal processes.
 - (f) "Land-disturbing activity" shall mean any land change which 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.

- (g) "Natural channel design concepts" means the utilization of engineering analysis and fluvial geomorphic processes to create, rehabilitate, restore, or stabilize an open conveyance system for the purpose of creating or recreating a stream that conveys its bankfull storm event within its banks and allows larger flows to access its bankfull bench and its floodplain.
- (h) "Owner" shall mean the owner or owners of the freehold of the premises or of a lesser estate therein, a mortgagee or vendee in possession, an assignee of rents, a receiver, an executor, a trustee, a lessee or another person, firm or corporation in control of a property.
- (i) "Peak flow rate" means the maximum instantaneous flow from a given storm condition at a particular location.
- (j) "Permittee" shall mean the person to whom the permit authorizing land-disturbing activities is issued or the person who certifies that the approved erosion and sediment control plan will be followed.
- (k) "Person" shall mean any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town, or other political subdivision of the commonwealth, interstate body, or other legal entity.
- (l) "Plan-approving authority" shall mean the department of transportation and environmental services which shall be responsible for determining the adequacy of a plan submitted for land-disturbing activities on an unit or group of units of lands and for approving plans.
- (m) "Runoff volume" means the volume of water that runs off the land development project from a prescribed storm event.
- (n) "State waters" shall mean all waters on the surface and or wholly or partially underground that is within or bordering the commonwealth or that is within the jurisdiction of the commonwealth.
- (o) "Water Quality Volume" means the volume equal to the first one-half inch of runoff multiplied by the impervious surface of the land development project.
- Sec. 5-4-1.1 Approved erosion and sediment control plan required--construction of buildings.

Except as provided in section 5-4-5 of this code, it shall be unlawful for any persons to construct or erect any building or structure on any land within the city unless there is in force an

approved erosion and sedimentation control plan issued under the provisions of this chapter.

Sec. 5-4-2 Same--enlargement of buildings.

Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to alter any building or structure on any land within the city in such manner as to change the land area covered by the building or structure unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter.

Sec. 5-4-3 Same--change or disturb terrain.

- (a) Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to clear, grade, excavate, fill, remove topsoil from or change the contour of any land in the city unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter.
- (b) Except as provided in section 5-4-5 of this code, it shall be unlawful for any person to remove or destroy trees, shrubs, grass, weeds, vegetation, ground cover or other plant life on any land in the city unless there is in force an approved erosion and sedimentation control plan issued under the provisions of this chapter

Sec. 5-4-3.1 Same--erosion impact source area.

Notwithstanding any contrary provision of this chapter, it shall be unlawful for any property owner to fail, neglect or refuse to implement a conservation plan, approved by the director, and within such reasonable time as the director shall specify, for any land designated by the director as an erosion impact source area

Sec. 5-4-3.2 Wetlands Mitigation Banks.

In accordance with the procedure set forth by § 10.1-563(E) of the Code of Virginia which is herein incorporated, any person engaging in the creation and operation of wetland mitigation banks in multiple jurisdictions, which have been approved and are operated in accordance with applicable federal and state guidance, laws, or regulations for the establishment, use, and operation of mitigation banks, pursuant to a permit issued by the Department of Environmental Quality, the Marine Resources Commission, or the U.S. Army Corps of Engineers, may, at the option of that person, file general erosion and sediment control specification for wetland mitigation banks annually with the Virginia Soil and Water Conservation Board (Board) for review and approval consistent with guidelines established by the Board.

Sec. 5-4-4 Compliance with approved plan.

(a) It shall be unlawful for any person to construct, erect or alter any building or structure for which an approved erosion and sedimentation control plan is required by this chapter, except in

accordance with the approved plan.

- (b) It shall be unlawful for any person to clear, grade, excavate, fill, remove topsoil from or change the contour of any land in the city for which an approved erosion and sedimentation control plan is required by this chapter except in accordance with the approved plan.
- (c) It shall be unlawful for any person to remove or destroy trees, shrubs, grass, weeds, vegetation, ground cover or other plant life on any land in the city for which an approved erosion and sedimentation control plan is required by this chapter except in accordance with the approved plan.

Sec. 5-4-5 Exceptions.

The provisions of this chapter shall not apply to any construction, reconstruction, repair or alteration of any building or structure when no land is disturbed and no trees, shrubs, grass or vegetation is destroyed or removed, nor to any of the following:

- (a) The construction or erection of any building or structure when the disturbed land area of the site is less than 2,500 square feet in size, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (b) The alteration of any building or structure when the disturbed land area of the site will be less than 2,500 square feet, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (c) The clearing, grading, excavating, filling or changing the contour of, or removing topsoil from, less than 2,500 square feet of land, provided there is no natural or man-made drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (d) The clearing, grading, excavating, filling or changing the contour of, or removing topsoil from, less than 2,500 square feet of land, provided there is no natural or manmade drainage ditch, swale draining in excess of 2,500 square feet or storm sewer on the disturbed land, and further provided the disturbance of the land does not cause sedimentation on land outside the exterior boundaries of the land disturbed.
- (e) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover, or other plant life which cover less than 2,500 square feet of land, provided there is no natural or manmade drainage ditch, swale draining in excess of 2,500 square feet, or storm sewer on the disturbed land and no existing or proposed grade on the disturbed land exceeds 10 percent.
- (f) The planting, trimming, pruning or removal of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life pursuant to chapter 2 of title 6 of this code.

- (g) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life which is dead, poisonous or infected with disease or injurious insects or pests.
 - (h) The gardening and care of lawns.
- (i) The removal or destruction of trees, shrubs, grass, weeds, vegetation, ground cover or other plant life from lots of less than 2,500 square feet on which there now exists a dwelling.
- (j) The exploration or drilling for oil and gas including the well site, roads, feeder lines and off-site disposal areas.
- (k) The repair or rebuilding of the tracts, right-of-way, bridges, communication facilities and other related structures and facilities of a railroad company.
- (1) Shore erosion control projects on tidal waters when the projects are approved by local wetlands boards, the Marine Resources Commission or the U.S. Army Corps of Engineers and located on tidal waters and within nonvegetated or vegetated wetlands as defined in Title 28.2 of the Code of Virginia. However, any associated land that is disturbed outside of this exempted area shall remain subject to the article and the regulations adopted pursuant thereto.
- (m) Emergency work to protect life, limb or property, and emergency repairs; provided, that, if the land-disturbing activity would have required an approved erosion and sediment control plan if the activity were not an emergency, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan-approving authority.
 - (n) Individual utility service connections.
- (o) Installation, maintenance, or repair of any underground public utility when such activity occurs on an existing hard surfaced road, street, or sidewalk provided the land-disturbing activity is confined to the area of the road, street, or sidewalk which is hard surfaced.
- (p) Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system.
 - (q) Surface or deep mining.
- (r) Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, or livestock feedlot operations; including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation. However, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is forested artificially or naturally in accordance with the provisions of Chapter 11(§ 10.1-1100 et seq.) of this title or is converted to bona fide agricultural or improved pasture use as described in subsection B of § 10.1-

- (s) Agricultural engineering operations including, but not limited, to the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the provisions of the Dam Safety Act, Article 2 (' 10.1-604 et seq.) of Chapter 6 of the Erosion and Sediment Control Law, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and irrigation.
- (t) Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles.
- Sec. 5-4-6 Permits not to be issued without approved erosion and sedimentation control plan when plan required by chapter.
- (a) No permit shall be issued to construct, erect, or alter any building or structure on any land within the city until a plan has been submitted and approved in accordance with the provisions of this chapter and the applicant has certified in writing that the plan will be followed. The person responsible for carrying out the plan shall provide the name of an individual holding a certificate of competence to the program authority, as provided by § 10.1-561, who will be in charge of and responsible for carrying out the land disturbing activity. However, any plan-approving authority may waive the certificate of competence requirement for an agreement in lieu of a plan for construction of a single family residence. If a violation occurs during the land-disturbing activity, then the person responsible for carrying out the agreement in lieu of a plan shall correct the violation and provide the name of an individual holding a certificate of competence, as provided by § 10.1-561. Failure to provide the name of an individual holding a certificate of competence prior to engaging in land-disturbing activities may result in revocation of the approval of the plan and the person responsible for carrying out the plan shall be subject to the penalties provided in this article.
- (b) No permit shall be issued to clear, grade, excavate, fill, remove topsoil from or change the contour of any land within the city until a plan has been submitted and approved in accordance with the provisions of this chapter and the applicant has certified in writing that the plan will be followed.
- Sec. 5-4-7 Minimum criteria; city handbook.
 - (a) The director shall administer and enforce the provisions of this chapter.
- (b) This chapter, the erosion and sediment control regulations of the Department of Conservation and Recreation Division of Soil and Water Conservation (VR 625-02-00) effective March 22, 1995, [4 VAC 50-30-10 et seq.], and the "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, which are incorporated herein by reference, shall be an integral part of the city's erosion and sediment control program and shall comprise the city's "Erosion and Sediment Control Handbook." The text of these regulations is on file in the office of the director.

- (c) In addition to the minimum requirements for controlling erosion and sedimentation for land-disturbing activities which are contained in VR 625-02-00 '4 [4 VAC 50-30-40], the following additional minimum requirements shall apply:
 - (1) Protection of adjacent properties.
- a. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance, by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins or by a combination of such measures.
- b. Vegetated buffer strips may be used alone only where runoff in sheet flow is expected. Buffer strips should be at least 20 feet in width. If at any time it is found that a vegetated buffer strip alone is ineffective in stopping sediment movement onto adjacent property, additional perimeter controls must be provided.
- (2) The director may require sediment basins or traps for smaller disturbed areas where deemed necessary. The sediment basin requirement may also be waived if the director agrees that site conditions do not warrant its construction.
- (3) Cut and fill slopes. Cut and fill slopes must be designed and constructed in a manner which will minimize erosion. Consideration must be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions and other applicable factors. Slopes which are found to be eroding excessively within one year of construction must be provided with additional slope-stabilizing measures until the problem is corrected. The following guidelines are provided to aid site planners and plan reviewers in developing an adequate design.
 - a. Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
- b. Diversions should be constructed at the top of long, steep slopes which have significant drainage areas above the slope. Diversions or terraces may also be used to reduce slope length.
 - (4) The following additional stormwater management criteria shall apply:
- a. A stormwater management plan shall be developed so that, from the site, the postdevelopment peak runoff rate from a two-year and a 10-year storm, considered individually, shall not exceed their respective predevelopment rates. The predevelopment and postdevelopment peak runoff rates must be verified by engineering calculations. Within the Four Mile Run Watershed, postdevelopment peak runoff during a 100-year frequency storm shall not increase the peak runoff of the Four Mile Run Flood Control Channel as required by the city's contract with the United States Army Corp of Engineers.

- b. 1. Concentrated stormwater runoff leaving a development site must be discharged directly into an adequate channel. If there is no adequate channel one must be constructed to convey stormwater to the nearest adequate channel. Newly constructed channels and conduits carrying a flow of 1,000 or more cubic feet per second shall be designed for a 100-year storm frequency and newly constructed channels and conduits carrying a flow of less than 1,000 cubic feet per second shall be designed for a 10-year storm frequency.
- 2. An "adequate channel" shall be defined as a natural or man-made channel or pipe which is capable of conveying the runoff from a two-year storm or a 10-year storm, considered individually, without overtopping its banks or eroding after development of the site in question. A receiving channel may also be considered adequate at any point where the total contributing drainage area is at least 100 times greater than the drainage area of the development site in question or, where it can be shown that the peak rate of runoff from the site for a two-year and a 10-year storm, considered individually, will not be increased after development.
- 3. In accordance with, §10.1-561 of the Code of Virginia, stream restoration and relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels.
- 4. In accordance with §10.1-561 of the Code of Virginia, any land disturbing activity that provides for stormwater management intended to address any flow rate capacity and velocity requirements for natural or manmade channels shall satisfy the flow rate capacity and velocity requirements for natural or manmade channels if the practices are designed to (i) detain the water quality volume and to release it over 48 hours; (ii) detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and (iii) reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels.
- 5. Runoff rate and channel adequacy must be verified with engineering calculations to the satisfaction of the director.
- c. All channel improvements or modifications must comply with all applicable laws and regulations.
- d. If the applicant chooses an option which includes stormwater detention, he must provide the city with a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the party responsible for performing the maintenance. The responsible party may be an individual, organization or the city, whichever has consented to carry out the maintenance. If the designated maintenance responsibility is with an individual or

organization other than the city, a maintenance agreement should be executed between the responsible party and the city.

- e. The owner or developer may continue to discharge stormwater that has not been concentrated (sheet flow) onto lower-lying property if:
- 1. the peak flow rate for a 10-year frequency storm after development does not exceed the predevelopment peak flow rate;
- 2. the increase in total volumes of runoff caused by the development will not have an adverse impact on the lower-lying property; and
- 3. there will be no exacerbation of existing drainage problems on the lower-lying or other downhill property.
- (5) Stabilization of waterways and outlets. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year frequency storm without erosion. Stabilization adequate to prevent erosion must also be provided at the outlets of all pipes and paved channels. Energy dissipators shall be installed as required by the director.
- (6) Working in or crossing watercourses. Construction vehicles should be kept out of watercourses to the extent possible. Where in-channel work is necessary, precautions must be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and banks) must always be restabilized immediately after in-channel work is completed.
- (7) Underground utility lines shall be installed in accordance with the following standard in addition to other applicable criteria: no more than 100 feet of trench are to be opened at one time.
- (8) Maintenance. All temporary and permanent erosion and sediment control practices must be maintained and repaired as specified in VR 625-02-00 § 6 [4 VAC 50-30-60].
- (9) Submission of an Erosion and Sediment Control Plan to the city is a grant of unlimited right of entry to the property to officials or agents of the city for the purposes of determining adequacy of the proposed plan and inspection of land-disturbing activities for compliance with the approved plan.
- (d) The "Virginia Erosion and Sediment Control Handbook, Third Edition, 1992" and the tree planting and preservation regulations authorized by § 11-410(CC)(1) of the Zoning Ordinance of the City of Alexandria, and known as the city's Landscape Guidelines, shall be used by any applicant making a submittal under this chapter and by the director in his or her review and consideration of the adequacy of any erosion and sediment control plan submitted.
- Sec. 5-4-8 Erosion and sediment control plans.

- (a) Applications for approved erosion and sediment control plans shall be submitted to and filed with the director, on forms prepared by the city, prior to the time any work subject to this chapter is begun on land. Fees for reviewing erosion and sediment control plans, plot plans and performing field inspections for all new structures, exterior alteration, plumbing, electrical, or mechanical building permits where more than two thousand five hundred (2,500) square feet are disturbed shall be required, the fee to be determined by the Director of Transportation and Environmental Services. Five (5) copies of an erosion and sediment control plan or plot plan must accompany any application, parts of which shall also be on forms prepared by the city. Upon receipt of an application and plans, the director shall consider the plan in light of the provisions of this chapter and promptly approve the plan, disapprove the plan or approve the plan with modifications, noting thereon any changes that will be required. The director shall promptly notify the applicant of his or her decision on a plan. Any approved plan shall be issued, dated, and bear the manual signature of the director of the department of transportation and environmental services or his or her deputy.
 - (b) An application shall show the following:
 - (1) The name, address and telephone number of the applicant.
 - (2) The name, address and telephone number of the owner of record.
 - (3) The name, address and telephone number of the person preparing the plan.
 - (4) The location of the site, including lot number and tax map page number.
- (5) The total land area, area being disturbed and proposed amount of previous and impervious area.
- (6) Soil types by AASHO classification (or other classifications used by soil engineers), if available.
 - (7) Method for collecting and depositing stormwater.
 - (8) Test boring and soil test results when:
- a. the site is in an area of the city known or suspected by the director to have soil problems or unstable soil;
 - b. any proposed slope on the site exceeds a grade of 20 percent;
- c. the presence of ground water in substantial amounts is known or suspected by the director to be on the site; or
 - d. unstable soil is known or suspected by the director to be on the site.

- (9) Methods for control of contamination of land when the site is in an area found by the director to be contaminated by a toxic substance and hazardous to the public health, safety and welfare. Said methods shall comply and be in accordance with the "Administrative Procedures for Control of Contaminated Land, Alexandria, Virginia," dated October 30, 1976, that were promulgated by the city manager and adopted by the city council on November 23, 1976, by ordinance number 2145. These administrative procedures may be amended or revised from time to time by the city manager with the approval of the city council by motion.
- (10) A general description of existing trees, shrubs, grass, weeds, vegetation, ground cover and other plant life.
 - (11) Any other pertinent information the director may require.
- (c) An erosion and sediment control plan shall follow the format of map number 4, plate 6-4 of chapter 6 of the city's erosion and sediment control handbook. The plan shall also include appropriate title blocks, scales and a vicinity map.
- (d) Where land-disturbing activities involve lands under the jurisdiction of more than one local control program an erosion and sediment control plan may, at the option of the applicant, be submitted to the Virginia Soil and Water Conservation Board for review and approval rather than to each jurisdiction concerned.
- (e) When land-disturbing activity will be required of a contractor performing construction work pursuant to a construction contract, the preparation, submission and approval of an erosion control plan shall be the responsibility of the owner.

Sec. 5-4-9 Regulations and restrictions generally.

All erosion and sediment control practices shall be in accordance with the city's erosion and sediment control handbook.

Sec. 5-4-10 Failure of director of transportation and environmental services to act.

Failure of the director to act on any erosion and sedimentation control plan within 45 days after it has been properly filed, unless otherwise agreed with the applicant, should be deemed to constitute approval of the plan.

- Sec. 5-4-11 Inspections and amendments of plans.
- (a) Periodic inspections are required on all projects by the program authority. The program authority shall either: Provide for an inspection during or immediately following initial installation of erosion and sediment controls, at lease once in every two-week period, within 48 hours following

any runoff producing storm event, and at the completion of the project prior to the release of any performance bonds; or establish an alternative inspection program which ensures compliance with the approved erosion and sediment control plan. Any alternative inspection program shall be:

- (1) Approved by the Board prior to implementation;
- (2) Established in writing;
- (3) Based upon a system of priorities that, at a minimum, address the amount of disturbed project area, site conditions and stage of construction; and
 - (4) Documented by inspection records.

The owner, occupier or operator shall be notified of the inspection. If the plan-approving or permit-issuing authority determines that there is a failure to comply with the plan, notice shall be served upon the permittee or person responsible for carrying out the plan by registered or certified mail to the address specified in the permit application or in the plan certification, or by delivery at the site of the land-disturbing activities to the agent or employee supervising such activities. Where the plan-approving authority serves such a notice, a copy of the notice shall be sent to the permitissuing authority. The notice shall specify the measures needed to comply with the plan and shall specify the time within which such measures shall be completed. Upon receipt of a sworn complaint of a substantial violation of this chapter from the designated enforcement officer, or if landdisturbing activities have commenced without an approved plan, the director may issue an order requiring that all or part of the land-disturbing activity on the site be stopped until the specified corrective measures have been taken. Where the identified non-compliance is causing or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the commonwealth, drainage systems discharging into such waters, or lower-lying property, or where the land-disturbing activities have commenced without an approved plan or any required permits, a stop-work order may be issued whether or not the permittee has been issued a notice to comply. Otherwise, such an order may be issued only after the permittee has failed to comply with a notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for seven days from the date of service pending application by the enforcing authority or alleged violator for appropriate relief to the circuit court. If the alleged violator has not obtained an approved plan or all of the required permits within seven days from the date of service of the order, the director may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Upon completion and acceptance of the corrective action, or obtaining an approved plan or any required permits the order shall be immediately lifted. Upon failure to comply with such measures within the time specified, the permit may be revoked, and the permittee or person responsible for carrying out the plan shall be deemed to be in violation of this chapter and upon conviction shall be subject to the penalties provided in section 5-4-18.

(b) The director may authorize amendments consistent with the requirements of this chapter

to an approved plan when inspection has revealed that the plan is inadequate to satisfy applicable regulations or when the person responsible for carrying out the plan finds that because of changed circumstances or changed conditions the plan cannot be carried out effectively.

Sec. 5-4-12 Guarantee of performance of plans.

A corporate surety bond, letter of credit, certificate of deposit or similar financial guarantee approved by the city attorney, conditioned upon carrying out all and every part of an approved erosion and sedimentation control plan and upon satisfaction of the guarantee required by section 5-4-13 of this chapter for at least the sum estimated to be the full costs of carrying out the plan and a reasonable allowance for estimated administrative costs and inflation which shall not exceed twenty-five percent of the estimated cost of the conservation action, or a cash escrow, upon the same conditions and in the same amount, shall be furnished the city whenever such costs exceed \$500.

Sec. 5-4-13 Acceptance of performance.

Upon completion of adequate stabilization of an approved erosion and sedimentation control plan, the permittee shall notify the director of such completion. The director shall then inspect the work and planting and, upon his determination that they are in compliance with the approved plan, he shall issue a letter of preliminary acceptance. A condition of any such preliminary acceptance shall be that the permittee guarantee all erosion and sedimentation control work for a period of one year from the date of its preliminary acceptance, or for a period of one year from any repair or replanting ordered by the director, or until such time that all control structures and a minimum of 90 percent of all plantings shall have survived for a year without need of further replanting or repair. During the one year period of the guarantee, the director may order in writing such replanting or repair work as shall be deemed necessary to enforce compliance with the approved plan or the guarantee. Such an order shall serve to revoke the preliminary acceptance and shall cause the permittee to renew the guarantee for an additional one year from the date of replanting or repair. Final acceptance shall occur when preliminary acceptance has remained unrevoked for a period of one year, or when all control structures and a minimum of 90 percent of all plants have survived for a period of one year without need of further replanting or repair. For purposes of this section, normal cleaning of silt basins alone shall not be construed to be repair work.

Sec. 5-4-14 Noncompliance and corrective actions.

- (a) In the course of making on-site inspections, should the director determine that active erosion and sediment control measures are not in compliance with the approved plan, he shall verbally notify the responsible contractor to take appropriate corrective measures.
- (b) Written confirmation of this notice to comply shall be sent, by certified mail, to the applicant for the erosion and sediment control permit or hand-delivered at the site of the land-disturbing activities to the agent or employee supervising such activities, citing a detailed description of the conservation measures necessary for compliance.

- (c) When no action is taken within 48 hours of delivery of notice to comply, the director shall send the applicant, by certified mail, a letter of intent to utilize the performance bond or cash escrow to apply the conservation measures to correct the deficiency if it has not otherwise been corrected by a specified time.
- (d) If no action has been taken by the time specified, the director shall proceed to have the deficiency corrected and he shall keep a close account of all related expenses which shall be charged to and paid from the applicant's performance bond or escrow account. If the director takes such conservation action upon such failure by the permittee, the director may collect from the permittee the difference, should the amount of reasonable cost of such action exceed the amount of the security held

Sec. 5-4-14.1 Civil Penalties

- (a) A violation of any section or provision of this article may, in addition to and not withstanding the penalty provided for in subsection (b), be a civil violation that shall be enforced through the levying of a civil penalty, pursuant to section 1-1-11 of this code, of \$500 for a person's first violation and of \$1,000 for each subsequent violation of the same section or provision. However, the civil penalty for commencement of land disturbing activities without an approved plan shall be \$1,000. Each day during which a violation exists shall constitute a separate violation. However, a series of violations arising from the same operative set of facts shall not give rise to the levying of a civil penalty more frequently than once in any 10-day period, and shall not result in civil penalties exceeding a total of \$3,000.
- (b) A violation of any section or provision of this article may, in addition to and not withstanding the penalty provided for in subsection (a), be restrained, prohibited or enjoined by appropriate proceedings in a court of competent jurisdiction.

Sec. 5-4-15 Time of validity of erosion and sediment control plans.

- (a) Any approved erosion and sedimentation control plan shall become null and void 180 days after the date of approval and no further work subject to this chapter shall be allowed unless and until an additional or updated erosion and sediment control plan has been submitted and approved in accordance with the provisions of this chapter or unless all requirements of the approved control plan have been completed in less than 180 days in accord with said plan and verified by an on-site inspection by the director.
- (b) When no change in conditions has occurred since the date of approval, an update plan shall be approved in accordance with the provisions of this chapter with no additional requirements.

Sec. 5-4-16 Waiver.

The city manager may, for good cause shown, waive the provisions of chapter 4 of this title that require an approved erosion and sediment control plan, provided:

(1) written application is made, and

(2) the director states in writing that such a waiver will not result in increased erosion or sedimentation or violate the general principles of good erosion and sediment control

management.

Sec. 5-4-17 Relation of chapter to other laws.

The provisions contained in this chapter shall be considered separate from, supplemental to and additional to the provisions contained in chapter 1 of title 8, elsewhere in this code, in the Zoning Ordinance of the City of Alexandria, or in other city ordinances. Nothing contained in this chapter shall excuse any person from compliance with all other applicable provisions of this code the Zoning Ordinance of the City of Alexandria, or other city ordinances.

Sec. 5-4- 18 Administrative appeal.

Final decisions to disapprove an erosion and sedimentation control plan by the director shall be in writing and subject to review by the city manager, provided the applicant or his duty authorized agent files a written notice of appeal with the city manager within 30 days from the date of the written final decision of disapproval.

Sec. 5-4-19 reserved.

Sec. 5-4-19.1 reserved.

Section 2. That this ordinance shall become effective upon the date and at the time of its final passage.

WILLIAM D. EUILLE Mayor

Final Passage: June 16, 2007

6-16-07

MOTION FOR FINAL PASSAGE OF ORDINANCE DOCKET ITEMS 22, 23, 24, 25, 26, 27 and 28:

Mr. Mayor, there being no public hearing speakers, I move that City Council approve and adopt on second reading and final passage Ordinance Docket items 22, 23, 24, 25, 26, 27 and 28.

ROLL CALL VOTE