Planning Commission 05-05-05
Board of Commissioners 05-26-05
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Article XIII

Fayette County Development Regulations

Post-Development Stormwater Management for New Development and Redevelopment

Section 8-450. Introduction

It is hereby determined that:

- Land development projects and other land use conversions, and their associated changes to land cover, permanently alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, which in turn increase flooding, stream channel erosion, and sediment transport and deposition;
- Land development projects and other land use conversions also contribute to increased nonpoint source pollution and degradation of receiving waters;
- The impacts of post-development stormwater runoff quantity and quality can adversely affect public safety, public and private property, drinking water supplies, recreation, fish and other aquatic life, property values and other uses of lands and waters;
- These adverse impacts can be controlled and minimized through the regulation of stormwater runoff quantity and quality from new development and redevelopment by the use of both structural facilities as well as nonstructural measures, such as the conservation of open space and greenspace areas. The preservation and protection of natural area and greenspace for stormwater management benefits is encouraged through the use of incentives or "credits." The Georgia Greenspace Program provides a mechanism for the preservation and coordination of those greenspace areas, which provide stormwater management quality and quantity benefits; and
- Localities in the State of Georgia are required to comply with a number of both State and Federal laws, regulations and permits which require a locality to address the impacts of post-development stormwater runoff quality and nonpoint source pollution.

Therefore, Fayette County has established this set of stormwater management policies to provide reasonable guidance for the regulation of post-development stormwater runoff for the purpose of protecting local water resources from degradation. It has determined that it is in the public interest to regulate post-development stormwater runoff discharges in order to control and minimize increases in stormwater runoff rates and volumes, post-construction soil erosion and sedimentation, stream channel erosion, and nonpoint source pollution associated with post-development stormwater runoff.

Section 8-451. General Provisions

A. Purpose and Intent

The purpose of this ordinance is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, and protect water and aquatic resources. This ordinance seeks to meet that purpose through the following objectives:

- Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
- Require that new development and redevelopment maintain the pre-development hydrologic response in their post-development state as nearly as practicable in order to reduce flooding, streambank erosion, nonpoint source pollution and increases in stream temperature, and maintain the integrity of stream channels and aquatic habitats;
- Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
- Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development stormwater management standards;
- Encourage the use of nonstructural stormwater management and stormwater better site design practices, such as the preservation of greenspace and other conservation areas, to the maximum extent practicable;
- Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety; and,
- Establish administrative procedures for the submission, review, approval and disapproval of stormwater management plans, and for the inspection of approved active projects, and long-term follow up.

B. Applicability

This ordinance shall be applicable to any new or redevelopment project within unincorporated Fayette County that meets one or more of the following criteria, unless specifically exempted below:

- The project creates 5,000 square feet or more of impervious cover;
- The project disturbs one acre or more of land; or

- The project is part of a larger common plan of development, even though it individually may not meet the criteria set forth above and the multiple separate and distinct land development activities may take place at different times.

The following activities are exempt from this ordinance:

- Individual single-family or duplex residential lots that are not part of a larger common plan of development;
- Individual single-family or duplex residential lots that are part of a larger common plan of development (e.g., a subdivision) but have no new roads (public or private) or other common structures associated with the subdivision or phased development. This exemption, however, may be waived by the Engineering Department if the Department determines the project may have significant adverse impacts on downstream properties;
- Additions or modifications to existing single-family or duplex residential structures;
- Agricultural or silvicultural land management activities within areas zoned for these activities; and,
- Repairs to any stormwater management facility or practice deemed necessary by the Engineering Department.

C. Designation of Ordinance Administrator

The Fayette County Engineering Department shall administer and implement the provisions of this ordinance.

D. Compatibility with Other Regulations

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

E. Severability

If the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this ordinance.

F. Effective Date

This ordinance shall be effective 1 August 2005 and apply to all development that have preliminary plats or site development plans initially received by the Fayette County Zoning Department on or after this date. Projects with received dates prior to 1 August

2005 shall satisfy the Stormwater criteria in place at the time the documents were initially submitted.

G. Stormwater Design Manual

The Engineering Department will utilize the policy, criteria and information including technical specifications and standards in the latest edition of the Georgia Stormwater Management Manual and any relevant local addenda, for the proper implementation of the requirements of this ordinance. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring and local maintenance experience.

The Engineering Department may publish an addendum to the Georgia Stormwater Management Manual to (1) clarify discrepancies between the manual and any section of the County's Development Regulations, (2) specify requirements where options/alternatives are provided, (3) establish minimum design standards, or (4) further describe submittal requirements. The criteria within the addendum shall be considered minimum design standards and, in the event of a conflict, supersede design standards set forth in the Georgia Stormwater Management Manual. A copy of the addendum shall be available from the Engineering Department.

Section 8-452. Definitions

"**Applicant**" means a person submitting a post-development stormwater management application and plan for approval.

"**Basin**" means an area of land that drains to a single outlet and is separated from other basins by a divide (i.e., a watershed).

"**Channel**" means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

"**Common Plan of Development**" means a contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or scale.

"**Conservation Easement**" means an agreement between a land owner and Fayette County or other government agency or land trust that permanently protects open space or greenspace on the owner's land by limiting the amount and type of development that can take place, but continues to leave the remainder of the fee interest in private ownership.

"**Detention**" means the temporary storage of stormwater runoff in a stormwater management facility for the purpose of controlling the peak discharge.

"**Detention Facility**" means a detention basin or structure designed for the detention of stormwater runoff and gradual release of stored water at controlled rates.

"**Developer**" means a person who undertakes land development activities.

"**Development**" means a land development or land development project.

"**Drainage Easement**" means an easement appurtenant or attached to a tract or parcel of land allowing the owner of adjacent tracts or other persons to discharge stormwater runoff onto the tract or parcel of land subject to the drainage easement.

"**Erosion and Sedimentation Control Plan**" means a plan that is designed to minimize the accelerated erosion and sediment runoff at a site during land disturbance activities.

"**Extended Detention**" means the detention of stormwater runoff for an extended period, typically 24 hours or greater.

"**Extreme Flood Protection**" means measures taken to prevent adverse impacts from large low-frequency storm events with a return frequency of 100 years or more.

"**Flooding**" means a volume of surface water that is too great to be confined within the banks or walls of a conveyance or stream channel and that overflows onto adjacent lands.

"**Greenspace**" or "**Open Space**" means permanently protected areas of the site that are preserved in a natural state.

"**Hydrologic Soil Group (HSG)**" means a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.

"**Impervious Cover**" means a surface composed of any material that significantly impedes or prevents the natural infiltration of water into soil. Impervious surfaces include, but are not limited to, rooftops, buildings, streets and roads, and any concrete or asphalt surface (excludes porous pavements).

"**Industrial Stormwater Permit**" means a National Pollutant Discharge Elimination System (NPDES) permit issued to an industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

"**Infiltration**" means the process of percolating stormwater runoff into the subsoil.

"**Jurisdictional Wetland**" means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

"**Land Development**" means any land change, including, but not limited to, clearing, digging, grubbing, stripping, removal of vegetation, dredging, grading, excavating, transporting and filling of land, construction, paving, and any other installation of impervious cover.

"**Land Development Activities**" means those actions or activities that comprise, facilitate or result in land development.

"**Land Development Project**" means a discrete land development undertaking.

"**Inspection and Maintenance Agreement**" means a written agreement providing for the long-term inspection and maintenance of stormwater management facilities and practices

on a site or with respect to a land development project, which when properly recorded in the deed records constitutes a restriction on the title to a site or other land involved in a land development project.

"**New Development**" means a land development activity on a previously undeveloped site.

"**Nonpoint Source Pollution**" means a form of water pollution that does not originate from a discrete point such as a sewage treatment plant or industrial discharge, but involves the transport of pollutants such as sediment, fertilizers, pesticides, heavy metals, oil, grease, bacteria, organic materials and other contaminants from land to surface water and groundwater via mechanisms such as precipitation, stormwater runoff, and leaching. Nonpoint source pollution is a by-product of land use practices such as agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

"**Nonstructural Stormwater Management Practice**" or "**Nonstructural Practice**" means any natural or planted vegetation or other nonstructural component of the stormwater management plan that provides for or enhances stormwater quantity and/or quality control or other stormwater management benefits, and includes, but is not limited to, riparian buffers, open and greenspace areas, overland flow filtration areas, natural depressions, and vegetated channels.

"**Off-Site Facility**" means a stormwater management facility located outside the boundaries of the site.

"**On-Site Facility**" means a stormwater management facility located within the boundaries of the site.

"**Overbank Flood Protection**" means measures taken to prevent an increase in the frequency and magnitude of out-of-bank flooding (i.e. flow events that exceed the capacity of the channel and enter the floodplain), and that are intended to protect downstream properties from flooding for the 2-year through 25-year frequency storm events.

"**Owner**" means the legal or beneficial owner of a site, including but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

"**Permit**" means the permit issued by the Fayette County Engineering Department to the applicant, which is required for undertaking any land development activity.

"**Person**" means, except to the extent exempted from this ordinance, any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision of the State, any interstate body or any other legal entity.

"**Post-development**" refers to the time period, or the conditions that may reasonably be expected or anticipated to exist, after completion of the land development activity on a site as the context may require.

"**Pre-development**" refers to the time period, or the conditions that exist, on a site prior to the commencement of a land development project and at the time that plans for the land development of a site are approved by the plan approving authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted shall establish pre-development conditions.

"**Project**" means a land development project.

"**Redevelopment**" means a land development project on a previously developed site, but excludes ordinary maintenance activities, remodeling of existing buildings, resurfacing of paved areas, and exterior changes or improvements which do not materially increase or concentrate stormwater runoff, or cause additional nonpoint source pollution.

"**Regional Stormwater Management Facility**" or "**Regional Facility**" means stormwater management facilities designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may assist in the financing of the facility, and the requirement for on-site controls is either eliminated or reduced.

"**Runoff**" means stormwater runoff.

"**Site**" means the parcel of land being developed, or the portion thereof on which the land development project is located.

"**Stormwater Better Site Design**" means nonstructural site design approaches and techniques that can reduce a site's impact on the watershed and can provide for nonstructural stormwater management. Stormwater better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover and using natural features for stormwater management.

"**Stormwater Management**" means the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner intended to prevent increased flood damage, streambank channel erosion, habitat degradation and water quality degradation, and to enhance and promote the public health, safety and general welfare.

"**Stormwater Management Facility**" means any infrastructure that controls or conveys stormwater runoff.

"**Stormwater Management Measure**" means any stormwater management facility or nonstructural stormwater practice.

"**Stormwater Management Plan**" means a document describing how existing runoff characteristics will be affected by a land development project and containing measures for complying with the provisions of this ordinance.

"**Stormwater Management System**" means the entire set of structural and nonstructural stormwater management facilities and practices that are used to capture, convey and control the quantity and quality of the stormwater runoff from a site.

"**Stormwater Retrofit**" means a stormwater management practice designed for a currently developed site that previously had either no stormwater management practice in

place or a practice inadequate to meet the stormwater management requirements of the site.

"**Stormwater Runoff**" means the flow of surface water resulting from precipitation.

"**Structural Stormwater Control**" means a structural stormwater management facility or 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 of such runoff.

"**Subbasin**" means hydrologic divisions of a watershed that are relatively homogeneous.

"**Subdivision**" see definition of "subdivision" in Article III of the Zoning Ordinance.

Section 8-453. Permit Procedures and Requirements

A. Permit Application Requirements

No owner or developer shall perform any land development activities without first meeting the requirements of this ordinance prior to commencing the proposed activity.

Unless specifically exempted by this ordinance, any owner or developer proposing a land development activity shall submit the following items to the Engineering Department:

- Stormwater Management Plan;
- Inspection and Maintenance Agreement;
- Stormwater Tax Assessment Area;
- Maintenance Bond; and
- Application Review Fees.

Each of the above submittals shall be in accordance with the criteria specified in the following subsections.

B. Stormwater Management Plan

The Stormwater Management Plan shall detail how post-development stormwater runoff will be controlled or managed and how the proposed project will meet the requirements of this ordinance, including the performance criteria set forth in Section 8-454 below.

This plan shall be submitted under the stamp and signature of a Professional Engineer (PE) licensed in the state of Georgia. In addition, the Professional Engineer shall provide written certification that the plan meets the design criteria established in this ordinance and the Georgia Stormwater Management Manual.

The Stormwater Management Plan shall include, at a minimum, the following information and be presented in the order set forth below:

1. *Common Address and Description of Site* – The description of the site shall include the metes and bounds of the property, via a survey or written legal description, and identification of all adjacent property owners.
2. *Vicinity Map*

3. *Existing Conditions Hydrologic Analysis* – The existing condition hydrologic analysis for stormwater runoff rates, volumes, and velocities shall include:

    - A topographic map of existing site conditions with the drainage basin boundaries indicated. Drainage divides and downstream receiving waters shall be clearly delineated on the topographic map;
    - Acreage, soil types and land cover of areas for each subbasin affected by the project;
    - All perennial and intermittent streams, jurisdictional wetlands, and other surface water features;
    - All existing stormwater conveyances and structural control facilities;
    - Direction of flow and exits from the site;
    - Analysis of runoff provided by off-site areas upstream of the project site; and
    - Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology.

    For redevelopment sites, "predevelopment conditions" for the portion of the site undergoing land development activities shall be based on field conditions prior to any structural or impervious improvements. "Predevelopment conditions" for the portion of the site outside the land development activities shall be based on the conditions present when the stormwater management plan is submitted to Fayette County.

4. *Post-Development Hydrologic Analysis* – The post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities shall include:

    - A topographic map of developed site conditions (i.e., proposed contours) with the post-development drainage basin boundaries indicated. Drainage divides and downstream receiving waters shall be clearly delineated on the topographic map;
    - Total area of post-development impervious surfaces and other land cover areas for each subbasin affected by the project;
    - Calculations for determining the runoff volumes that need to be addressed for each subbasin for the development project to meet the post-development stormwater management performance criteria in Section 8-454;
    - Location and boundaries of proposed natural feature protection and conservation areas;
    - Documentation and calculations for any applicable site design credits that are being used; and

- Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology.

If the land development activity on a redevelopment site constitutes more than 50 percent of the site, then the stormwater runoff performance criteria in Section 8-454 must be met for the entire site.

5. *Stormwater Management System* – The description, scaled drawings and design calculations for the proposed post-development stormwater management system, which shall include the following:

   - A map and drawing of the stormwater management facilities, including the location of nonstructural site design features and the placement of existing and proposed structural stormwater controls, including design water surface elevations, storage volumes available from zero to maximum head, location of inlet and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes;
   - Cross-section and profile drawings and design details for each of the structural stormwater controls in the system, including supporting calculations to show that the facility is designed according to the applicable design criteria;
   - A hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (including stage-storage or outlet rating curves, and inflow and outflow hydrographs);
   - Documentation and supporting calculations to show that the stormwater management system adequately meets the post-development stormwater management performance criteria in Section 4;
   - Drawings, design calculations, elevations and hydraulic grade lines for all existing and proposed stormwater conveyance elements including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow; and
   - Where applicable, a narrative describing how the stormwater management system corresponds with any watershed protection plans and/or local greenspace protection plan.

6. *Post-Development Downstream Analysis* – A downstream peak flow analysis that includes the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. The analysis of downstream conditions in the report shall address every point or area along the project site's boundaries at which runoff will exit the property. The analysis shall focus on the portion of the drainage channel or watercourse immediately downstream from the project. This area shall extend downstream from the project to a point in the drainage basin where the project area is 10 percent of the total basin area. For example, if the project area is 7 acres, the Post-Development Downstream

Analysis should extend downstream to a point where the drainage area is 70 acres or greater.

In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. The analysis shall be in accordance with the stormwater design manual.

7. *Landscaping and Open Space Plan* – A detailed landscaping and vegetation plan describing the woody and herbaceous vegetation that will be used within and adjacent to stormwater management facilities and practices. The landscaping plan shall include:
    - The arrangement of planted areas around the stormwater management facilities and practices;
    - Information necessary to construct the landscaping elements shown on the plan drawings;
    - Descriptions and standards for the methods, materials and vegetation that are to be used in the construction;
    - Density of plantings; descriptions of the stabilization and management techniques used to establish vegetation; and
    - A description of who will be responsible for ongoing maintenance of vegetation for the stormwater management facility and what practices will be employed to ensure that adequate vegetative cover is preserved.
8. *Maintenance Access Easements* – The applicant must ensure access from public right-of-way to stormwater management facilities and practices requiring regular maintenance at the site for the purpose of inspection and repair by securing all the maintenance access easements needed on a permanent basis. Such access shall be sufficient for all necessary equipment for maintenance activities. Upon final inspection and approval, a plat or document indicating that such easements exist shall be recorded and shall remain in effect even with the transfer of title of the property.

    In common residential developments (e.g., subdivisions), all stormwater management facilities and practices except those used exclusively for water conveyance (e.g., swales, ditches, and storm pipes) shall be on common property owned by a Homeowners Association, or other entity if approved by the Engineering Department, and not counted as area for an individual lot.
9. *Evidence of Acquisition of Applicable Local and Non-local Permits* – The applicant shall certify and provide documentation to the Fayette County Engineering Department that all other applicable environmental permits have been acquired for the site prior to approval of the stormwater management plan.
10. *Operations and Maintenance Plan* – Property owners are responsible for performing operation and maintenance activities for stormwater management facilities and practices located on their property; see Section 8-453(C) and (D) for

additional information. The applicant shall provide a project-specific Operations and Maintenance Plan that includes detailed descriptions of required operations and maintenance procedures for the project's stormwater management facilities and practices to ensure their continued function as designed and constructed or preserved. The plan shall identify the parts or components of each stormwater management facility or practice that needs to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary for this work. The plan shall include a detailed inspection and maintenance schedule, a list of all maintenance tasks, and identify the responsible parties for all maintenance, funding, access and safety issues. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall also be included in the plan. Checklists shall be provided, as appropriate. Any revisions to the Operations and Maintenance Plan shall be submitted with the stamp and seal of a Professional Engineering (PE) licensed in the State of Georgia and receive written approval from the Fayette County Engineering Department.

C. Inspection and Maintenance Agreements

The applicant or owner of the land involved in a land development project requiring a stormwater management facility or practice hereunder and for which Fayette County requires ongoing maintenance must execute a stormwater management Inspection and Maintenance Agreement, as defined in this article and/or a conservation easement, if applicable, that shall be binding on all subsequent owners of the site or any portion thereof.

The Inspection and Maintenance Agreement shall require approval by the Engineering Department prior to final plat approval or issuance of a Certificate of Occupancy. A covenant running with the land will describe said agreement and the obligation of all present and future holders of any interest in the development or any portion thereof. Said covenant shall be recorded on the deed of every parcel of property and/or lot that is derived in any way from the land development activity. Thereafter, each deed shall be recorded in the county deed records by the applicant.

The stormwater management Inspection and Maintenance Agreement shall identify by name and official title, if applicable, the person(s) bound by said agreement to cause said inspection and maintenance. Responsibility for the operation and maintenance of the stormwater management facility or practice shall remain that of the party which executed the stormwater management Inspection and Maintenance Agreement unless and until such time as the duties hereunder are properly assumed by a Homeowners Association which is created as specified in this article. Evidence of the assumption of such duties shall be in a writing executed by the party assigning said duties and the Homeowners Association and agreed to by Fayette County.

The duties created under the Inspection and Maintenance Agreement shall transfer to each and every subsequent owner/applicant, or Homeowners Association (where one is established and duties are assigned thereto, in accordance with this Article), or similar holders of interest in the development or any portion thereof. Upon transfer, each

owner/applicant, Homeowners Association, or similar interest holder shall cause the deed of transfer to be marked upon its face with notice of obligations of the Inspection and Maintenance Agreement through use of a restrictive covenant, as previously described. Each successor in title shall be bound by the Inspection and Maintenance Agreement to all the duties of his predecessor thereunder. The stormwater Inspection and Maintenance Agreement shall incorporate by reference the project's Operation and Maintenance Plan and account for all the work requirements specified in the plan.

In addition to enforcing the terms of the Inspection and Maintenance Agreement, the Engineering Department may also enforce all of the provisions for ongoing inspection and maintenance in Section 6 of this ordinance.

Residential Subdivisions – Prior to final plat approval, the developer of a subdivision, which is subject to the provisions of this article, shall create a Homeowners Association for the residential subdivision(s) for which the developer is requesting approval. All property owners within the subdivision shall be members of the Homeowners Association. The Homeowners Association shall be the legal entity to which all correspondence and notice, required under or related to this ordinance is given by Fayette County and from which Fayette County will accept the same.

D. Stormwater Tax Assessment Area

Prior to final plat approval, the developer of any common development subject to the provisions of this ordinance shall establish a Stormwater Tax Assessment Area that shall thereafter encompass the development, each subdivision thereof, and any other property that is alleged to be covered/served by the Stormwater Management Plan. The Stormwater Tax Assessment Area shall be established through covenant running with each parcel of land in the tax assessment area, as evidenced through a recording in county deed records. The recording shall cause notice of the existence of the Stormwater Tax Assessment Area to transfer from one interest holder to the next with each sale of any parcel in the stormwater tax assessment area, until the Stormwater Management Plan is replaced with a new plan or said plan is found to be inapplicable by the Engineering Department.

Property owners within a Stormwater Tax Assessment Area will be billed annually through their regular ad valorem County tax bill for the cost to the County of County performance of maintenance and repair activities on privately owned stormwater management facilities and practices since January 1st of the applicable tax year. The rate for Stormwater Tax Assessment Areas shall be determined based on the total cost incurred by the County in repairing and maintaining these facilities in the applicable tax year divided by the number of non-exempt parcels which exist in all Stormwater Tax Assessment Areas in existence in the County in the applicable tax year.

A parcel that exists in a Stormwater Tax Assessment Area shall be exempt from the stormwater tax assessment if all requirements set forth in the Inspection and Maintenance Agreement have been met and all necessary documentation thereof has been submitted to and approved by the Engineering Department. The determination of applicability of exemption shall be made on a yearly basis by the Engineering Department. For

residential subdivisions, all property owners shall be considered exempt or non-exempt based on the work performed by the Homeowners Association for that subdivision.

E. Maintenance Bonds

Prior to final plat approval of all subdivision development projects, the developer shall submit to the Engineering Department a bond or irrevocable letter of credit for the purpose of guaranteeing the materials and workmanship of all stormwater control measures associated with the development for a period of two years. The bond amount shall be calculated by the Engineering Department and provided to the developer upon completion of field activities and submittal of the final plat to Fayette County Zoning Department.

If, during the two-year period, the need for repairs to any of the stormwater control measures becomes evident then the developer will be notified in writing by the County Engineer and informed of the measures to be taken to repair the facilities. If the developer has not taken significant action, as determined by the County Engineering Department, within 30 days of said notification, the County Engineer shall take such steps as are necessary to claim an amount of the funds from the bond or letter of credit which, as estimated by the County Engineer, will cover all costs and expenses the County will incur in causing the repairs to be made.

F. Application Procedure

1. Two copies of the Stormwater Management Plan and the Inspection and Maintenance Agreement shall be submitted to the Engineering Department with the project's construction drawings or commercial site plan.
2. The Engineering Department shall inform the applicant whether the submittals are approved or disapproved.
3. If the deliverables required by this ordinance are disapproved, the Engineering Department shall notify the applicant of such fact in writing. The applicant may then revise any item not meeting the requirements hereof and resubmit the same, in which event subparagraph 2 above and this subparagraph shall apply to such resubmittal.
4. A Land Disturbance Permit for a project shall not be issued by the Engineering Department until all applicable sections of this ordinance are satisfied and approved by the Engineering Department.
5. Notwithstanding the issuance of a Land Disturbance Permit, in conducting the land development project, the applicant or other responsible person shall be subject to the following requirements:
    - The applicant shall comply with all applicable requirements of the approved plan and this ordinance and shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan;

- The land development project shall be conducted only within the area specified in the approved plan;
- The Engineering Department shall be allowed to conduct periodic inspections of the project;
- No changes may be made to an approved plan without review and written approval by the Engineering Department; and,
- Upon completion of the project, the applicant or other responsible person shall submit the engineer's report and certificate and as-built plans required by Section 5.

6. Developments Requiring a Final Plat – all remaining submittal requirements (e.g., creation of a stormwater tax assessment area and posting of maintenance bonds) shall be submitted to the Engineering Department with or prior to the project's Final Plat. The Engineering Department shall inform the applicant whether the submittals are approved or disapproved. If any deliverable is disapproved, the Engineering Department shall notify the applicant of such fact in writing. The applicant may then revise any item not meeting the requirements hereof and resubmit the same, in which event this subparagraph shall apply to such resubmittal. The Final Plat shall not be signed by the Engineering Department until all submittal requirements are satisfied.
7. Developments Not Requiring a Final Plat – all remaining submittal requirements (e.g., posting of maintenance bonds) shall be submitted to the Engineering Department prior to issuance of a Certificate of Occupancy by the Fayette County Permits and Inspections Department. The Engineering Department shall inform the applicant whether the submittals are approved or disapproved. If any deliverable is disapproved, the Engineering Department shall notify the applicant of such fact in writing. The applicant may then revise any item not meeting the requirements hereof and resubmit the same, in which event this subparagraph shall apply to such resubmittal. The Fayette County Permits and Inspections Department shall not issue the Certificate of Occupancy until all submittal requirements are satisfied.

G. Application Review Fees

The fee for review of any stormwater management application shall be based on the fee structure established by the Fayette County Board of Commissioners and shall be made prior to the issuance of any building permit for the development.

H. Modifications for Off-Site Facilities

The stormwater management plan for each land development project shall provide for stormwater management measures located on the site of the project, unless provisions are made to manage stormwater by an off-site or regional facility. The off-site or regional facility must be located on property legally dedicated for the purpose, must be designed and adequately sized to provide a level of stormwater quantity and quality control that is

equal to or greater than that which would be afforded by on-site practices and there must be a legally-obligated entity responsible for long-term operation and maintenance of the off-site or regional stormwater facility. In addition, on-site measures shall be implemented, where necessary, to protect upstream and downstream properties and drainage channels from the site to the off-site facility.

A stormwater management plan must be submitted to the Engineering Department that shows the adequacy of the off-site or regional facility.

To be eligible for a modification, the applicant must demonstrate that the use of an off-site or regional facility will not result in the following impacts to upstream or downstream areas:

1. Increased threat of flood damage to public health, life, and property;
2. Deterioration of existing culverts, bridges, dams, and other structures;
3. Accelerated streambank or streambed erosion or siltation;
4. Degradation of in-stream biological functions or habitat; or
5. Water quality impairment in violation of State water quality standards, and/or violation of any state or federal regulations.

The Engineering Department shall verify that these criteria are satisfied.

Section 8-454. Post-Development Stormwater Management Performance Criteria

The following performance criteria shall be applicable to all stormwater management plans, unless otherwise provided for in this ordinance:

A. Water Quality

All stormwater runoff generated from a site shall be adequately treated before discharge. It will be presumed that a stormwater management system complies with this requirement if:

1. It is sized to treat the prescribed water quality treatment volume from the site, as defined in the Georgia Stormwater Management Manual; and
2. Appropriate structural stormwater controls or nonstructural practices are selected, designed, constructed or preserved, and maintained according to the specific criteria in the Georgia Stormwater Management Manual.

B. Stream Channel Protection

Stream channels shall be protected from bank and bed erosion and degradation by using all of the following three approaches:

1. Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer, as established in Fayette County's Watershed Protection Ordinance and Soil Erosion and Sedimentation Control Ordinance;

2. 24-hour extended detention storage of the 1-year, 24-hour return frequency storm event. This requirement may be adjusted or waived by the Engineering Department for sites that discharge directly into larger perennial streams, rivers, wetlands, or lakes, if the applicant can demonstrate that the reduction in these flows will not have an impact on upstream or downstream streambank or channel integrity; and
3. Erosion prevention measures such as energy dissipation and velocity control.

C. Overbank and Extreme Flood Protection

Downstream overbank flood and property protection shall be provided by controlling (attenuating) the post-development peak discharge rate to the pre-development rate for the 25, 50, and 100-year, 24-hour return frequency storm event. If control of the 1-year, 24-hour storm under 8-454(B) is exempted, then peak discharge rate attenuation of the 2-year through the 25-year return frequency storm event shall also be provided, (i.e., the 2, 5, 10 and 25-year storm). Overbank and Extreme Flood Protection shall be provided for all drainage basins within a development. The procedures for providing overbank and extreme flood protection shall follow the criteria specified in the Georgia Stormwater Management Manual.

This requirement may be adjusted or waived by the Engineering Department, on a sub-watershed by sub-watershed basis, for sites where the post-development downstream analysis shows that uncontrolled post-development conditions will not increase downstream peak flows, or that meeting the requirement will cause greater peak flow downstream impacts than the uncontrolled post-development conditions.

D. Structural Stormwater Controls

All structural stormwater controls shall be selected and designed using the appropriate criteria from the Georgia Stormwater Management Manual. All structural stormwater controls must be designed appropriately to meet their intended function. For other structural stormwater controls not included in the Georgia Stormwater Management Manual, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the Engineering Department before being included in the design of a stormwater management system. In addition, if hydrologic or topographic conditions, or land use activities warrant greater control than that provided by the minimum control requirements, the Engineering Department may impose additional requirements deemed necessary to protect upstream and downstream properties and aquatic resources from damage due to increased volume, frequency, and rate of stormwater runoff or increased nonpoint source pollution loads created on the site in question.

Applicants shall consult the Georgia Stormwater Management Manual for guidance on the factors that determine site design feasibility when selecting and locating a structural stormwater control.

E. Stormwater Credits for Nonstructural Measures

The use of one or more site design measures by the applicant may allow for a reduction in the water quality treatment volume required under Section 8-454(A). The applicant may, if approved by the Engineering Department, take credit for the use of stormwater better site design practices and reduce the water quality volume requirement. For each potential credit, there is a minimum set of criteria and requirements, which identify the conditions or circumstances under which the credit may be applied. The site design practices that qualify for this credit and the criteria and procedures for applying and calculating the credits are included in the Georgia Stormwater Management Manual.

F. Drainage System Guidelines

Stormwater conveyance facilities, which may include but are not limited to culverts, stormwater drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutter, swales, channels, ditches, and energy dissipaters shall be provided when necessary for the protection of public right-of-way and private properties adjoining project sites and/or public right-of-ways. Stormwater conveyance facilities that are designed to carry runoff from more than one parcel, existing or proposed, shall meet the following requirements:

1. Methods to calculate stormwater flows shall be in accordance with the Georgia Stormwater Management Manual;
2. All culverts, pipe systems and open channel flow systems shall be sized in accordance with the stormwater management plan using the methods included in the Georgia Stormwater Management Manual;
3. Design and construction of stormwater conveyance facilities shall be in accordance with the criteria and specifications found in the Georgia Stormwater Management Manual;
4. Storm Sewer Installation Report – A third-party pipe installation inspection report shall be required for all pipes placed in the ground and shall include the following information:
    - Description of subgrade and bedding used in installation;
    - Pipe material certifications;
    - Description of backfill methods used;
    - A summary of all field inspections, including the name and affiliation of the inspector, date and time of visit(s), and summary of activities observed; and
    - Certification from a Registered Professional Engineer that the pipe was installed in accordance to the Approved Construction Plans and any applicable Georgia DOT, AASHTO or American Concrete Pipe Association Standards.

    The Engineering Department can request additional information for the pipe installation report as a condition of issuing the Land Disturbance Permit. The

Engineering Department shall also be notified before the pipe installation begins so the County may also periodically inspect the installation process.

The developer shall submit the Storm Sewer Installation Report to the Engineering Department prior to the County's final inspection of the site. The Engineering Department shall inform the applicant whether the report is approved or disapproved. If disapproved, the Engineering Department shall notify the applicant of such fact in writing and identify the appropriate corrective measures. The applicant may then perform the corrective measures and resubmit the same, in which event this subparagraph shall apply to such resubmittal. The Final Plat shall not be signed by the Engineering Department until all submittal requirements are satisfied.

5. Drainage Easements – Drainage easements shall be provided for all stormwater management facilities designated for water conveyance. These easements shall normally be twenty (20) feet in width, except where existing streams or creeks or constructed basins require greater width. Such easements shall be shown on plans and plats as required by other sections of the county's ordinances. Since these easements are part of an overall system for the development, neither the easement location nor the system element located in it may be modified without the approval of the Engineering Department.
6. Phased Development – If a project is developed in phases, the stormwater management system in an initial phase must be sized and constructed to handle the quantity and effects of stormwater that may flow into that system from subsequent phases.

G. Dam Design Guidelines

Any land disturbing activity that involves a site that proposes a dam shall comply with the Georgia Safe Dams Act and Rules for Dam Safety, as applicable, and Article X of the Fayette County Development Regulations.

Section 8-455. Construction Inspections of Post-Development Stormwater Management System

A. Inspections to Ensure Plan Compliance During Construction

Periodic inspections of the stormwater management system construction shall be conducted and certified by a Professional Engineer registered in the State of Georgia. Construction inspections shall utilize the approved stormwater management plan for establishing compliance. The minimum number and schedule of the inspections shall be based on the proposed design and established by the Engineering Department during the project's preconstruction meeting.

All inspections shall be documented with written reports that contain the following information:

1. The name of the inspector, the date and location of the inspection, and a summary of the activities observed;
2. A determination if the construction activities are in compliance with the approved stormwater management plan;
3. Variations from the approved construction specifications; and,
4. Any other variations or violations of the conditions of the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing of the nature of the violation and the required corrective actions.

B. Final Inspection and As-Built Plans

Upon completion of a project, and before a certificate of occupancy shall be granted or a final plat signed, the applicant is responsible for certifying that the completed project is in accordance with the approved stormwater management plan and that the systems will operate as designed. Upon completion of the construction activities, the applicant shall submit "as-built" plans for all stormwater management facilities and practices associated with the project. The plan must show the final design specifications for all stormwater management facilities and practices and must be certified by a Professional Engineer registered in the State of Georgia. The as-built plan shall also include stage/storage data for all detention or retention structures. These data shall be provided and certified by a Registered Land Surveyor. A final inspection by the Engineering Department is required before the release of any performance securities can occur.

Section 8-456. Ongoing Inspection and Maintenance of Stormwater Facilities and Practices

A. Long-Term Maintenance & Inspection of Stormwater Facilities and Practices

Stormwater management facilities and practices included in a stormwater management plan that are subject to an Inspection and Maintenance Agreement must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the plan and this ordinance.

The responsible person, as designated in the approved Inspection and Maintenance Agreement, shall inspect the stormwater management facilities or practices on a periodic basis. In the event that the stormwater management facility has not been maintained and/or becomes a danger to public safety or public health, the Engineering Department shall notify the person responsible for carrying out the maintenance plan by registered or certified mail to the person specified in the Inspection and Maintenance Agreement. The notice shall specify the measures needed to comply with the agreement and the plan and shall specify the time within which such measures shall be completed. If the responsible person fails or refuses to meet the requirements of the Inspection and Maintenance Agreement, the Engineering Department may correct the violation as provided in Subsection 6.4 hereof.

Inspection programs by the Engineering Department may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in stormwater management facilities; and evaluating the condition of stormwater management facilities and practices.

B. Right-of-Entry for Inspection

The terms of the Inspection and Maintenance Agreement shall provide for the Engineering Department to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when it has a reasonable basis to believe that a violation of this ordinance is occurring or has occurred and to enter when necessary for abatement of a public nuisance or correction of a violation of this ordinance.

C. Records of Maintenance Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall provide records of all maintenance and repairs to the Engineering Department.

D. Failure to Maintain

If a responsible person fails or refuses to meet the requirements of the Inspection and Maintenance Agreement, the Engineering Department, after thirty (30) days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the facility or practice in proper working condition. Recovery of costs associated with the performance of said work shall be through the Stormwater Tax Assessment Area established in Section 3.4. Alternatively, the Engineering Department may issue citations to help force compliance with the Inspection and Maintenance Agreement.

Section 8-457. Violations, Enforcement and Penalties

Any action or inaction which violates the provisions of this ordinance or the requirements of an approved stormwater management plan or permit, may be subject to the enforcement actions outlined in this Section. Any such action or inaction, which is continuous with respect to time, is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

A. Notice of Violation

If the Engineering Department determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management plan or the provisions of this ordinance, it shall issue a written notice of violation to such applicant or other responsible person. Where a person is engaged in activity covered by this ordinance without having first secured a permit, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation shall contain:

1. The name and address of the owner or the applicant or the responsible person;
2. The address or other description of the site upon which the violation is occurring;
3. A statement specifying the nature of the violation;
4. A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the stormwater management plan or this ordinance and the date for the completion of such remedial action; and
5. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed.

B. Penalties

In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the Engineering Department shall first notify the applicant or other responsible person in writing of its intended action, and shall provide a reasonable opportunity, of not less than ten (10) days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the Engineering Department may take any one or more of the following actions or impose any one or more of the following penalties.

1. *Stop Work Order* – The Engineering Department may issue a stop work order that shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.
2. *Withhold Certificate of Occupancy* – The Engineering Department may recommend that the Fayette County Permits and Inspection Department refuse to issue a certificate of occupancy for the building or other improvements

constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

3. *Suspension, Revocation or Modification of Permit* – The Engineering Department may suspend, revoke or modify the permit authorizing the land development project. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated [upon such conditions as the Engineering Department may deem necessary] to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
4. *Citations* – For intentional and flagrant violations of this ordinance, or in the event the applicant or other responsible person fails to take the remedial measures set forth in previously issued notice-of-violation(s) or otherwise fails to cure the violations within ten days, the Engineering Department may issue a citation to the applicant or other responsible person, requiring such person to appear in State Court of Fayette County to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed $1,000 or imprisonment for 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

Sections 8-458 through 8-470 Reserved.