

SECTION 3.3 - STORM WATER MANAGEMENT—GENERAL

3.3.1 General.

A. *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;

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, the City of Alpharetta 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.

B. *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:

1. Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
2. 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;
3. Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;

4. 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;
5. 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. Coordinate site design plans, which include greenspace, with the City's greenspace protection plan;
6. 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,
7. 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.

C. *Applicability.*

1. This ordinance shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Subsection b below. These standards apply to any new development or redevelopment site that meets one or more of the following criteria:
 - a. New development that involves the creation of 5,000 square feet or more of impervious cover, or that involves other land development activities of one (1) acre or more;
 - b. Redevelopment that includes the creation or addition of 5,000 square feet or more of impervious cover, or that involves other land development activity of one (1) acre or more;
 - c. Any new development or redevelopment, regardless of size, that is defined by the City Engineer or designee to be a hotspot land use; or,
 - d. Land development activities that are smaller than the minimum applicability criteria set forth in items a and b above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.
2. The following activities are exempt from this ordinance:
 - a. Individual 'For-Sale' dwelling or duplex residential lots that are not part of a subdivision or phased development project;
 - b. Additions or modifications to existing 'For-Sale' dwelling or duplex residential structures;
 - c. Agricultural or silvicultural land management activities within areas zoned for these activities; and,
 - d. Repairs to any stormwater management facility or practice deemed necessary by the City Engineer.

- D. *Stormwater Management Manual.* The City of Alpharetta will utilize the policy, criteria and information including technical specifications and standards in the latest edition of the Georgia Stormwater Management Manual and the City of Alpharetta Stormwater Management Design Manual, for the proper implementation of the requirements of this ordinance. The Engineering/Public Works Department has developed a City Stormwater Management Design Manual to assist in the design and evaluation of stormwater management facilities and practices. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring and local maintenance experience. However, the failure to update the manual shall not relieve any applicant from the obligation to comply with the requirements of this ordinance, and shall not prevent the City Engineer from imposing the most current and effective practices. The manual may establish design standards for new development and redevelopment that includes the creation of less than 5,000 square feet of impervious cover or involves land development activity of less than one (1) acre.

E. *Effective Date.* This Ordinance shall become effective immediately upon adoption.

3.3.2 Definitions.

Accidental Discharge. A discharge prohibited by this ordinance which occurs by chance and without planning or thought prior to occurrence.

Agriculture Use. The establishment, cultivation, or harvesting of products of the field or orchard; the preparation and planting of pasture land; farm ponds; and the construction of farm buildings.

Applicant. A person submitting a post-development stormwater management application and plan for approval.

Best Management Practices or "BMPs". A wide range of management procedures, activities, and prohibitions on practices which control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

Buffer. With respect to a stream, a natural or enhanced vegetated area, lying adjacent to the stream.

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

City of Alpharetta Separate Storm Sewer System. Any facility designed or used for collecting and/or conveying stormwater, including but not limited to any roads with drainage systems, highways, City streets, curbs, gutters, inlets, catch basins, piped storm drains, pumping facilities, structural stormwater controls, ditches, swales, natural and man-made or altered drainage channels, reservoirs, and other drainage structures, and which is State Waters or is: Owned or maintained by the City of Alpharetta; Not a combined sewer; and Not part of a publicly-owned treatment works.

Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Conservation Easement. An agreement between a land owner and the City of Alpharetta 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.

Construction Activity. Activities subject to the Georgia Erosion and Sedimentation Control Act or NPDES General Construction Permits. These include construction projects resulting in land disturbance. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

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

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

Developer. A person who undertakes land development activities.

Development. A land development or land development project.

Discharge. The release of treated or untreated water to the stormwater system.

Drainage Easement. 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.

Easement. An acquired legal right for a specific use of land owned by others.

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

Extended Detention. The detention of stormwater runoff for an extended period, typically 24 hours or greater.

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

Flood or Flooding. 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; or a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; or the unusual and rapid accumulation or runoff of surface waters from any source.

Floodplain. Any land area susceptible to flooding, which would have at least a one percent probability of flooding occurrence in any calendar year based on the basin being fully developed as shown on the current land use plan; i.e., the regulatory flood.

Greenspace or Open Space. Permanently protected areas of the site that are preserved in a natural state.

Hotspot. An area where the use of the land has the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

Hydrologic Soil Group (HSG). 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.

Illegal Connection. Either of the following:

Any pipe, open channel, drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system, regardless of whether such pipe, open channel, drain or conveyance has been previously allowed, permitted, or approved by an authorized enforcement agency; or

Any pipe, open channel, drain or conveyance connected to the City of Alpharetta separate storm sewer system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Illicit Discharge. Any direct or indirect non-stormwater discharge to the City of Alpharetta separate storm sewer system, except as exempted in Section 3.3.9.C. of this ordinance.

Impervious Cover. A [man-made structure or](#) surface composed of any material that significantly impedes or prevents the natural infiltration of water into soil [below the structure or surface](#). Impervious surfaces include, but are not limited to, rooftops, buildings, [walls](#), streets and roads, [dams](#), [wet extended or micropool detention ponds](#), and any concrete or asphalt surface. Streets, parking areas, sidewalks, and other surfaces constructed with pervious paving and green roofs shall not be considered impervious cover for the purposes of stormwater calculations in this Section of the UDC if it is a stormwater management practice with a recorded long-term maintenance agreement.

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

Industrial Stormwater Permit. 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. The process of percolating stormwater runoff into the subsoil.

Inspection and Maintenance Agreement. 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.

Jurisdictional Wetland. 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. 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. Those actions or activities which comprise, facilitate or result in land development.

Land Development Project. A discrete land development undertaking.

Land Disturbance. Any land or vegetation change, including, but not limited to, clearing, grubbing, stripping, removal of vegetation, dredging, grading, excavating, transporting and filling of land, that do not involve construction, paving or any other installation of impervious cover.

Land Disturbance Activity. Those actions or activities which comprise, facilitate or result in land disturbance.

Maintenance. Any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in this Ordinance and to prevent structural failure of such facilities.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. A permit issued by the Georgia EPD under authority delegated pursuant to 33 USC § 1342(b) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

New Development. A land development activity on a previously undeveloped site.

Non-perennial Stream. Any stream that is not classified as a perennial stream or that the City Engineer determines to be falsely classified as a perennial stream, beginning at: The location of a spring, seep, or groundwater outflow that sustains streamflow; or a point in the stream channel with a drainage area of 25 acres or more; or where evidence indicates the presence of a stream in a drainage area of other than 25 acres, the City of Alpharetta may require field studies to verify the existence of a stream.

Nonpoint Source Pollution. 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.

Non-Stormwater Discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Nonstructural Stormwater Management Practice or Nonstructural Practice. 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. A stormwater management facility located outside the boundaries of the site.

On-Site Facility. A stormwater management facility located within the boundaries of the site.

Overbank Flood Protection. 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. 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.

Parcel. Any plot, lot or acreage shown as a unit on the latest county tax assessment records.

Perennial Stream. Means any stream which is designated and shown as a permanent stream on the 7.5-minute quadrangle maps of the U.S. Geological Survey, plus any stream which the Mayor and City Council may determine to be, and designate as, a flowing stream.

Permit. The permit issued by the City of Alpharetta to the applicant which is required for undertaking any land development activity.

Person. 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.

Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; petroleum hydrocarbons; automotive fluids; cooking grease; detergents (biodegradable or otherwise); degreasers; chemicals; steam cleaning or laundry wastes; heated water; chlorinated water or chlorine (except as exempted above); non-hazardous liquid and solid wastes and yard wastes; bark and other fibrous material; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations, so that same may cause or contribute to pollution; animal carcasses; silt; acids or alkalis; recreational vehicle wastes; dyes (without prior permission of the Department); floatables; pesticides, herbicides, and fertilizers; liquid and solid wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; concrete and cement; washing of fresh concrete for cleaning and/or finishing purposes or to expose aggregates; and noxious or offensive matter of any kind.

Pollution. The contamination or other alteration of any water's physical, chemical or biological properties by the addition of any constituent and includes but is not limited to, a change in temperature, taste, color, turbidity, or odor of such waters, or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety, welfare, or environment, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Post-development. 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. 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.

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Private. Property or facilities owned by individuals, corporations, and other organizations and not by city, state, or federal government.

Project. A land development project.

Protection Area, or Stream Protection Area. With respect to a stream, the combined areas of all required buffers and setbacks applicable to such stream.

Redevelopment. 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. 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.

Riparian. Belonging or related to the bank of a river, stream, lake, pond or impoundment.

Runoff. Stormwater runoff.

Setback. With respect to a stream, the area extending beyond any buffer applicable to the stream.

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

State Waters. Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface and subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State of Georgia which are not entirely confined and retained completely upon the property of a single person.

Stormwater Better Site Design. 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. 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. Any infrastructure that controls or conveys stormwater runoff.

Stormwater Management Manual. The most recent update of the City of Alpharetta Stormwater Management Design Manual, combined with the latest edition of the Georgia Stormwater Management Manual.

Stormwater Management Measure. Any stormwater management facility or nonstructural stormwater practice.

Stormwater Management Plan. 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. 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. 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 or Stormwater. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stream Bank. The sloping land that contains the stream channel and the normal flows of the stream.

Stream Channel. The portion of a watercourse that contains the base flow of the stream.

Structural Stormwater Control. 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.

Subdivision. The division of a tract or parcel of land resulting in one or more new lots or building sites for the purpose, whether immediately or in the future, of sale, other transfer of ownership or land development, and includes divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

Variance. The modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this Ordinance.

Watershed. The land area that drains into a particular stream.

3.3.3 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 to the City of Alpharetta a permit application on a form provided by the Community Development Department for that purpose.

Unless otherwise exempted by this ordinance, a permit application shall be accompanied by the following items in order to be considered:

1. Stormwater preliminary plan and consultation meeting certification in accordance with Section 3.3.3.B.;
2. Stormwater management plan in accordance with Section 3.3.3.C.;
3. Inspection and maintenance agreement in accordance with Section 3.3.3.D., if applicable;
4. Performance bond in accordance with Section 3.3.3.E., if applicable; and,
5. Permit application and plan review fees in accordance with Section 3.3.3.F.

B. *Stormwater Preliminary Plan and Consultation Meeting.* Before any stormwater management permit application is submitted, the land owner or developer shall meet with the City Engineer for a consultation meeting on a preliminary plan for the post-development stormwater management system to be utilized in the proposed land development project. This consultation meeting shall take place at the time of the preliminary plat of subdivision or other early step in the development process. The purpose of this meeting is to discuss the post-development stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential ideas for stormwater management designs before the formal site design engineering is commenced.

To accomplish this goal the following information shall be included in the preliminary plan:

Existing conditions and proposed site layout sketch plans, which illustrate at a minimum: existing topography; location of floodplain/floodway boundaries; wetland delineations; lakes and ponds; perennial and non-perennial streams; stream buffers and setbacks; mapping of predominant soils from soil surveys (when available); boundaries of existing predominant vegetation; forest cover; locations of specimen trees; zoning buffers; location of existing and proposed roads and other impervious surfaces; preliminary selection and location of proposed structural stormwater controls; location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; flow paths; relationship of site to upstream and downstream properties and drainages; and preliminary location of proposed stream channel modifications, such as bridge or culvert crossings. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.

Local watershed plans, the City greenspace protection plan (if applicable), and any relevant resource protection plans will be consulted in the discussion of the preliminary plan.

C. *Stormwater Management Plan Requirements.* 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 3.3.4 below.

This plan shall be in accordance with the criteria established in this Section and must be submitted with the stamp and signature of a Professional Engineer (PE) licensed in the state of Georgia, who must

verify that the design of all stormwater management facilities and practices meet the submittal requirements outlined in the submittal checklist(s) found in the Stormwater Management Manual.

The stormwater management plan must ensure that the requirements and criteria in this ordinance are being complied with and that opportunities are being taken to minimize adverse post-development stormwater runoff impacts from the development. The plan shall consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system. The plan shall include all of the information required in the Stormwater Management Site Plan checklist found in the Stormwater Management Manual. This includes:

1. Common address and legal description of site.
2. Vicinity Map.
3. Existing Conditions Hydrologic Analysis. The existing conditions hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of existing site conditions with the drainage basin boundaries indicated; acreage, soil types and land cover of areas for each subbasin affected by the project; all perennial and intermittent streams 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 shall be modeled using the established guidelines for the portion of the site undergoing land development activities. The redevelopment guidelines, including how the predevelopment conditions will be modeled for redevelopment sites, will be established in the stormwater management manual.
4. Post-Development Hydrologic Analysis. The post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of developed site conditions with the post-development drainage basin boundaries indicated; 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 3.3.4; location and boundaries of proposed natural feature protection and conservation areas; documentation and calculations for any applicable site design credits that are being utilized; 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 area for the entire site, then the performance criteria in Section 3.3.4 must be met for the stormwater runoff from 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: A map and/or drawing or sketch 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; a narrative describing how the selected structural stormwater controls will be appropriate and effective; 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 3.3.4; 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 which 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 each and 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. 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 Management Manual.
7. Construction-Phase Erosion and Sedimentation Control Plan. An erosion and sedimentation control plan in accordance with Section 3.1.1 *Soil Erosion and Sedimentation Control* or the NPDES Permit for Construction Activities. The plan shall also include information on the sequence/phasing of construction and temporary stabilization measures and temporary structures that will be converted into permanent stormwater controls.
8. 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 must also include: the arrangement of planted areas, natural and greenspace areas and other landscaped features on the site plan; 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.
9. Operations and Maintenance Plan. Detailed description of ongoing operations and maintenance procedures for stormwater management facilities and practices to ensure their continued function as designed and constructed or preserved. These plans will identify the parts or components of a stormwater management facility or practice that need to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary. The plan shall include an inspection and maintenance schedule, maintenance tasks, responsible parties for 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 be included in the plan.
10. 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. The stormwater management manual establishes guidelines for easements and maintenance.
11. Inspection and Maintenance Agreements. Unless an on-site stormwater management facility or practice is dedicated to and accepted by the City of Alpharetta as provided in Section 3.3.3.D. below, the applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management facility or practice in accordance Section 3.3.3.D.
12. Evidence of Acquisition of Applicable Local and Non-local Permits. The applicant shall certify and provide documentation to the City Engineer that all other applicable environmental permits have been acquired for the site prior to approval of the stormwater management plan.

- D. *Stormwater Management Inspection and Maintenance Agreements.* Prior to the issuance of any permit for a land development activity requiring a stormwater management facility or practice hereunder and for which the City requires ongoing maintenance (as defined in the stormwater management manual), the applicant or owner of the site must, unless an on-site stormwater management facility or practice is dedicated to and accepted by the City, execute an inspection and maintenance agreement, and/or a conservation easement, if applicable, that shall be binding on all subsequent owners of the site.

The inspection and maintenance agreement, if applicable, must be approved by the City Engineer prior to plan approval, and recorded in the deed records upon final plat approval.

The inspection and maintenance agreement shall identify by name or official title the person(s) responsible for carrying out the inspection and maintenance. Responsibility for the operation and maintenance of the stormwater management facility or practice, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor owner. If portions of the land are sold or otherwise transferred, legally binding arrangements shall be made to pass the inspection and maintenance responsibility to the appropriate successors in title. These arrangements shall designate for each portion of the site, the person to be permanently responsible for its inspection and maintenance.

As part of the inspection and maintenance agreement, a schedule shall be developed for when and how often routine inspection and maintenance will occur to ensure proper function of the stormwater management facility or practice. The agreement shall also include plans for annual inspections to ensure proper performance of the facility between scheduled maintenance and shall also include remedies for the default thereof.

In addition to enforcing the terms of the inspection and maintenance agreement, the City may also enforce all of the provisions for ongoing inspection and maintenance in Section 3.3.8 of this ordinance.

The City, in lieu of an inspection and maintenance agreement, may accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this ordinance and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance. The City may refuse to accept dedication of any existing or future stormwater management facility if the City Engineer determines that accepting the facility is not in the best interest of the City due to maintenance costs or other factors.

- E. *Performance and Maintenance Bonds.* The Stormwater Management Manual may require performance and/or maintenance bonds for stormwater management facilities or practices and define the bond amounts.

F. *Application Procedure.*

1. Applications for land development permits shall be filed with the Community Development Department in accordance with Section 4.4.3 *Land Disturbance Permits*.
2. Permit applications shall include the items set forth in Section 3.3.3.A. above (two copies of the stormwater management plan and the inspection maintenance agreement, if applicable, shall be included).
3. Upon a finding by the City Engineer that the permit application, stormwater management plan and inspection and maintenance agreement, if applicable, meet the requirements of this ordinance, the City Engineer will approve the plans. The land disturbance permit may then be issued by the Community Development Department, provided all other legal requirements for the issuance of such permit have been met.
4. Notwithstanding the issuance of the permit, in conducting the land development project, the applicant or other responsible person shall be subject to the following requirements:
 - a. 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;
 - b. The land development project shall be conducted only within the area specified in the approved plan;

- c. The City shall be allowed to conduct periodic inspections of the project;
- d. No changes may be made to an approved plan without review and written approval by the City; and,
- e. 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 3.3.5.B.

G. *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 City Engineer which shows the adequacy of the off-site or regional facility.

To be eligible for a modification, the applicant must demonstrate to the satisfaction of the City Engineer 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.

3.3.4 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;
 - 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; and,
 - 3. Runoff from hotspot land uses and activities identified by the Engineering/Public Works Department are adequately treated and addressed through the use of appropriate structural stormwater controls, nonstructural practices and pollution prevention practices.
- B. *Stream Channel Protection.* Protection of stream channels from bank and bed erosion and degradation shall be provided by using all of the following three approaches:
 - 1. Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer;
 - 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 City Engineer for sites that discharge directly

into larger streams, rivers, wetlands, or lakes, or to a man-made channel or conveyance system where the reduction in these flows will not have an impact on upstream or downstream streambank or channel integrity;

3. Erosion prevention measures such as energy dissipation and velocity control.
- C. *Overbank Flooding 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-year, 24-hour return frequency storm event. If control of the 1-year, 24-hour storm under Section 3.3.4.B. is exempted, then peak discharge rate attenuation of the 2-year through the 25-year return frequency storm event must be provided. This requirement may be adjusted or waived by the City Engineer 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. *Extreme Flooding Protection.* Extreme flood and public safety protection shall be provided by controlling and safely conveying the 100-year, 24-hour return frequency storm event such that flooding is not exacerbated. This requirement may be adjusted or waived by the City Engineer 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.
 - E. *Structural Stormwater Controls.* All structural stormwater management facilities 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 City Engineer 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 City Engineer 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.
 - F. *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 3.3.4.A. The applicant may, if approved by the City Engineer, 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.
 - G. *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, gutters, 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 rights-of-way. 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 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 Stormwater Management Manual; and,
 3. Design and construction of stormwater conveyance facilities shall be in accordance with the criteria and specifications found in the Stormwater Management Manual.
- H. *Dam Design Guidelines.* Any land-disturbing activity that involves a site which proposes a dam shall comply with the Georgia Safe Dams Act and Rules for Dam Safety as applicable.

3.3.5 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 by the staff of the Engineering/Public Works Department or conducted and certified by a professional engineer who has been approved by the Engineering/Public Works Department. Construction inspections shall utilize the approved stormwater management plan for establishing compliance.

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

1. The date and location of the inspection;
2. Whether construction is 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, the applicant is responsible for certifying that the completed project is in accordance with the approved stormwater management plan. All applicants are required to submit actual "as built" plans for any stormwater management facilities or practices after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and practices and must be certified by a Professional Engineer. A final inspection by the Engineering/Public Works Department is required before the release of any performance securities can occur.

3.3.6 Stream buffer protection.

- A. *Findings and Purposes.*

1. *Findings.* Whereas, the Engineering/Public Works Department of City of Alpharetta finds that buffers adjacent to streams provide numerous benefits including:
 - a. Protecting, restoring and maintaining the chemical, physical and biological integrity of streams and their water resources.
 - b. Removing pollutants delivered in urban stormwater.
 - c. Reducing erosion and controlling sedimentation.
 - d. Protecting and stabilizing stream banks.
 - e. Providing for infiltration of stormwater runoff.
 - f. Maintaining base flow of streams.
 - g. Contributing organic matter that is a source of food and energy for the aquatic ecosystem.
 - h. Providing tree canopy to shade streams and promote desirable aquatic habitat.
 - i. Providing riparian wildlife habitat.

- j. Furnishing scenic value and recreational opportunity.
 - k. Providing opportunities for the protection and restoration of greenspace.
2. *Purposes.* The purpose of this Ordinance is to protect the public health, safety, environment and general welfare; to minimize public and private losses due to erosion, siltation and water pollution; and to maintain stream water quality by provisions designed to:
- a. Create buffer zones along the streams of the City for the protection of water resources; and,
 - b. Minimize land development within such buffers by establishing buffer zone requirements and by requiring authorization for any such activities.
- B. *Applicability.* This ordinance shall apply to all land development activity on property containing a stream protection area. These requirements are in addition to, and do not replace or supersede, any other applicable buffer requirements established under state law and approval or exemption from these requirements do not constitute approval or exemption from buffer requirements established under state law or from other applicable local, state or federal regulations.
1. *Grandfather Provisions.* This ordinance shall not apply to the following activities:
- a. Work consisting of the repair or maintenance of any lawful use of land that is zoned and approved for such use on or before the effective date of this ordinance.
 - b. Existing development and on-going land disturbance activities including but not limited to existing agriculture, silviculture, landscaping, gardening and lawn maintenance, except that new development or land disturbance activities on such properties will be subject to all applicable buffer requirements.
 - c. Any land development activity that is under construction, fully approved for development, scheduled for permit approval or has been submitted for approval as of the effective date of this ordinance.
 - d. Land development activity that has not been submitted for approval, but that is part of a larger master development plan, such as for an office park or other phased development that has been previously approved within two years of the effective date of this ordinance.
 - e. Grandfathering provisions only apply to Section 3.3.6 Stream Buffer Protection.
2. *Exemptions.* The following specific activities are exempt from this ordinance. After the effective date of this ordinance, it shall apply to new subdividing and platting activities. Any land development activity within a buffer established hereunder or any impervious cover within a setback established hereunder is prohibited unless a variance is granted pursuant to Section C below. Exemption of these activities does not constitute an exemption for any other activity proposed on a property.
- a. Activities for the purpose of building one of the following:
 - (1) A stream crossing by a driveway, transportation route or utility line;
 - (2) Public water supply intake or public wastewater outfall structures;
 - (3) Intrusions necessary to provide access to a property;
 - (4) Public access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks;
 - (5) Unpaved foot trails and paths;
 - (6) Activities to restore and enhance stream bank stability, vegetation, water quality and/or aquatic habitat, so long as native vegetation and bioengineering techniques are used;
 - (7) The City of Alpharetta Greenway system.
 - b. Public sewer line easements paralleling the creek, except that all easements (permanent and construction) and land disturbance should be at least 25 feet from the top of the bank.

This includes such impervious cover as is necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures. This exemption shall not be construed as allowing the construction of roads, bike paths or other transportation routes in such easements, regardless of paving material, except for access for the uses specifically cited in Item a., above.

- c. Land development activities within a right-of-way existing at the time this ordinance takes effect or approved under the terms of this ordinance.
- d. Within an easement of any utility existing at the time this ordinance takes effect or approved under the terms of this ordinance, land disturbance activities and such impervious cover as is necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures.
- e. Emergency work necessary to preserve life or property. However, when emergency work is performed under this Section, the person performing it shall report such work to the Engineering/Public Works Department on the next business day after commencement of the work. Within ten (10) days thereafter, the person shall apply for a permit and perform such work within such time period as may be determined by the City Engineer to be reasonably necessary to correct any impairment such emergency work may have caused to the water conveyance capacity, stability or water quality of the protection area.
- f. Forestry and silviculture activities on land that is zoned for forestry, silvicultural or agricultural uses and are not incidental to other land development activity. If such activity results in land disturbance in the buffer that would otherwise be prohibited, then no other land-disturbing activity other than normal forest management practices will be allowed on the entire property for three years after the end of the activities that intruded on the buffer.

C. *Land Development Requirements.*

- 1. *Buffer and Setback Requirements.* All land development activity subject to this ordinance shall meet the following requirements:
 - a. An undisturbed natural vegetative buffer shall be maintained for 50 feet, measured horizontally, on both banks (as applicable) of a non-perennial stream as measured from the top of the stream bank. An additional setback shall be maintained for 25 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback.
 - b. An undisturbed natural vegetative buffer shall be maintained for 100 feet, measured horizontally, on both banks (as applicable) of a perennial stream as measured from the top of the stream bank. An additional setback shall be maintained for 50 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback. If approved by the City Engineer, the buffer requirement may be achieved by maintaining an average of width of 100 feet and a minimum distance of 50 feet from each side of the stream as measured horizontally from the top of the stream bank. If approved by the City Engineer, the setback may be achieved by restricting the construction of any impervious surface within an average setback of 150 feet on each side of the stream and a minimum distance of 75 feet as measured horizontally from the top of the stream bank. No averaging shall be allowed on the following:
 - (1) Big Creek.
 - (2) Foe Killer Creek.
 - (3) Any perennial stream within a seven (7) mile radius upstream of the Roswell water supply intake protected pursuant to Section 3.3.12.
 - c. No septic tanks or septic tank drain fields shall be permitted within the buffer or the setback.

- d. No solid fences greater than four (4) feet in height are permitted within the buffer. Fences that are not private in nature (such as split rail) may be allowed for the delineation of property or other purposes not intended to disturb the buffer area.
2. *Variance Procedures.* Variances from the above buffer and setback requirements may be granted in accordance with the following provisions:
- a. Where a parcel was platted prior to the effective date of this ordinance, and its shape, topography or other existing physical condition prevents land development consistent with this ordinance, and the City of Alpharetta finds and determines that the requirements of this ordinance prohibit the otherwise lawful use of the property by the owner, the City Engineer may grant a variance from the buffer and setback requirements hereunder, provided such variance require mitigation measures to offset the effects of any proposed land development on the parcel.
 - b. Requests for variances shall follow the procedures described in Section 4.5 and Section 5.2. Variances will be considered only in the following cases:
 - (1) When a property's shape, topography or other physical conditions existing at the time of the adoption of this ordinance prevents land development unless a buffer variance is granted.
 - (2) Unusual circumstances when strict adherence to the minimal buffer requirements in the ordinance would create an extreme hardship.

Variances will not be considered when, following adoption of this ordinance, actions of any property owner of a given property have created conditions of a hardship on that property.
 - c. At a minimum, a variance request shall include the following information:
 - (1) A site map that includes locations of all streams, wetlands, floodplain boundaries and other natural features, as determined by field survey;
 - (2) A description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;
 - (3) A detailed site plan that shows the locations of all existing and proposed structures and other impervious cover, the limits of all existing and proposed land disturbance, both inside and outside the buffer and setback. The exact area of the buffer to be affected shall be accurately and clearly indicated;
 - (4) Documentation of unusual hardship should the buffer be maintained;
 - (5) At least one alternative plan, which does not include a buffer or setback intrusion, or an explanation of why such a site plan is not possible;
 - (6) A calculation of the total area and length of the proposed intrusion;
 - (7) A stormwater management site plan, if applicable; and,
 - (8) Proposed mitigation, if any, for the intrusion. If no mitigation is proposed, the request must include an explanation of why none is being proposed.
 - d. The following factors will be considered in determining whether to issue a variance:
 - (1) The shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;
 - (2) The locations of all streams on the property, including along property boundaries;
 - (3) The location and extent of the proposed buffer or setback intrusion; and,
 - (4) Whether alternative designs are possible which require less intrusion or no intrusion;
 - (5) The long-term and construction water-quality impacts of the proposed variance;

(6) Whether issuance of the variance is at least as protective of natural resources and the environment.

D. *Additional Information Requirements for Development on Buffer Zone Properties.* All buffer and setback areas must be recorded on the final plat of the property following plan approval. Any permit applications for property requiring buffers and setbacks hereunder must include the following:

1. A site plan showing:
 - a. The location of all streams on the property;
 - b. Limits of required stream buffers and setbacks on the property;
 - c. Buffer zone topography with contour lines at no greater than (2) two-foot contour intervals;
 - d. Delineation of forested and open areas in the buffer zone;
 - e. Detailed plans of all proposed land development in the buffer and of all proposed impervious cover within the setback; and
 - f. Location of the floodplain;
2. A description of all proposed land development within the buffer and setback; and,
3. Any other documentation that the City of Alpharetta may reasonably deem necessary for review of the application and to insure that the buffer zone ordinance is addressed in the approval process.

E. *Responsibility.* Neither the issuance of a development permit nor compliance with the conditions thereof, nor with the provisions of this ordinance shall relieve any person from any responsibility otherwise imposed by law for damage to persons or property; nor shall the issuance of any permit hereunder serve to impose any liability upon the City of Alpharetta, its officers or employees, for injury or damage to persons or property.

F. *Inspection.* The City may cause inspections of the work in the buffer or setback to be made periodically during the course thereof and shall make a final inspection following completion of the work. The permittee shall assist the City in making such inspections. The City shall have the authority to conduct such investigations as it may reasonably deem necessary to carry out its duties as prescribed in this ordinance, and for this purpose to enter at reasonable time upon any property, public or private, for the purpose of investigating and inspecting the sites of any land development activities within the protection area.

No person shall refuse entry or access to any authorized representative or agent who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out official duties.

3.3.7 Wetlands.

A. Definitions.

Wetlands. Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

Generalized Wetlands Map. The current U.S. fish and Wildlife Service National Wetlands Inventory maps for the City of Alpharetta, Georgia.

Jurisdictional Wetlands. An area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers.

Jurisdictional Wetland Determination. A delineation of jurisdictional wetland boundaries by the U.S. Army Corps of Engineers, as required by Section 404 of the Clean Water Act, 33 U.S.C. § 1344, as amended.

Regulated Activity. Any activity that will, or which may reasonably be expected to, result in the discharge of dredged or fill material into waters of the U.S. excepting those activities exempted in Section 404 of the Federal Clean Water Act.

B. *Establishment of the Wetlands Protection District.* The Wetlands Protection District is hereby established which shall correspond to all lands within the jurisdiction of the City of Alpharetta Georgia that are mapped as wetland areas by the U.S. Fish and Wildlife Service National Wetlands Inventory Maps. This map shall be referred to as the Wetlands Map and is hereby adopted by reference and declared to be a part of this ordinance, together with all explanatory matter thereon and attached thereto.

The Wetlands Map does not represent the boundaries of jurisdictional wetlands and cannot serve as a substitute for a delineation of wetland boundaries by the U.S. Army Corps of Engineers, as required by Section 404 of the Clean Water Act, as amended. Any local government action under this ordinance does not relieve the landowner from federal or state permitting requirements.

C. *Protection Criteria.* No regulated activity will be permitted within the Wetlands Protection District without a permit from the City of Alpharetta. If the area proposed for development is located within 50 feet of a Wetlands Protection District boundary, as determined by the Director using the Generalized Wetlands Map, a U.S. Army Corps of Engineers determination shall be required. If the Corps determines that wetlands are present on the proposed development site, the local permit or permission will not be granted until a Section 404 Permit or Letter of Permission is issued.

The filling in of established lakes, ponds and wetlands is discouraged.

D. *Permitted Uses.* The following uses shall be allowed as of right within the Wetlands Protection District to the extent that they are not prohibited by any other ordinance or law, including laws of trespass, and provided they do not require structures, grading, fill, draining, or dredging except as provided herein.

1. Conservation or preservation of soil, water, vegetation, fish and other wildlife, provided it does not affect waters of Georgia or of the United States in such a way that would require an individual 404 Permit.
2. Outdoor passive recreational activities, including fishing, bird watching, hiking, boating, horseback riding, and canoeing.
3. Forestry practices applied in accordance with best management practices approved by the Georgia Forestry Commission and as specified in Section 404 of the Clean Water Act.
4. The cultivation of agricultural crops. Agricultural activities shall be subject to best management practices approved by the Georgia Department of Agriculture.
5. The pasturing of livestock, provided that riparian wetlands are protected, that soil profiles are not disturbed and that approved agricultural Best Management Practices are followed.
6. Education, scientific research, and nature trails.

E. *Prohibited Uses.* The following uses are not permitted within the Wetlands Protection District.

1. Receiving areas for toxic or hazardous waste or other contaminants;
2. Hazardous or sanitary waste landfills;

F. *Administration, plan review, and permitting procedures are provided for in Section 4.4 of this code.*

3.3.8 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 which 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.

A stormwater management facility or practice shall be inspected on a periodic basis by the responsible person in accordance with the approved inspection and maintenance agreement. In the event that the stormwater management facility has not been maintained and/or becomes a danger to public safety or public health, the City Engineer 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/Public Works Department may correct the violation as provided in Subsection D hereof.

Inspection programs by the Engineering/Public Works 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 representatives of the City 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/Public Works Department.
- D. *Failure to Maintain.* If a responsible person fails or refuses to meet the requirements of the inspection and maintenance agreement, the Engineering/Public Works 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. The City may assess the owner(s) of the facility for the cost of repair work which shall be a lien on the property, and may be placed on the ad valorem tax bill for such property and collected in the ordinary manner for such taxes.
- E. *Maintenance Responsibility.* For all existing and new development the following maintenance responsibilities shall apply:
 - 1. Any stormwater management facility which services individual subdivisions shall be privately owned with routine maintenance provided for by the owner(s). In subdivisions with an established homeowners association, the homeowners association shall be responsible for routine maintenance. The owner shall maintain a perpetual, non-exclusive easement which allows for access for inspection and other maintenance.
 - 2. Any stormwater management facility which services an individual subdivision in which the facility is within designated open areas or an amenity with an established homeowners association shall be privately owned and maintained. The owner shall maintain a perpetual, non-exclusive easement which allows for access for inspection and emergency maintenance.
 - 3. Any stormwater management facility which services commercial and industrial development shall be privately owned and maintained. The City shall reserve the right, but not the duty to enter the premises for emergency repairs.
 - 4. All other stormwater management facilities, including regional stormwater detention, shall be publicly owned and/or maintained only if accepted for maintenance by the City.

5. The director may require dedication of privately owned stormwater facilities, which discharge to the City's stormwater system, to the City.
6. Drainage easements where a subdivision is traversed by a water course, drainage way, natural stream or channel off the street right-of-way shall be clearly defined on the plat and deed of the individual property owner for the purpose of maintaining the free flow of water. The owner shall be required to keep the easement free of obstructions and will maintain same in such a way as to assure free and maximum flow at all times.

3.3.9 Illegal connection.

A. *Findings.* It is hereby determined that:

Discharges to the City of Alpharetta's separate storm sewer system that are not composed entirely of stormwater runoff contribute to increased nonpoint source pollution and degradation of receiving waters;

These non-stormwater discharges occur due to spills, dumping and improper connections to the City's separate storm sewer system from residential, industrial, commercial or institutional establishments.

These non-stormwater discharges not only impact waterways individually, but geographically dispersed, small volume non-stormwater discharges can have cumulative impacts on receiving waters.

The impacts of these discharges adversely affect public health and safety, drinking water supplies, recreation, fish and other aquatic life, property values and other uses of lands and waters;

These impacts can be minimized through the regulation of spills, dumping and discharges into the City's separate storm sewer system;

Localities in the State of Georgia are required to comply with a number of State and Federal laws, regulations and permits which require a locality to address the impacts of stormwater runoff quality and nonpoint source pollution due to improper non-stormwater discharges to the City's separate storm sewer system;

Therefore, the City of Alpharetta adopts this ordinance to prohibit such non-stormwater discharges to the City's separate storm sewer system. It is determined that the regulation of spills, improper dumping and discharges to the City's separate storm sewer system is in the public interest and will prevent threats to public health and safety, and the environment.

B. *Purpose and Intent.* The purpose of this ordinance is to protect the public health, safety, environment and general welfare through the regulation of non-stormwater discharges to the City's separate storm sewer system to the maximum extent practicable as required by Federal law. This ordinance establishes methods for controlling the introduction of pollutants into the City's separate storm sewer system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are to:

1. Regulate the contribution of pollutants to the City's separate storm sewer system by any person;
2. Prohibit illicit discharges and illegal connections to the City's separate storm sewer system;
3. Prevent non-stormwater discharges, generated as a result of spills, inappropriate dumping or disposal, to the City's separate storm sewer system; and,
4. To establish legal authority to carry out all inspection, surveillance, monitoring and enforcement procedures necessary to ensure compliance with this ordinance;
5. No variances shall be granted to illicit discharge or illegal connection.

C. *Prohibition of Illicit Discharges.* No person shall throw, drain, run, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into any component of the City of Alpharetta separate storm sewer system, or to cause permit or suffer to be thrown, drained, run, or allow to seep or otherwise discharge, into such system, any pollutants or waters containing any pollutants, other than stormwater.

1. The following discharges are exempt from the prohibition provision above:
 - a. Water line flushing performed by a government agency, other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, natural riparian habitat or wetland flows, and any other water source not containing pollutants;
 - b. Discharges or flows from firefighting, and other discharges specified in writing by the City of Alpharetta as being necessary to protect public health and safety;
 - c. The prohibition provision above shall not apply to any non-stormwater discharge permitted under an NPDES permit or order issued to the discharger and administered under the authority of the State and the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval from the City Engineer has been granted for any discharge to the City's separate storm sewer system.
- D. *Prohibition of Illegal Connections.* The construction, connection, use, maintenance or continued existence of any illegal connection to the City's separate storm sewer system is prohibited.
 1. This prohibition expressly includes, without limitation, illegal connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
 2. A person violates this ordinance if the person connects a line conveying sewage to the City's separate storm sewer system, or allows such a connection to continue.
 3. The person responsible for any connection in violation of this Ordinance shall immediately cause the illegal connection to be disconnected and redirected, if necessary to Fulton County's sanitary sewer system upon approval by the Director of Fulton County's sanitary sewer department or an approved onsite wastewater management system. Such person shall provide the City Engineer with written confirmation that the connection has been disconnected, and, if necessary, redirected to Fulton County sanitary sewer.
 4. Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that property upon receipt of written notice of violation from the City Engineer requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be completed, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the City Engineer.
- E. *Industrial or Construction Activity Discharges.* Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City Engineer prior to allowing discharges to the City's separate storm sewer system.
- F. *Access and Inspection of Properties and Facilities.* Representatives of the City shall be permitted to enter and inspect properties and facilities at reasonable times as often as may be necessary to determine compliance with this ordinance.
 1. If a property or facility has security measures in force which require proper identification and clearance before entry into its premises, the owner or operator shall make the necessary arrangements to allow access to representatives of the City.
 2. The owner or operator shall allow representatives of the City ready access to all parts of the premises for the purposes of inspection, sampling, photography, videotaping, examination and copying of any records that are required under the conditions of an NPDES permit to discharge stormwater.

3. The City shall have the right to set up on any property or facility such devices as are necessary in the opinion of representatives of the City to conduct monitoring and/or sampling of flow discharges.
 4. The City may require the owner or operator to install monitoring equipment and perform monitoring as necessary, and make the monitoring data available to the Engineering/Public Works Department. This sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the owner or operator at his/her own expense. All devices used to measure flow and quality shall be calibrated to ensure their accuracy.
 5. Any temporary or permanent obstruction to safe and easy access to the property or facility to be inspected and/or sampled shall be promptly removed by the owner or operator at the written or oral request of the City Engineer and shall not be replaced. The costs of clearing such access shall be borne by the owner or operator.
 6. Unreasonable delays in allowing representatives of the City access to a facility is a violation of this ordinance.
 7. If a representative of the City has been refused access to any part of the premises from which stormwater is discharged, and the representative of the City is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, environment and welfare of the community, then the representative of the City may seek issuance of a search warrant from any court of competent jurisdiction.
- G. *Notification of Accidental Discharges and Spills.* Notwithstanding other requirements of law, as soon as any person responsible for a facility, activity or operation, or responsible for emergency response for a facility, activity or operation has information of any known or suspected release of pollutants or non-stormwater discharges from that facility or operation which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the City's separate storm sewer system, State Waters, or Waters of the U.S., said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release so as to minimize the effects of the discharge.

Said person shall notify the Engineering/Public Works Department by phone, facsimile, or in person within 24 hours of the nature, quantity and time of occurrence of the discharge. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Engineering/Public Works Department within three business days of the phone or in person notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years. Said person shall also take immediate steps to ensure no recurrence of the discharge or spill.

In the event of such a release of hazardous materials, emergency response agencies and/or other appropriate agencies shall be immediately notified.

Failure to provide notification of a release as provided above is a violation of this ordinance.

3.3.10 Variances from requirements.

- A. The City Engineer may grant a variance in accordance with Section 5.2 if exceptional circumstances applicable to a site exist such that strict adherence to the provisions of this Ordinance will result in unnecessary hardship and will not fulfill the intent of the Ordinance.
- B. In order to have a variance considered, the applicant shall submit a written request to the City Engineer identifying the specific variance sought and the reasons that the variance should be granted. The written request shall include supporting data and all other information necessary to evaluate the proposed variance.
- C. The City Engineer will conduct a review of the request for a variance within fifteen (15) working days of receiving the request.

3.3.11 Conservation subdivision.

A. Purposes.

1. To provide for the preservation of greenspace as a nonstructural stormwater runoff and watershed protection measure.
2. To provide a residential zoning district that permits flexibility of design in order to promote environmentally sensitive and efficient uses of the land.
3. To preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat.
4. To permit clustering of houses and structures on less environmentally sensitive soils which will reduce the amount of infrastructure, including paved surfaces and utility easements, necessary for residential development.
5. To reduce erosion and sedimentation by minimizing land disturbance and removal of vegetation in residential development.
6. To promote interconnected greenways and corridors throughout the community.
7. To promote contiguous greenspace with adjacent jurisdictions.
8. To encourage interaction in the community by clustering houses and orienting them closer to the street, providing public gathering places and encouraging use of parks and community facilities as focal points in the neighborhood.
9. To encourage street designs that reduce traffic speeds and reliance on main arteries.
10. To promote construction of convenient landscaped walking trails and bike paths both within the subdivision and connected to neighboring communities, businesses, and facilities to reduce reliance on automobiles.
11. To conserve scenic views and reduce perceived density by maximizing the number of houses with direct access to and views of open space.
12. To preserve important historic and archaeological sites.
13. No variances shall be granted to conservation subdivisions.

B. General Regulations.

1. *Applicability of Regulations.* This Conservation Subdivision option is available in the Residential Estate (RE) zoning district as a use by right. Applicant shall comply with all other provisions of the zoning code and all other applicable laws, except those that are incompatible with the provisions contained herein.
2. *Ownership of Development Site.* The tract of land to be subdivided may be held in single and separate ownership or in multiple ownership. If held in multiple ownership, however, the site shall be developed according to a single plan with common authority and common responsibility.
3. *Housing Density Determination.* The maximum number of lots in the Conservation Subdivision shall be determined by either of the following two methods, at the discretion of the City:
 - a. *Calculation:* The maximum number of lots is determined by dividing the area of the tract of land by the minimum lot size specified in the underlying zoning. In making this calculation, the following shall not be included in the total area of the parcel:
 - (1) Slopes over 25 percent of at least 5,000 square feet contiguous area;
 - (2) The 100-year floodplain;
 - (3) Bodies of open water over 5,000 square feet contiguous area;

- (4) Wetlands that meet the definition of the Army Corps of Engineers pursuant to the Clean Water Act;
- (5) Anticipated right-of-way needs for roads and utilities; or,
- (6) Required stream buffers.

C. *Application Requirements.*

1. *Site Analysis Map Required.* Concurrent with the submission of a preliminary plat, Applicant shall prepare and submit a site analysis map. The purpose of the site analysis map is to ensure that the important site features have been adequately identified prior to the creation of the site design, and that the proposed Open Space will meet the requirements of this article. The preliminary plat shall include the following features, in addition to the other requirements of this document.
 - a. Property boundaries;
 - b. All streams, rivers, lakes, wetlands and other hydrologic features;
 - c. Topographic contours of no less than 10-foot intervals;
 - d. All Primary and Secondary Conservation Areas labeled by type, as described in Section 4 of this Article;
 - e. General vegetation characteristics;
 - f. General soil types;
 - g. The planned location of protected Open Space;
 - h. Existing roads and structures; and,
 - i. Potential connections with existing greenspace and trails.
2. *Open Space Management Plan Required.* An open space management plan, as described in Section 4, shall be prepared and submitted prior to the approval of the preliminary plat.
3. *Instrument of Permanent Protection Required.* An instrument of permanent protection, such as a conservation easement or permanent restrictive covenant and as described in Subsection D below, shall be placed on the Open Space concurrent with the issuance of a land disturbance permit.
4. *Other Requirements.* The Applicant shall adhere to all other applicable requirements of the underlying zoning and the Unified Development Code.

D. *Open Space.*

1. *Definition.* Open Space is the portion of the conservation subdivision that has been set aside for permanent protection. Activities within the Open Space are restricted in perpetuity through the use of an approved legal instrument.
2. *Standards to Determine Open Space.*
 - a. The minimum restricted Open Space shall comprise at least 40% of the gross tract area.
 - b. The following are considered Primary Conservation Areas and are required to be included within the Open Space, unless the Applicant demonstrates that this provision would constitute an unusual hardship and be counter to the purposes of this article:
 - (1) The regulatory 100-year floodplain;
 - (2) Buffer zones of at least 75 ft. width along all perennial and intermittent streams;
 - (3) Slopes above 25 percent of at least 5,000 square feet contiguous area;
 - (4) Wetlands that meet the definition used by the Army Corps of Engineers pursuant to the Clean Water Act;

- (5) Populations of endangered or threatened species, or habitat for such species; and,
 - (6) Archaeological sites, cemeteries and burial grounds.
- c. The following are considered Secondary Conservation Areas and should be included within the Open Space to the maximum extent feasible:
- (1) Important historic sites;
 - (2) Existing healthy, native forests of at least one acre contiguous area;
 - (3) Individual existing healthy trees greater than 8 inches caliper, as measured from their outermost drip line;
 - (4) Other significant natural features and scenic viewsheds such as ridge lines, peaks and rock outcroppings, particularly those that can be seen from public roads;
 - (5) Prime agricultural lands of at least five acres contiguous area; and,
 - (6) Existing trails that connect the tract to neighboring areas.
- d. Above-ground utility rights-of-way and small areas of impervious surface may be included within the protected Open Space but cannot be counted towards the 40 percent minimum area requirement (exception: historic structures and existing trails may be counted). Large areas of impervious surface shall be excluded from the Open Space.
- e. At least 75 percent of the Open Space shall be in a contiguous tract. The Open Space should adjoin any neighboring areas of Open Space, other protected areas, and non-protected natural areas that would be candidates for inclusion as part of a future area of protected Open Space.
- f. The Open Space shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjoining lots shall be provided with safe, convenient access to the Open Space.
3. *Permitted Uses of Open Space.* Uses of Open Space may include the following:
- a. Conservation of natural, archeological or historical resources;
 - b. Meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented areas;
 - c. Walking or bicycle trails, provided they are constructed of porous paving materials;
 - d. Passive recreation areas;
 - e. Active recreation areas, provided that they are limited to no more than 10 percent of the total Open Space, are not located within Primary Conservation Areas, and do not require significant tree removal. Active recreation areas may include impervious surfaces. Active recreation areas in excess of this limit must be located outside of the protected Open Space;
 - f. Agriculture, horticulture, silviculture or pasture uses, provided that all applicable best management practices are used to minimize environmental impacts, such activities are not conducted within Primary Conservation Areas, and such activities are in compliance with this ordinance;
 - g. Nonstructural stormwater management practices, provided that they are limited to no more than 10 percent of the total Open Space, are not located within Primary Conservation Areas, and do not require significant tree removal;
 - h. Easements for drainage, access, and underground utility lines, provided that they are limited to no more than 10 percent of the total Open Space, are not located within Primary Conservation Areas, and do not require significant tree removal; or
 - i. Other conservation-oriented uses compatible with the purposes of this ordinance.

4. *Prohibited uses of Open Space.*
 - a. Golf courses;
 - b. Roads, parking lots and impervious surfaces, except as specifically authorized in the previous sections;
 - c. Agricultural and forestry activities not conducted according to accepted Best Management Practices; and,
 - d. Other activities as determined by the Applicant and recorded on the legal instrument providing for permanent protection.
5. *Ownership and Management of Open Space.*
 - a. Ownership of Open Space. The applicant must identify the owner of the Open Space who is responsible for maintaining the Open Space and facilities located thereon. If a Homeowners Association is the owner, membership in the association shall be mandatory and automatic for all homeowners of the subdivision and their successors. If a Homeowners Association is the owner, the Homeowners' Association shall have lien authority to ensure the collection of dues from all members. The responsibility for maintaining the Open Space and any facilities located thereon shall be borne by the owner.
 - b. Management Plan. Applicant shall submit a Plan for Management of Open Space and Common Facilities ("Plan") that:
 - (1) Allocates responsibility and guidelines for the maintenance and operation of the Open Space and any facilities located thereon, including provisions for ongoing maintenance and for long-term capital improvements;
 - (2) Estimates the costs and staffing requirements needed for maintenance and operation of, and insurance for, the Open Space and outlines the means by which such funding will be obtained or provided;
 - (3) Provides that any changes to the Plan be approved by the Board of Commissioners; and,
 - (4) Provides for enforcement of the Plan.
 - c. In the event the party responsible for maintenance of the Open Space fails to maintain all or any portion in reasonable order and condition, the City may assume responsibility for its maintenance and may enter the premises and take corrective action, including the provision of extended maintenance. The costs of such maintenance may be charged to the owner, Homeowner's Association, or to the individual property owners that make up the Homeowner's Association, and may include administrative costs and penalties. Such costs shall become a lien on all subdivision properties.
6. *Legal Instrument for Permanent Protection.*
 - a. The Open Space shall be protected in perpetuity by a binding legal instrument that is recorded with the deed. The instrument shall be one of the following:
 - (1) A permanent conservation easement in favor of either:
 - (i) A land trust or similar conservation-oriented non-profit organization with legal authority to accept such easements. The organization shall be bona fide and in perpetual existence and the conveyance instruments shall contain an appropriate provision for retransfer in the event the organization becomes unable to carry out its functions; or
 - (ii) A governmental entity with an interest in pursuing goals compatible with the purposes of this ordinance.

If the entity accepting the easement is not the City, then a third right of enforcement favoring the City shall be included in the easement;

- (2) A permanent restrictive covenant for conservation purposes in favor of a governmental entity; or,
 - (3) An equivalent legal tool that provides permanent protection, if approved by the City.
- b. The instrument for permanent protection shall include clear restrictions on the use of the Open Space. These restrictions shall include all restrictions contained in this article, as well as any further restrictions the Applicant chooses to place on the use of the Open Space.

3.3.12 Water supply watershed protection.

A. Definitions.

Buffer. A natural or enhanced vegetated area with no or limited minor land disturbances, such as trails and picnic areas, located adjacent to reservoirs or perennial streams within a water supply watershed.

Corridor. All land within the buffer areas established adjacent to reservoirs or perennial streams within a water supply watershed and within other setback areas specified in Section IV of this ordinance.

Impervious Surface. A man-made structure or surface that prevents the infiltration of storm water into the ground below the structure or surface. Examples are buildings, roads, driveways, parking lots, decks, swimming pools, or patios.

Perennial Stream. A stream that flows throughout the whole year as indicated on a USGS Quad map.

Small Water Supply Watershed. A watershed that contains less than 100 square miles of land within the drainage basin upstream of a governmentally owned public drinking water supply intake.

Utility. Public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, stormwater systems and railroads or other utilities identified by a local government.

Water Supply Watershed. The area of land upstream of a governmentally owned public drinking water intake.

B. *Establishment of a Water Supply Watershed District.* The Roswell Water Supply Watershed District is hereby designated and shall comprise the land that drains to City of Roswell water intake at Big Creek. The boundary of this overlay is defined by the ridgeline of the watershed and the boundary of a radius of seven (7) miles upstream of the Roswell Water Supply Intake. This overlay is delineated and defined on the Water Supply Watershed Protection District Map of The City of Alpharetta, hereafter referred to as The Map. The Map is hereby incorporated into and made a part of this ordinance by reference.

The Roswell Intake is within a small water supply watershed. An intake for the City of Roswell Georgia is located on Big Creek. This Water Supply Watershed does not contain a reservoir.

C. *Protection Criteria.* The following regulations shall apply to the Roswell Water Supply Watershed within the City of Alpharetta as identified on the Map. Stream buffer requirements are also established as part of the City of Alpharetta Soil Erosion and Sedimentation Control Ordinance and the Stormwater Owner Ordinance. In areas of conflict, the stricter Ordinance will prevail.

1. The corridors of all perennial streams within a seven mile radius upstream of the Roswell water supply intake must be protected by the following criteria:
 - a. A buffer shall be maintained for a distance of 100-feet on both sides of the stream as measured from the stream banks.
 - b. No impervious surface shall be constructed within a 150-foot setback area on both sides of the stream as measured from the stream banks. Septic tanks and septic tank drain fields are prohibited in the 150-foot setback area.

2. The corridors of all perennial streams outside a seven-mile radius upstream of the Roswell water supply intake must be protected by the following criteria:
 - a. A buffer shall be maintained for a distance of 50-feet on both sides of the stream as measured from the stream banks.
 - b. No impervious surface shall be constructed within a 75-foot setback area on both sides of the stream as measured from the stream banks. Septic tanks and septic tank drain fields are prohibited in the 75-foot setback area.
 3. The impervious surface area of facilities, including all public and private structures and utilities, within the water supply watershed shall be limited to 25% of the total area within the development, or the existing use, whichever is greater. The total amount of impervious area may exceed the 25% impervious limit if the following conditions are met and approved by the City Engineer.
 - a. The impervious surface area of facilities, including all public and private structures and utilities, within the water supply watershed shall be limited to 25% of the total area within the development, or the existing use, whichever is greater. All impervious surfaces must be included in the determination of the total impervious surface density of the City.
 - b. If the pending Big Creek Watershed Study recommendations are formally adopted by all of the local governments within the watershed, then the following approach may be considered: the total amount of impervious area may exceed the 25% impervious limit if the following conditions are met and approved by the City Engineer. The total directly connected impervious surface area within the development shall not exceed 25%. Impervious can be considered disconnected from the drainage system if the runoff from the impervious surface flows over a minimum of 25 feet of pervious surface or if the runoff from 1.2 inches of rainfall is treated by the following water quality best management practices:
 - (1) Wet ponds (extended detention for less than 20 acres)—ED-micro pool.
 - (2) Wetlands—constructed.
 - (3) Infiltration Trenches.
 - (4) Dry Swales.
 - (5) Sand Filters.
 - (6) Bio-retention.
 - (7) Vegetated filtration Systems.
 - (8) Any other best management practice approved by the city Engineer.
 4.
 - a. New facilities which handle hazardous materials of the types listed in Section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) and amounts of 10,000 pounds or more on any one day, shall perform their operations on impervious surfaces and in conformance with any applicable federal spill prevention requirements or the requirements of the Standard Fire Prevention Code.
 - b. New sanitary landfills are allowed only if they have synthetic liners and leachate collection systems.
 - c. New hazardous waste treatment or disposal facilities are prohibited.
- D. *Exemptions.* The following uses shall be exempted:
1. Land uses existing prior to the adoption of this ordinance.
 2. Mining activities permitted by the Department of Natural Resources under the Surface Mining Act.
 3. Utilities from the stream corridor buffer and setback area provisions in accordance with the following conditions if the utilities to be located in the buffer or setback areas cannot feasibly be located outside these areas:

- a. The utilities shall be located as far from the stream bank as reasonably possible.
 - b. The installation and maintenance of the utilities shall be such to protect the integrity of the buffer and setback areas as best as reasonably possible.
 - c. The utilities shall not impair the quality of the drinking water stream.
4. Specific forestry and agricultural activities in the stream corridor buffer and setback areas in accordance with the following conditions:
- a. The activity shall be consistent with best management practices established by the Georgia Forestry Commission or the Georgia Department of Agriculture.
 - b. The activity shall not impair the quality of the drinking water stream.
- E. *Administration.* Administration, enforcement, review and permitting shall be as per Section 4.4 of this Code.

All development activities or site work conducted after approval of the site plan shall conform to the specifications of said site plan. Changes to the approved plans must be approved by the Director.

The following activities and developments are exempt from the requirement for detailed site plans:

- 1. Detached 'For-Sale' dwellings constructed within a subdivision of fewer than five parcels.
 - 2. Repairs to a facility that is part of a previously approved and permitted development.
 - 3. Construction of minor structures, such as sheds or additions to residences.
 - 4. Commercial development of under 800 square feet within the Central Business District.
- F. *Suspension, Revocation.* The Director may suspend or revoke a permit if she finds that the applicant has not complied with the conditions or limitations set forth in the permit or has exceeded the scope of the work set forth in the permit.

3.3.13 Groundwater recharge areas.

A. Definitions.

Aquifer. Any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well.

Drastic. The standardized system for evaluating groundwater pollution potential using the hydro geologic settings described in U.S. Environmental Protection Agency document EPA-600-2-87-035.

Pollution Susceptibility. The relative vulnerability of an aquifer to being polluted from spills, discharges, leaks, impoundments, application of chemicals and other human activities in the recharge area.

Pollution Susceptibility Map. The relative vulnerability to pollution prepared by the Department of Natural Resources, using the DRASTIC methodology. (Georgia Department of Natural Resources Hydrologic Atlas 20: Groundwater Pollution Susceptibility Map of Georgia)

Recharge Area. Any portion of the earth's surface, where water infiltrates into the ground to replenish an aquifer.

Significant Recharge Areas. Those areas mapped by the Georgia Department of Natural Resources in Hydrologic Atlas 18 (1989 edition).

Establishment of the Groundwater Recharge Area Protection District. The Groundwater Recharge Area District is hereby established which shall correspond to all lands within the jurisdiction of the City of Alpharetta, Georgia that are mapped as significant recharge areas by the Georgia Department of Natural Resources in Hydrologic Atlas 18, 1989 edition. Said map is hereby adopted and made a part of this ordinance.

Determination of Pollution Susceptibility. Each recharge area shall be determined to have a pollution susceptibility of high, medium, or low based on the Georgia Pollution Susceptibility Map, Hydrologic Atlas 20, 1992 edition. Said map is hereby adopted and made a part of this ordinance.

B. Protection Criteria.

1. No construction may proceed on a building to be served by a septic tank unless the Fulton County Health Department approves the proposed septic tank installations as meeting the requirements of the Georgia Department of Human Resource for On-Site Sewage Management (hereinafter DHR Manual), and Sections B. and C. below.
2. New homes served by a septic tank/drain field system shall be on lots having minimum size limitations as follows, based on application of Table MT-1 of the DHR Manual (hereinafter DHR Table MT-1). The minimums set forth in Table MT-1 may be increased further based on consideration of other factors (set forth in Sections A—F) of the DHR Manual.
 - a. 150% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a high pollution susceptibility area;
 - b. 125% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a medium pollution susceptibility area;
 - c. 110% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a low pollution susceptibility area.
3. New agricultural waste impoundment sites shall be lined if they are within a high pollution susceptibility area; a medium pollution susceptibility area and exceed 15 acres; or a low pollution susceptibility area and exceed 50 acres. As a minimum, the liner shall be constructed of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than 5×10^{-7} cm/sec or other criteria established by the Natural Resource and Conservation Service.
4. New above-ground chemical or petroleum storage tanks, having a minimum volume of 660 gallons, shall have secondary containment for 110% of the volume of such tanks or 110% of the volume of the largest tank in a cluster of tanks. Such tanks used for agricultural purposes are exempt, provided they comply with all federal requirements.
5. New facilities that handle hazardous materials of the types listed in section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) and in amounts of 10,000 pounds or more on any one day shall perform their operations on impervious surfaces and in conformance with any applicable federal spill prevention requirements and local fire code requirements.
6. Permanent storm water infiltration basins shall not be constructed in areas having high pollution susceptibility.

C. Exemptions.

1. Any lot of record approved prior to the adoption of this ordinance is exempt from the minimum lot size requirements contained in [Article IV] Sections IV.B. and C. of this ordinance.

D. Administration, plan review and permitting procedures are provided for in Section 4.4 of this Code.

1. The following activities and developments are exempt from the requirement for detailed site plans:
 - a. Detached 'For-Sale' dwellings constructed within a subdivision of fewer than five parcels.
 - b. Repairs to a facility that is part of a previously approved and permitted development.
 - c. Construction of minor structures, such as sheds or additions to residences.

3.3.14 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.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. Any person who has violated or continues to violate the provisions of this ordinance, may be subject to the enforcement actions outlined in this Section or may be restrained by injunction or otherwise abated in a manner provided by law. The imposition of any of the penalties described below shall not prevent such equitable relief.

In the event the violation constitutes an immediate danger to public health or public safety, representatives of the City are authorized to enter upon the subject private property, without giving prior notice, to take any and all measures necessary to abate the violation and/or restore the property. The City is authorized to seek costs of the abatement as outlined in this Section.

A. *Notice of Violation.* If the Engineering/Public Works 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 therefor, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

1. The notice of violation shall contain:

- a. The name and address of the owner or the applicant or the responsible person;
- b. The address or other description of the site upon which the violation is occurring;
- c. A statement specifying the nature of the violation;
- d. 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 [the City Engineer shall provide a reasonable opportunity, of not less than ten 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 the violation];
- e. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed and the City's intended action; and
- f. A statement that the determination of violation may be appealed to the City of Alpharetta by filing a written notice of appeal within fifteen (15) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours' notice shall be sufficient).

2. Such notice may require without limitation:

- a. The performance of monitoring, analyses, and reporting;
- b. The elimination of illicit discharges and illegal connections;
- c. That violating discharges, practices, or operations shall cease and desist;
- d. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- e. Payment of costs to cover administrative and abatement costs; and,
- f. The implementation of pollution prevention practices.

B. *Appeal of Notice of Violation.* Any person receiving a Notice of Violation may appeal the determination of the City Engineer in accordance with Section 4.5 Appeals.

C. *Enforcement Measures After Appeal.* If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within ten (10) days

of the decision of the appropriate authority upholding the decision of the City Engineer, then representatives of the City may enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

- D. *Costs of Abatement of the Violation.* Within thirty (30) days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the assessment or to the amount of the assessment within fifteen (15) days of such notice. If the amount due is not paid within thirty (30) days after receipt of the notice, or if an appeal is taken, within thirty (30) days after a decision on said appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this article shall become liable to the City by reason of such violation.

- E. *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.

1. **Stop Work Order**—The City Engineer may issue a stop work order which 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 City Engineer may refuse to approve 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 City Engineer 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 City Engineer may deem necessary] to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
4. **Penalties.**
 - a. Each violation of this Ordinance is subject to a penalty not to exceed two thousand dollars (\$2,000.00) or thirty (30) days in the City's jail.
 - (1) The City may institute appropriate actions or proceedings at law or equity for the enforcement of this Ordinance;
 - (2) Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, or other appropriate forms of remedy or relief;
 - (3) Each day of noncompliance is considered a separate offense; and
 - (4) Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation, including application for injunctive relief.
 - b. Any person who undertakes any development activity requiring a stormwater management plan hereunder without first submitting the plan for review and approval

shall pay to the City, in addition to any permit or inspection fee, an administrative fee of five thousand dollars (\$5,000.00).

- c. The determination by the City Engineer that a violation of this Ordinance has occurred shall be conclusive and final unless the accused violator submits a written request for a hearing within seven (7) days of the violation notice being served.
- F. *Violations Deemed a Public Nuisance.* In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this ordinance is a threat to public health, safety, welfare, and environment and is declared and deemed a nuisance, and may be abated by injunctive or other equitable relief as provided by law.
- G. *Remedies Not Exclusive.* The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable Federal, State or local law and the City of Alpharetta may seek cumulative remedies.

The City may recover attorney's fees, court costs, and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.