Chapter 14: Land Development and Environmental Protection

Article 1: In General

Section 1: Definitions

For the purposes of this Chapter, certain terms and words are hereby defined. Where words are not herein defined, but are defined in another applicable Chapter, Article or Section, those words shall have the meaning as defined therein. The following words, terms and phrases, when used in this Chapter, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning:

Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected to a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls is new construction.

Aggrieved person(s) means a person(s) whose property is the subject of the action appealed from or a person who has a substantial interest in the action appealed from that is in danger of suffering special damage or injury not common to all property owners similarly situated.

Agricultural operations means those practices involving the establishment, cultivation, or harvesting of products of the field or orchard, the preparation and planting of pasture land, farm ponds, dairy operations, livestock and poultry management practices and the construction of farm buildings.

Alley means a minor way, which is used primarily for vehicular service access to the back or side of properties otherwise fronting on a street.

Appeal means a review authorized by this Chapter of any final order, requirement, or decision of the Director of Community Development or the City Manager based on or made in the enforcement of this Chapter, excluding Article 2, Section 12 of this Chapter.

Applicant means any person who acts in the person's own behalf or as the agent of an owner of property and engages in alteration of land or vegetation in preparation for construction activity.

As-built drawings means amended site plans specifying the location, dimensions, elevations, capacities and operational capabilities of public improvements, including water, sewer, road and drainage structures and stormwater management facilities as they have been constructed.

Bank (stream bank) means as measured horizontally from that point where vegetation has been wrested by normal stream flow or wave action.

Basement means a space having one-half (1/2) or more of its floor-to-ceiling height below the average level of adjoining ground and with a floor-to-ceiling height of not less than six and one-half (6 1/2) feet.

Best management practices (BMP's) means a collection of structural practices and vegetative measures which, when properly designed, installed and maintained, will provide effective erosion and sedimentation control. The term "properly designed" means designed in accordance with the hydraulic design specifications contained in the Manual for Erosion and Sediment Control in Georgia specified in O.C.G.A. § 12-7-6(b).

Bicycle lane means that part of a street or highway adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles.

Block means a piece or parcel of land entirely surrounded by public highways or streets, other than alleys. In cases where the platting is incomplete or disconnected, the Director of Community Development may delineate the outline of the block.

BNR means the Board of Natural Resources.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting system.

Buffer area means that portion of a lot set aside for open space and/or visual screening purposes, pursuant to the applicable provisions of the City of Dunwoody Code and all conditions of zoning, to separate different use districts, or to separate uses on one (1) property from uses on another property of the same use district or a different use district.

Buffer, stream means the portion of a lot and/or area of land immediately adjacent to the banks of streams as regulated by the land development regulations of the City of Dunwoody Code.

Buffer zone, state means the area of land immediately adjacent to the banks of State waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

Buildable area means the area of a lot remaining after all setback requirements, including buffer areas, have been met.

Builder means a person who constructs a structure or dwelling for residential occupancy by humans.

Building means any structure having a roof supported by columns or walls and intended for the shelter, housing, or enclosure of any individual, animal, process, equipment, goods, or materials of any kind.

Building permit means required written permission issued by the Director of Community Development, his designee, or a Building Inspector as defined in Chapter 8 of the City of Dunwoody Code, for the construction, repair, alteration, or addition to a structure.

Building setback line. Building setback line means the minimum horizontal distance required between the public right-of-way or the utility easement abutting a private street and the principal building or structure on a lot or any projection thereof except projections that are authorized exceptions to building set back line requirements in the Dunwoody Zoning Ordinance and any zoning conditions approved by the City Council pursuant thereto. The size of the utility easement(s) for a private street shall be equal to the required size of the public right of way and shall not be any smaller in width or length than what would be required for a public right of way.

Caliper means the diameter of a tree trunk, applied only to new or replacement plantings, that is taken six (6) inches above the ground for up to and including four-inch caliper size, and twelve (12) inches above the ground for larger sizes.

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

Channel protection means the protection of stream channels, in accord with the Georgia Stormwater Management Manual, from bank and bed erosion and degradation by preserving or restoring the applicable stream buffer, by providing extended detention, and by integrating erosion prevention measures such as energy dissipation and velocity control.

City means the City of Dunwoody, Georgia, an incorporated municipality of the State of Georgia. When appropriate to the context, the term "City" also includes authorized officers, employees and agents thereof.

City arborist means the City official having the primary responsibilities of administration and enforcement of the tree protection ordinance.

City Manager means the City Manager of the City of Dunwoody or designee.

City of Dunwoody Stormwater Management Manual means the Georgia Stormwater Management Manual.

City zoning ordinance or *zoning ordinance* means the zoning ordinance of the City of Dunwoody, Georgia.

Collector street means a street or road designated as a collector street in the City of Dunwoody Thoroughfare Plan.

Commission means the State of Georgia Soil and Water Conservation Commission.

Comprehensive plan means the City of Dunwoody Comprehensive Plan adopted by the City Council, as it may be amended from time to time, which divides the City into land use categories and which constitutes the official policy of the City regarding long term planning and use of land. If a Comprehensive Plan has not yet been adopted by the City Council, Comprehensive Plan shall mean the current Comprehensive Plan adopted by Dekalb County that covers the geographical boundaries of the City.

Conservation easement means a restriction or limitation on the use of real property which is expressly recited in any deed or other instrument of grant or conveyance executed by or on behalf of the owner of the land described therein and whose purpose is to preserve land or water areas predominantly in their natural scenic landscape or open condition or in an agricultural farming, forest or open space use and includes conservation easements authorized by State law.

Construction means any alteration of land for the purpose of achieving its development or changed use, including particularly any preparation for, building of or erection of a structure.

Construction waste means waste building materials and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures. Such waste includes, but is not limited to: asbestos-containing waste, wood, tree stumps, tree tops, bricks, metal, concrete, wall board, paper, cardboard, glass, wire, plastics, and other typical construction waste products and refuse.

Council or City Council means the Council for the City of Dunwoody, Georgia.

Critical root zone means an area of root space that is within a circle circumscribed around the trunk of a healthy tree using a radius of one (1) foot per inch DBH.

Crosswalk means a right-of-way within a block dedicated to public use, ten (10) feet or more in width, intended primarily for pedestrians and from which motor-propelled vehicles are excluded, and which is designed to improve or provide access to adjacent roads or lots.

Cut means a portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to excavated surface. Also known as "excavation."

DBH (Diameter at breast height) means the diameter of a tree trunk measured in inches at a height of four and one-half (4 1/2) feet above the ground. If a tree splits into multiple trunks below four and one-half (4 1/2) feet, then the trunk is measured at its most narrow point beneath the split.

DNR means the Department of Natural Resources of the State of Georgia.

Density factor means a unit of measurement used to prescribe the calculated required tree coverage on a site.

Department means the Department of Community Development.

Detention means the temporary storage of stormwater runoff in a stormwater management facility for the purpose of controlling the peak discharge of the stormwater, as that term is defined by state law, the City of Dunwoody Stormwater Management Manual or this Code.

Detention facility means a facility that provides for storage of stormwater runoff and controlled release of this runoff during and after a flood or storm.

Developer means any person who acts in the person's own behalf or as the agent of an owner of property and engages in alteration of land or vegetation in preparation for construction activity.

Development means all activities associated with the conversion of land or the expansion of replacement of an existing use to any new use intended for human operation, occupancy, or habitation, other than for agricultural purposes devoted strictly to the cultivation of land, dairying or animal husbandry. Such activities include, but are not limited to, land disturbance (clearing and grubbing the land of vegetation and stumps, and grading) and the construction of improvements such as, but not limited to, streets, driveways or parking area, water sewer mains, storm water drainage facilities, sidewalks or other structures permanently placed in or on the property. Where appropriate to the context, development also may be used to denote a specific subdivision or project which is a single entity or intended to be constructed as in interrelated whole, whether simultaneously or in phases.

Development permit means any permit that authorizes land disturbance for the use, construction thereon or alteration of any real property within the City of Dunwoody.

Director means the director of the Community Development Department.

Director, EPD means the director of the Environmental Protection Division of the Georgia Department of Natural Resources.

District means the DeKalb County Soil and Water Conservation District.

Drainage means the removal of surface or subsurface water from a given area, either by gravity or by pumping, commonly applied herein to surface water.

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

Drainage plan means a plan prepared using appropriate and commonly accepted engineering standards, which specifies the means for alteration or development of a drainage system.

Drainage structure means a device composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water from one (1) place to another by intercepting the flow and carrying it to a release point for stormwater management, drainage control, or flood control purposes.

Drainage system means the surface and subsurface system for the removal of water from the land, including, but not limited to, both the natural elements of streams, marshes, swales and ponds, whether of an intermittent or continuous nature, and the manmade element which includes culverts, ditches, channels, detention facilities that comprise the storm drainage system.

EPD means the Environmental Protection Division of the Georgia Department of Natural Resources.

Elevated building means a nonbasement building built to have the lowest floor elevated above ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), and/or shear walls.

Erosion means the process by which land surface is worn away by the action of wind, water, ice or gravity.

Erosion and sedimentation control plan means a plan for the control of soil erosion and sedimentation resulting from a land disturbing activity and that conforms to the requirements of the Manual for Soil Erosion and Sedimentation Control in Georgia.

Exceptional and historical trees means those trees or stands of trees which are exceptional representatives of their species in terms of size, age or unusual botanical quality, or are associated with historically notable events.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before June 6, 1974.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Extended detention means the detention of stormwater runoff for an extended period, typically twenty-four (24) hours or greater.

Extreme flood protection means measures taken to prevent adverse impacts from large low-frequency storm events with a return frequency of one hundred (100) years.

Fill means a portion of land surface to which properly compacted soils have been added: the depth above the original ground.

Finished grade means the final elevation and contour of the ground after cutting or filling and conforming to the proposed design.

Flood or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from the usual and rapid accumulation or runoff of surface waters from any source.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as zone A.

Flood hazard map means the official City map designating the elevation and boundaries of flooding and associated floodways under base flood conditions maintained by the City, based upon the flood insurance study for Dekalb County dated January 5, 1983 or any revision thereto, the United States Corps of Engineers or other reputable reports accepted by the Community Development Director or her designee, and based upon competent engineering studies prepared by a currently state-registered professional engineer, or the City.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

Floor means the top surface of an enclosed area in a building (including basement), i.e., the top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

Frontage, lot means the distance for which the front boundary line of the lot and the street line are coincident.

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Georgia Stormwater Management Manual is the manual adopted by the City Council that provides the criteria, technical design specifications and standards for the proper implementation of the requirements of this Chapter.

Grading means altering the shape of ground surfaces to a predetermined condition; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and shall include the land in its cut or filled condition.

Ground elevation means the original elevation of the ground surface prior to cutting or filling.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building.

Impervious surface means any surface that is highly resistant to infiltration by water, including but not limited to surfaces such as concrete or asphalt as well as most conventionally surfaced streets, roofs, sidewalks, driveways, parking lots, and other similar structures.

Infiltration means the process of percolating stormwater runoff into the soil.

Inspection and maintenance agreement means a written agreement executed by an owner in a form approved by the director that will provide 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.

Intermediate regional flood (IRF) means a one-hundred-year frequency flood as defined on the flood hazard map which has a probability of occurring once every one hundred (100) years or having a one (1) percent chance of being equaled or exceeded in any given year. Also known as the base flood, or one hundred-year flood.

Intermediate regional floodplain means the land area within the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year as defined on the flood hazard map. Also known as area of special flood hazard, or one hundred-year floodplain.

Land-disturbing activity means any activity which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the State, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land, but not including agricultural practices as described in Article 2, Section 11(b)(3) of this Chapter.

Larger common plan of development or sale means a contiguous area where multiple separate and distinct construction activities are occurring under one (1) plan of development or sale. For the purposes of this paragraph, "plan" means an announcement, piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application,

zoning request, or computer design, or physical demarcation such as boundary signs, lot stakes, or surveyor markings indicating that construction activities may occur on a specific plot.

Live detention means that quantity of water capable of being effectively contained by a designated facility for stormwater storage for a specified period of time.

Local issuing authority means the governing authority of the City of Dunwoody.

Local street means a street used primarily for access to abutting properties in residential, industrial or other developments.

Lot means a designated parcel, tract, or area of land legally established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed, or built upon.

Lot, corner means a lot abutting upon two (2) or more streets at their intersection or upon two (2) parts of the same street forming an interior angle of less than one hundred thirty-five (135) degrees.

Lot, double-frontage means a lot that abuts two (2) parallel streets or that abuts two (2) streets that do not intersect at the boundaries of the lot. A double-frontage lot may also be referred to as a through lot.

Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of 44 CFR 60.3.

Maintenance of detention facility means preserving the enclosed walls or impounding embankments of the detention facility in good condition; ensuring structural soundness, functional adequacy and freedom from excessive sediment; removing obstructions affecting operation of outlet device(s) and rectifying any unforeseen erosion problems.

Major thoroughfare/major arterial means a street, road or highway shown as a major thoroughfare in the City of Dunwoody Transportation and Thoroughfare Plan, or if one has not been adopted, the most current Dekalb County Transportation and Thoroughfare Plan.

Manufactured home means a new or used structure, transportable in one (1) or more sections, which, in the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length or, when erected on site, is three hundred twenty (320) or more square feet and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities and includes the plumbing, heating, air-conditioning, and electrical systems contained therein; except that such term shall include any structure which meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required

by the secretary of housing and urban development and complies with the standards established under the National Manufactured Housing Construction and Safety Standards Act of 1974, 42 U.S.C. section 5401 et seq.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this Chapter, the term is synonymous with national geodetic vertical datum (NGVD).

Metropolitan River Protection Act (MRPA) means a state law found at O.C.G.A. § 12-5-440 et seq., which addresses environmental and developmental matters in certain metropolitan river corridors and their drainage basins.

Minor thoroughfare/minor arterial means a street, road or highway shown as a minor thoroughfare in the City of Dunwoody Transportation and Thoroughfare Plan, or if one has not yet been adopted by the City, the most current Dekalb County Transportation and Thoroughfare Plan.

Multi-phase residential development means any development undertaken by a single developer or a group of developers acting in concert, to develop lots for sale in a residential subdivision where such land is developed pursuant to multiple preliminary or final plats and such land is contiguous or is known, designated, or advertised as a common unit or by a common name.

Multi-use trail means a recreation corridor intended for the use of non-motorized forms of transportation such as, but not limited to, walking, running, bicycles, in-line skates, as identified in a master plan for multi-use trails in the City of Dunwoody approved by the City Council or, if one has not been approved by the City, the current DeKalb County master plan for multi-use trails.

National geodetic vertical datum (NGVD), as corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the floodplain.

North American Vertical Datum (NAVD), as corrected in 1988, is a vertical datum used as a reference for establishing varying elevations within the floodplain on flood maps created pursuant to the Georgia Flood Map Modernization Program.

Natural ground surface means the ground surface in its original state before any grading excavation or filling.

Nephelometric turbidity units (NTU's) means numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloidally dispersed chapters are present.

New construction means any structure for which the permitted date of construction commenced after adoption of this Chapter.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after June 6, 1974.

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

Nonstructural stormwater management practice or *nonstructural practice* means any natural or planted vegetation or other nonstructural component and practice 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 green space areas, overland flow filtration areas, vegetated channels and natural depressions.

Off-site facility means a stormwater management facility located outside the boundaries of the site.

One hundred-year floodplain means land in the floodplain subject to a one (1) percent or greater statistical occurrence probability of flooding in any given year.

On-site facility means a stormwater management facility located within the boundaries of the site.

Open space means that portion of a lot, including yards, established pursuant to the requirements of this Chapter as open space, which is open and unobstructed from ground level to the sky, with the exception of natural foliage or accessory recreational facilities or walkways, which is accessible to all persons occupying a building on the lot and is not a part of the roof of any portion of any building.

Operator means the party or parties that have: (a) operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or (b) day-to-day operational control of those activities that are necessary to ensure compliance with a storm-water pollution prevention plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the storm-water pollution prevention plan or to comply with other permit conditions.

Overbank flood protection means measures taken to prevent an increase in the frequency and magnitude of out-of-bank flooding (i.e. flow events that exceed the capacity of the channel

and enter the floodplain), and that are intended to protect downstream properties from flooding for the two-year through twenty-five-year frequency storm events.

Owner means the person in whom is vested the fee ownership, dominion or title of property, the proprietor; this term may also include a tenant, if chargeable under the lease for maintenance of the property, and any agent of the owner or tenant including a developer.

Permit means the authorization necessary to conduct a land-disturbing activity under the provisions of this ordinance.

Person means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision of this State, any interstate body or any other legal entity.

Planning commission means the planning commission of the City of Dunwoody.

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

Potential purchaser as used in this Chapter means a person purchasing property in a residential subdivision or a multi-phase residential development from a developer and/or builder for occupancy as a residence or as a residence to be rented or leased to others.

Pre-development refers to the wooded conditions of a site.

Project means the entire proposed development project regardless of the size of the area of land to be disturbed.

Protected zone means all areas of a parcel required to remain in open space, including all areas required as yard areas, buffer areas, stream buffers, state buffer zones or landscaped areas according to provisions of the City of Dunwoody Zoning Ordinance or by conditions of zoning or variance approval.

Public facilities shall mean the roads, water, sewer, schools, traffic control devices, and electrical service.

Public works director means the director of the Public Works Department or designee.

Qualified personnel means any person who meets or exceeds the education and training requirements of O.C.G.A. § 12-7-19.

Reach means a longitudinal segment of a stream or river measured along specified points on the stream or river.

Reasonable access means a fifteen-foot access easement from the public right-of-way to the stormwater management facility and a drainage and maintenance easement encompassing the stormwater management facility and extending ten feet outside the pond's 100-year water ponding elevation.

Recreation areas means those portions of open space designed and intended for active recreational use, such as sports fields and other play areas.

Recreational vehicle means a vehicle that is:

(1) Built on a single chassis;

(2) Four hundred (400) square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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

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

Residential shall have the same meaning as given in the City of Dunwoody Zoning Ordinance except that it shall not include apartments.

Roadway drainage structure means a device such as a bridge, culvert, or ditch, composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water under a roadway by intercepting the flow on one (1) side of a traveled way consisting of one (1) or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

Rock outcropping means a single, contiguous piece of exposed rock that has a horizontal surface area equal to or greater than two hundred (200) square feet.

Runoff means the portion of precipitation on the land that reaches the drainage system.

Runoff coefficient means the ratio of runoff to rainfall.

Sediment means solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, ice or gravity as a product of erosion.

Sedimentation means the process by which eroded material is transported and deposited by the action of water, wind, ice or gravity.

Sedimentation facility means a detention facility specifically developed for the purpose of allowing the deposit of sediment resulting from the land development process which may be constructed as part of or separately from a detention facility.

Sediment basin means a detention facility specifically developed for the purpose of allowing the deposit of sediment resulting from the land development process that may be constructed as part of or separately from a detention facility.

Seller as used in this Chapter means a builder or developer.

Significant tree means any existing, healthy, living tree eight (8) inches DBH or greater in size.

Site plan means that plan required to acquire a development, construction or building permit which shows the means by which the applicant will conform with applicable provisions of this Chapter and other applicable ordinances.

Soil and water conservation approved plan means an erosion and sedimentation control plan approved by the City Council or, if one has not yet been approved by the City Council, the most current one approved by the Dekalb County Soil and Water Conservation District.

Specimen tree means any tree that has been determined to meet the criteria within Article 2, Section 12 of this Chapter for the determination of specimen trees.

SS&WCC means the State Soil and Water Conservation Commission.

Stabilization means the process of establishing an enduring soil cover of vegetation by the installation of temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or

walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

State means the State of Georgia.

State general permit means the national pollution discharge elimination system general permit or permits for storm-water runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq. and O.C.G.A. § 12-5-30(f).

State waters means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation except as defined in O.C.G.A. § 12-7-17.

Stormwater better site design means nonstructural site design approach and technique 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 hotspot means 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. Examples of stormwater hotspots include, but are not limited to the following: gas/fueling stations, vehicle maintenance areas, vehicle washing/steam cleaning facilities, auto recycling facilities, outdoor material storage areas, loading and transfer areas, landfills, construction sites, industrial sites, and industrial rooftops.

Stormwater management facility means those structures and facilities that are designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the drainage system.

Stormwater management manual means the Georgia Stormwater Management Manual.

Stormwater management measure means any stormwater management facility or nonstructural stormwater practice.

Stormwater retrofit means a stormwater management practice designed for a currently developed site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

Stream means natural, running water flowing continuously or intermittently in a channel on or below the surface of the ground, and shall include, but not be limited to, all streams

depicted on the 1995 DeKalb County Geographic Information System (GIS) map maintained by the DeKalb County GIS director. No stream shall be excluded from this definition due to its failure to be identified on the map. Field verification shall be performed to make a final determination as to the existence of a stream where a dispute exists. Such field verification shall be performed by the Director of Community Development, or his/her designee.

Streambank means a sloping land that contains a stream channel in the normal flows of the stream.

Stream channel means the portion of a watercourse that contains the base flow of the stream.

Street, private means an access way similar to and having the same function as a public street, providing access to more than one (1) property but held in private ownership. Private streets, when authorized, shall be developed in accordance with the specifications for public streets established in this Chapter.

Street, public means any right-of-way set aside for public travel dedicated to the City and any right-of-way that has been accepted for maintenance as a street by the City.

Street right-of-way line means the dividing line between a lot, tract or parcel of land and a street right-of-way.

Structure means anything constructed or erected with a fixed location on the ground, or attached to something having a fixed location on or in the ground. This does not include telephone poles and utility boxes.

Structural erosion and sedimentation control measures mean measures for the stabilization of erodible or sediment-producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures, sediment traps and land grading. Such measures can be found in the publication "Manual for Erosion and Sediment Control in Georgia."

Structural stormwater control means a structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow of such runoff.

Subdivision means any division or redivision of a lot, tract or parcel, regardless of its existing and future use, into two (2) or more lots, tracts or parcels. Where appropriate to context, subdivision may also be used to reference the aggregate of all lots held in common ownership at the time of division.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of repairs, reconstruction, alteration or improvements to a structure taking place during the life of a structure, the cumulative cost of which equals or exceeds fifty (50) percent of the market value of the structure. The market value of the structure should be the appraised value of the structure prior to the start of the initial repair or improvement or, in the case of damage, the value of the structure prior to the damage occurring. This term includes structures that have incurred substantial damage regardless of the actual repair work performed. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the structure commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a building required to comply with existing state or local health, sanitary, or safety code specifications which have been identified by a code enforcement official and which are solely necessary to assure safe living conditions, or any alteration to a structure listed on the National Register of Historic Places or a State inventory of historic places.

Substantially improved existing manufactured home parks or subdivision is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Thoroughfare plan means a comprehensive street plan of the City of Dunwoody indicating proposed location and right-of-way widths for major thoroughfares, minor thoroughfares, collector streets and other streets.

Tree means any living, self-supporting, woody perennial plant which has a trunk caliper of two (2) inches or more measured at a point six (6) inches above the ground and which normally attains a height of at least ten (10) feet at maturity usually with one (1) main stem or trunk and many branches.

Tree harvesting means the felling, loading, and transporting of timber products done pursuant to a special exception issued by the Board of Zoning Appeals.

Tree save area means the boundaries of the area or areas surrounding trees wherein it is essential that they remain undisturbed in order to prevent damage and loss of trees that are to be retained on site during the development and building process.

Tree replacement means the replacement of trees and landscape plant materials into the minimum required landscape areas, as determined by the zoning regulations or the tree protection ordinance.

Trout streams means all streams or portions of streams within the watershed as designated by the Game and Fish Division of the Georgia Department of Natural Resources under the provisions of the Georgia Water Quality Control Act, O.C.G.A. § 12-5-20 et seq.

Trout waters, first order means streams into which no other streams flow except springs.

Trout waters, primary means streams or waters supporting a self-sustaining population of rainbow, brown or brook trout.

Trout waters, secondary means streams or waters in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year.

Used for includes the phrases "arranged for," "designed for," "intended for," "maintained for" and "occupied for."

Vegetation means all plant growth, especially trees, shrubs, vines, ferns, mosses and grasses.

Vegetative erosion and sedimentation control practices means practices for the stabilization of erodible or sediment producing areas by covering the soil with: (1) permanent seeding, sprigging or planting, producing long-term vegetative cover; or (2) temporary seeding, producing short-term vegetative cover; or (3) sodding, covering areas with a turf of perennial sod-forming grass. Such practices can be found in the publication "Manual for Erosion and Sediment Control in Georgia" published by the Georgia Soil and Water Conservation Commission.

Watercourse means any natural or artificial watercourse, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water flows either continuously or intermittently and which has a definite channel, bed and banks, and including any area adjacent thereto subject to inundation by reason of overflow or floodwater.

Water quality protection means the requirement that all developments must improve the quality of storm runoff from the development site.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Article 2: Environmental Control

Section 1: Preamble

(a) This Article establishes public policies for the protection of the natural environment and specifies standards for land development to ensure achievement of these public policies.

(b) By declaration of public policies for environmental protection, the City Council expresses its intent to protect the public interest by seeking to assure, where appropriate, maintenance of the natural environment, prevention of its degradation and assuring high quality land development. The Council further declares its intent that these policies shall constitute the public policy framework within which a comprehensive program for protection of the natural environment and implementation of a comprehensive drainage improvement program shall be accomplished.

(c) The development process, as established by this Chapter 14, is guided by the policies and provisions contained in the comprehensive plan of the City of Dunwoody or, until such time as the City of Dunwoody adopts a final Comprehensive Plan, the Interim Comprehensive Plan of the City of Dunwoody as adopted from the Dekalb Couty 2025 Comprehensive Plan.

Section 2: Purposes

(a) It is the purpose of this Article to establish public policies for the protection of the natural environment and to establish requirements, standards and procedures for land development. The public policy objective of protecting the natural environment is to be achieved by:

(1) Regulating the alteration of land and topography.

(2) Regulating the removal and requiring the replacement of certain vegetation.

(3) Requiring erosion control and sedimentation control.

(4) Protecting City streams and floodplains from substantial alteration of their natural functions and from sediment and debris accumulation.

(5) Specifying standards for drainage system design.

(6) Assuring the continuous and efficient operation of the drainage system.

(7) Protecting the water quality within intermittent and perennial streams throughout the City of Dunwoody.

(b) It is the City Council's intent that land development be accomplished in conformity with the public policy statements. To that end, the plans required under applicable provisions

of this Article shall be reviewed by the City to enable a full exchange of information between the City and the applicant as to the City's public policies for land development.

(c) The Council further declares its intent that these public policies be evaluated periodically so as to reflect the community's interests in protection of the natural environment and to give direction to City actions in matters affecting the natural environment and land development.

Section 3: Scope and Applicability

(a) The provisions of this Article shall apply to all development activity within the City.

(b) Before filing a land development application on a project for review and approval, the applicant shall meet with the Department to discuss the procedure for approval of a land development permit and the requirements as to the general layout of streets, parking, open space/lot coverage, street improvements, drainage, sewage, fire protection and similar matters, as well as the availability of existing services, including schools. The Department and the applicant shall review the applicant's stormwater management plans, inspection and maintenance requirements and water quality control requirements. The Department may advise the applicant, when appropriate, to discuss the proposed project with those officials who must eventually approve those aspects of the project coming within their jurisdiction. This meeting will also allow City officials to discuss with the applicant the necessary regulations that will properly accomplish the project.

(c) For purposes of this section, a valid and complete application for a land disturbance permit shall consist of the following:

(1) Three (3) paper copies and one (1) DVD containing electronic images of complete civil plans, which shall include a site plan, a grading and drainage plan, a utility plan, a soil erosion and sedimentation control plan, a landscape plan, and a tree survey;

(2) One (1) hydrology report and completed stormwater quality site development review tool documentation;

(3) An application signed by the owner of the property, or a completed indemnification agreement signed by the owner of the property; and

(4) Payment of the appropriate development review application fee.

(d) For purposes of this section, a valid and complete application for a sketch plat approval shall consist of the following:

(1) Four (4) copies of the preliminary plat site plan that is in conformance with the zoning of the property in effect at the time of the application, and, a tree survey;

(2) An application signed by the owner of the property, or if the application is not signed by the owner, a completed indemnification agreement signed by the owner of the property; and

(3) Payment of the appropriate development review application fee.

Section 4: Amendment Procedure

This Article may be amended by the City Council after giving public notice and holding a public hearing thereon in accordance with all applicable procedural requirements.

Section 5: Administration and Enforcement Generally

The City shall administer and enforce the provisions of this Article as follows:

(a) The Director is designated to administer and enforce the grading, vegetation, erosion control, sedimentation control, drainage and water quality provisions of this Article for all development and construction projects with the following duties and responsibilities:

(1) Review all development permits to assure that the permit requirements of this Article have been satisfied;

(2) Advise permittee when additional Federal or State permits may be required, and if specific federal or state permits are known to be required, that copies of such permits be provided and maintained on file with the development permit; and

(3) Notify adjacent communities and the State Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(b) The Director shall administer and enforce those provisions of this Article that apply to developed and occupied areas and to property in an undeveloped state affecting City responsibility for maintenance of the storm drainage system. The Director shall assure that maintenance is provided within any altered or relocated portion of any watercourse so that the flood-carrying capacity is not diminished.

Section 6: Inspection; right of entry

(a) Upon presentation of City identification to the applicant, contractor, owner, owner's agent, operator or occupants, City employees may enter during all reasonable hours any property under proposed or existing development or construction. These employees may make inspections of the facilities for the purpose of determining plan requirements or compliance with all ordinance provisions.

(b) All new developments and redevelopments shall execute an inspection and maintenance agreement unless an on-site stormwater management facility or practice is dedicated to and accepted by the City. The applicant shall execute an easement and an inspection and maintenance agreement that will bind all subsequent owners of land served by an on-site stormwater management facility or practice.

(c) City employees may inspect any drainage system within or outside of an existing drainage easement. All stormwater management facilities located on private property, whether dedicated to the City or not, shall be accessible at all times for City inspection. Where stormwater management facilities are accepted by the City for maintenance, public access easements shall be provided. Reasonable access shall be provided to all drainage easements for inspection and maintenance functions.

(d) The Department, in addition to other procedures provided, may obtain an inspection warrant under the conditions specified in this section. The warrant shall authorize the director to conduct a search or inspection of property without the consent of the person whose property is to be searched or inspected, under the conditions set out in this section.

(1) Inspection warrants may be issued by Municipal Court when all of the following conditions are met:

(A) The person seeking the warrant must establish under oath or affirmation that the property to be inspected is to be inspected as a part of a legally authorized program of inspection which includes that property or that there is probable cause for believing that there is a condition, object, activity, or circumstance which legally justifies such an inspection of that property; and

(B) The issuing judge determines that the issuance of the warrant is authorized by law.

(2) The inspection warrant shall be validly issued only if it meets all of the following requirements:

(A) The warrant is attached to the affidavit required to be made in order to obtain the warrant;

(B) The warrant describes, either directly or by reference to the affidavit, the property upon which the inspection is to occur and is sufficiently accurate that the executor of the warrant and the owner or possessor of the property can reasonably determine from it the property for which the warrant authorizes an inspection;

(C) The warrant indicates the conditions, objects, activities, or circumstances which the inspection is intended to check or reveal; and

(D) The warrant refers, in general terms, to the ordinance provisions sought to be enforced.

Section 7: Emergency Maintenance Operations

(a) The Director may conduct emergency maintenance operations on private land and on drainage systems where emergency conditions exist. Emergency maintenance shall constitute the removal of trees and other debris, which in the judgment of the Director of Community Development or Direction of Public Works create a condition potentially injurious to life, property and the public road system.

(b) The provisions of Section 12 of this Article shall not apply in the case of tree trimming, removal or cutting necessitated by emergencies such as floods, windstorms, ice storms or other disasters.

(c) Emergency maintenance conducted on any drainage system shall not be construed as constituting a continuing maintenance obligation on the part of the City.

Section 8: Issuance of notice of violation; variances; specification of time period for correction; appeals

(a) Notice of violation. Whenever the Director determines that development activity or inactivity on a property does not comply with the approved development and construction plans, that approved and required erosion and sedimentation control facilities or devices have been altered, damaged or destroyed, or that any other activities violate the provisions of this Article, the Director shall issue a notice of violation. Whenever the Director determines that the drainage system has been unlawfully altered, causing inadequate drainage, the Director shall issue a notice of violation. The provisions of this section shall be in addition to any other penalty provisions applicable to this Article. The notice of violation of the provisions of this Article or of any rule or regulation adopted pursuant hereto shall be addressed to the owner of the property or the owner's agent and to the person, tenant, firm, corporation, property owner or property owner's agent found to be violating the provisions of this Article and shall:

(1) Be in writing;

(2) Include a description of the property sufficient for identification of where the violation has occurred;

(3) List the specific provisions of this Article which have been violated;

(4) State that, if these repairs, construction or alterations are not completed within a reasonable time period specified by the inspector, summons shall be issued for the person, firm, corporation, owner, or owner's agent to appear in Municipal Court. However, in the judgment of the Director, where the violation is willful, in

wanton disregard of the provisions of this Article or constitutes a public health and safety hazard or endangers the ecosystem, the Director may issue a court summons in lieu of a notice of violation.

(b) Penalty. It shall be unlawful for any person, firm or corporation to do anything prohibited or fail to do anything required by the provisions of this Article, as they now exist or as they may hereafter be amended. Any person, firm or corporation that shall do anything prohibited or fail to do anything required by the provisions of this Article, as they now exist or as they may hereafter be amended, upon conviction of a violation in Municipal Court shall be subject to a fine and/or imprisonment in accordance with Chapter 1 of this Code. Where any offense or violation continues from day-to-day, each day's continuance thereof shall be deemed a separate offense. The owner of any buildings or premises or parts thereof, where anything in violation of this Article exists, and any architect, builder, engineer, contractor, or any other agent of the owner, or any tenant, who commits, or assists in the commission of any violation, shall be guilty of a separate offense.

(c) Variances.

(1) Except as further limited herein, an applicant may request a variance from the terms of the requirements of Sections 10, 11, 13, and 14 of this Article. The Board of Zoning Appeals shall be authorized to hear variance requests. The Zoning Board of Appeals shall have no power to consider or to grant variances which are the responsibility of the Director of the Environmental Protection Division pursuant to O.C.G.A. § 12-2-8 and other relevant State statutes and regulations. The Board of Zoning Appeals is authorized to consider applications for variances pursuant to this section within the seventy-five-foot stream buffer required at Section 14(i)(2) of this Article, but not within the twenty-five-foot state buffer zone adjacent to waters of the state set forth in Section 11(b)(4) of this Article, nor within fifty feet of the stream bank. Where variances involving the same project are requested from both the Director of the Environmental Protection Division and the Director of Community Development, the Director of Community Development shall take no action on any such request for variance until the Director of the Environmental Protection Division grants the variance or otherwise approves the request pending before the Environmental Protection Division. Receiving a variance from the Director of the Environmental Protection Division does not obligate the Board of Zoning Appeals to permit the project to proceed if the project does not also meet all the other requirements of this Article. No variance from the provisions of Chapter 14 shall be authorized except as specifically authorized in this section or specifically authorized in another section of Chapter 14.

(2) Applications for variances authorized in subsection (1) above shall be made in writing to the Community Development Director and shall contain all of those materials and documents necessary to demonstrate that said request meets the criteria for granting variances. The Community Development Director shall

review the variance request and make a recommendation of approval or denial to the Board of Zoning Appeals.

(3) In considering a request for a variance to the terms of this Article authorized in subsection (1) above, the Board of Zoning Appeals shall use all of the following criteria:

(A) The request, while not strictly meeting the requirements of Chapter 14, will in the judgment of the Board of Zoning Appeals be at least as protective of natural resources and the environment as would a plan which met the strict application of these requirements. In making such a judgment, the Board of Zoning Appeals shall examine whether the request will be at least as protective of the natural resources and the environment with regard to the following factors:

(i) Stream bank or soil stabilization;

(ii) Trapping of sediment in surface runoff;

(iii) Removal of nutrients, heavy metals, pesticides and other pollutants from surface runoff;

(iv) Terrestrial habitat, food chain, and migration corridor;

(v) Buffering of flood flows;

(vi) Infiltration of surface runoff;

(vii) Noise and visual buffers;

(viii) Downstream water quality; and

(ix) Impact on threatened and endangered species, as those species are designated by law or federal or state regulation.

(B) By reason of exceptional topographic or other relevant physical conditions of the subject property that were not created by the owner or applicant, there is no opportunity for any development under any design configuration unless a variance is granted.

(C) The request does not go beyond the minimum necessary to afford relief and does not constitute a grant of special privileges inconsistent with the limitations upon other properties that are similarly situated.

(D) The grant of the variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the area in which the property is located.

(E) The literal interpretation and strict application of the applicable provisions or requirements of Chapter 14 would cause an extreme hardship, provided the hardship was not created by the owner.

(d) All appeals of final decisions of the Board of Zoning Appeals under the provisions of this Article shall be as follows:

(1) Any person aggrieved by a final decision of the Board of Zoning Appeals, or any officer, department, board or agency affected by such decision, may seek review of such decision by petitioning the Superior Court of DeKalb County for a writ of certiorari, setting forth plainly the alleged errors. Such petition shall be filed within thirty (30) days after the final decision of the Board of Zoning Appeals is rendered.

(2) In any such petition filed, the Board of Zoning Appeals shall be designated the respondent in certiorari and the City of Dunwoody shall be designated the defendant in certiorari. The Chairman, Vice-Chairman or Secretary of the Board of Zoning Appeals shall be authorized to acknowledge service of a copy of the petition and writ for the Board of Zoning Appeals as respondent. Service upon the City as defendant shall be as otherwise provided by law. Within the time prescribed by law, the Board of Zoning Appeals shall cause to be filed with the clerk of DeKalb County Superior Court a duly certified record of the proceedings had before the Board, including a transcript of the evidence heard before it, if any, and the written decision of the Board.

(f) This Article is not intended to abrogate, annul or otherwise interfere with any easement, covenant or other private agreement or legal relationship provided that when the regulations of this Article are more restrictive or impose higher standards or requirements than such easements, covenants, or other private agreements or legal relationships, the regulations of this Article shall govern. Further, where there is a conflict between any standard or requirement within Chapter 14, or between the Chapter 14 standards and any other provision of the Code, the more restrictive standard or requirement shall apply.

Section 9: Plan submission requirements

(a) All site plans submitted in accordance with applicable provisions of this Article shall meet the requirements for their preparation and shall also provide information to enable a determination to be made by the Director as to plan conformance with the public policy statements of this Article.

(b) All persons proposing developments, redevelopments or construction shall submit site plans to the Director illustrating the means by which conformance with policy provisions

may be achieved and illustrating compliance with applicable development standards before issuance of a development or building permit.

(c) Electric, telephone and gas utilities shall submit plans and obtain a development permit only for major transmission installations located within rights-of-way or easements devoted exclusively to installations of utility facilities. Individual single-family lots within approved subdivisions shall be exempt from these requirements for new residential construction with the exception that individual single-family lots where site plans for each are required by special designation on the recorded plat or such lots are located within the intermediate regional floodplain shall be submitted for review and approval in accordance with this Article and other applicable provisions of the Code. Owners and developers of individual single-family lots shall be required to use best management practices to prevent sedimentation from leaving the site.

(d) Grading, erosion control, sedimentation control, water quality control and drainage plans shall be prepared under the supervision of a currently state-registered professional engineer, architect or landscape architect, or combination as may be appropriate for project planning and design. Tree protection plans may be prepared by and implemented under the supervision of a currently state-registered professional architect, forester, landscape architect or engineer as may be appropriate for project planning and design. When the hydrologic engineering analysis includes applications of the principles for flood routing, super critical flow, high energy dissipation or conversion, backwater curves, floodplain studies or other advanced hydrologic engineering techniques, the analysis shall be made by a currently state-registered professional engineer proficient in hydrology.

(e) Site plans and supporting documentation to show conformance with this Article shall be submitted in accordance with the applicable provisions of Dunwoody Zoning Ordinance and all conditions of zoning and shall include the following:

(1) Evidence of conformance with the requirements of this Article for grading, vegetation alteration, erosion control, sedimentation control, water quality control and drainage system alteration or development. Grading plans shall illustrate existing and proposed contours to the two-foot interval at a minimum; golf courses and other open space areas shall be exempt from this requirement but general grading plans for golf courses and other open space areas shall be submitted. Water quality plans shall include the identification of existing wetland areas within the development site and shall demonstrate use of the stormwater quality site development review tool. Related plans shall show locations of structures, roads, surface drainage, existing and proposed drainage conduits, buffer areas, stream buffers, state buffer zones, and proposed alterations to the existing site;

(2) A hydrologic engineering analysis of stormwater runoff under pre-developed and post-developed site conditions and a detailed evaluation of the projected effects on upstream and downstream properties within the affected drainage basin. In

determining downstream effects from stormwater management structures, BMPs, and the development, hydrologic-hydraulic engineering studies shall extend downstream to a point where the proposed development represents less than ten (10) percent of the total watershed. This analysis shall include a determination of the culvert, floodplain and channel cross-section area required to carry the affected runoff at the intermediate regional flood stage level.

(3) Delineation of the boundaries of the intermediate regional floodplain for streams draining in excess of one hundred (100) acres. The actual building site in relation to the intermediate regional floodplain boundaries shall be shown; the same information shall be indicated by the seller to the purchaser of each property so affected. The elevation contours representing the intermediate regional flood conditions shall be shown when they are located outside established ditch banks. A benchmark suitable for determining intermediate regional flood elevations shall be established;

(4) The projected sequence of work represented by the grading, vegetation, erosion control, sedimentation control, water quality control and drainage plans as related to other major items of construction;

(5) Upon development project completion, location, size and invert elevations of piped segments of the storm drainage system, of control weirs, BMPs and water surface elevations and volumes in detention ponds shall be shown on the final plat for a subdivision, and on a final plan for other developments which shall be submitted to the Director prior to approval. The currently state-registered professional engineer, architect or landscape architect reviewing the construction shall provide a certificate that the development is in substantial compliance with approved plans. As-built elevation certifications prepared by currently state-registered land surveyors or currently state-registered professional engineers for all developments, including fill, allowed within a flood-prone area, shall be submitted to the Director; and

(6) A separate tree protection plan in conformance with the requirements of Section 12 of this Article.

Section 10: Grading

(a) Policies. It is hereby declared to be public policy to:

(1) Encourage the design of residential grading plans to provide natural appearance of land contours and to provide ease of use in public areas.

(2) Minimize the adverse effects of land clearance and grading upon existing vegetation.

(3) Minimize the adverse effects of land clearance and grading upon the drainage system by strict erosion control and sedimentation control measures.

(4) Minimize erosion and shear failure potential by encouraging limited cutting and filling.

(b) Standards.

(1) All grading operations shall be conducted in compliance with the approved site plans.

(2) Before beginning construction activity, the intermediate regional floodplain elevation contours shall be identified on the property by staking or other identifying mechanisms no less than every one hundred (100) feet, and shall be identifiable throughout project development.

(3) Finish grade slopes on residential projects and lots shall not be steeper than three-to-one (3:1), unless absolutely impractical due to vegetation, topography, or soil conditions. Three-to-one (3:1) finish grade slopes shall transition to two-to-one (2:1) slopes at all perpendicular stream crossings.

(4) Large-scale general grading shall include installation of approved soil and erosion control measures and be limited to phases approved by the Director and completed prior to commencing building construction.

(5) Prohibit grading and filling in floodplains, except as provided for in Article IV, Floodplain Management.

(6) The burying, piling, or concealing in any way of construction waste is prohibited, except where permitted within an M-2 (Industrial) District, as defined in the Dunwoody Zoning Ordinance, and by a permit issued by the Georgia Department of Natural Resources, Environmental Protection Division. No certificate of occupancy shall be issued by the City under Chapter 8 of this Code until the applicant provides a written certification to the Director of Community Development or designee, accompanied by a landfill receipt, that proves that all construction waste has been removed from the property.

Section 11: Soil Erosion and Sedimentation Control

(a) Policies. It is hereby declared to be public policy to:

(1) Minimize the removal of vegetation;

(2) Minimize the exposure of bare earth to precipitation by encouraging the scheduling of land development in increments of workable size which can be

completed within a single construction season or within a time period compatible with the type and size of the project;

(3) Provide for the reestablishment of vegetation within a reasonable period following completion of final grading and utility installation;

(4) Give priority to the paving of streets, parking lots and other areas within a reasonable time following completion of final grading; and

(5) Encourage the use of erosion control and sedimentation techniques found in the Manual for Erosion and Sedimentation Control in Georgia, as published by the State Soil and Water Conservation Commission.

(b) Standards.

(1) Any land disturbing activity permitted under this Chapter 14 shall be carried out in accordance with the Georgia Erosion and Sedimentation Act of 1975, as amended, this Chapter, and the permit conditions specified by the Director.

(2) Nothing contained in State law or this Chapter shall prevent the issuing authority from adopting rules and regulations, ordinances, or resolutions which contain requirements that exceed the minimum requirements contained in this section or in State law.

(3) Exemptions. This Section 11 shall apply to any land-disturbing activity undertaken by any person on any land except for the following:

(A) Surface mining, as the same is defined in O.C.G.A. § 12-4-72, "Mineral Resources and Caves Act";

(B) Granite quarrying and land clearing for such quarrying;

(C) Such minor land-disturbing activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities which result in minor soil erosion;

(D) The construction of single-family residences, when such construction disturbs less than one (1) acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one (1) acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements as set forth in Section 11(b)(4) and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to Article 2 of Chapter 5 of the Georgia Water Quality Control Act. In any such buffer zone, no land-

disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least fifty (50) horizontal feet and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least fifty (50) horizontal feet, but the Director may grant variances to no less than twenty-five (25) feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least twenty-five (25) horizontal feet, and no variance to a smaller buffer shall be granted. The minimum requirements of Section 11(b)(4) and the buffer zones provided by this section shall be enforced by the development department;

(E) Agricultural operations as defined in O.C.G.A. § 1-3-3, "definitions", to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including but not limited to cattle, calves, swine, hogs, goats, sheep, and rabbits or for use in the production of poultry, including but not limited to chickens, hens and turkeys; producing plants, trees, fowl, or animals; the production of aqua culture, horticultural, dairy, livestock, poultry, eggs and apiarian products; farm buildings and farm ponds;

(F) Forestry land management practices, including harvesting; providing, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in paragraphs 15 and 16 of subsection (b)(4)(C) of this section, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of five (5) years after completion of such forestry practices;

(G) Any project carried out under the technical supervision of the Natural Resources Conservation Service of the United States Department of Agriculture;

(H) Any project involving less than one (1) acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one (1) acre or within two hundred (200) feet of the bank of any state waters, and for purposes of this paragraph, "state waters" excludes channels and drainageways which have water in them only during and immediately after rainfall events and intermittent streams which do not have water in them year-round; provided, however, that any person responsible for a project which

involves less than one (1) acre, which involves land-disturbing activity, and which is within two hundred (200) feet of any such excluded channel or drainageway, must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained herein shall prevent the City of Dunwoody from regulating any such project which is not specifically exempted by paragraphs (b)(3)(A), (B), (C), (D), (E), (F), (G), (I), or (J). of this section;

(I) Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the Georgia Department of Transportation, the Georgia Highway Authority, or the state tollway authority; or any road construction or maintenance project, or both, undertaken by any county or municipality; provided, however, that construction or maintenance projects of Department of Transportation or state tollway authority which disturb one (1) or more contiguous acres of land shall be subject to provisions of O.C.G.A. § 12-7-7.2; except where the Department of Transportation, the Georgia Highway Authority, or the state road and tollway authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the local issuing authority, the local issuing authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. § 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

(J) Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. § 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the State general permit, in which case the local issuing authority shall enforce compliance with the minimum requirements set forth in section O.C.G.A. § 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

(K) Any public water system reservoir.

(4) Minimum requirement for soil erosion and control and sedimentation control using best management practices.

(A) General provisions. Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities. Therefore, plans for those land-disturbing activities that are not exempted by this Chapter shall contain provisions for application of soil erosion and sedimentation control measures and practices. The provisions shall be incorporated into the erosions and sedimentation control plans. Soil erosion and sedimentation control measures and practices shall conform to the minimum requirements of subsection (b)(4)(B) and (C) of this section and any other applicable provision of this Section 11. The application of measures and practices shall apply to all features of the site, including street and utility installations, stormwater management facilities, drainage facilities and other temporary and permanent improvements. Measures shall be installed to prevent or control erosion and sedimentation pollution during all stages of any land-disturbing activity. The Director may require that land disturbance activity be phased. Soil erosion and sedimentation control plans shall address appropriate measures to effectively control soil erosion during successive phases of construction.

(B) Minimum requirements.

(i) Best management practices as set forth in subsections (b)(4)(B) and (C) of this section shall be required for all land-disturbing activities. Proper design by phases, installation and maintenance of best management practices shall constitute a complete defense to any action by the Director of the Environmental Protection Division (EPD) or to any other allegation of noncompliance with paragraph (2) of this subsection or any substantially similar terms contained in a permit for the discharge of stormwater issued pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act". As used in this subsection, the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. § 12-7-6(b).

(ii) A discharge of stormwater runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act", for each day on which such discharge results in the turbidity of receiving waters

being increased by more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries or by more than ten (10) nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the Director of the Environmental Protection Division. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five (5) acres.

(iii) Failure to properly design, install, or maintain best management practices shall constitute a violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the Division pursuant to O.C.G.A. § 12-5-30(f), the "Georgia Water Quality Control Act", for each day on which such failure occurs.

(iv) The Director of the Environmental Protection Division may require, in accordance with regulations adopted by the BNR, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land disturbing activities occur.

(C) The rules and regulations, ordinances, or resolutions adopted pursuant to this Chapter for the purpose of governing land-disturbing activities shall require, at a minimum, protections at least as stringent as the state general permit; and best management practices, including conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the Manual for Erosion and Sediment Control in Georgia published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

(i) Stripping of vegetation, regrading and other development activities shall be conducted in a manner so as to minimize erosion;

(ii) Cut-fill operations shall be kept to a minimum;

(iii) Development plans shall conform to topography and soil type so as to create the lowest practical erosion potential;

(iv) Whenever feasible, natural vegetation shall be retained, protected and supplemented as provided in Sections 12 and 14 of this Article;

(v) The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;

(vi) Disturbed soil shall be stabilized as quickly as practicable;

(vii) Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;

(viii) Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;

(ix) To the extent necessary, sediment in run-off water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. § 12-7-1 et seq.;

(x) Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping of fills;

(xi) Cuts and fills shall not endanger adjoining property;

(xii) Fills shall not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;

(xiii) Grading equipment shall cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;

(xiv) Land-disturbing activity plans for erosion and sedimentation control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediment on-site or preclude sedimentation of adjacent waters beyond the levels specified in subsection (b)(4)(B)(ii) of this section;

(xv) Except as provided in paragraph (xvi) of this subsection, there is established a twenty-five-foot state buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action,

except where the Director of the Environmental Protection Division determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the Director of the Environmental Protection Division pursuant to O.C.G.A. § 12-2-8, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; provided, however, the buffers of at least twenty-five (25) feet established pursuant to part 6 of Article 5, Chapter 5 of Title 12, the "Georgia Water Quality Control Act", shall remain in force unless a variance is granted by the Director of the Environmental Protection Division as provided in this paragraph. The following requirements shall apply to any such buffer:

1. No land disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

2. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within twenty-five (25) degrees of perpendicular to the stream; cause a width of disturbance of not more than fifty (50) feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines;

(xvi) There is established a fifty-foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of

Title 12, the "Georgia Water Quality Control Act", except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of twenty-five (25) gallons per minute or less shall have a twenty-five-foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the BNR, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The Director of the Environmental Protection Division may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer:

1. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed: provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

2. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within twenty-five (25) degrees of perpendicular to the stream; cause a width of disturbance of not more than fifty (50) feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

(D) The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of

nor create a presumption of a violation of the standards provided for in this section or the terms of the permit.

(5) Application/permit process.

(A) *General.* The property owner, developer and designated planners and engineers shall review the general development plans and detailed plans of the local issuing authority that affect the tract to be developed and the area surrounding it. They shall review the zoning ordinance, stormwater management ordinance, subdivision ordinance, flood damage prevention ordinance, this Chapter, and other ordinances which regulate the development of land within the jurisdictional boundaries of the local issuing authority. However, the operator is the only party who may obtain a permit.

(B) *Application requirements.*

(i) No person shall conduct any land-disturbing activity within the jurisdictional boundaries of the City of Dunwoody without first obtaining a permit from the Director to perform such activity.

(ii) The application for a permit shall be submitted to the Director and must include the applicant's erosion and sedimentation control plan with supporting data, as necessary. Said plans shall include, at a minimum, the data specified in subsection (b)(5)(C) of this section. Applications for a permit will not be accepted unless accompanied by eight (8) copies of the applicant's soil erosions and sedimentation control plans. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan or that such a visit was not required in accordance with rules and regulations established by the BNR.

(iii) A permitting fee, as determined by the City Council shall be charged for each acre or fraction thereof in the project area.

(iv) In addition to the local permitting fees, fees will also be assessed pursuant to paragraph (5) subsection (a) of O.C.G.A. § 12-5-23, provided that such fees shall not exceed eighty dollars ($80.00) per acre of land-disturbing activity, and these fees shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity included in the planned development or each phase of development. All applicable fees shall be paid prior to issuance of the land disturbance permit. In a jurisdiction that is certified pursuant to O.C.G.A. § 12-7-8(a) half of such fees levied shall be submitted to the Division; except

that any and all fees due from an entity which is required to give notice pursuant to paragraph (9) or (10) of O.C.G.A. § 12-7-17 shall be submitted in full to the Division, regardless of the existence of a local issuing authority in the jurisdiction.

(v) Immediately upon receipt of an application and plan for a permit, the local issuing authority shall review the plan for the adequacy of the erosion and sedimentation control plan. The Director shall approve or disapprove a plan within thirty-five (35) days of receipt. Failure of the Director to act within thirty-five (35) days shall be considered an approval of the pending plan. No permit will be issued unless the plan has been approved by the Director, and any variances required by subsection (b)(4)(C)(xv) and (xvi) and bonding if required by subsection (b)(5)(B)(vii) have been obtained.

(vi) If a permit applicant has had two (2) or more violations of previous permits, this Chapter, or the Erosion and Sedimentation Act, as amended, within three (3) years prior to the date of filing of the application under consideration, the Director may deny the permit application.

(vii) The Director may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but not exceeding, three thousand dollars ($3,000.00) per acre or fraction thereof of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this section or with the conditions of the permit after issuance, the Director may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

(C) *Plan requirements.*

(i) Plans must be prepared to meet the minimum requirements as contained in subsection (b)(4)(B) and (C) of this section. Conformance with the minimum requirements may be attained through the use of design criteria in the current issue of the Manual for Erosion and Sediment Control in Georgia, published by the State Soil and Water Conservation Commission as a guide; or through the use of more stringent alternate design criteria which conform to conservation and engineering practices including, but not limited to, design criteria published by Dekalb County in its approved stormwater management manual or City of Dunwoody's approved stormwater management policy. The Manual for Erosion

and Sediment Control in Georgia is hereby incorporated by reference into this Chapter as if fully set forth herein. The plan for the land-disturbing activity shall consider the interrelationship of the soil types, geological and hydrological characteristics, topography, watershed, vegetation, proposed permanent structures including roadways, constructed waterways, sediment control and storm water management facilities, local ordinances and State laws.

(ii) The following minimum data shall be required for each site plan:

1. Narrative or notes, and other information: Notes or narrative are to be located on the site plan in general notes or in erosion and sediment control notes;

2. A description of existing land use at project site and description of proposed project;

3. Name, address, and phone number of the property owner;

4. Name and phone number of twenty-four (24) hour local contact who is responsible for erosion and sedimentation controls;

5. Size of project, or phase under construction, in acres;

6. Activity schedule showing anticipated starting and completion dates for the project. The following statement: "the installation of erosion and sedimentation control measures and practices shall occur prior to or concurrent with land-disturbing activities" must be on the site plan in bold letters;

7. Stormwater and sedimentation management systems-storage capacity, hydrologic study, and calculations, including off-site drainage areas;

8. Vegetative plan for all temporary and permanent vegetative measures, including species, planting dates, and seeding, fertilizer, lime, and mulching rates. The vegetative plan should show options for year-round seeding;

9. Detailed drawings for all structural practices. Specifications may follow guidelines set forth in the Manual for Erosion and Sediment Control in Georgia, but must be site specific;

10. Maintenance statement -- "Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion and sediment control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."; and

11. Other information pertinent to requirements of this Chapter as required by the Director.

(iii) Maps, drawing, and supportive computations shall bear the signature/seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sedimentation control. After December 31, 2006, all persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements as developed by the Commission pursuant to O.C.G.A. § 12-7-20. The certified plans shall contain:

1. Graphic scale and north point or arrow indicating magnetic north.

2. Vicinity maps showing location of project and existing streets.

3. Boundary line survey.

4. Delineation of disturbed areas within project boundary.

5. Existing and planned contours, with an interval in accordance with the following:

TABLE INSET:

Map Scale	Ground Slope	Contour interval (ft.)
1 inch = 100 ft. Or larger scale	Flat 0 – 2% Rolling 2 – 8% Step 8% +	0.5 or 1 1 or 2 2, 5, or 10

6. Adjacent areas and feature areas such as streams, lakes, residential areas, etc. which might be affected should be indicated on the plan.

7. The names of property owners and current zoning of all abutting property.

8. Proposed structures or additions to existing structures and paved areas.

9. Delineate the stream buffers as required by Section 14 of this Article, adjacent to state waters identified by the City of Dunwoody.

10. Delineate the specified horizontal buffer along designated trout streams, where applicable.

11. Location of erosion and sedimentation control measures and practices using coding symbols from the Manual for Erosion and Sediment Control in Georgia, Chapter 6.

(iv) Maintenance of all soil erosion and sedimentation control practices, whether temporary or permanent, shall be at all times the responsibility of the property owner.

(D) *Permits.*

(i) Permits shall be issued or denied as soon as practicable but in any event not later than forty-five (45) days after receipt by the Director of a completed application, provided variances and bonding are obtained, where necessary.

(ii) No permit shall be issued by the Director unless the erosion and sedimentation control plan has been approved and the Director has affirmatively determined that the plan is in compliance with this Chapter, any variances required by subsection (b)(4)(C)(xv) and (xvi) are obtained, bonding requirements, if necessary, as per subsection (b)(5)(B)(vii) are met and all ordinances and rules and regulations in effect within the jurisdictional boundaries of the City of Dunwoody are met. If the permit is denied, the reason for denial shall be furnished to the applicant.

(iii) If the tract is to be developed in phases, then a separate permit shall be required for each phase.

(iv) The permit may be suspended, revoked, or modified by the City of Dunwoody, as to all or any portion of the land affected by the plan, upon finding that the holder or his successor in the title is not in compliance with the approved erosion and sedimentation control plan or that the holder or his successor in title is in violation of this Chapter. A holder of a permit shall notify any successor in title to him as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.

(v) No permit shall be issued until the applicant files documents with the Director demonstrating compliance with all applicable local, State and Federal requirements.

(6) Inspection and enforcement.

(A) The Director will periodically inspect the sites of land-disturbing activities for which permits have been issued to determine if the activities are being conducted in accordance with the plan and if the measures required in the plan are effective in controlling erosion and sedimentation. Also, the City of Dunwoody shall regulate both primary and secondary permittees as such terms are defined in the state general permit. Primary permittees shall be responsible for installation and maintenance of best management practices where the primary permittee is conducting land-disturbing activities. Secondary permittees shall be responsible for installation and maintenance of best management practices where the secondary permittee is conducting land-disturbing activities. If, through inspection, it is deemed that a person engaged in land-disturbing activities as defined herein has failed to comply with the approved plan, with permit conditions, or with the provisions of this section, a written notice to comply shall be served upon that person by the Director. The notice shall set forth the measures necessary to achieve compliance and shall state the time within which such measures must be completed. If the person engaged in the land disturbing activity fails to comply within the time specified, he shall be deemed in violation of this section.

(B) The Director shall have the power to conduct such investigations as may reasonably be necessary to carry out duties as prescribed in this section, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigation and inspecting the sites of land-disturbing activities.

(C) No person shall refuse entry or access to any authorized representative or agent of the City of Dunwoody, the Commission, or the Division who requests entry for the 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 his official duties.

(D) The Commission shall periodically review the actions of the City. The Commission may provide technical assistance to the City of Dunwoody for the purpose of improving the effectiveness of the City's erosion and sedimentation control program. The Commission shall notify the Division and request investigation by the Division if the City's program is found to be deficient or ineffective.

(E) The BNR shall promulgate rules and regulations setting forth the requirements and standards for certification and the procedures for decertification of a local issuing authority. The Division may periodically review the actions of the City of Dunwoody which has been certified as a local issuing authority pursuant to O.C.G.A. § 12-7-8(a). Such review may include, but shall not be limited to, review of the administration and enforcement of the City of Dunwoody's ordinances. If such review indicates that DeKalb County has not administered or enforced its ordinances or has not conducted the program in accordance with any agreement entered into pursuant to O.C.G.A. § 12-7-7(e), the Division shall notify the City of Dunwoody governing authority in writing. Upon receipt of the notification, the governing authority shall have thirty (30) days within which to take the necessary corrective action to retain certification as a local issuing authority. If the City of Dunwoody does not take necessary action within thirty (30) days after notification by the Division, the Division may revoke the certification of the City of Dunwoody as a local issuing authority.

(7) Penalties and incentives.

(A) *Failure to obtain a permit for land-disturbing activity.* If any person commences any land-disturbing activity requiring a land-disturbing permit as prescribed in this Chapter without first obtaining said permit, the person shall be subject to revocation of his business license, work permit or other authorization for the conduct of a business and associated work activities within the City of Dunwoody.

(B) *Stop work orders.* Upon notice from the Director or other City authorized representative, work on any project that is being done contrary to the provisions of this Chapter 14 or in a dangerous or unsafe manner, shall be immediately stopped. Such notice shall be in writing and shall be given to the owner of the property, his/her authorized agent or the person or persons in charge of the activity on the property, and shall state the conditions under which work may be resumed. Where an emergency exists, no written notice shall be required.

(i) For the first and second violations of the provisions of this section on a site, the Director shall issue a written notice of violation. The violator shall have five (5) days to correct the violation. If the violation is not corrected within five (5) days, the Director shall issue a stop work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided that if the violation presents an imminent threat to public health or waters of the State, the Director shall issue an immediate stop work order in lieu of a warning.

(ii) For a third and each subsequent violation on a site, the Director shall issue an immediate stop-work order, and;

(iii) All stop-work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred.

(iv) When a violation in the form of land disturbance without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the Director, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the Director. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

(C) *Bond forfeiture.* If, through inspection, it is determined that a person engaged in land-disturbing activities has failed to comply with the approved plan, a written notice to comply shall be served by the Director upon that person. The notice shall set forth the measures necessary to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this Chapter and, in addition to other penalties, shall be deemed to have forfeited his performance bond, if required to post one under the provisions of subsection (b)(5)(B)(vii). The Director may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

(D) *Monetary penalties.* Any person who violates any provisions of this section, or any permit condition or limitation established pursuant to this section, or who negligently or intentionally fails or refuses to comply with any final or emergency order of the development director issued as provided in this section, shall be liable for a civil penalty not to exceed two thousand five hundred dollars ($2,500.00) per day. Notwithstanding any limitation of law as to penalties which can be assessed for violations of City ordinances, the Municipal Court or any other court of competent jurisdiction trying cases brought under City ordinances approved under this section shall be authorized to impose penalties for such violations not to exceed two thousand five hundred dollars ($2,500.00) for each violation; however the maximum assessment shall not exceed the amount

authorized by Chapter 1 of this Code. Each day during which violation or failure or refusal to comply continues shall be a separate violation.

(8) Education and certification. All persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the Commission in consultation with the Division and the stakeholder advisory board created pursuant to O.C.G.A. § 12-7-20.

(9) Administrative appeal, judicial review.

(A) *Administrative remedies.* The suspension, revocation, modification or grant with condition of a permit by the City of Dunwoody upon finding that the holder is not in compliance with the approved erosion and sediment control plan; or that the holder is in violation of permit conditions; shall entitle the person submitting the plan or holding the permit to an appeal before the Board of Zoning Appeals pursuant to the procedures and standards set forth in Section 8(c) of this Article.

(B) *Judicial review.* Any person aggrieved by administrative appeals from a decision or order of the Board of Zoning Appeals authorized by subsection (b)(8)(A) of this section shall be as provided for in Section 14(d) of this Article.

(10) Validity and liability.

(A) *Validity.* If any section, paragraph, clause, phrase, or provision of this section shall be adjudged invalid or held unconstitutional, such decisions shall not affect the remaining portions of this section.

(B) *Liability*

(i) Neither the approval of a plan under the provisions of this section, nor the compliance with provisions of this section shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law nor impose any liability upon the City of Dunwoody, its officers or employees for damage to any person or property.

(ii) The fact that a land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this section or the terms of the permit.

(iii) No provision of this section shall permit any persons to violate the Georgia Erosion and Sedimentation Act of 1975, the Georgia Water Quality Control Act or the rules and regulations promulgated and approved thereunder or pollute any waters of the State as defined thereby.

Section 12: Tree Protection

(a) Intent and Purpose

(1) INTENT: To provide minimum landscape standards for developments in the city so as to enhance architectural features, strengthen vistas and provide shade.

(2) PURPOSE:

(A) To preserve landscaping in its natural state to the greatest extent possible.

(B) To promote architectural harmony between buildings, landscaping and the local environs.

(C) To enhance economic opportunities over the long term by maintaining Dunwoody as an attractive and progressive community for residents, businesses and developers.

(D) To minimize the adverse impacts of new development on existing land uses.

(E) To promote xeriscaping, or water-saving techniques where practical.

(F) To provide environmental benefits such as pollution abatement, erosion and run-off control, energy conservation, minimization of flood hazards and continued maintenance of ecology systems

(b) Definitions

All words used in this ordinance carry their customary dictionary meanings, except where specifically defined herein or in the Dunwoody Zoning Ordinance as amended.

_____*Buildable area*: The portion of a lot which is not located within any minimum required yard, landscape area, or buffer, i.e., that portion of a lot wherein a building may be located.

_____*Caliper*: An American Association of Nurseryman standard for trunk measurement of nursery stock. Caliper of the trunk shall be taken six (6) inches above the ground for up to and including four-(4) inch caliper size, and twelve (12) inches above the ground for larger sizes.

_____*Certificate of occupancy*: A permit issued by the Building Inspector indicating that the

use of the building or land in question is in conformity with all relevant City of Dunwoody ordinances, or that there has been a legal variance there from as provided by one of the ordinances.

_____*Certified Arborist*: An individual who has been certified as an arborist by the International Society of Arboriculture and maintains said certification in good standing.

_____*City Arborist*: The Community Development Director or designee of the City of Dunwoody having primary enforcement responsibilities under this ordinance, and charged with the responsibility for approval of all landscape plans for land development in the City of Dunwoody required pursuant to this ordinance.

_____*Diameter at breast height (DBH)*: A standard measure of tree size. The tree trunk diameter is measured in inches at a height of 4 1/2 feet above the ground. If a tree splits into multiple trunks below 4 1/2 feet, then the trunk is measured at its most narrow point beneath the split.

_____*Ground cover*: A category of plants usually ranging from a few inches to a foot or more in height. Some ground covers are excellent for preventing soil erosion; others are helpful in carrying out design patterns.

_____*In perpetuity*: The state or condition of lasting forever, continuing forever, or occurring continually.

_____*Development permit*: A permit issued by the City of Dunwoody that authorizes the commencement of development on a given tract of land.

_____*Landscape plan*: A plan that identifies areas of tree preservation and methods of tree protection within the protected zone, as well as all areas or replanting. Within replanting areas, the common and botanical names of the proposed species, the number of plants of each species, the size of all plants, the proposed location of all plants, and any unique features of the plant shall be indicated.

_____*Ornamental Trees*: Small growing trees, attaining a mature height of less than forty (40) feet, grown primarily for aesthetic purposes, i.e.. flowers, fruit, etc. Common ornamental trees in this area include: Dogwood and Bradford Pear trees. A list of trees generally acceptable to this area is included in the Appendix of the Tree Preservation Ordinance.

_____*Protected zone*: All lands that fall outside of the buildable area of a parcel, all areas of the parcel required to remain in open space, and all areas required as landscaping strips according to provisions of the City of Dunwoody zoning regulations, or conditions of the zoning approval.

_____*Revegetation*: The replacement of trees and landscape plant materials into the minimum required landscape areas, as determined by the Zoning Ordinance, conditions of zoning approval, or the Tree Preservation Ordinance.

_____*Specimen tree*: Any tree which has been determined by the City Arborist to be of high value because of its type, size, age, and/or of historical significance, or other professional criteria, and has been so designated in administrative standards established by the city. This is usually a plant with desirable form, foliage, fruit, or flower that can be emphasized although isolated.

_____*Structure*: Anything constructed, assembled, or erected, the use of which requires location on the ground or attachment to something having location on or in the ground.

_____*Substantial Building Permit*: A nonresidential building permit issued by the City of Dunwoody with a total value in excess of 50% of the Dekalb County Tax Assessor's 100% assessed value of the existing improvements only. The aggregate value of all building permits issued to the property over the previous 12 months shall be included in this calculation (see Appendix I-D of the Tree Preservation Ordinance).

_____*Tree*: Any self supporting wood perennial plant which at maturity attains a trunk diameter of four (4) inches or more measured at a point four and one half (4 1/2) feet above the ground level and which normally attains a height of at least twenty five (25) feet at maturity, usually with one main stem or trunk and many branches.

_____*Tree density factor*: A unit of measure used to prescribe and calculate required tree coverage on a site. Unit measurements are based upon tree size. (Appendix I-A ofTree Preservation Ordinance).

_____*Tree Topping*: The removal of tree limbs, branches, or stems by cutting at the internodes and resulting in the failure of the tree to assume apical dominance.

_____*Zoning regulations*: The Dunwoody Zoning Ordinance as amended or such other regulations subsequently adopted by the council, inclusive of conditions of zoning approval established pursuant thereto.

(c) Applicability: The terms and provisions of this Ordinance shall apply to any activity on real property which requires the issuance of a Development Permit or a Substantial Building Permit within the City of Dunwoody, but excluding the construction of individual single family detached and duplex dwellings. No Development Permit or Substantial Building Permit shall be issued by the city without it being determined that the proposed development is in conformance with the provisions of these regulations. An application for a development permit shall include a separate Landscape Plan that has been prepared and sealed by a Registered Landscape Architect, Certified Arborist, or Registered Forester.

(d) Landscape Strips.

(1) Minimum landscape strip dimensions for each lot are expressed in linear feet in the following chart: When a protected zone equivalent to the following landscape dimensions has not been left on a site in a non-single family residential district, or

when grading has occurred outside the buildable area on a lot, then landscape strips must be provided as follows:

YARD	FRONT	15
SIDE		
	CORNER	15
	INTERIOR	5
REAR		5

(2) Within a single family or duplex subdivision where street access to lots with frontage on more than one street is restricted , a ten foot no access strip shall be required along the frontage of the street(s) with the higher classification. These no access strips shall be planted in accordance with the requirements for landscape strips above.

(3) No permanent structures are permitted within landscape strips. This includes pavement, retaining walls, curbing, dumpsters, drainage structures, detention facilities, etc.

(A) The only exceptions to this rule are sidewalks and footpaths, when the width of the right-of-way is insufficient.

(4) Curb stops must be used when parking perpendicular to five (5) foot landscape strips.

(5) Signs within landscape strips may only be located in areas of turf or ground cover and must not conflict with the growth potential of trees and shrubs. Signs are not permitted within required undisturbed buffers.

(6) The deposition of storm water runoff into, or drainage swales through landscape strips is generally not permitted.

(A) Exceptions will be considered only if this standard will create an undue hardship to the property owner. Under no circumstance may the length of a drainage easement through a landscape strip exceed the width of the strip.

(7) *Design standards*: All required landscape strips shall be planted with a combination of trees, shrubs, perennials, groundcovers, and grass, as approved by the City Arborist. The landscape strips shall be designed with a minimum 60% coverage in trees and large shrubs (4’x 4’ or larger). Small shrubs, perennials, ornamental grasses, groundcover, and grass may constitute no more than 40% coverage of the landscape strip. All landscape strips along the public right-of-way shall be planted in a manner to achieve a 2-3’ tall evergreen screening buffer.

Landscape strip coverage will be calculated as follows:

(A) Calculate the total spatial area of the landscape strip.

(B) Calculate the total coverage of landscape materials, ensuring that the coverage of trees and large shrubs is greater than or equal to 60% of the total area of the strip. The following sizes shall be used when calculating coverage of the landscape materials:

Trees greater than 6" caliper: 100 square feet
Trees less than 6" caliper: 50 square feet
Large shrubs: (4' height x 4' spread or larger): 16 square feet
Ornamental grasses: 12 square feet
Small shrubs: 9 square feet
Perennials: 6 square feet

(C) Any exposed ground should be planted with a ground cover or an appropriate mulching material. Mulching materials shall not exceed four (4) inches in height.

(8) Trees within required landscape strips shall be provided as follows:

(A) Landscape strips shall have a minimum of one tree for every thirty (30) linear feet of a landscape strip to the nearest whole number.

(B) Clumping is permitted provided that adequate spacing is allowed for future growth.

(9) Where desirable, the landscape strip need not be a strip per se or may be reduced to a width of ten (10) feet with the approval of the City Arborist. The minimum area (square feet) to be landscaped must be calculated by multiplying the width of the lot (measured at the building setback line) by the linear foot requirements provided in.A.l. of this section.

(e) Parking Areas

(1) Parking lots designed for eight (8) or more spaces shall be designed as follows:

(A) The planter islands may be sized according to two different options:

(B) Each planter island shall be a minimum of 400 square feet. Planter islands shall be located at the terminus of each parking row and no further apart than every ten (10) parking spaces.

(C) Each planter island shall be a minimum of 300 square feet. Planter islands shall be located at the terminus of each parking row and no further apart

than every twenty (20) parking spaces. Planting strips with a minimum width of five (5) feet shall run continuously between all planter islands. These strips shall be planted with one (1) overstory tree for every thirty (30) linear feet of the strip.

(2) All planter islands must be designed with at least 60% coverage in trees in shrubs and no more than 40% coverage in ground cover and landscaping materials.. Planter islands abutting double rows of parking shall include two (2) overstory trees. Planter islands abutting single rows of parking shall include one (1) overstory tree. No plant materials, with the exception of trees, shall exceed three (3) feet in height. Turfgrass, however, shall not be planted in the required islands.

(3) All planter islands and landscape strips must be curbed to prevent vehicular encroachment.

(4) Planter islands and strips shall be designed to prevent compaction. This may be accomplished by planting a dense shrub cover or by elevating the planting area a minimum of one (1) foot above the curb.

(f) Street Trees

(1) Street trees are required in all residential districts. Street tree requirements are as follows:

(A) A Street Tree Planting Plan shall be submitted to and approved by the City Arborist prior to issuance of a development permit. The plan shall be prepared and sealed by a Registered Landscape Architect, Certified Arborist, or Registered Forester. All proposed trees shall be individually located on the plan with an included species list.

(B) Street trees shall be planted in the right-of-way, in accordance with the details provided in the Appendix. Street trees shall be planted no further than fifty (50) feet apart and no closer than 25 feet from street intersections. It is not mandatory to plant street trees on each individual lot, where spacing distances are inadequate. Street trees are required on both sides of the street. The City Arborist may approve alternate spacing when the fifty foot spacing requirement cannot be met due to driveways and other improvements.

(C) Street tree species shall be selected in accordance with Appendix XX-A and shall be subject to the approval of the City Arborist. No more than 35% of any one species shall be used throughout the development.

(D) Street trees shall have a minimum caliper of three (3) inches. They shall be single-stemmed with a single, straight leader.

(E) The builder shall install on each lot the street tree(s) specified on the Street Tree Planting Plan prior to the issuance of the certificate of occupancy. However, street tree plantings shall be delayed from May 1 through October 1. In this case, the builder shall enter into a performance surety agreement with the City guaranteeing tree planting by October 15. The performance surety agreement must be executed before the issuance of the certificate of occupancy for lots in this case.

(G) Impermeable rigid tree root barriers shall be installed in a linear method in all tree strips. The barriers shall be a minimum of 24" deep and include ribs to direct root growth downward. The root barriers shall be installed in accordance with the details provided in the Appendix.

(H) Expandable plastic tree trunk protectors shall be installed on each tree.

(I) Street trees may count towards the minimum individual lot tree density requirements, as set forth inTree Preservation Ordinance.

(J) Street trees shall be maintained by the property owner who owns the lot associated with the tree(s) and/or by the homeowners' association. Maintenance shall include, but is not limited to, watering, pruning, tree replacement and removal of leaves and litter from the sidewalks and street, as necessary. All maintenance shall be in compliance with ANSI A300 standards for tree care. A maintenance responsibility statement shall be provided on the final plat.

(g) Minimum Standards for Landscape Materials

(1) All landscape materials shall meet the minimum guidelines as outlined in the American Standard for Nursery Stock andTree Preservation Ordinance, and subsequent Appendix

(2) All deciduous trees shall be a minimum two-inch (2") caliper at the time of planting.

(3) All evergreen trees shall be 6 feet tall or larger.

(4) All shrubs and ornamental grasses shall be 3-gallon size or larger.

(5) All perennials shall be 1-gallon size or larger.

(6) Sod, rather than seed, shall be used in all landscape strips and no access strips that abut public right-of-way and shall extend to the curb of the public roadway.

(7) Sod, rather than seed, shall be used on all single-family residential lots and shall be installed in all areas designated for grass from the back of the curb to the front corner of all houses, at a minimum.

(8) All species must be ecologically compatible with the intended growing site.

(9) No more than 35% of any one tree or shrub species may be used.

(10) Evergreen trees may only be used in the interior and/or rear landscape strips.

(11) All plant materials are subject to the approval of the City Arborist.

(h) Installation and Maintenance

(1) Installation. All landscaping shall be installed in a sound workmanlike manner and according to accepted good planting procedures. The City Arborist shall inspect all landscaping and no certificate of occupancy or similar authorization will be issued unless the landscaping meets the requirements provided in this ordinance.

(2) Staking and Guying. Newly planted trees shall not be staked or guyed unless they are unable to stand upright without support. Materials used shall be flat woven polypropylene photodegradable ¾" wide with 900 lb. break strength. Any staking and guying materials used shall be removed within one (1) year of installation.

(3) Irrigation. An irrigation system shall be installed in all landscape strips, planter islands, enhanced buffers, and no access strips. The system shall meet the following minimum standards:

(A) Preserved trees, shrubs, and native plant communities shall not be required to be irrigated, unless directed by the City Arborist.

(B) Drip irrigation systems shall be installed in areas planted with trees, shrubs, perennials, and groundcovers. The City Arborist may approve an alternate comparable system if it provides irrigation at the ground level rather than an upright spray.

(C) Turfgrass areas shall be irrigated on a different zone than trees, shrubs, perennials, and groundcovers.

(D) Moisture sensor and/or rain gauge equipment shall be required on automatic irrigation systems to avoid irrigation during periods of sufficient rainfall.

(E) No significant irrigation overthrow shall be permitted onto impervious surfaces.

(4) A watering schedule shall be submitted as part of the landscape plan. The schedule shall indicate the different irrigation zones and the frequency and amount of irrigation. The watering schedule shall be in accordance with Dekalb County's regulations concerning water usage.Minimum Space Requirements. All trees planted shall be provided with adequate space to grow unobstructed to maturity, to avoid sight obstructions, and to provide clearance. The following include the minimum requirements that must be met.

TABLE INSET:

Location	**Overstory Trees**	**Understory Trees**
Distance to other trees	30 feet	20 feet
Distance to overhead power lines	20 feet	0 feet
Distance to light poles	20 feet	15 feet
Distance to fire hydrants, electrical transmission boxes, water meters, or other infrastructure	15 feet	15 feet

(5) Maintenance. The owner, occupant, tenant and respective agent of each, if any, shall be jointly and severally responsible for the maintenance and protection of all required landscaping in perpetuity, in accordance with the following standards:

(A) Keep landscaping reasonably free of visible signs of insects and disease and appropriately irrigated to enable landscaping to exist in a healthy growing condition.

(B) Mow or trim landscaping in a manner and at a frequency appropriate to the use made of the material and species on the site so as not to detract from the appearance of the general area. Growth of plant material at maturity shall be considered where future conflicts such as view, signage, street lighting, utilities and circulation might arise;

(C) Maintain all landscaping to minimize property damage and public safety hazards, including removal of dead or decaying plant material, and removal of low hanging branches next to sidewalks and walkways obstructing street lighting; and

(D) All pruning shall be done in accordance with *ANSI A300 (Part 1) Standards for Tree Care Operations – Pruning*. Tree topping is not allowed. Crown reduction pruning shall be used instead to reduce the height of a tree when necessary. Topped trees shall not be counted toward tree density requirements.

(i) Agreement and Bonding

(1) The developer or owner shall post a performance bond or cash escrow guaranteeing all landscaping materials and work for a period of two (2) years after the approval or acceptance thereof by the City. The bond or cash escrow will be required for commercial developments prior to the issuance of a certificate of occupancy. The bond or cash escrow will be required for residential developments within one year of the date of recording the final plat or before the final certificate of occupancy is issued for the development, whichever case occurs first. In the case of residential developments with multiple builders, each builder will be responsible for providing the bond or cash escrow for the lots for which he/she has received a building permit.

(2) The bond will be in the amount of 115% of the estimated cost of replacing all of the required landscaping.

(3) An itemized estimate should be provided by the owner and based on the opinion of a landscape contractor and found to be reasonable by the City Arborist.

(4) The City Arborist shall make an inspection and notify the owner or developer and the Bond Company of any corrections to be made within this two (2) year period.

(j) Effective Date: This ordinance shall become effective upon approval by the Mayor and Council of the City of Dunwoody.

(k) Enforcement. It shall be the duty of the City Arborist to enforce this Ordinance. The City Arborist shall have the authority to revoke, suspend, or void any Development Permit and shall have the authority to suspend all work on a site or any portion thereof, and to issue citations. The City Arborist shall have the authority to approve alternate methods of compliance with the provisions of this article when he/she determines the overall intent of the article and/or specific guidelines can be met.

(l) Violation and Penalty. Any person, firm or corporation violating any of the provisions of this ordinance shall be deemed guilty of an ordinance violation . Each day's continuance of a violation shall be considered a separate offense. The owner of any property wherein a violation exist, and any builder, contractor, agent who may have assisted in the commission of any such violation, shall be guilty of a separate offense. The Dunwoody Municipal Court shall have jurisdiction to try offenses to these regulations.

(m) Appeal. Any person aggrieved or affected by any decision of the City Arborist relating to the application of these regulations may appeal to the Zoning Board of Appeals for relief or reconsideration within thirty (30) days from the date of the adverse decision of the City Arborist.

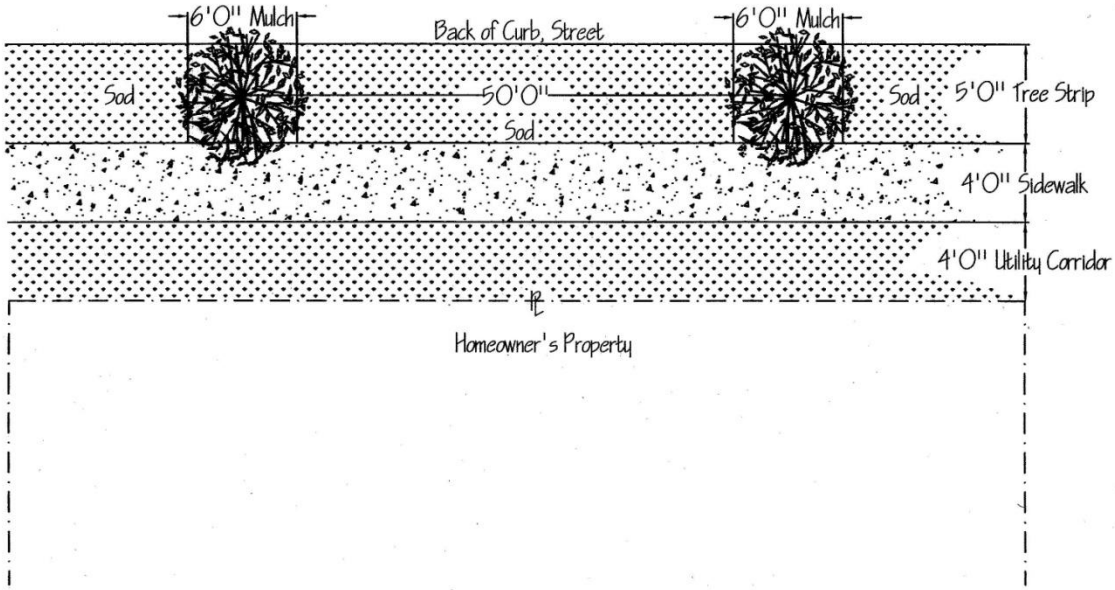
(n) VALIDITY Should any section or provision of this Ordinance be declared by a court of

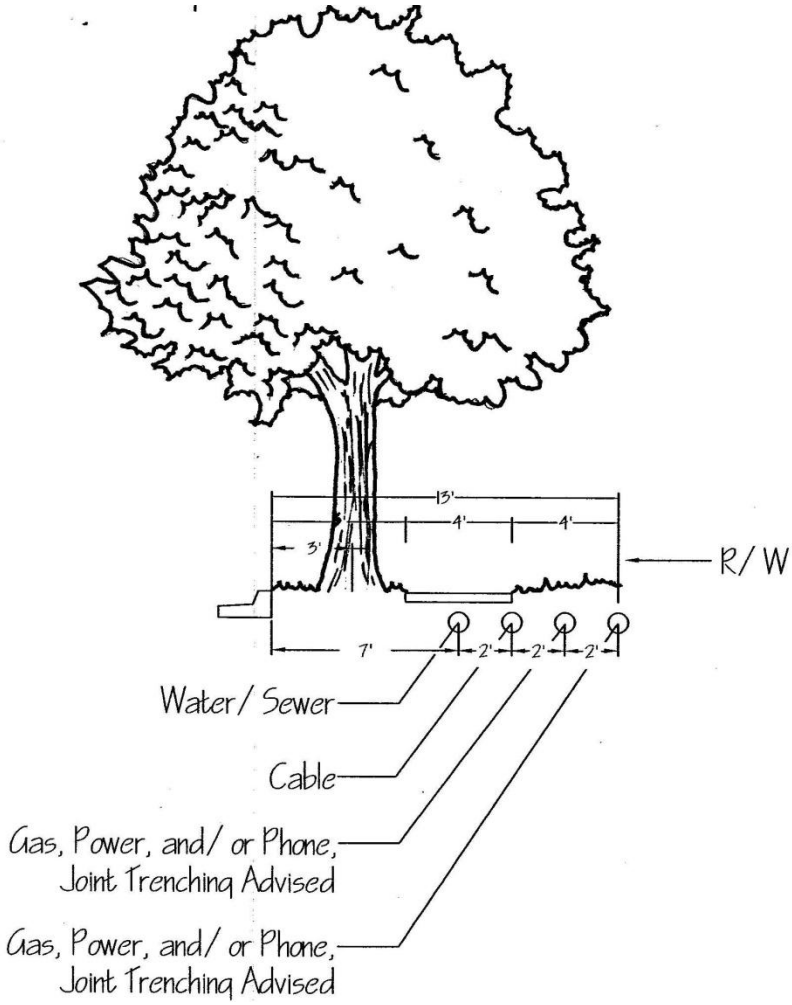
competent jurisdiction to be invalid, such decision shall not affect the validity of the Ordinance in whole or any part thereof other than the part so declared invalid.

(o) Conflicting Ordinance Repealsed. The provisions of any Ordinance or parts of Ordinances in conflict herewith are repealed.

APPENDIX XX-A: STREET TREES

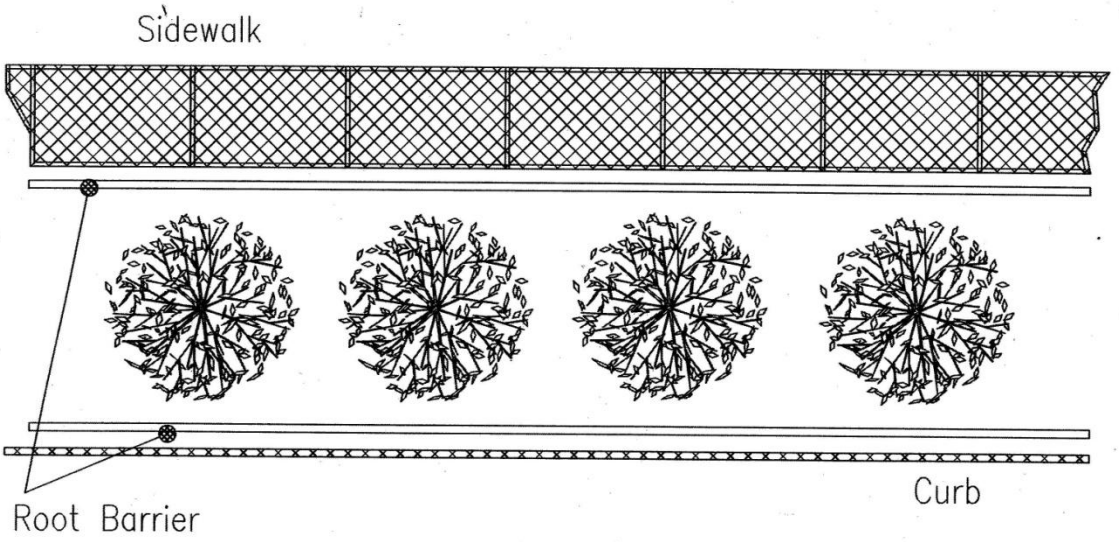
XX-A(1): Details for the location of street trees, sidewalks, utility corridor, etc.





APPENDIX XX-A: STREET TREES

XX-A(2): Detail for the locations of the root barriers



XX-A(3): Approved Street Tree Species

Botanical Name	Common Name	Notes
Acer buergerianum 'Trident Maple'	Trident Maple	single-stem only
Acer rubrum 'Autumn Flame'	Autumn Flame Red Maple	
Acer rubrum 'October Glory'	October Glory Red Maple	
Acer rubrum 'Red Sunset'	Red Sunset® Red Maple	
Acer rubrum 'Summer Red'	Summer Red® Red Maple	
Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	
Acer saccharum 'Legacy'	Legacy Sugar Maple	
Betula nigra 'BNMTF'	Dura-Heat® River Birch	single-stem only
Ginkgo biloba ' Princeton Sentry'	Princeton Sentry Ginkgo	
Ostrya virginiana	American Hophornbeam/Ironwood	
Parrotia persica	Persian Ironwood	single-stem only
Pistacia chinensis	Chinese Pistache	
Quercus hemisphaerica'Darlington'	Darlington Oak	
Quercus lyrata	Overcup Oak	
Quercus nuttalli	Nuttall Oak	
Quercus phellos	Willow Oak	
Quercus shumardii	Shumard Oak	
Ulmus parvifolia 'Emer I'	Athena® Elm	
Ulmus parvifolia 'Emer II'	Allée® Elm	
Ulmus parvifolia 'UPMTF'	Bosque™ Elm	
Zelkova serrata 'Green Vase'	Green Vase Japanese Zelkova	
Zelkova serrata 'Village Green'	Village Green Japanese Zelkova	

(p) Tree Preservation

(1) Intent and Purpose.

(A) Intent: The intent of this ordinance is to provide standards for the preservation of trees as part of the land development and building construction process for the purpose of making the City of Dunwoody a more attractive place to live, provide a healthy living environment, and to better maintain control of flooding, noise, glare, and soil erosion.

(B) Purpose:

(i) The purpose of this ordinance is to facilitate the preservation and/or replacement of trees as part of the land development, building construction process within the City of Dunwoody.

(ii) Benefits derived from tree protection and replanting include:

a. Improved control of soil erosion;

b. Moderation of storm water runoff, and improved water quality;

c. Interception of airborne particulate matter, and the reduction of some air pollutants.

d. Enhanced habitat for desirable wildlife;

e. Reduction of noise and glare;

f. Climate moderation and the reduction of the heat island effect;

g. Aesthetics, scenic amenity;

h. Increased property value; and

i. Assistance in traffic calming.

(C) Definitions

All words used in this ordinance carry their customary dictionary meanings, except where specifically defined herein or in the Dunwoody Zoning Ordinance as amended.

Accessory structure: A structure, the use of which is customarily incidental and subordinate to that of the main building of the same lot, such as a guest house, toolshed,

woodshed and the like.

Accessory use: A use customarily incidental and subordinate to the primary use of the main building or to the primary use of the premises.

Buildable area: The portion of a lot which is not located within any minimum required yard, landscape area, or buffer, i.e., that portion of a lot wherein a building may be located.

Caliper: An American Association of Nurseryman standard for trunk measurement of nursery stock. Caliper of the trunk shall be taken six (6) inches above the ground for up to and including four- (4) inch caliper size, and twelve (12) inches above the ground for larger sizes.

Certified Arborist: An individual who has been certified as an arborist by the International Society of Arboriculture and maintains said certification in good standing.

City Arborist: The Community Development Director or designee of the City of Dunwoody having primary enforcement responsibilities under this ordinance, and charged with the responsibility for approval of all landscape plans for land development in the City of Dunwoody required pursuant to this ordinance.

Critical Root Zone (CRZ): A circular region measured outward from a tree trunk representing the essential area of roots that must be maintained or protected for the tree's survival. The CRZ is one foot of radial distance for every inch of the tree's DBH, with a minimum of eight feet.

Crown Reduction Pruning: Method of pruning to reduce the height or spread of a tree by performing appropriate pruning cuts.

Diameter at breast height (DBH): A standard measure of tree size. The tree trunk diameter is measured in inches at a height of 4 1/2 feet above the ground. If a tree splits into multiple trunks below 4 1/2 feet, then the trunk is measured at its most narrow point beneath the split.

Detached: Shall be defined as being separated from a principle structure by a minimum of three (3) feet.

Hardwood Tree: A tree that does not bear either needles or cones. The term hardwood is based on the colloquialism and does not reflect any true qualities of the tree.

Development permit: A permit issued by the City of Dunwoody that authorizes the commencement of development on a given tract of land.

Landscape plan: A plan that identifies areas of tree preservation and methods of tree protection within the protected zone, as well as all areas or replanting. Within replanting areas, the common and botanical names of the proposed species, the number of plants of each species, the size of all plants, the proposed location of all plants, and any unique features of the plants

shall be indicated.

Overstory Tree: Those trees that compose the top layer or canopy of vegetation and will generally reach a mature height of greater than forty feet (40').

Protected zone: All lands that fall outside of the buildable area of a parcel, all areas of the parcel required to remain in open space, and all areas required as landscaping strips according provisions of the City of Dunwoody zoning regulations, or conditions of the zoning approval.

Revegetation: The replacement of trees and landscape plant materials into the minimum required landscape areas, as determined by the Zoning Ordinance, conditions of zoning approval, or the Tree Preservation Ordinance.

Softwood Tree: Any coniferous (cone-bearing) tree. The term softwood is based on the colloquialism and does not reflect any true qualities of the tree.

Special tree: Any tree, which qualifies for special consideration for preservation due to its size, type, and condition as defined in this article.

Specimen tree: Any tree, which qualifies for special consideration for preservation due to its size, type, condition, location or historical significance as defined in this article.

Structure: Anything constructed, assembled, or erected, the use of which requires loction on the ground or attachment to something having location on or in the ground.

Substantial Building Permit: A nonresidential building permit issued by the City of Dunwoody with a total value in excess of 50% of the Dekalb County Tax Assessor's 100% assessed value of the existing improvements only. The aggregate value of all building permits issued to the property over the previous 12 months shall be included in this calculation (see Appendix).

Tree: Any self supporting wood perennial plant which at maturity attains a trunk diameter of four (4) inches or more measured at a point four and one half (4 1/2) feet above the ground level and which normally attains a height of at least twenty five (25) feet at maturity, usually with one main stem or trunk and many branches.

Tree density factor: A unit of measure used to prescribe and calculate required tree coverage on a site. Unit measurements are based upon tree size. (Appendix).

Tree Topping: The removal of tree limbs, branches, or stems by cutting at the internodes and resulting in the failure of the tree to assume apical dominance.

Understory Tree: Those trees that grow beneath the Overstory trees, and will generally reach a mature height of less than forty feet (40').

Zoning regulations: The Dunwoody Zoning Ordinance as amended or such other

regulations subsequently adopted by the council, inclusive of conditions of zoning approval established pursuant thereto.

(2) Applicability The terms and provisions of this Ordinance shall apply to any activity on real property, which requires the issuance of a Development Permit or Substantial Building Permit within the City of Dunwoody. No Development Permit or Substantial Building Permit shall be issued by the city without it being determined that the proposed development is in conformance with the provisions of these regulations.

(3) Permit Procedure

(A) All applications for a Development Permit or a Substantial Building Permit shall include the following:

(i) Tree Protection Plan: A tree protection plan shall be submitted with other permit drawings. This plan shall be a separate drawing, shall be prepared and sealed by a Registered Landscape Architect, Certified Arborist, or Registered Forester, and shall include the following information:

a. Tree Survey: The Tree Survey shall be a to-scale map or site plan that has been prepared and sealed by a Registered Landscape Architect, Certified Arborist, Registered Forester, Registered Surveyor, or Registered Engineer. The Tree Survey shall include the following minimum requirements:

1. All specimen trees are to be located and labeled with their size and species. Their Critical Root Zone (CRZ) shall be delineated and the spot elevation at the base of their trunk shall be indicated. They shall also be labeled in a way to determine if they are intended for removal or preservation.

2. All trees with a dbh measurement of twelve inches (12”) or larger shall be located and their size and species shall be indicated.

3. Sampling methods may be used to determine tree density calculations for forested areas over five (5) acres.

b. Definition of Spatial Limits.

1. Limits of land disturbance, clearing, grading, and trenching;

2. Tree protection zones;

3. Areas of revegetation;

4. Indication of staging areas for parking, material storage, concrete washout, debris burn, and other areas where tree protection may be affected.

5. Locations of existing and proposed structures, paving, driveways, cut and fill areas, detention areas, utilities, etc.

c. Detail drawings of tree protection measures (where applicable.)

1. Protective tree fencing;

2. Erosion control fencing;

3. tree protection signs;

4. ransplanting specifications;

5. Tree wells, and aeration systems;

6. Staking specifications; and

7. other applicable drawings.

d. Tree Density Calculations

e. Procedures and schedules of the implementation, installation, and maintenance of tree protection measures.

(ii) An on-site inspection will be made by the City Arborist prior to the commencement of any development activity.

(iii) All landscape plans, tree protection plans, and related documentation shall be reviewed by the City Arborist for conformance to the provisions of these regulations and either approved, returned for revisions, or denied within thirty (30) days of receipt. If denied, the reasons for denial shall be annotated on the landscape plan or otherwise stated in writing.

(iv) Issuance of the Development Permit or a Substantial Building Permit is contingent upon approval of the required Tree Protection Plan and Landscape Plan and an on-site inspection by the City Arborist for Tree Protection measures.

(q) Removal of Trees

(1) Trees are not to be removed in any protected zone. When preserving trees in a protected zone will result in a documented economic hardship, an exception may be made. The documentation proving the hardship shall be submitted as part of the Tree Protection Plan. Nothing in these regulations shall be construed to allow the removal of vegetation in a natural, undisturbed buffer required by zoning regulations.

(2) The removal of dead, diseased, insect-infested, or hazard trees is exempt from the provisions of this article provided the property owner can provide documentation of the condition of said trees. Documentation includes, but is not limited to, photographs or a report by a Certified Arborist and shall be submitted prior to removal.

(3) When no trees are present in the protected zone or when it is proposed that any portion of the protected zone be disturbed, it shall be the responsibility of the owner/developer to landscape said areas (where improvements are not constructed), with trees or other plant materials subject to zoning regulations.

(4) Trees shall not be removed from a floodplain except as follows:

(A) Those trees found to be dead, diseased, or insect infested by the City Arborist, the County Extension Service, the Georgia Forestry Commission, or a registered forester.

(B) As necessary for construction, repair, or maintenance of public roads, utilities, or drainage structures.

(r) Tree Replacement-Revegitation

(1) The replacement of trees in the minimum required landscape areas, as determined by this ordinance, must occur under the following conditions.

(A) To establish the minimum tree density requirements for the site.

(B) Where grading occurs outside the buildable area of the lot.

(C) If the buildable area of the lot leaves no protected zone.

(D) If no trees are present within an existing protected zone.

(E) Where specimen trees or specimen stands of trees within the buildable portion of the lot are to be removed.

(F) Where specimen trees or specimen stands of trees, and trees within otherwise designated tree protective zones have been irreparably damaged or removed through development or construction activities.

(2) The quantity of replacements trees into a site must be sufficient so as to produce a total site tree density factor of no less than 20 units per acre (Note: the terms unit and tree are NOT interchangeable). Procedures for determining the site density requirements and the subsequent tree replacement requirements are provided in Appendix and incorporated by reference herein. A required buffer or trees located in the floodplain shall not be counted towards tree density.

(3) The spacing of replacement trees must be compatible with spatial limitations, and within responsible considerations towards potential species size.

(4) The following number of trees shall be maintained and/or planted on all single-family residential lots developed in the City.

Lot Size	**Number of Required Trees**
≤ 8,000 square feet	1 tree
8,001 to 15,000 square feet	2 trees
15,001 to 20,000 square feet	3 trees
20,001 to 25,000 square feet	4 trees
25,001 to 30,000 square feet	5 trees
≥30,001 square feet	1 tree per 5,000 square feet of lot size

(A) Understory trees may constitute no more than 25% of the required trees; lots less than 8,000 square feet are exempt from this requirement.

(B) Notwithstanding the foregoing, it is required that all reasonable efforts be made to save Specimen Trees. (Reasonable effort shall include, but not be limited to, alternate building design, building location, parking area layout, parking area location, water retention location and the like.)

(C) Tree Save Areas are encouraged and will be given credit of up to 50% individual lot requirements when the number of trees in the tree save areas is equal to or greater than the total number of trees required on the total number of lots within the subdivision.

(5) Occasionally, this intent cannot be met because a project site will not bear the

required density of trees. In this case, the City Arborist may approve a contribution to the City of Dunwoody Tree Replacement Fund. The following standards have been established for administering these contributions.

(A) The City Arborist must review and approve all requests for alternative compliance. In no instance shall one hundred percent (100%) of the required site density be met through alternative compliance. As many trees as can reasonably be expected to survive must be planted on the site in question.

(B) No permit shall be issued until the required contribution has been made to the Tree Replacement Fund.

(C) The amount of the contribution shall be determined from the Fee Schedule for the Community Development Department.

(D) The City of Dunwoody Tree Replacement Fund shall be used for planting trees on public property. Funds may be used for the purchase of trees, installation of trees and irrigation, and the purchase of mulch and soil amendments for the planted areas.

(6) Species selected for replacement must be quality specimens, and must be ecologically compatible with the specifically intended growing site. No more than 35% of any one species may be used. Evergreens may constitute no more than 25% of the trees in non-buffer areas. Standards for transplanting, and selecting quality replacement stock shall be in accordance with standards of the International Society of Arboriculture, National Association of Arborists, American Standard for Nursery Stock, and Appendix . Appendix offers a list of trees generally acceptable for credit in the Tree Density Calculation.

(7) Understory replacement trees may account for no greater than 25% of the required tree density units. The City Arborist shall have the discretion to approve the additional use of understory trees for meeting density requirements on single family lots if the size and/or layout of the lot does not allow for large overstory trees.

(8) Species selection and replacement densities are subject to approval by the City Arborist.

(s) Specimen and Special Trees

(1) Some trees on a site warrant special consideration and encouragement for preservation. These trees are referred to as specimen or special trees. The following criteria are used by the City Arborist to identify specimen and special trees. Both the size and condition must be met for a tree to qualify.

Criteria	Special Trees	Specimen Trees
Minimum size for hardwoods	14” to 23” DBH	24” DBH
Minimum size for softwoods	20” to 29” DBH	30” DBH
Minimum size for understory trees	4” to 5” DBH	6” DBH
Minimum Life Expectancy	25 years	15 years

Condition Criteria

Relatively sound and solid trunk with no extensive decay.

No more than one major and several minor dead limbs

No major insect or pathological problems.

No major pruning deficiencies, i.e. topping

At least 75% of the Critical Root Zone in a natural, undisturbed state

(2) In order to encourage the preservation of specimen and special trees and the incorporation of these trees into the design of projects, additional density credit will be given for specimen and special trees which are successfully saved and maintained. Credit for any specimen or special tree thus saved would be one and a half (1.5) times the assigned unit value shown in the Appendix. Should the property owner retain the services of a Certified Arborist to improve the quality of said trees (services include, but are not limited to, installation of cabling & bracing, installation of lightning protection, corrective pruning, removal of deadwood, supplemental irrigation, introduction of mycorrhizae, etc.), the density credit shall be increased to two (2) times the assigned value designated in the Appendix. The property owner must supply a letter of commitment from the Certified Arborist and/or provide documentation of services provided in order to receive the increased density credit.

The City Arborist may identify and require the preservation of a tree stand if it contains one or more specimen or special trees and the trees are interlocked with other members of the stand in such a manner as to imperil the individual tree if other members of the stand were to be removed.

(3) No specimen tree may be removed without the prior written approval of the City Arborist.

(A) Specimen trees that are approved for removal must be replaced by species with potential for comparable size and quality. All specimen trees must be replaced with 3" caliper or larger trees at a density of one and a half (1.5) times the unit value of the tree removed, i.e. a 30"DBH specimen tree (4.9 density units) must be replaced with 7.35 units. Specimen tree replacement density is in addition to the minimum required density for the site.

(B) Any specimen tree, which is fatally damaged during construction, as determined by the City Arborist, or removed without the appropriate review and approval of the City Arborist, must be replaced with 4" caliper or larger trees with a total density equal to three (3) times the unit value of the tree removed. Size alone will determine whether a tree was of specimen quality if the tree is removed without approval. Additionally, the area that encompassed the Critical Root Zone of the specimen tree shall remain undisturbed to allow for the planting of replacement trees.

(t) Tree Protection

(1) The following minimum tree protection measures must be in place for all tree save areas:

(A) Trees identified for preservation shall have protection fencing that is a minimum of four (4) feet high installed at the edge of the critical root zones. The City Arborist shall have the discretion to require the installation of four (4) foot high minimum chain link fencing in those areas where the likelihood of possible encroachment occurs. All tree protection zones shall be designated as such with signage posted visibly on all sides of the fenced area. Signs requesting workers' cooperation and compliance with tree protection standards are recommended at the site entrance(s).

(B) All tree protection zones shall be designed to prevent the sedimentation of erosion material. Silt fences must be placed along the outer uphill edges of tree protection zones at the development interface.

(C) No person shall encroach into the tree protection zones. Construction activities, including but not limited to, parking, vehicle and foot traffic, material storage, concrete washout, debris burning, and other activities shall be arranged so as to prevent disturbance within the protected areas.

(D) Reasonable efforts shall be made to locate utility lines along corridors between tree protection zones. If utility lines must encroach into the protection zones, they shall be installed by tunneling rather than trenching.

(E) All tree protection devices shall remain in fully functioning condition until the Certificate of Occupancy is issued.

(i) Any tree, designated for preservation, which is negligently damaged during construction or removed without the appropriate review and approval, as determined by the City Arborist, shall be treated according to the National Arborists Association Standards. If fatally damaged, the tree(s) shall be replaced with four (4) inch caliper trees equal to the unit value of the tree removed. Any specimen tree damaged as described above shall be replaced with trees equal to three (3) times the unit value of the tree removed.

(ii) All tree protection zones shall be mulched with at least four (4) inches and not more than eight (8) inches of organic mulch, such as pine straw, wood chips, tree leaves, or compost.

(iii) There shall be no construction activity inside the tree save areas, including but not limited to, grading, paving, and construction of buildings and other structures.

(iv) The site shall be designed and maintained in a manner to ensure proper drainage in tree save areas during and after construction.

(F) The developer shall designate a Tree Protection Supervisor. This person shall demonstrate knowledge in the area of tree protection practices during construction and shall be on site to ensure tree protection measures are enforced. The Tree Protection Supervisor shall participate in a Pre-Construction Conference with the City prior to the commencement of any development. The Tree Protection Supervisor must notify the City Arborist immediately should any tree damage occur on the site.

(G) Tree Protection inspections shall be performed by a Certified Arborist or Registered Forester during construction. The inspections shall be conducted prior to the commencement of development, immediately following the clearing and grubbing phase, immediately following the grading phase, and at the end of the project before a Certificate of Occupancy (commercial developments) is issued or the Final Plat approved (residential developments). The site shall be inspected to ensure all tree protection regulations are being met and to identify any existing or developing tree-related problems that require treatment. An inspection report shall be prepared and certified by the inspector and submitted to the City Arborist. Any damage noted shall be treated according to the recommendation of the inspector prior to the issuance of a Certificate of Occupancy or approval of the Final Plat. The City Arborist shall have the authority to require additional reports should he/she determine significant construction damage has occurred, the Tree Protection Supervisor has

failed to enforce minimum protection standards, or if other development processes, including but not limited to utility placement and building construction, may impact the tree save areas.

(2) MAINTENANCE All maintenance activities performed on preserved or planted trees to be included in the tree density requirements shall be performed according to the most current professional standards, including, but not limited to, the standards described below. It shall be the responsibility of the property owner to ensure such work is in compliance. Should maintenance activities on said trees not be in compliance with such professional standards, the property owner will be responsible for replacing the damaged trees with new trees of an equivalent density value, based on the DBH at the time damage occurs.

(A) Nursery Stock: All nursery stock shall meet standards defined in the *American Standard for Nursery Stock ANSI Z60.1*.

(B) Pruning: All pruning shall be done in accordance with *ANSI A300 (Part 1) Standards for Tree Care Operations – Pruning*. Tree topping is not allowed. Crown reduction pruning shall be used instead to reduce the height of a tree when necessary. Topped trees shall not be counted toward tree density requirements.

(C) Fertilization: All tree fertilization shall be performed in accordance with *ANSI A 300 (Part 2) Standards for Tree Care Operations – Fertilization*.

(D) Cabling and Bracing: All cabling and bracing installation and maintenance shall be performed in accordance with *ANSI A300 (Part 3) Standards for Tree Care Operations – Cabling and Bracing*.

(E) Lightning Protection: All lightning protection installation and maintenance shall be performed in accordance with *ANSI A300 (Part 4) Standards for Tree Care Operatioins – Lightning Protection*.

(F) Safety: All tree-related work shall be performed in accordance with *ANSI Z133.1 Standards for Tree Care Operations – Safe Work Practices*.

(3) ENFORCEMENT It shall be the duty of the City Arborist to enforce this Ordinance. The City Arborist shall have the authority to revoke, suspend, or void any Development Permit and shall have the authority to suspend all work on a site or any portion thereof. The City Arborist shall have the authority to approve alternate methods of compliance with the provisions of this article when he/she determines the overall intent of the article and/or specific guidelines can be met.

(4) VIOLATION AND PENALTY Any person, firm, or corporation violating any of the provisions of this Ordinance shall be deemed guilty of an ordinance violation. Each day's continuance of a violation shall be considered a separate offense. The

owner of any property wherein a violation exist, and any builder, contractor, agent who may have assisted in the commission of any such violation, shall be guilty of a separate offense. The Dunwoody Municipal Court shall have jurisdiction to try offenses to these regulations.

(5) APPEAL Any person aggrieved or affected by any decision of the City Arborist relating to the application of this ordinance may appeal to the Zoning Board of Appeals for relief or reconsideration within thirty (30) days from the date of the adverse determination by the City Arborist.

(6) EFFECTIVE DATE This ordinance shall become effective upon approval by the Dunwoody City Council.

(7) Should any section or provision of this ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the ordinance in whole or any part thereof other than the part so declared invalid.

(8) CONFLICTING RESOLUTIONS REPEALED the provisions of any ordinance or parts of ordinance in conflict herewith are repealed.

APPENDIX X PROCEDURE FOR CALCULATING THE REQUIRED TREE REPLACEMENT DENSITY FACTOR.

The following abbreviations are used below:

TDF-Tree Density Factor
RTF-Remaining Tree Factor
RRD-Required Replacement Density

Step 1. Calculate the tree density factor (TDF) for the site multiplying the number of site acres by 20.

EXAMPLE: A 2.2 acre site has a TDF OF 2.2 x 20 = 44.

Step 2. Calculate the existing trees, which will remain, or the Remaining Tree Factor (RTF). These will remain on site and be protected during construction. The RTF is determined by converting the DBH of individual existing trees to density factor units, using Table 1. These units are then totaled to determine the RTF for the site.

EXAMPLE: A total of 15 trees will remain on the 2.2 acres site in Step 1. These trees include:

7 - 12" pines
3 - 14" pines
3 - 18" oaks
1 - 20" hickory
1 30" oak

When converted to density factor units using Step 1, we arrive at the following values:

DBH	UNITS		QUANTITY		# TREES
12"	.8	x	7	=	5.6
14"	1.1	x	3	=	3.3
18"	1.8	x	3	=	5.4
20"	2.2	x	1	=	2.2
30"	4.9	x	1	=	4.9
			RTF	=	21.4

The sum total of units, 21.4, is the RTF.

Step 3. Calculate the required replacement density (RRD) by subtracting the RTF (Step 2) from the TDF (Step 1).

RRD = TDF - RTF

EXAMPLE: RRD = 44 - 21.4
RRD = 22.6

Step 4. The RRD can be converted back to caliper inches using Table 3. Any number or combination of transplantable size trees can be used so long as their total density factor units will equal or exceed the RRD.

EXAMPLE: On the 2.2-acre site the following number and size of trees will be planted:

Number	Size	Species	Density Factor
15	6’	Pines	(12 x .4) = 6.0
20	2"	Red Maples	(20 x .5) = 10.0
7	6"	Oaks	(7 x 1.0) = 7.0
			23.0

23.0 is greater than the RRD of 22.6 thus the minimum requirements have been met.

TABLE 1. SAMPLE TREE DENSITY CALCULATION

Required TDF
2.2 acres x 20 units/acre = 44 units required

RTF (Remaining Tree Factor)

SIZE	UNITS	NUMBER	TOTAL UNITS
24"	3.1	2	6.2
18"	1.8	10	18.0
10"	0.6	8	4.8
		TOTAL RTF	29.0

RRD (Required Replacement Density)

SIZE	UNITS	NUMBER	TOTAL UNITS
2"-3"	.5	10	5.0
1"	.4	100	40.0
		TOTAL RRD	45.0

RTF + RRD > or = TDF
29 + 45.0 = 74.0 > or = 44, therefore Tree DENSITY SATISFIED

TABLE 2. EXISTING TREES TO REMAIN. Conversion from DBH to density factor units for RTF, or Remaining Tree Factor.

DBH	UNITS	DBH	UNITS	DBH	UNITS
1-4	0.1	22	2.6	37	7.5
5-7	0.3	23	2.9	38	7.9
8-9	0.5	24	3.1	39	8.3
10	0.6	25	3.4	40	8.7
11	0.7	26	3.7	41	9.2
12	0.8	27	4	42	9.6
13	0.9	28	4.3	43	10.1
14	1.1	29	4.6	44	10.6
15	1.2	30	4.9	45	11
16	1.4	31	5.2	46	11.5
17	1.6	32	5.6	47	12
18	1.8	33	5.9	48	12.6
19	2	34	6.3	49	13.1
20	2.2	35	6.7	50.	13.6
21	2.4	36	7.1		

TABLE 3. REPLACEMENT TREES. Conversion from caliper to density factor units for replacement trees. (1,2)

Caliper: Single-Stem Deciduous Trees	Density Units
2”	0.5
3”	0.6
4”	0.7
5”	0.9
6”	1.0

Height: Multi-Stem Deciduous Trees	Density Units
12’ to 14’	0.5
14’ to 16’	0.6
16’ to 18’	0.7
18’ to 20’	0.9

Height: Evergreen Trees	Density Units
6’ to 8’	0.4
8’ to 10’	0.5
10’ to 12’	0.6
12’ or greater	0.7

2. Tree relocation: Replacement units will be granted to trees relocated on site. Tree relocation is subject to City Arborist and/or Zoning Enforcement officer approval.

APPENDIX X STANDARDS FOR SELECTING QUALITY REPLACEMENT STOCK

1. Trees selected for planting must meet minimum requirements as provided below and in the American Standard of Nursery Stock.

(a). Trees selected for planting must be free from injury, pests, disease, or nutritional disorders.

(b). Trees selected for planting must be of good vigor. The determination of vigor is a subjective evaluation, and dependent upon species variability. The following criteria is generally used for the determination of vigor:

(1) Foliage should have a green or dark green color. Vigorous trees will have large leaves and dense foliage when compared to trees with poor vigor.

(2) Shoot growth for most vigorous trees will be at least 1 foot per year. At least 1/2 of the branches should arise from the top 1/3 and 1/2 from the center 1/3.

(3) Bark texture can denote vigor. Smooth or shiny bark on the trunk and branches of a young tree usually signifies good vigor, conversely, rough and full bark could indicate poor vigor.

(4) Trunk taper. The trunks of vigorous trees will generally have an increase in diameter with a decrease in height. Trees with reverse tapers or no taper should be avoided.

(5) Root color. Young roots of most trees will be light in color.

(6) Trees selected for planting must be free of root defects. Two types of root defects generally occur:

(a) Kinked roots, in which taproots, major branch roots, or both are

bent more than 90 degrees with less than 20 percent of the root system originating above the kink. A tree with such roots will probably bend at the soil line when released from a supporting stake.

(b) Circling or girdling roots which circle 80 percent or more of the root system by 360 degrees or more. A tree with such roots would ultimately have less than 20 percent of its system available for support.

APPENDIX X TRANSPLANTING STANDARDS

1. The transplanting of new trees can result in major injury to their root system. If proper transplanting techniques are employed, conditions will be more favorable for tree recovery, and the rate of attrition for newly planted trees will be reduced.

2. Transplanting procedures shall follow standards established by the International Society of Arboriculture in the "Trees and Shrub Transplanting Manual", and the booklet by the Georgia Extension Service entitled "Plant Trees Right!" The following is a summary several of the more important considerations provided in the manual and booklet.

(a) Preplanting considerations.

(1) Only healthy trees with a well-developed root system and a well-formed top, characteristic of the species should be planted.

(2) Trees selected for planting must be compatible with the specific site conditions.

(3) The ability of a species to regenerate a new root system and to become reestablished should be considered. Generally, deciduous trees should be planted in the fall after leaf drop, or in early spring before bud break. There are indications that bare root trees will re-establish more readily if planted in early spring just prior to bud break.

(b) Planting procedures

(1) Planting holes should be at least three times the diameter of the root ball.

(2) Trees should not be planted deeper than they were in their former location or container.

(3) Spade compacted bottom and sides of the planting hole should be roughed or scarified to allow the penetration of developing roots.

(4) Good water drainage from the bottom of the planting hole is essential for root regeneration.

(5) Once the transplanted tree is set, the hole should be backfilled with soil of good texture and structure. Traditionally, backfill material is comprised of a mix of negative soil, organic matter such as peat, and inorganic material such as perlite or vermiculite in a 1:1:1 ration. There are indications that a backfill with native soil alone may be adequate.

(6) The addition of fertilizer to backfill soil can cause root injury, and is therefore not recommended. If fertilizer must be added, a low rate should be used. Approximately 1.5 pounds of nitrogen per cubic yard of backfill is recommended for bare root plants, and 2.5 pounds of nitrogen per cubic yard of backfill for balled and burlapped trees.

(7) The backfill should be gently tamped (but not compacted), and soaked for settling.

(8) The soil should be slightly mounded to allow for settling; a ridge or dike around the perimeter of the hole can facilitate watering.

APPENDIX X SUBSTANTIAL BUILDING PERMIT

A. Example one

1. The 100 percent assessed value of the improvements of a 10,000 square foot shopping center is assessed by Dekalb County at $250,000.

2. In January the owner is issued a permit in the amount of $25,000 to replace heating and air conditioning equipment. Three months later he is issued a permit in the amount of $50,000 to replace the roof covering and add a false mansard roof.

3. Does this equate to a Substantial Building Permit?
$25,000 + $50,000 = $75,000 (building permits 12 months)
$75,000 / $250,000 = 30.00% < 50.00%
This case is not a substantial building permit.

B. Example two

1. The 100 percent assessed value of the improvements of a 10,000 square feet shopping center is assessed by Dekalb County at $250,000.

2. The owner decides to build phase two of the shopping center, which includes an additional 6,000 square feet of space. The low bid on the job is $200,000.

3. Does this equate to a Substantial Building Permit?
$200,000 / $250,000 = 80.00% > 50.00%
Yes, this is a substantial building permit.

C. Example three

1. A site is cleared and graded for a gas station but not developed therefore the counties assessed value of the improvements is $0.

2. Two years later the owner applies for a building permit in the amount of $500,000 for the construction of a gas station.

3. Does this equate to a Substantial Building Permit?
Yes, because the permit exceeds half of the value of the improvements. In this case the formula used in examples one and two are not appropriate because zero can not be used as a denominator but obviously the value of the permit exceeds half of the improvement value.

APPENDIX X PLANTING STANDARD

A. The best way to plant (see diagram attached).

1. After selecting a suitable location, mark out a planting area that is five times the diameter of the planting ball. Use a rototiller or shovel to loosen and mix the soil in this entire area to a depth of about 12 inches.

2. In the center of the prepared area, dig a shallow hole to set the tree or shrub. The hold should allow the root ball to sit on solid ground rather than loose soil. Once the ball is set the hole, its upper surface should be level with the existing soil.

3. After the tree is properly situated, cut and remove the rope or wires holding the burlap in place and securing any part of the tree.

4. Backfill around the root area, and gently firm the soil to prevent major air pockets. Do not pack the soil. Water can be used to help the soil settle and prevent overpacking. Rake the soil even over the entire area, and cover it with two to four inches of mulch. Maintaining the mulch layer carefully will improve tree growth substantially.

5. Water berms or dikes are not recommended as they encourage abnormal root growth.

6. It is best not to stake the tree, but if wind is a problem or the tree starts to lean, support it with a flexible stake so the trunk will sway in the wind. The movement is necessary for building the trunk's strength. Remove the stake and wire after one growing season since leaving wire or string around the tree can cause death.

7. Do not wrap the trunk with "protective" tape. It will slow the tree's ability to adapt to the site and provide a home for insects. Tree barks needs air and sunlight in order to build a healthy protective sheath.

Section 13: Stormwater Management

(a) The governing authority believes the City's stream systems are a valuable natural resource that requires joint and cooperative action by the City and the development

industry to resolve existing stormwater management and flooding problems, prevention of their worsening or recurrence while utilizing this resource for the good of the entire City.

The development industry and the City shall cooperate to control water quality and maintain the City's drainage and stream systems from stormwater runoff resulting from development activities.

(b) Standards.

(1) The City of Dunwoody shall require all land development to comply with the criteria, technical specifications, and standards of the Georgia Stormwater Management Manual, as may be hereafter amended. The rainfall intensities used in hydrologic and hydraulic computations shall be those published in the Georgia Stormwater Management Manual.

(2) Applicability. A combination of storage and controlled release of stormwater runoff shall be required for all development and construction for the entire site which meets one (1) or more of the following criteria:

(A) Increases the peak rate of runoff from the site by more than one (1) cubic foot per second for a ten-year frequency storm;

(B) Involves the creation of five thousand (5,000) square feet or more of impervious cover, or that involves other land development activities of one (1) acre or more;

(C) Includes the creation, addition or replacement in redevelopment of five thousand (5,000) square feet or more of impervious cover, or that involves other land development activity of one (1) acre or more;

(D) Any new development or redevelopment, regardless of size, that meets the definition of a stormwater hotspot; or

(E) 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.

(3) Exemptions. The provisions of this section shall not apply to the following criteria:

(A) Individual single-family or duplex residential lots that are not part of a subdivision or phased development project unless they meet one (1) of the criteria listed above in (b)(2);

(B) Additions or modifications to existing single-family or duplex residential structures unless it meets one (1) of the criteria listed above in (b)(2);

(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 Director.

(E) The Director may exempt the owner from those provisions of this section where complete compliance with those specific provisions is physically impossible.

(F) If the installation of a stormwater management facility would reduce downstream flood peaks by less than one (1) percent.

(G) The requirements, or portions thereof, of subsections (2) and (3) above shall not be waived if the Director determines that such waiver would increase known flooding problems, or exceed the capacity of the downstream drainage system.

(H) A waiver of these minimum runoff quantity control requirements may be granted only after a written request is submitted by the applicant containing descriptions, drawings, and any other information that is necessary to evaluate the proposed land disturbing activity. A separate written waiver request shall be required if there are subsequent additions, extensions, or modifications, to the development which would alter the approved stormwater runoff characteristics of a land disturbing activity receiving a waiver.

(I) Appeals from said waiver decisions may be taken to the Board of Zoning Appeals pursuant to the provisions of Section 8(c) of this Article.

(4) If forty (40) percent of a site is to be redeveloped, all stormwater requirements must be met for the redeveloped area only and the non-disturbed area will be treated as predeveloped prior to the redevelopment. But if more than forty (40) percent of the site is to be redeveloped, then the entire site must meet all stormwater requirements.

(5) A downstream peak flow analysis will include 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 ten (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 Georgia Stormwater Management Manual.

(6) Detention designs may be rejected by the Director if they incorporate structures and facilities that will demand considerable maintenance or will be difficult to maintain or will utilize numerous small structures if other alternatives are physically possible.

(7) Discharge velocities from detention facilities shall be reduced to provide a non-erosive velocity flow from a structure, channel, or other control measure as set forth in the approved Georgia Stormwater Management Manual.

(8) Stormwater management and flood control facilities may include both structural and nonstructural components. Natural or planted vegetation as well as other natural runoff conduits are examples of these non-structural components and shall be retained where practicable. In addition, these components must provide for or enhance stormwater quantity and/or quality control or other stormwater benefits.

(9) The drainage system being developed shall have adequate capacity to accommodate the flow from all upstream areas for a one hundred-year storm event.

(10) The drainage system from a proposed development must discharge into an outfall that has adequate capacity to accommodate the runoff from the development. If the connecting downstream system is not able to accommodate the allowable design flows from the site, then the design engineer must design drainage facilities with the capacity to over-detain flows so they can be accommodated by the existing downstream conveyance structures whereby allowing the existing downstream system to operate correctly. If downstream easements are needed to extend the drainage system to an adequate outfall, the developer shall obtain these easements.

(11) A landscaping plan shall be submitted for all detention and other storage facilities as part of the overall drainage plan.

(12) Land uses within the intermediate regional floodplain shall not diminish or restrict the capacity of the channels or floodplains of the stream, its tributaries, drainage ditches or any other stormwater management facilities or systems and shall not increase the IRF elevation or velocity or concentration of flow in downstream areas. The development permit shall be denied if the required hydrologic studies reveal that a request for filling or grading within the intermediate regional floodplain would overload the capacity of the channel downstream or increase flood stages upstream, unless equivalent flow and storage capacity is replaced and

maintained by the owner within the intermediate regional floodplain. Altered sections of the intermediate regional floodplain shall have a positive slope so as to provide positive drainage back to the stream flow line and this section must be maintained by the owners in perpetuity so as to prevent or remove silt buildup.

(13) Excavation within floodplain areas shall not be permitted unless the excavation can be accomplished in such a manner that the existing low level drainage pattern through the floodplain shall be maintained. The area of compensation within the floodplain shall be considered as ineffective flow area for the purpose of calculating floodplain elevations to meet no-rise certification requirements. The amount of compensation shall be limited to one hundred fifty (150) cubic yards per acre of floodplain area.

(14) The live detention storage to be provided shall be calculated on the basis of the one hundred-year frequency rainfall as published in the Georgia Stormwater Management Manual. The detention system required shall be necessary to handle the runoff of a one hundred-year rainfall, for any and all durations from the post-development, with a release rate that does not exceed the pre-development release rate during the same duration storm. Detention control structures and other drainage improvements shall be located and designed to prevent erosion damage to adjacent property owners.

(15) When the applicant requests and the Director determines that development and construction projects are too small, or that engineering and economic factors make combined detention or other stormwater management facilities more practical, the City may authorize the joint construction of these facilities to serve two (2) or more properties by two (2) or more applicants. This authorization shall be granted by the Board of Zoning Appeals upon application for approval being submitted through the Director. Where joint detention facilities serving two (2) or more properties are approved for construction, no use of land or occupancy of buildings within the properties served by these facilities shall be permitted until completion of the detention facility, except upon approval of the Board of Zoning Appeals.

(16) The following requirements shall apply to the installation, development and maintenance of all stormwater and sedimentation control facilities designed for temporary storage of stormwater runoff:

(A) Permanent fencing at least four (4) feet in height shall be required around all facilities having a temporary water storage depth of greater than four (4) feet or those designated by the board of health as constituting a public health hazard.

(B) This fencing shall be designed, installed and maintained to allow the free flow of runoff and sediment into the facility. Fencing shall be established on the outside edge of a facility. The fence shall include a gate of

sufficient size to permit entrance of equipment necessary to allow periodic maintenance activities. The gate shall be placed in a manner such that the gate does not obstruct reasonable access or become obstructive. The Director may waive fencing in nonresidential areas where a pond is more than five hundred (500) feet from a residential district and in residential districts when detention is provided in natural areas such as stream channels and fencing in the opinion of the Director would damage the environment or affect stream flow.

(C) The access easement to the facility shall not have a profile slope steeper than thirty-three (33) percent and a cross slope of no more than ten (10) percent. The elevation of the maintenance easement around the facility shall be established at the top of the dam or wall elevation and be constructed with a cross slope of no more than ten (10) percent to the drainage facility. Fencing that complies with the requirement of subsection (b)(16)(B) of this section shall be constructed on the outside edge of the maintenance easement. Gates that comply with the requirements of subsection (b)(16)(B) of this section shall be constructed on each maintenance easement.

(D) Detention and sedimentation control facilities shall not be placed in any of the following:

(i) Transitional buffer zones as defined by the City of Dunwoody Zoning Ordinance.

(ii) Floodplains.

(iii) Wetlands.

(iv) Stream buffer zones.

(v) State buffer zones.

(E) Perforated standpipes or a French drain, in accordance with published design standards available from the Director, or other methods which will achieve equal performance to prevent standing water and inadequate drainage, shall be installed within all the detention and sedimentation control facilities.

(F) Except as otherwise provided in this section, the commercial and/or multifamily residential property owner shall be responsible for the maintenance of the stormwater management facilities during grading, construction, and following final approval of the completed project. This maintenance and certification obligation shall be binding on all future owners, successors and assigns of the property.

(G) In the case of single-family residential subdivisions approved after the date of adoption of this provision, and in accordance with the requirements of Article III of this Chapter, the City may assume maintenance responsibility one (1) year after the release of the performance bond for subdivision streets. A special drainage district as authorized by the Georgia Constitution, Article IX, Section II, Paragraph VI, may be established for property in a single-family residential subdivision at the time the plat is finally recorded, and will be so noted on the plat. Upon completion of developer maintenance, all detention ponds shall have a positive slope to the outlet in order to facilitate complete drainage.

(H) Stormwater management facilities in single-family residential subdivisions constructed under permits issued prior to the adoption of the City ordinance assigning maintenance responsibility will not be accepted for City maintenance unless individually approved by and at the discretion of the Board of Zoning Appeals and suitable access easements are provided. At the time the Director accepts a detention facility for City maintenance, a special drainage district may be established that includes all properties for which the detention facility is designed to compensate for increased peak runoff rates due to development.

(17) In residential districts, not less than seventy (70) percent of the minimum lot area, as established by applicable zoning district development standards, shall be above the intermediate regional flood elevation contours with the exception that lots in the R-150 district shall conform to requirements of the R-100 district.

(18) All buildings located adjacent to the intermediate regional floodplain shall be constructed so that all portions of the structure, including the basement floor or crawl areas, shall be not less than three (3) feet above the intermediate regional flood elevations; however, structural support units may be located within the intermediate regional floodplain, provided they do not conflict with the hydrologic design characteristics of the approved plans and do not conflict with other requirements of this Article. Any structure or manufactured home so erected must be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure, and be constructed with flood-resistant materials and utility equipment resistant to flood damage. Electrical, heating, ventilation, plumbing, air-conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Floodproofing of residential construction will be in accordance with subsection (b)(10) of this section. When floodproofing is utilized for a nonresidential structure, the owner of the property shall obtain written certification from a registered professional engineer or architect and shall provide such certification to the Director before the Director approves such activity.

(19) The profile elevation of the centerline of all public streets shall be constructed a minimum of one (1) foot above the intermediate regional flood elevation contours. The Director may grant exceptions to this provision in cases where construction of the street elevation is below the intermediate regional flood elevation and elevation contours would improve drainage or reduce the effects of flooding.

(20) Special drainage system maintenance requirements are as follows:

(A) Pursuant to all applicable City and County law, trash, garbage, construction materials, construction by-products or other debris shall not be deposited in any part of the drainage system.

(B) No restriction or barriers, including fences, may be placed in the drainage system or intermediate regional floodplain without first obtaining a development permit. When on-site or off-site debris has accumulated within an intermediate regional floodplain in such a manner as to interfere with the free flow of water so as to increase the risk of hazardous inundation of upstream properties adjacent to the intermediate regional floodplain, the Director shall require the owner of the property where this debris was generated, if its source can be identified, to clear and remove the debris so as to permit the free flow of water.

(C) No impoundment of water which retains in excess of five-tenths (0.5) acre-ft of runoff shall be removed without first obtaining a development permit, which shall only be issued after competent engineering studies provided by the applicant show that this removal will not adversely affect downstream properties.

(D) No permanent structures or additions shall be constructed within the intermediate regional floodplain other than those non-building facilities required or authorized by the Director which will not conflict with the hydrologic design characteristics of the approved development and construction plans. Land within the intermediate regional floodplain may be used to meet setback, yard, open space and buffer requirements in accordance with applicable provisions of the City of Dunwoody Zoning Ordinance and the buffer requirements of this Chapter.

(21) Any proposal for development in a regulatory floodway as identified on the flood boundary-floodway map must be accompanied by engineering certifications assuring that no increase in the flood levels of the base flood would be caused by the proposed development. Such proposals include culverts and bridges.

(22) New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundations and other exterior walls below the base flood elevation shall be designed to preclude finished living space and

designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls, as follows:

(A) Designs for complying with this requirement must either be certified by a currently state-registered professional engineer or currently state-registered professional architect and meet the following minimum criteria:

(i) Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding.

(ii) The bottom of all openings shall be no higher than one (1) foot above grade.

(iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

(B) Electrical, plumbing and other utility connections are prohibited below the base flood elevation.

(C) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).

(D) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

Section 14: Water Quality Control

The following provisions are included in the land development regulations in order to control the water quality of storm runoff from all development and construction activities and all developed sites:

(a) Standards.

(1) New development and redevelopments in the City of Dunwoody must use the stormwater quality site development review tool to facilitate the evaluation of the project in accordance with recommendations of this ordinance and the Georgia Stormwater Management Manual.

(2) At a minimum, new projects shall include stormwater quality provisions and the BMPs necessary to accomplish each of the following.

(A) Water quality BMPs must be installed on all developments to improve the water quality of the storm runoff from the development site. Stormwater management systems (which can include both structural stormwater controls and better site design practices) must be designed to remove eighty (80) percent of the average annual post-development total suspended solids load. As a minimum, the runoff from the first one and two-tenths (1.2) inches of rainfall must be treated. Acceptable BMPs for treating stormwater runoff are set forth in the Georgia Stormwater Management Manual.

(B) BMPs shall be used to control discharges into the local drainage system of any organic or inorganic matter that cause or tend to cause pollution of such waters.

(i) Minimization of impervious areas within developments and minimization of impervious areas directly connected to the local drainage system is encouraged as a non-structural BMP for water quality and quantity control.

(ii) A plan shall be provided to protect all existing wetland/floodplain areas within the development site.

(b) Drainage plans. The following performance criteria shall be used by the City in evaluating all drainage plans, unless otherwise provided for in this section:

(1) 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:

(A) It is sized to treat the prescribed water quality treatment volume from the site, as defined in the Georgia Stormwater Management Manual;

(B) 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,

(C) Runoff from a stormwater hotspot and activities identified by the City of Dunwoody are adequately treated and addressed through the use of appropriate structural stormwater controls, nonstructural practices and pollution prevention practices.

(c) Stream channel protection. Protection of stream channels from bank and bed erosion and degradation shall be provided by using all of the following three (3) approaches:

(1) Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer;

(2) Twenty-four-hour extended detention storage of the one-year, twenty-four-hour return frequency storm event;

(3) Erosion prevention measures such as energy dissipation and velocity control.

(d) 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 twenty-five-year, twenty-four-hour return frequency storm event. If control of the one-year, twenty-four-hour storm is exempted, then peak discharge rate attenuation of the two-year through the twenty-five-year return frequency storm event must be provided.

(e) Extreme flooding protection. Extreme flood and public safety protection shall be provided by controlling and safely conveying the one hundred-year, twenty-four-hour return frequency storm event such that flooding is not exacerbated.

(f) 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 the Director before being included in the design of a stormwater management system.

(g) Stormwater credits for nonstructural measures. The use of one (1) or more site design measures by the applicant may allow for a reduction in the water quality treatment volume required. The applicant may, if approved by the Director, 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 that 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.

(h) Drainage system guidelines. Stormwater conveyance facilities, which may include but are not limited to culverts, stormwater drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutter, swales, channels, ditches, and energy dissipaters shall be provided when necessary for the protection of public right-of-way and private properties adjoining project sites and/or public right-of-ways. Stormwater conveyance facilities that are designed to carry runoff from more than one (1) parcel, existing or proposed, shall meet the following requirements:

(1) Methods to calculate stormwater flows shall be in accordance with the Georgia Stormwater Management Manual;

(2) All culverts, pipe systems and open channel flow systems shall be sized in accordance with the stormwater management plan using the methods included in the Georgia Stormwater Management Manual; and

(3) Design and construction of stormwater conveyance facilities shall be in accordance with the criteria and specifications found in the Georgia Stormwater Management Manual.

(A) Stream buffers shall be established along all streams throughout the City.

(i) Stream buffers shall consist of an undisturbed stream buffer a minimum of seventy-five (75) feet from each stream bank and shall preserve any existing mature riparian forest that can provide shade, leaf litter, woody debris and erosion protection to the stream. Land use in the stream buffer is limited to stormwater channels, footpaths, and utility or roadway crossings, except as otherwise provided below.

(ii) Within the stream buffer, the Director may approve specific encroachments of multi-use trails that are part of a Master Plan for Multi-Use Trails in the City of Dunwoody approved by the City Council. Such encroachments shall be limited to specific locations not less than twenty-five (25) feet from the banks of state waters when, after study of alternative trail alignments, the Director determines that there is no feasible alternative to the proposed encroachment. Such encroachments shall be designed to minimize impervious surfaces and shall incorporate BMPs and other mitigation practices that minimize the impact of encroachments on water quality.

(iii) The stormwater discharge crossing a stream buffer or state buffer zone shall be designed to ensure that sheet flow is established through the stream buffer and prevent channelized flow through the stream buffer.

(iv) Piping of streams shall not be allowed in a stream buffer except where a variance is granted as provided in Article II Section 8(b)(3). However, perpendicular crossings of roads and utility crossings such as sewer pipes and water pipes may be allowed, but should be kept to an absolute minimum. Within transitional buffer zones, a property owner may remove unwanted ground cover (e.g. poison ivy) using hand tools, and in conformance with section 11(b)(4)(C)(xv).

Section 15: Groundwater recharge area

Development within groundwater recharge areas, as delineated by the Georgia Department of Natural Resources' (DNR) Significant Recharge Areas, Hydrological Atlas 18 (1989 Edition) and the DNR's Pollution Susceptibility Map, shall meet the criteria for the protection of groundwater recharge areas established in Chapter 391-3-16-.02 of the DNR's Rules for Environmental Planning Criteria.

Article III: Subdivisions

Division 1: Generally

Section 1: Title

This Article shall be known, cited, and referred to as the subdivision regulations of the City of Dunwoody.

Section 2: Effective Date

These subdivision regulations shall become effective upon adoption of this ordinance by the City Council.

Section 3: Policies and Purposes

(a) Policies.

(1) It is declared to be the policy of the City of Dunwoody to consider the subdivision of land and the subsequent development of the subdivided land as subject to the control of the City pursuant to the City's official Comprehensive Plan in order to promote the orderly, planned, efficient, and economical development of the City.

(2) Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood, or other menace.

(3) The existing and proposed public improvements shall conform to and be properly related to the proposals shown in the Comprehensive Plan, official map, and the capital budget and program of the county, and it is intended that these regulations shall supplement and facilitate the enforcement of the provisions and standards contained in building and housing codes, zoning ordinances, the comprehensive plan, official map and land use plan, and the capital budget and program of the City.

(b) These regulations are adopted for the following purposes:

(1) To protect and provide for the public health, safety, and general welfare of the citizens of the City of Dunwoody.

(2) To guide the future growth and development of the City in accordance with the Comprehensive Plan.

(3) To protect and conserve the value of land and the economic stability of all communities in the City and to encourage the orderly and beneficial development of the City through appropriate growth management techniques, including consideration of the timing and sequencing of development, consideration of infill development in existing neighborhoods and nonresidential areas with adequate public facilities.

(4) To guide public policy and both public and private actions in order to provide adequate and efficient transportation, water, sewerage, schools, parks, playgrounds, recreation, and public services and support facilities.

(5) To provide for the safe and efficient circulation of traffic throughout the City, having particular regard to avoidance of congestion in the streets and highways and the pedestrians and bicycle traffic movements appropriate to the various uses of lands and buildings, and to provide for the proper location and width of streets and building lines.

(6) To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments.

(7) To establish reasonable standards of design and procedures for subdivisions and re-subdivisions to further the orderly layout and use of land, and to ensure proper legal descriptions and monumenting of subdivided land.

(8) To ensure to the extent legally possible that public facilities and services are available concurrent with development and will have a sufficient capacity to serve the proposed subdivision.

(9) To protect and restore the highest quality of the City's air and water resources; to assure the adequacy of drainage facilities; to safeguard the water table, and to encourage the wise use and management of natural resources throughout the City in order to preserve the integrity, stability, and beauty of the City and the value of the land.

(10) To preserve the natural beauty, environment, and topography of the City and to ensure appropriate development with regard to these natural features.

Section 4: Public Purpose

Regulation of the subdivision of land and the attachment of reasonable regulations to land subdivision is an exercise of valid police power delegated by the state to this City. A developer of land has the duty of compliance with the regulations set forth herein for design, dedication, improvement, and restrictive use of the land to conform to the physical and economic development of the City and to the health, safety, and general welfare of the future lot owners in the subdivision and of the community at large.

Section 5: Interpretation

In their interpretation and application, these regulations shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. These regulations shall be construed broadly to promote the purposes for which they are adopted. Any conflict between provisions should be resolved in the way that best serves the purposes of the regulations.

Section 6: Scope and applicability

These regulations shall apply to all subdivision of land, as defined in Article 1, Section 1 of this Chapter, located within the boundaries of the City of Dunwoody.

Section 7: Exemptions

(a) This Article does not apply to a lot or parcel of land established by deed or plat recorded among the land records of Dekalb County prior to the effective date of these subdivision regulations or the division or sale of land by judicial decree.

(b) For purposes of this Article, the division of land into two (2) lots shall be considered a subdivision but exempt from the plat review procedures provided that:

(1) Each proposed lot complies with the requirements of the City of Dunwoody Zoning Ordinance and all conditions of zoning;

(2) Each proposed lot fronts an existing paved public street, which contains the necessary right-of-way width required by this Chapter;

(3) All such plats are drawn to final plat standards in this Chapter; and

(4) The lot being divided is not a lot which resulted from a subdivision of property that was exempt from these regulations in the immediately preceding twenty-four (24) months.

Section 8: Plats not to be recorded until accepted; lots not to be sold in unaccepted subdivision

No person shall record any subdivision plat until it has been approved and accepted by the Director, as the City's designee, nor shall any lot be sold by reference to any subdivision plat whether recorded or not, if the plat is made after the effective date of this Chapter, unless it shall have been approved and accepted by the Director. The recording of a plat shall be based on an approved plat and shall not be recorded solely on the basis of a metes and bounds description.

Section 9: Issuance of building permits and certificates of occupancy; extension of services

No development permit, building permit, or certificate of occupancy shall be issued for a lot or plat subdivided or sold in violation of the provisions of these regulations, nor shall the City have any obligation to extend services to any parcel created in violation of these regulations.

Section 10: Power and duty of Planning Commission to hear variances, criteria to be used in deciding variances, appeals

(a) The Planning Commission, or a Design Review Board if one is created by the City, shall hear and decide applications for variances from the strict application of Division 3 of Article III of this Chapter 14 ("Design Standards"), where strict application of any regulation enacted in Division 3 of Article III would result in exceptional and undue hardship to the owner of such property. These regulations provide the minimum necessary requirements for subdivisions in the City of Dunwoody; thus, variances from the requirements of Division 3 of Article III shall be authorized only upon the Planning Commission or Design Review Board making all of the following findings:

(1) By reason of the shape or topographical conditions of a parcel of property which were not created by the owner or applicant, the strict application of Division 3 of Article III would deprive the property owner of rights and privileges enjoyed by other similarly situated property owners in the same zoning district;

(2) By reason of the shape or topographical conditions of a parcel of property which were not created by the owner or applicant, there is no opportunity for development under any design configuration allowed by these subdivision regulations unless a variance is granted;

(3) The requested variance does not go beyond the minimum necessary to afford relief, and does not constitute the grant of a special privilege inconsistent with the limitations upon other property owners in the zoning district in which the subject property is located;

(4) The requested variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the zoning district in which the subject property is located; and

(5) The requested variance will not in any manner vary the provisions of the City of Dunwoody Zoning Ordinance, the City of Dunwoody Comprehensive Plan or the zoning map of the City of Dunwoody.

(b) No variance shall be granted by the Planning Commission or Design Review Board to:

(1) Allow any variance which conflicts with or changes any requirement enacted as a condition of zoning or of a special land use permit by the City Council;

(2) Increase the density allowed on the property; or

(3) Vary the requirements set forth in Division 3, Part E of this Article.

(c) Applications for variances must be submitted in writing to the Director of Community Development along with the application for sketch plat approval or if a variance becomes necessary after the Planning Commission has approved the sketch plat, within thirty (30) days of discovery of the condition(s) requiring such a variance from the preliminary plat. Applications shall contain all those materials and documents required by the Director of Community Development that are necessary to demonstrate the necessity for the variance and compliance with the requirements of this Code. At a minimum, the variance application must contain a full explanation of the reasons for the variance and must include a plat that shows the proposed subdivision designed without the variance and a plat that shows the proposed subdivision designed with the variance.

(d) When the variance application is first considered by the Planning Commission or Design Review Board, the Director of Community Development shall provide the Planning Commission or Design Review Board with written findings of fact and a recommendation for approval or disapproval of the variance.

(e) Applications for variances that accompany the application for sketch plat approval shall be heard by the Planning Commission or Design Review Board contemporaneously with the public hearing on the sketch plat.

(f) Applications for variances from the preliminary plat shall be heard at a public hearing by the Planning Commission or Design Review Board at the next meeting of the Planning Commission or Design Review Board held after the filing of a complete application for variance from the preliminary plat. All land development activity associated with a proposed variance from a preliminary plat shall cease until a final decision on the variance is made by the Planning Commission or Design Review Board. Land development activity that is not related to the proposed variance may continue unabated.

(g) All decisions by the Planning Commission or Design Review Board approving or disapproving a variance must be issued in writing and must provide the grounds for the decision of the Planning Commission or Design Review Board. The Planning Commission or Design Review Board shall issue a final decision on a variance submitted with the application for a sketch plat at the same time that it issues the final decision

approving or disapproving the sketch plat. The Planning Commission or Design Review Board shall issue a final decision on a variance from the preliminary plat within fifty (50) days after the first meeting at which the Planning Commission or Design Review Board considers the variance. If a final decision is not made on a subdivision plat variance in accordance with the time constraints set forth in this section, the variance shall stand disapproved.

(h) Appeals of variances that accompany applications for sketch plat approval shall be made by writ of certiorari to the Superior Court of DeKalb County. Any person or entity (i.e., an owner, applicant, adjoining neighbor or a neighbor whose property line is within one thousand five hundred (1,500) feet of the nearest property line of the proposed subdivision) aggrieved by a variance decision of the Planning Commission or Design Review Board affecting a preliminary plat, may appeal such decision by filing a petition for writ of certiorari to the Superior Court of DeKalb County.

Section 11: Enforcement, violations and penalties

(a) General. It shall be the duty of the Director of Community Development to enforce this Chapter.

(b) Violations and Penalties. Any person, firm or corporation violating any of the provisions of these regulations shall be deemed guilty of an offense and upon conviction in Municipal Court shall be punished as is provided in Chapter 1 of the City of Dunwoody Code of Ordinances. Each violation of these regulations shall be considered a separate offense. The owner of any structures, buildings, lots or parcels or parts thereof, where anything in violation of these regulations exists, and any architect, builder, contractor or any other agent of the owner, or any tenant, who commits or assists in the commission of any violation, shall be guilty of a separate offense.

(c) Enforcement. Appropriate actions and proceedings, including the issuance of stop work orders and actions in a court of law, may be taken by the City of Dunwoody in law or in equity to prevent any violation of these regulations, to prevent unlawful construction, to recover damages, to restrain, correct, or abate a violation and to prevent illegal occupancy of a building structure or premises. These remedies shall be in addition to the penalties described above.

Division 2: Plat Approval Procedure

Part A. Conference

Section 1: Conference with City officials

Before filing the sketch plat for a subdivision for review and approval, the applicant shall meet with the Community Development Director or his/her designee to discuss the procedure for approval of a subdivision plat and the requirements as to general layout of streets, reservations of

open space, street improvements, drainage, sewerage, fire protection, and similar matters, as well as the availability of existing services, including schools. The Director may advise the applicant, when appropriate, to discuss the proposed subdivision with those officials who must eventually approve those aspects of the subdivision plat coming within their jurisdiction. This conference will allow early evaluation of the applicant's intentions and coordination with the comprehensive plan and the zoning ordinance. This conference will also allow City officials to discuss with the applicant the necessary regulations that will properly accomplish the project.

Part B: Sketch Plat

Section 1: Application and sketch plat required

The owner of the land where the proposed development is to occur, or his authorized agent, shall file a sketch plat with the Department of Community Development along with an application for approval. The application shall:

(1) Be made on forms prepared by the Department of Community Development;

(2) Be accompanied by minimum of eighteen (18) copies of the sketch plat, which must be prepared by a registered civil engineer, surveyor, architect, or landscape architect, as described in these regulations and complying in all respects with these regulations;

(3) Be accompanied by an application fee in the amount set by the City Council; and

(4) Include the name, address and telephone number of an agent who is authorized to receive all notices required by these regulations.

Section 2: Required information

The following existing conditions shall be shown on a sketch plat:

(1) *Boundary lines.* Perimeter boundary of the overall tract, bearings and distances, referred the legal point of beginning;

(2) *Streets on or adjacent to tract.* Name, right-of-way width, and location of streets on and adjacent to the tract, and any existing railroad, sidewalk, trail, or bike lane;

(3) *Contour data.* Topographic contour data at no more than two-foot elevation intervals. The source of this data shall be written on the plat. Existing contour data from the City of Dunwoody Geographic Information System Department may be used where available;

(4) *Tree survey.* A tree survey in compliance with Article 2, Section 12 or tree sample calculations where allowed by the City Arborist which may be submitted as a separate plan;

(5) *Historic resources.* Any building, structure, site or district identified as historic by the DeKalb County Historic Preservation Commission, the DeKalb County Historic Resources Survey, the City of Dunwoody Historic Preservation Commission, if one is established, the Comprehensive Plan, by listing on the Georgia or National Register of Historic Places, or by listing as a National Historic Landmark.

(6) *Natural features on tract.* Other conditions on the tract such as stream buffers, state waters, cemeteries, wetlands, existing structures, intermediate regional floodplain boundary (where available), rock outcroppings, and archeological resources;

(7) *Soils.* Location of soils as shown on Soil Survey of DeKalb County, Georgia by the United States Department of Agriculture;

(8) *Geographical data.* Numerical and graphic scales, north arrow, land lot and district numbers and lines, city and county names and limit lines;

(9) *Prior subdivisions.* Name and reference of any formerly recorded subdivision crossing any of the land shown on the plat;

(10) *Zoning district.* Show zoning district, case number and conditions of zoning;

(11) *Permits.* Show any special administrative permit number, special land use permit number, or Board of Zoning Appeals case number and conditions;

(12) *Variances.* Show any administrative variance approvals;

(13) *Septic tanks.* Show existing septic tank and drain field location or note absence;

(14) *Sewers.* Show size and location of sanitary sewer main(s) available;

(15) *Sewer easements.* Show a sanitary sewer easement with a minimum width of fifteen (15) feet of for all City and Dekalb County maintained lines not within City or County right-of-way, unless otherwise required by Dekalb County Water and Sewer Department;

(16) *Water mains.* Show size and location of water main(s) and fire hydrants;

(17) *Water main easements.* Show a water main easement with a minimum width of fifteen (15) feet for all City and County maintained lines not within right-of-way;

(18) *IRF*. Show on plan whether FEMA, City or Dekalb County benchmark used to establish IRF also identify location of Benchmark;

(19) *Wetlands.* Provide wetlands determination from U.S. Army corps of engineers;

(20) *Receiving waters.* Provide distance to and name of receiving waters;

(21) *Certificate of conformity.* Certification by the applicant that no lots platted are non-conforming or will result in any non-conforming lots.

(22) *Bury pits.* Show location of any existing inert waste bury pits.

(23) *Seal.* All sheets of plats must be sealed by a professional engineer, architect, surveyor, or landscape architect currently registered in the state of Georgia;

Section 3: Depiction of proposed physical layout

The following proposed features shall be shown on the sketch plat:

(1) *Title.* The title under which the proposed subdivision is to be recorded, if known, with the name of the property owner(s) and designers and the date of the plat;

(2) *Street names.* The name of all proposed streets.

(3) *Rights-of-way.* Street rights-of-way and widths indicated, including any necessary right-of-way required for improvements as shown on the thoroughfare plan;

(4) *Sidewalks.* All proposed sidewalk and bike lane locations;

(5) *Lots.* Lot lines, lot numbers, block letters, and the total number of proposed lots within the development;

(6) *Dedications.* Sites, if any, to be dedicated or reserved for common areas, public parks, open space, schools, playgrounds, multi-use trails, or other public uses, together with the purpose and the conditions or limitations of these dedications, if any;

(7) *Yards.* Minimum building setback lines as required under the yard requirements of the zoning ordinance;

(8) *Zoning conditions.* All conditions of zoning and proposed deed restrictions shall be recited on the sketch plat;

(9) *Corner lots.* Show that corner lots shall have an extra width of not less than fifteen (15) feet more than required for interior lots for the zoning district within which they are located;

(10) *Transitional buffers.* Show transitional buffers, if any, and any required screening fencing;

(11) *BMPs.* Show conceptual location of storm water management and water quality BMP facilities on sketch plat;

(12) *IRF*. Show proposed IRF contour, spot elevation (if available) and source;

(13) *Covenants.* Indicate whether the proposed subdivision will be subject to private covenants and whether a homeowner's association will be established;

(14) *Sewer easements.* Show a sanitary sewer easement with a minimum width of fifteen (15) feet for all City or Dekalb County maintained lines not within City or County right-of-way;

(15) *Water main easements.* Show a water main easement with a minimum width of fifteen (15) feet for all City or Dekalb County maintained lines not within right-of-way of City or County;

(16) *Fire hydrants.* Show new fire hydrant(s) and eight-inch fireline(s); and

(17) *Fencing.* Show any required fencing around detention ponds, if required.

(18) *Electrical service.* Show whether electrical service will be above ground or underground.

Section 4: Additional information to be filed with the sketch plat

The following additional information shall be submitted with the sketch plat:

(1) O*wner consent.* The property owner must consent in writing to the proposed development in a consent affidavit provided by the Director of Community Development with the application;

(2) *Taxes.* Provide statement from Dekalb County Tax Commissioner certifying that all ad valorem taxes on the property have been paid;

(3) *Location.* A small map of the City of Dunwoody depicting the subdivision location within the City;

(4) *Vicinity map.* Vicinity map at a scale of four hundred (400) feet to one (1) inch showing the location of the tract with reference to surrounding properties, streets,

municipal boundaries, and streams within five hundred (500) feet of the tract, and showing zoning districts of adjoining property;

(5) *Adjacent properties.* Names of adjoining property owners and the zoning classification of adjacent properties; and

(6) *Engineer.* Name, address and phone of developer and engineer on plat.

Section 5: Scale

Sketch plats shall be prepared at an appropriate scale of not more than one hundred (100) feet to one (1) inch. Maximum sheet size shall be twenty-four (24) inches by thirty-six (36) inches.

Section 6: Official acceptance of application and sketch plat

(a) The Director of Community Development shall give written notice to the applicant within seven (7) days from the date the sketch plat and application are submitted whether the sketch plat application is accepted for review and the official date of such official acceptance. An application shall be accepted when it fully complies with the requirements of Sections 1 through 5 of this Part.

(b) If the application and sketch plat are not accepted, the Director of Community Development shall inform the applicant of the deficiencies and request the applicant to resubmit the application and sketch plat with the additional information.

Section 7: Referral of sketch plat for review

(a) Upon official acceptance of the application and the sketch plat, the Director of Community Development shall provide copies of the sketch plat to the Community Development Department, Public Works, Police Department, and any other city department the Director determines should be consulted for the particularities of the proposed subdivision. Each such department and receiving entity shall review the sketch plat and shall make comments and recommendations regarding any required changes necessary to comply with all applicable regulations. Each department shall return its annotated copy of the sketch plat and written comments and recommendations to the Director within fourteen (14) days from the date of receipt.

(b) Once the Director of Community Development has received each department's comments and recommendations, the Director shall either notify the applicant that the sketch plat has been approved or notify the applicant that revisions to the sketch plat are required.

(c) In the event that any revisions to the sketch plat are required, the applicant may submit a revised sketch plat to the Director of Community Development and, if the applicant submits a revised sketch plat, the Director shall have fourteen (14) days to review the revisions and determine whether such revisions are sufficient for approval. If the

revisions are insufficient, the Director shall notify the applicant that further revisions to the sketch plat are required and for each set of revisions submitted by the applicant the Director shall have fourteen (14) days for review as described in this section.

(d) If a sketch plat is not approved within one hundred eighty (180) days of the official acceptance of the application, the application and sketch plat shall be considered withdrawn without further action by the City. The Director shall approve the sketch plat if the application and sketch plat conform to all requested revisions, the requirements of this Code and state law and shall deny the sketch plat if the application and sketch plat do not conform to all requested revisions, the requirements of this Code or State Law.

Section 8: Public Notification for sketch plats; and procedure for appeal

(a) When the sketch plat has been submitted, the applicant shall place a public notification sign on the site of the proposed subdivision within seven (7) days of submittal for 30 days. At the same time as the sign is posted, the applicant shall also place in a box, on site of the proposed subdivision, in a place which is accessible to the public, fifty (50) 11"× 17" copies of the proposed sketch plat. The Director shall verify that the sign has been posted. If applicant fails to properly post the required sign, the sketch plat shall not be approved until the applicant has properly posted the required notification sign and made copies of the plat available to the public in a box on the site in accordance with requirements set forth in this Code.

(b) Once the application has been submitted, the applicant and members of the public shall be allowed to submit written comments to the Community Development Director that supports or opposes the sketch plat.

(c) The Community Development Director may approve or disapprove the proposed sketch plat in accordance with the approval standards contained in Section 9 of this Part.

(d) Any person or entity (i.e., an owner, applicant, adjoining neighbor or a neighbor whose property line is within one thousand five hundred (1,500) feet of the nearest property line of the proposed subdivision) aggrieved by a denial or approval of a sketch plat, may appeal by filing a petition for writ of certiorari to the Superior Court of DeKalb County.

Section 9: Standards for approval of sketch plats; approved preliminary plats

(a) The Community Development Director shall not approve a sketch plat unless it is found that:

(1) Provisions have been made for a water supply system that is sufficient in terms of quantity, dependability, and quality for purposes of health, emergency, and adequate fire protection for the subdivision proposed;

(2) If a public sewage system is proposed, adequate provision has been made for such a system and, if other methods of sewage disposal are proposed, that such systems will comply with Federal, State, and local laws and regulations;

(3) Adequate areas have been allocated within a subdivision to meet the regulations in this Chapter for the long-term collection, management, and treatment of stormwater;

(4) The proposed subdivision is designed to avoid areas of flood plains, watercourses, wetlands, exceptional or specimen trees or woodlands;

(5) No platting of lots within the subdivision will create any non-conforming lots or increase the non-conformity of existing non-conforming lots on property within or adjacent to the subdivision;

(6) If the subdivision abuts a state highway, all applicable statutory provisions are followed, including the rules of Georgia Department of Transportation;

(7) The proposed subdivision meets all the requirements of this Chapter, the City of Dunwoody Zoning Ordinance, the official comprehensive plan, the official thoroughfare map, and all other standards and regulations adopted by all boards, commissions, agencies, and officials of the City of Dunwoody and all other applicable laws from other, relevant jurisdictions;

(8) A properly issued certificate of appropriateness, when the subdivision or portions thereof lie within a designated historic area that required such a certificate as may be required by State law or this Code; and

(9) Lot lines have been laid out so as to minimize crossing municipal or county boundaries;

(10) All requirements of Sections 2 and 3 of Part B of this Division have been fulfilled.

(b) The Director of Community Development may require the applicant to submit a site plan for any lot to demonstrate that the lot contains adequate buildable area that is suitable for the intended use.

(c) After review of the sketch plat and related comments, and where, in the judgment of the Director of Community Development, the sketch plat conforms to all of the requirements of this Chapter and the City of Dunwoody Zoning Ordinance, all conditions of zoning, and any other applicable City regulations or law, the Director of Community Development shall approve said sketch plat. The following wording for approval shall be shown on the sketch plat:

"This sketch plat has been submitted to and approved by the City of Dunwoody, on this _____ day of _____.

By: _____ (By Dir.)
Director of Community Development
City of Dunwoody, Georgia"

(d) A sketch plat shall become and will be known as a preliminary plat upon its approval by the Planning Commission.

Section 10: Scope of approval of approved preliminary plat; digital submission of preliminary plat

The preliminary plat shall not constitute nor provide assurance of approval of the final plat, but is to be used as the development design for the subdivision and for the acquisition of a development permit as provided for in the City of Dunwoody Zoning Ordinance. The preliminary plat shall be submitted to the Community Development Department in a digital format acceptable to the City, prior to or simultaneous with an application for a development permit.

Section 11: Expiration

The preliminary plat shall expire twenty-four (24) months from the date of the approval of the preliminary plat. If fifty-one (51) percent of linear feet of total road in the entire development shown on the preliminary plat is complete at the expiration of twenty-four (24) months from the date of the approval of the preliminary plat, then the Director of Community Development is authorized to grant a one-time, one year extension of the approval of the preliminary plat. An expired preliminary plat is null and void and is of no effect. An expired preliminary plat may not be renewed.

Section 12: Revised preliminary plat

If the approved sketch plat, which becomes the preliminary plat, is amended or altered by the applicant, without an approved variance, after approval as a sketch plat, then the applicant shall be required to re-submit the revised preliminary plat as a new sketch plat and begin anew the application process contained in Part B (Sketch Plat) of this Division (Plat Approval Procedure).

Part C: Final Plat

Section 1: Preparation

The applicant shall have a registered surveyor prepare the final plat of the subdivision. An application for final plat approval may be made when a preliminary plat of the proposed subdivision has been approved and construction of all required infrastructure is complete to ascertain its location as built.

Section 2: Filing; digital submission of final plat; fee

The final plat and a fee in the amount established by the City Council shall be filed with the City. The final plat and as-built drawings shall also be submitted in a digital format acceptable to the City.

Section 3: Review, certification by City departments

(a) Upon receipt of the final plat, the Director of Community Development shall forward copies of the final plat to the following City departments for certification that the improvements are complete and in conformity with the preliminary plat:

(1) Appropriate official of the Department of Community Development;

(2) Geographic information system department;

(3) Police and fire department;

(4) Public Works Department;

(5) Any other department or entity the Director of Community Development deems appropriate.

(b) Any department to which the final plat is submitted shall note on the plat whether the development meets or fails to meet the requirements of this Code and of that department, specifically, whether all improvements were properly completed and whether the improvements are in conformity with the preliminary plat. If the improvements are incomplete or if the improvements are not in conformity with the preliminary plat, the department shall note on the plat the manner in which the plat fails to meet these requirements. Each department must return its copy of the final plat with notations made within twenty-one (21) calendar days of receipt thereof.

(c) Upon receipt of the annotated copies from all of the departments which received the final plat for notation, the Director of Community Development shall independently review the final plat and determine whether it complies with all City zoning, environmental, and subdivision ordinances and regulations and all applicable State and Federal laws. The Director of Community Development shall certify in writing on the final plat his/her finding of whether the final plat complies with all City zoning, environmental, and subdivision ordinances and regulations and all applicable State and Federal laws.

(d) The final plat shall conform to the approved preliminary plat on file with the City and shall comply with the City of Dunwoody Zoning Ordinance including conditions of zoning.

(e) The final plat shall not be forwarded to the City Council until such time as the Director of Community Development certifies that the final plat conforms to the approved

preliminary plat and complies with all City zoning, environmental, and subdivision ordinances and regulations and all applicable State and Federal laws.

Section 4: Referral to the City Manager

(a) No later than fourteen (14) calendar days after receiving the annotated copies from all of the departments which received the final plat for notation, the Director of Community Development shall transmit the final plat, containing the certification required in Section 3(c) of Part C of this Division and any necessary supplemental materials to the City Manager for approval.

(b) The City Manager as the designee for the governing authority of the City shall approve or disapprove the final plat within ten (10) days of receiving the final plat, as indicted by a receipt stamp on the final plat. If the final plat is not approved or denied within ten (10) days of receipt, the final plat shall be approved automatically and the City Manager shall acknowledge and certify such approval. If the final plat is denied, the City Manager shall provide the reason(s) for denial in writing and such writing shall be given to the applicant with the denied plat. If the final plat is approved, the City Manager shall place the following wording on the original as follows:

"This plat has been submitted to and accepted by the City Manager of the City of Dunwoody, Georgia, and has been approved as required by State law and City codes as meeting all conditions precedent to recording in the Superior Court of Dekalb County.
Dated this _____ day of _____, _____.
By:_____
[City Manager as designee of the governing authority]"

(c) Final plat acknowledgement and approval by the City Manager shall constitute that approval, if any, required in order to file subdivision plats with the Clerk of the Superior Court of DeKalb County pursuant to O.C.G.A. § 15-6-67(d).

Section 5: Appeal of final plat decision

The decision of the City Manager to approve or disapprove the final plat may be appealed to the City Council by request in writing to the City Manager within thirty (30) days of the City Manager's decision. If no appeal is made within the thirty-day period, the decision of the City Manager shall be final. If an appeal is made to the City Council, the City Council shall set a hearing date for the appeal within thirty (30) days of the appeal being requested and the decision of the City Council shall be final. The City Council decision may be appealed only by a petition for writ of certiorari to the Superior Court of DeKalb County.

Section 6: Recording

The approved final plat shall be recorded with the Clerk of the Superior Court of DeKalb County by the Director of Community Development and returned to the applicant.

Section 7: Dedication offers

The filing and recording of the final plat by the Director of Community Development shall, upon completion of the improvements by the applicant and compliance with all procedures of this Chapter, be deemed an acceptance of the dedication of the streets and other public land as shown upon said plat on behalf of the public.

Section 8: Material specifications for drawing

The final plat shall be composed of mylar, or other durable, stable, and reproducible drafting medium approved by the Director of Community Development and must meet all provisions of the Georgia Plat Act, O.C.G.A. § 15-6-67.

Section 9: Scale

Final plats shall be prepared at a scale of not more than one hundred (100) feet to one (1) inch and shall have a maximum sheet size of not more than twenty-four (24) inches in width and thirty-six (36) inches in length, and a minimum sheet size of not less than seventeen (17) inches in width and twenty-one (21) inches in length.

Section 10: Compliance with zoning ordinance

The final plat shall comply with the requirements of the City of Dunwoody Zoning Ordinance and all conditions of zoning for the subject property to be shown in the upper right corner of the final plat with text height at a minimum of .18 inches for 24" × 36" sheet size and .09 inches for 17" × 21" sheet size.

Section 11: Required information

The final plat shall show the following:

(1) Sufficient data to determine readily and reproduce on the ground the location, bearings and lengths of every right-of-way, street line, lot line, boundary line and building line, whether curved or straight;

(2) Tract boundary lines, land lot and district lines, City and County limit lines, right-of-way lines of streets, easements and other rights-of-way and property lines of residential lots and other sites;

(3) All dimensions shall be accurate to the nearest one hundredth of a foot and all angles accurate to the nearest second;

(4) Name and right-of-way width of each street including necessary right-of-way required for present or future widening of major, minor, collector, residential or other streets as shown on the thoroughfare plan;

(5) Sidewalk and bike path locations and width;

(6) House numbers: numbers will be assigned by the Geographic Information System Department and placed on the final plat by the Director of Community Development;

(7) Title, north arrow, date, scale, land lot numbers and district numbers;

(8) Location, dimensions and purpose of easements and areas to be dedicated to public use, common areas or sites for other than residential use with notices stating their purpose and limitations;

(9) Intermediate regional floodplain contour line and setback line required by this Chapter, state waters/state streams, wetlands, and required stream buffers;

(10) Water and sewer utility locations, and the location and type of permanent stormwater management facilities and water quality facilities;

(11) Lots numbered in numerical order and blocks lettered alphabetically; all lot and block numerals shall be kept in a uniform sequence on all plats and units of the subdivision;

(12) Accurate location, material and description of monuments and markers; within each subdivision set one (1) monument on two (2) front corners of the property adjacent to existing rights-of-way on interior streets, or as otherwise approved by the development director; each monument shall be a minimum four-inch diameter disk by twenty-four-inch high concrete monument with brass caps set flush with finished grade; and

(13) Lots which shall not be built upon until detailed plans for grading and drainage have been approved by the Director of Community Development.

Section 12: Space for comments, certifications

A blank space of fifty (50) square inches shall be provided on the final plat to allow room for any stamps, notes, approval or denials as required to be placed thereon by City agencies and for the certification of the Director of Community Development and approval or denial by the City Manager.

Section 13: Surveyor's and owner's acknowledgments

The following wording for the engineer's [surveyor's] and owner's acknowledgments shall be shown and certified on the final plat:

(1) *Surveyor's acknowledgment.*

"In my opinion, this plat, drawn by me or under my supervision, was made from an actual survey, and is a correct representation of the land platted and has been prepared in conformity with the minimum standards and requirements of law. _____R.L.S. No._____."

(2) *Owner's acknowledgment.*

"I, _____, the owner of the land shown on this plat and whose name is subscribed hereto, acknowledges that this plat was made from an actual survey, and for value received the sufficiency of which is hereby acknowledged, do hereby convey all streets and rights-of-way, water mains and sewer lines shown hereon in fee simple to the City of Dunwoody, and further dedicate to the use of the public forever all alleys, parks, watercourses, drains, easements and public places hereon shown for the purposes and considerations herein expressed. In consideration of the approval of this development plan and other valuable considerations, the owner further releases and holds harmless the City of Dunwoody from any and all claims, damages or demands arising on account of the design, construction and maintenance of the property shown hereon; on account of the roads, fills, embankments, ditches, cross-drains, culverts, water mains, sewer lines, and bridges within the proposed rights-of-way and easements shown; and on account of backwater, the collection and discharge of surface water, or the changing of courses of streams.

"And further the owner warrants that he owns fee simple title to the property shown hereon and agrees that the City of Dunwoody shall not be liable to him/her, his/her heirs, successors or assigns for any claims or damages resulting from the construction or maintenance of cross-drain extensions, drives, structures, streets, culverts, curbs or sidewalks, the changing of courses of streams and rivers, flooding from natural creeks and rivers, surface waters and any other matter whatsoever. I further warrant that I have the right to sell and convey the land according to this plat and do hereby bind myself and owners subsequent in title to defend by virtue of these present.

"All single-family residential lots on this plat are included in a special taxing district for funding the maintenance of stormwater detention facilities required because of this development. [Note: This paragraph is only required in single-family residential subdivisions.]

"All roads have been properly designed and dedicated to accommodate any required parking in the right-of-way.

"In witness whereof, I have hereunto set my hand this _____ day of _____, _____.

(SEAL)
(Owner)_____
Witness:_____
Notary Public."

Section 14: Protective covenants to meet minimum zoning requirements

The final plat shall not contain protective covenants stipulating lower standards than the minimum restrictions required by the City of Dunwoody Zoning Ordinance.

Section 15: Disclosure statement required for residential subdivisions and multi-phase residential developments

(a) Before any final plat for any residential subdivision and any multi-phase residential development may be submitted for review by the City, a disclosure statement, sworn to by the applicant under penalty of perjury before a notary public or other officer authorized to administer oaths, must be filed with the Director of Community Development. The disclosure statement shall be in a form promulgated by the Director of Community Development and approved by the City Attorney.

(b) Any applicant for the final plat, intending to make written or oral representations to potential purchasers of homes in any residential subdivision and any multi-phase residential development must submit the information specified herein on the disclosure statement which shall be made available to members of the public by the Director of Community Development:

(1) An estimated date of completion of the entire residential subdivision;

(2) A statement of the average size of homes to be constructed in the subdivision, any specified style of architecture, landscaping, the type of construction materials to be used (i.e. brick, stone, stucco, pressboard, etc.), and the average size of lots;

(3) A statement of the applicant's commitment to build any community amenities within the subdivision, including but not limited to a clubhouse, tennis courts or swimming pool;

(4) A statement of the general terms and conditions at which the applicant proposes to dispose of the lots and/or homes in the residential subdivision;

(5) Copies of all forms of conveyance to be used in selling lots to potential purchasers;

(6) A statement of all deed restrictions, easements and covenants applicable to the residential subdivision;

(7) Copies of instruments creating any deed restrictions, easements and covenants applicable to the residential subdivision;

(8) A statement regarding whether there will be a mandatory membership in any homeowners association and if so, a copy of the budget for the association for its first year of operation including the estimated amount of the first year's assessments and the estimated amount of revenue to be subsidized by the developer; and

(9) An explanation of the timing and method of transfer of control of the association to the homeowners where there is a mandatory membership in the homeowner's association governing the residential subdivision.

(c) With respect to the first phase and subsequent phases of a multi-phase residential development, the applicant must also submit the following information:

(1) An estimated date of completion of each phase of a multi-phase residential development and estimated date of completion of all phases of the development;

(2) A statement of the average size of homes to be constructed in the future phases of the development, any specified type of architecture, landscaping, the type of construction materials to be used (i.e. brick, stone, stucco, pressboard, etc), and the average size of lots;

(3) A statement of any community amenities to be built within the development currently or in the future, including but not limited to a clubhouse, tennis courts or swimming pools the applicant is committed to constructing in future phases; and

(4) A statement of the general terms and conditions at which the applicant proposes to dispose of the lots and/or homes in the future phases of the development.

(d) If the applicant intends to make no representations or commitments to potential purchasers concerning each of the representations set forth in subsection (b) and (c), the applicant shall note the same in the disclosure statement filed with the Director of Community Development which statement shall be made available by the Director of Community Development to the public.

(e) After the required disclosure statement has been submitted, the Director of Community Development shall examine the information provided and determine whether the information submitted is consistent with the final plat and if the information is consistent, the Director of Community Development shall approve the disclosure statement in writing within thirty-five (35) days of submission of the statement.

(f) If it appears to the Director of Community Development that a disclosure statement is incomplete or fraudulent, the Director shall disapprove the disclosure statement and notify the applicant for the final plat in writing within fourteen (14) days after the initial submission of the statement. Such notification shall serve to suspend the review of the final plat by any City employee or official until the applicant files such additional information, as the Director shall require. No final plat may be certified by the Director until such time as the Director approves the applicant's disclosure statement.

(g) If at any time after approval of the disclosure statement the Director of Community Development becomes aware that the disclosure statement contains false or misleading information, or that the applicant is developing in a manner inconsistent with the approved disclosure statement, the Director shall disapprove the disclosure statement and notify the applicant in writing that the disclosure statement has been disapproved.

(h) Subsequent to the recording of the final plat for a residential subdivision and for each phase of a multi-phase residential development, the approved disclosure statement on file with the City shall be provided by any seller to potential purchasers at the execution of the purchase and sales contract or, if no such contract is executed, ten (10) days prior to the real estate closing on any property governed by this section.

Section 16: Violations

It shall be unlawful for any person to sell property in a residential subdivision or a multi-phase residential development without providing a potential purchaser with a copy of an approved disclosure statement as required by Section 15 of this Part. It shall be unlawful for any person to provide the Director of Community Development with false or misleading information in an approved disclosure statement as required by Section 15 of this Part. It shall be unlawful for any person to develop in a manner inconsistent with the approved disclosure statement. Any person, firm or corporation convicted of violating this section shall be subject to fine and/or imprisonment in accordance with Chapter 1 of this Code.

Part D: Revised Final Plat

Section 1: Procedure

(a) The original recorded plat shall be used for all revisions.

(b) When it becomes necessary to revise an original recorded final plat due to some error, required adjustment or desired adjustment, the applicant shall confer with the Director of Community Development to determine if the revision is a minor or major revision. The applicant's surveyor shall make the necessary corrections on the original final plat or prepare a new tracing of that portion of the subdivision involved. The subdivision name, date and book and page number of the original recording shall be noted on the new plat. If the original final plat is not available, then any proposed revision to the final plat shall be considered a major change.

(c) A minor change is one that corrects a drafting or scrivener's error or is otherwise administrative in nature and does not affect how the subdivision will be developed or built. A major change is any other change, including changes that alter how the subdivision will be developed or built, such as, but not limited to, changing or moving lot lines, increasing or decreasing the number of lots, changing the location of any public facilities or utilities, and revising protective covenants applying to the property.

(d) If the Director of Community Development determines the change is minor, then the Director will obtain the City Manager's acknowledgement, approval, and acceptance of the revised final plat, and shall file such revised plat with the Clerk of the Dekalb County Superior Court.

(e) If the Director of Community Development determines the change is major, the revised plat must proceed through the approval process for final plats described in this Code.

(f) The basis for the Director's characterization of the change as either major or minor shall be recorded in black ink on the revised plat.

Section 2: When new tracing required

If the original final plat is not available, the applicant shall prepare a new mylar or other durable, stable, and reproducible drafting medium approved by the Department of Community Development, in accordance with Section 1(b) of this Part.

Section 3: Revisions and explanation to be in black ink

Revisions and a notation explaining the revisions shall be shown in black ink on the revised plat.

Section 4: Space for certifications

A blank space consisting of not less than fifty (50) square inches shall be provided on the revised plat to accommodate required certifications.

Section 5: Scale

Revised plats shall be prepared at a scale of not less than fifty (50) feet to one (1) inch.

Section 6: Compliance with zoning ordinance

The revised plat shall comply with the regulations of the City of Dunwoody Zoning Ordinance, including all conditions of zoning, which are to be shown in the upper right hand corner of the revised plat.

Section 7: Inclusion of required wording

The revised plat shall show the following wording in black ink:

"This revised plat has been submitted to the City Manager of the City of Dunwoody, Georgia, and has been approved as required by State Law and City codes as meeting all conditions precedent to recording in the Superior Court of Dekalb County. This plat is hereby approved subject to any protective covenants shown hereon.

Dated this _____ day of_____

_____
City Manager
City of Dunwoody, Georgia"

Section 8: Original protective covenants not to be changed

All revisions to original plats shall be bound by the protective covenants on the original final plat and a statement to that effect shall be noted in black ink on the revised plat unless noted otherwise.

Section 9: City may require additional data

Other data which may be required in support of a revised final plat are: a final engineering design report on proposed revisions and such other certificates, affidavits, endorsements, or dedications as may be required by City officials in the enforcement of this Chapter.

Division 3: Design Standards

Part A: General Provisions

Section 1: Adequate public facilities

The applicant shall submit sufficient information and data with the application on the proposed subdivision to demonstrate compliance with the following:

(1) Comprehensive plan consistency required. Proposed public improvements shall conform to and be properly related to the City of Dunwoody Comprehensive Plan and all applicable capital improvement plans.

(2) Water. All habitable buildings and buildable lots shall be connected to a public water system capable of providing water for health and emergency purposes, including adequate fire protection.

(3) Wastewater. All habitable buildings and buildable lots shall be served by an approved means of wastewater collection and treatment.

(4) Stormwater Management. Drainage improvements shall accommodate potential runoff from the entire upstream drainage area and shall be designed to prevent increases in downstream flooding as required under Article II, Section 13 (Stormwater Management) of this Chapter. Stormwater quality management facilities shall be adequate as required by Article II, Section 14 of this Chapter. The City of Dunwoody may require the use of control methods such as retention or detention, and or the construction of offsite drainage improvements to mitigate the impacts of the proposed developments.

(5) Roads. Proposed roads shall provide a safe, convenient, and functional system for vehicular, pedestrian, and bicycle circulation, shall be properly related to the comprehensive plan, and shall be appropriate for the particular traffic characteristics of each proposed development.

(6) Extension policies. All public improvements and required easements shall be extended through the parcel on which new development is proposed. Streets, water lines, wastewater systems, drainage facilities, electric lines, and telecommunications lines shall be constructed through new development to promote the logical extension of public infrastructure.

Section 2: Conservation of natural resources

(a) To better implement the policies and purposes of this Chapter, to protect the health, safety, and welfare of the citizens of the City of Dunwoody and to minimize the negative environmental effects of development, subdivisions shall be designed and developed to avoid areas of environmental sensitivity. The following land areas shall be preserved in their natural state or not subject to any development or land disturbance activity, and shall not be part of the buildable area:

(1) Wetlands; and

(2) The intermediate regional floodplain;

(b) Subdivisions shall be also laid out to:

(1) Avoid adversely affecting watercourses, ground water, and aquifer recharge;

(2) Minimize cut and fill;

(3) Minimize impervious cover and the environmental impacts of roads and access points;

(4) Minimize flooding; and

(5) Minimize adverse effects of noise, odor, traffic, drainage, and utilities on neighboring properties.

(c) The Director of Community Development shall not recommend approval for a sketch plat or parts thereof if the Director determines that:

(1) The areas listed in subsection (a) above have not been set aside and protected from development;

(2) The proposed subdivision does not comply with the requirements of subsection (b) above; or

(3) If the proposed subdivision is not in the best interest of the public health, safety, and general welfare of the City.

Part B: Streets

Section 1: Generally

(a) The provisions of this Part apply to streets in subdivisions and in other projects requiring a development or land disturbance permit from the City of Dunwoody.

(b) The arrangement, character, extent, width, grade and location of all subdivision streets shall conform to the provisions of this Chapter and to the thoroughfare plan. New streets shall be designed and located with consideration of their relation to existing and planned streets, to topographical conditions, to public convenience and safety in their appropriate relation to the proposed uses of the land to be served by the streets.

Section 2: Arrangement where not shown on thoroughfare plan

Where not shown in the thoroughfare plan, the arrangement of streets in a subdivision shall either:

(1) Provide for the continuation or appropriate projection of existing streets in surrounding areas; or

(2) Conform to a plan for a neighborhood approved or adopted by the board of commissioners to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impracticable.

Section 3: Minor streets/minor arterials

(a) Local residential streets shall be so designed to discourage speeding and encourage safe environment for pedestrians and bicyclists. They shall be designed to discourage high speed through traffic by the use of traffic calming devices.

(b) Within historic districts, the platting of lots and streets shall be compatible with the historic patterns that exist within the historic district except for numbered state or federal routes.

Section 4: Thoroughfare plan

The Director of Community Development and the Public Works Director shall review changes in the patterns of traffic, land development, and subdivisions, and prepare a report to the City Council with recommendations concerning appropriate revisions to the thoroughfare plan. Such review shall:

(1) Ensure safe and efficient access between neighborhoods and local services;

(2) Ensure the continuity and adequacy of local streets, collector streets and arterial streets to form a coherent and continuous system of routes;

(3) Identify applications of appropriate traffic calming and traffic management strategies to discourage unnecessary traffic and travel speeds in neighborhoods; and

(4) Ensure a coherent and continuous system for pedestrian and bicycle travel.

Section 5: Subdivisions bordering on or containing arterial streets, railroad right-of-way or limited-access highway right-of-way

Where a subdivision borders on or contains an arterial street (major thoroughfares, and minor thoroughfares), a railroad right-of-way or limited-access highway right-of-way, the Director of Community Development may require the following:

(1) Rear service alleys to facilitate traffic flow, safety and public services;

(2) Provision of one (1) or a pair of smaller marginal access streets approximately parallel to and on each side of this right-of-way at a distance suitable for the appropriate use of the intervening land as park or open space and to provide for multipurpose trails. These distances shall also be determined with due regard for the requirements of approach grades and future grade separations; or

(3) In the case of limited-access highways only, reverse frontage lots may be created with landscape buffers and a non-access reserve strip along the rear property line.

Section 6: Reserve strips

Reserve strips that separate developed or developable land from necessary access to streets shall be prohibited except when such access is controlled by the City of Dunwoody.

Section 7: Street intersection spacing

Street intersections with centerline offsets of less than one hundred twenty-five (125) feet as shown in the DeKalb County Standards for Construction and Design shall be prohibited in subdivisions.

Section 8: Intersections – Right angles

Street intersections in subdivisions shall be as nearly at right angles as practicable. No interior angle shall be less than seventy-five (75) degrees. Intersections or more than two (2) streets shall be designed according to the specific types illustrated in the DeKalb County Standards for Construction and Design.

Section 9: Intersections – Property line to be curved or mitered

At each street intersection in a subdivision the property line at each block corner shall either be mitered or rounded. A mitered property line shall be located on the interior chord of a convex curve or located fifteen (15) feet inside the tangent of a concave curve. A rounded property line shall be established with a curve of radius R varying with the interior angle as specified in the following table, unless sufficient data is presented to show that strict adherence to this requirement is impractical due to topographical or engineering considerations.

Table of Intersection Returs

TABLE INSET:

Interior angle in degrees	**R**	**R**
150 – 145	12	15
145 – 140	12	18
140 – 135	12	20
135 – 85	12	25
85 – 75	20	40
75 – 65	30	70
65 – 55	40	80
55 – 45	50	100
45 – 0	75	140

Section 10: Traffic improvements, street improvements, curb cuts, visibility requirements, and private street construction standards

(a) Each building shall be located on a lot or parcel that abuts a public street or private street. Private streets shall only be allowed if the development seeking to have a private street(s) is ten (10) acres or larger in size. The Planning Commission shall have the authority to

waive this minimum acreage requirement if all real property owners that abut the proposed private street agree to such waiver.

(b) Where this Chapter measures minimum building setback lines and frontages, or imposes development standards in connection with, or with reference to public streets, such measurements or standards set forth in the district regulations and supplemental regulations of the City of Dunwoody Zoning Ordinance, in this Chapter or elsewhere in the Code of the City of Dunwoody shall apply similarly for property abutting a private street where such private street has been approved by the Planning Commission. Nothing in this Article is intended to authorize any kind of development on a private street that would not be authorized where there was public right of way.

(c) Private streets within any zoning district shall not be used to satisfy the off-street parking requirements of the Code. Private streets within any district shall be assigned names and locations. The names of these streets shall be shown on plans required for the issuance of building and development permits as provided in this Chapter, Chapter 7 (Building Code), and the City of Dunwoody Zoning Ordinance. The Geographical Information Services department shall approve all private street names and addresses, thereby avoiding conflicting names and addresses.

(d) Lots may front on a public street or private street constructed to the standards found in this Chapter.

(e) Where sewer lines are constructed underneath a private street, the developer is required to grant an easement to the City for installation, maintenance and repair of such sewer lines.

(f) Private streets shall not be eligible for participation in the City's residential sidewalk district program as provided for in Chapter 23 (Streets and Sidewalks) of this Code.

(g) Developers and property owners' associations shall ensure access to all private streets by emergency and law enforcement vehicles and shall ensure that private streets are constructed to allow access by all emergency vehicles and law enforcement vehicles.

(h) The use of private streets may not result in an increase in permitted density above that which would otherwise be permitted by the applicable district regulations. Density calculations shall be made based on a public street system and the preliminary plat that provides for a private street shall be density neutral. Additionally, a utility easement(s) is not to be included in any plat as a part of an individual lot and thus such land that comprises the utility easement(s) cannot be used to calculate the required minimum lot size, or minimum front yard size.

(i) Private streets shall comply with requirements for public streets found in this Chapter and all other applicable sections of the Code of the City of Dunwoody. Private streets shall be surfaced with the same type of materials that are used by the City's Department of Public Works for the surfacing and resurfacing of public streets or with materials that are

as protective as those used by the City to surface and resurface streets so long as such alternative materials are approved by the Director of Public Works.

Section 11: Planning Commission approval to create a private street

(a) The Planning Commission shall authorize a private street where the Department of Community Development has certified that the applicant has submitted all required documentation as set forth herein and where the Planning Commission finds that:

(1) The location of the proposed private street(s) will not adversely impact use of any existing surrounding public street(s); and

(2) The location of the proposed private street will not adversely impact adjacent existing communities or neighborhoods; and

(3) The applicant has shown that there is the requisite legal mechanism for the maintenance of the proposed private street(s); and

(4) The applicant has provided written evidence that the proposed private street system is acceptable to the City departments or divisions responsible for law enforcement, sanitation, transportation and fire and rescue; and

(b) If the private street is to be located in a historic district as that term is defined in the Dekalb County Code of Ordinances or the City of Dunwoody Code of Ordinances, then the applicant must provide the Planning Commission with a certificate of appropriateness authorizing the private street from the Historic Preservation Commission of Dekalb County or the Historic Preservation Commission of Dunwoody, if one is created. If no such certificate of appropriateness is provided to the Planning Commission then the Planning Commission shall deny the application for a private street.

(c) Street rights-of-way shall be owned by the mandatory homeowners' association as required by Section 12 of this Part. Street rights-of-way shall comply with all the requirements set forth in this Code, including but not limited to the requirements set forth in this Chapter and in the City of Dunwoody Zoning Ordinance. An access easement and a utility easement shall entirely overlay the rights-of-way and shall be dedicated to the City of Dunwoody for public use. All applicable setbacks, lot widths and lot areas shall be measured from the homeowner's association right of way.

Section 12: Legal mechanisms of maintenance of private streets, resurfacing fund

(a) <u>Maintenance of private streets</u>.

(1) Each developer that chooses to include private streets within a condominium, as that term is defined by State Law, or any other residential, commercial, institutional, industrial or office development, shall organize and establish a property owners' association prior to recording of the final plat. Membership in

the property owners' association shall be mandatory for each original and successive purchaser of a lot, building or unit within the development. The property owners' association shall be organized so that it has clear legal authority to maintain and exercise control over the private street(s) and required improvements associated with private streets, including, but not limited to, sidewalks, bikeways, curbs and gutters, traffic signs and markings, associated landscaping and lighting, entry signs, monuments, perimeter walls and fences, entry gates and gatehouses. The declaration of covenants creating the property owners' association shall be recorded with the clerk of the Superior Court of DeKalb County and the recorded declaration of covenants and articles of incorporation creating the property owners' association shall provide that all private streets and associated improvements are owned by the property owners' association or are held in common by the property owners within the development. Said streets shall be properly maintained and insured with no liability or maintenance responsibilities accruing to the City. The recorded declaration of covenants and articles of association shall specifically require the property owners' association repair and maintain each private street in the same manner as similar public streets are maintained by the City and such maintenance and repair shall be performed in compliance with all City standards and all applicable provisions of law.

(2) Prior to any final plat approval, the developer shall submit articles of incorporation, declaration of covenants and bylaws for the property owners' association to the Department of Community Development. Those documents must thereafter be reviewed and approved by the City attorney.

(b) Maintenance fund. The declaration of covenants and articles of association shall provide for a street maintenance fund the proceeds of which shall be used solely for the purpose of regular maintenance of the street(s), whether for resurfacing or a similar purpose. For the purposes of providing further assurance that City funds shall not be used for maintenance of private streets, the developer shall submit proof of deposit of fifty (50) percent of the current estimate of resurfacing costs, as determined by the Director of Community Development or designee, in an interest bearing account on behalf of the property owners' association.

(c) Maintenance bond. At the end of the twelve-month maintenance period provided for in Division 4, Part D, Section 6 of this Article, a developer must provide a maintenance bond renewable annually to cover the cost of maintenance and repair for any private streets within a subdivision. The bond shall be for an amount equal to fifty (50) percent of the current estimate of resurfacing costs, as determined by the Director of Community Development or designee. The developer may avoid securing the maintenance bond set forth in this subsection if the developer submits proof to the Department of Community Development that one hundred (100) percent of the then-current estimate of resurfacing costs, as determined by the Director or designee, has been deposited in an interest-bearing account on behalf of the property owners' association. If the developer chooses this alternative, the declarations of covenants and articles of association shall specifically

require the property owners' association to continuously maintain one hundred (100) percent of the then-current estimate of resurfacing costs of the private streets in this maintenance fund.

(d) Assessment and liens. The property owners' association must be empowered to levy assessments against owners within the development for the payment of expenditures made by the association for maintenance of the private streets and other items set forth in subsection (a) herein. At least fifteen (15) percent of all fees or assessments paid shall be set aside in the maintenance fund. Any unpaid assessments shall constitute a lien in favor of the property owners' association on the lot, building or unit of the owner.

Section 13: Inspection of private streets within nine months of approval of the final plat; failure to correct deficiencies

(a) Within nine (9) months following approval of the final plat, the City's Director of Community Development or designee shall inspect the private street(s) to ensure compliance with all City standards and all applicable provisions of this Code including, but not limited to, the requirements set forth in law for public streets, curbs, sidewalks, signage and street lighting. The developer shall be notified of any deficiencies in writing and such deficiencies shall be corrected within sixty (60) days of the written notice of deficiencies unless the City agrees to extension of that period in writing.

(b) Failure to correct the complete list of deficiencies shall be a violation of this section and shall subject the developer to prosecution for a code violation in the Municipal Court of the City of Dunwoody. Any person found to have violated this section shall be subject to a fine of not less than five hundred dollars ($500.00) for each violation. A separate and distinct offense shall be regarded as committed each day on which such person shall continue any such violation.

(c) The Director of Community Development or designee shall deny the issuance of certificates of occupancy until all deficiencies have been corrected.

Section 14: Abandonment of existing public streets

(a) Any abandonment of a public street by the City pursuant to this section must comply with the applicable requirements set forth in State Law and this code, including but not limited to the requirements set forth in O.C.G.A. §§ 32-7-2(b) and 32-7-4 and as may hereinafter be amended.

(b) A property owner(s) may petition the City Council to abandon an existing public street that abuts the owner(s)' property. The petition must include documents that comply with all of the following requirements set forth in this section.

(c) The petition shall contain evidence that each abutting landowner to the public street seeks to have the street abandoned.

(d) The petition shall contain evidence that once abandoned pursuant to the requirements of State Law, all property owners that abut the street agree that ownership of the street shall be placed in a property owners' association. The petition shall include evidence that one hundred (100) percent of all property owners in the property owners' association have agreed that the street at issue may become private and have agreed to maintain and exercise control over the private street as required by this ordinance.

(e) The petition shall contain evidence that the property owners' association has the financial ability to maintain the street and associated improvements in perpetuity.

(f) The petition shall include evidence that the declaration of covenants and articles of association or other legal instrument(s) creating the property owners' association provide or have been amended to provide that membership in the property owners' association shall be mandatory for each original and successive purchaser of a lot, building or unit on the street.

(g) The petition shall include evidence that the property owners' association shall be organized so that it has absolute legal authority to maintain and exercise control over the private street(s) and required improvements associated with private streets, including, but not limited to, sidewalks, bikeways, curbs and gutters, traffic signs and markings, associated landscaping and lighting, entry signs, monuments, perimeter walls and fences, entry gates and gatehouses.

(h) The petition shall include evidence that the declaration of covenants creating the property owners' association shall be recorded with the clerk of the Superior Court of DeKalb County and the recorded declaration of covenants and articles of incorporation creating the property owners' association shall provide that all private streets and associated improvements are owned by the property owners' association or are held in common by the property owners within the development. Said streets shall be properly maintained and insured with no liability or maintenance responsibilities accruing to the City.

(i) The petition shall include evidence that the declaration of covenants and articles of association shall provide for a maintenance fund, the proceeds of which shall be used solely for the purpose of regular maintenance of the street(s), whether for resurfacing or similar purpose. For the purposes of providing further assurances that City funds shall not be used for maintenance of private streets, the property owners' association shall submit proof of a maintenance fund equal to fifty (50) percent of the current estimate of resurfacing costs, as determined by the Director of Community Development or designee, in an interest bearing account on behalf of the property owners' association.

(j) The petition shall include evidence that the property owners have a maintenance bond renewable annually in an amount equal to fifty (50) percent of the current estimate of resurfacing costs, as determined by the Director of Community Development or designee.

(k) The petition shall include evidence that the property owners' association is empowered to levy assessments against owners on the street(s) for the payment of expenditures made by

the association for maintenance of the private streets and improvements associated with private streets, including, but not limited to, sidewalks, bikeways, curbs and gutters, traffic signs and markings, associated landscaping and lighting, entry signs, monuments, perimeter walls and fences, entry gates and gatehouses and evidence that any unpaid assessments shall constitute a lien in favor of the property owners' association on the lot, building, or unit of the owner. At least fifteen (15) percent of all fees or assessments paid shall be set aside in the maintenance fund.

(l) The City Council shall not consider a petition for abandonment unless it:

(1) Contains all of the evidence and documents required by this ordinance and has been reviewed by the Planning Commission; and

(2) Is supported by an analysis by the Department of Public Works that shows that the street is no longer used by the public to the extent that it serves no substantial public purpose and that the public at large will benefit from its closure since the public will no longer be responsible for any costs to maintain and repair the street; and

(3) Is supported by an analysis by the Department of Community Development that shows that the abandonment of the street shall not negatively impact adjacent neighboring communities and the public at large.

Deferral of a petition and/or failure to provide a recommendation by the Planning Commission shall not prevent the City Council from taking any and all appropriate action with respect to the petition identified in this section.

Section 15: Street classification and right-of-way width

All streets shall be classified according to the table in this section. Street construction standards shall be no less than as follows:

TABLE INSET:

Type of Road	**Travel Lanes**	**Bike Lanes**	**Paving Width**	**Planting Strips**	**Sidewalks**	**Utility Strips**	**Property ROW**	**Under-ground utilities**	**Street Lights**
Parkway, 4 lane divided	4 @ 11’	2 @ 4’		2 @ 6’	2 @ 5’	2 @ 15’	120	Y	Y
Major arterial	4 @ 11’	2 @ 4’		2 @ 6’	2 @ 5’	2 @ 15’	100	Y	Y
Minor arterial	2 @ 11’	2 @ 4’		2 @ 6’	2 @ 5’	2 @ 15’	80	Y	Y
Residential arterial	2 or 4 @ 11’	2 @ 4’		2 @ 6’	2 @ 5’	2 @ 15’		Y	Y

Collector	2 @ 11’	2 @ 4’		2 @ 5’	2 @ 5’	2 @ 15’	70	Y	Y
Res. Pkwy (min. 100 homes)	2 @ 11’			2 @ 5’	2 @ 5’	2 @ 15’		Y	Y
Local residential	2 @ 12’	0		2 @ 5’	2 @ 5’	2 @ 14’		Y	Y
Local office and institutional	2 @ 12’	0		2 @ 5’	2 @ 5’	2 @ 15’		Y	Y
Local industrial	2 @ 14’	0		2 @ 5’	1 @ 5’	2 @ 15’		Y	Y
Alley, private	1 @ 12’	0		0	0	0	0	Y	O
Alley, public	1 @ 16’	0		0	0	0	20	Y	Y

Paving Width = travel lanes + bike lanes

Property Right-of-way = paving width + curb & gutter width + utility strip + bike lanes + other (median or shoulder)

Section 16: Improvements, right-of-way dedication

(a) All proposed new streets shall be designed and built according to one of the standards listed in Section 15 of this Part and as shown in the DeKalb County Standards for Construction and Design.

(b) Where a proposed subdivision or project requiring a land development permit has frontage on an existing public street, right-of-way shall be dedicated along that frontage so as to meet the standards of that street's classification in the City thoroughfare plan. The right-of-way shall be improved wherever required as further provided in this section. For existing streets on which a proposed subdivision or project requiring a land development permit has frontage, the applicant shall:

(1) Dedicate a minimum of fifty (50) percent of the required right-of-way width as measured from the centerline of the existing street right-of-way;

(2) Install all required sidewalks, street trees, streetlights, and place utilities according to the standards in Section 15 of this Part; and

(3) Provide a minimum of fifty (50) percent of the roadway pavement required in Section 15 of this Part and install it to the right-of-way centerline.

(c) Land reserved for any road purposes may not be counted in satisfying yard or area requirements on the City of Dunwoody Zoning Ordinance where the land is to be

dedicated to the public in fee simple or an easement associated with the road is granted to the City of Dunwoody.

(d) Right-of-way dedication and road widening shall extend for the full length of road frontage of the property under development and shall conform to the standards in these regulations. Flares at pavement ends may be required to extend beyond property under development.

(e) The City Council, after considering all related factors, may authorize deviations from this section as follows:

(1) Right-of-way dedication may be waived or modified if:

(A) Existing use of property is not to be substantially changed as a result of proposed development or construction;

(B) Existing government construction plans for the roadway indicate lesser right-of-way would be required for dedication; or

(C) The adjoining frontage is developed and the predominant existing right-of-way meets City standards.

(2) Road improvements may be waived or modified if:

(A) Existing use of property not to be substantially changed (i.e., traffic generation and ingress/egress would remain the same);

(B) Governmental construction plans for the road indicate a pavement width less than City standards (only the planned pavement width shall be required);

(C) No more than five (5) percent of average daily traffic generation would occur between 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m., on weekdays;

(D) The existing road meets current county standards; or

(E) Widening would create a hazard to traffic, pedestrians, or bicyclists along the thoroughfare.

(3) The applicant may, with written concurrence of the Director of Community Development and the City attorney, provide payment to the City in lieu of road improvements when:

(A) Road improvements by state or local action are scheduled within twenty-four (24) months;

(B) Existing utility companies' improvements are situated so as to require their removal or relocation before road improvements should be accomplished;

(C) Improvements would be economically unfeasible or would cause unreasonable land development hardships because of topography, soils, bridges, grades, etc., and delay of improvements would not adversely impact the City's road system; and

(D) Payment for road improvements shall be in accordance with a schedule adopted by the City Council in January of each year and based on current street construction costs for the required section.

Section 17: Half Streets

Half streets are prohibited. The applicant shall be required to pave the full standard width of any existing unpaved public right-of-way or any proposed public street on which the proposed subdivision has frontage and access.

Section 18: Temporary dead-end streets

Temporary dead-end streets may be platted, if recommended by the Director of Community Development and approved by the City Manager, where the proposed subdivision adjoins property not yet subdivided or property that may be redeveloped. A temporary dead end street shall end in a temporary turn-around. The right-of-way of any temporary dead end street shall be carried to the boundary of the properties being subdivided. Street signs shall be posted stating: "No Exit -- temporary dead-end street."

Section 19: Permanent dead-end streets; cul-de-sac required

(a) Dead-end streets designed to be so permanently shall be provided with a cul-de-sac at the closed end and shall not exceed one thousand two hundred (1200) feet.

(b) The minimum outside radius of a cul-de-sac on a public street shall be forty (40) feet, measured to the inside face of the outside curb. Each cul-de-sac shall provide a landscaped island at the center, and the clear width of the paved roadway measured from the outside of the landscaped island to the inside face of the outside curb shall not be less than twenty-four (24) feet. The radius of the right of way for the cul-de-sac shall not be less than fifty (50) feet.

Section 20: Alleys

(a) Alleys shall be required wherever topography or the presence of arterial roads or other features makes vehicular access from the front of the lot impractical or unsafe. Where the alley serves as the primary means of vehicular access to the lot, it shall be dedicated as a public right-of-way and built to the standards required in these regulations/this Chapter.

(b) Alleys may be permitted as private streets providing secondary or service access and where the principal buildings have adequate access for emergency vehicles from a public street on their frontage. Private alleys may end in a turn-around. All alleys dedicated to the public shall provide a continuous connection between one (1) or more public streets. Alleys shall be paved and constructed to the same standards as the connecting public streets except that:

(1) The paved width of an alley shall be not less than twelve (12) feet;

(2) Alleys shall be constructed with flush curbs;

(3) Buildings shall be set back at least ten (10) feet from the back of curb of an alley.

Section 21: Street grades

(a) Subdivision street grades shall not exceed the following, with due allowance for reasonable vertical curves:

TABLE INSET:

Type	**Percent Grade**
Major arterial	8
Minor arterial	10
Residential arterial and alley	12
Collector street	12
Local residential	12
Alleys	12

(b) A sixteen (16) percent grade on local residential streets may be approved by the Director of Community Development where a sight distance in feet of ten (10) times the speed limit is maintained. An as built street profile may be required.

(c) No street grade shall be less than one (1) percent and no one (1) percent grade shall be longer than three hundred (300) feet.

(d) Up to a twelve (12) percent grade on alleys may be allowed, provided the development director approves any required drainage plan.

Section 22: Minimum horizontal curve radius

Subdivision streets with design speeds of twenty (20) miles per hour may not have a minimum centerline horizontal curve radius less than ninety (90) feet. No other subdivision street shall have a horizontal curve radius less than one hundred fifty (150) feet. Radius shall be measured from the centerline of the right-of-way.

Section 23: Minimum sight distance

All subdivision streets shall have a minimum sight distance of at least two hundred (200) feet.

Section 24: Design of intersections

Subdivision intersections shall not be designed in such a manner as to create a traffic hazard. A minimum of one hundred fifty (150) feet clear sight distance in each direction from the intersection shall be provided. Where a subdivision street enters an existing major or minor arterial, a minimum of two hundred fifty (250) feet sight distance in each direction shall be maintained. If, due to other restrictions, this minimum sight distance cannot be maintained, the applicant shall, at the applicant's expense, provide adequate traffic-control devices or other physical improvements subject to the approval and installation by the City.

Section 25: Access management

The following standards shall apply to all subdivisions and all projects requiring a land development permit where the primary access is from a state or federal highway or an arterial classified as a major, minor or residential arterial or collector street in the City of Dunwoody Transportation and Thoroughfare Plan. These standards shall apply unless a more restrictive standard is required by the Georgia Department of Transportation:

(1) Commercial or office properties may be required, based on site conditions as determined by the Director of Community Development, to provide a cross access drive and pedestrian access to allow circulation between sites. Cross access is not required between non-residential uses and single-family uses.

(2) Joint driveways, cross access easements and pedestrian access shall be established wherever feasible along a major or minor arterial or collector street. The building site shall incorporate the following:

(A) Continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation of at least 1,000 feet of linear frontage along the thoroughfare.

(B) A design speed of ten (10) mph and a two-way travel aisle width of twenty-four (24) feet to accommodate automobiles, service vehicles, and loading vehicles.

(C) Stub-outs and other design features to indicate that abutting properties may be connected to provide cross access via a service drive.

(3) The Director may reduce the required separation distance of access points where they prove impractical, provided all of the following requirements are met:

(A) Joint access driveways and cross access easements are provided in accordance with this section.

(B) The site plan incorporates a unified vehicular and pedestrian access and circulation system in accordance with this section.

(C) The property owner shall enter a written agreement with the City of Dunwoody, recorded with the deed, that pre-existing connections on the site that do not meet the requirements of this section will be closed and eliminated after construction of each side of the joint use driveway.

(4) All developments shall have access to a public right-of-way. The number of access points shall be as follows:

Minimum Number of Access Points

TABLE INSET:

Type of Development	**Minimum No. of Access Points**	**Type of Primary Access**
Residential, under 75 units	1	Residential arterial or collector street
Residential, 76 to 150 units	2	Residential arterial or connector street
Residential, 151 – 300	3	Collector street
Residential, over 300 units	4	Collector street
Nonresidential, less than 300 required parking spaces	1	Collector street
Nonresidential, 300 – 999 required parking spaces	2	Major or minor arterial or collector street
Nonresidential, 1000 or more required parking spaces	2 or more as determined by the Department	Major or minor arterial or collector street

(5) The separation of access points on a major or minor arterial or collector street shall be determined by the speed limit of the road with the following minimum spacing requirements:

TABLE INSET:

Posted Speed Limit of Road	**Minimum Driveway Spacing**
Less than 35 MPH	125 feet
36 to 45 MPH	245 feet
Greater than 45 MPH	440

(A) The distance between access points shall be measured from the centerline of the proposed driveway or public street to the centerline of the nearest existing adjacent driveway or public street.

(B) Driveway spacing at intersections and corners shall provide adequate sight distance, response time, and permit adequate queuing space.

(C) No driveway, except residential access, shall be allowed within one hundred (100) feet of the centerline of an intersecting arterial or collector street.

(D) No non-residential access except right in/right out channelized access shall be allowed within one hundred (100) feet of the centerline of any other major or minor arterial.

(E) The requirements of this section are not intended to eliminate all access to a parcel of land that was legally subdivided prior to the enactment of this section.

(6) Where major or minor arterials or collector streets include medians, directional median openings shall be separated by a minimum of three hundred thirty (330) feet and full median openings shall be separated by a minimum of six hundred sixty (660) feet.

(7) All street design and other development activities, including landscaping, shall be arranged on site so as to provide safe and convenient access for emergency vehicles.

(8) Along major or minor arterials, residential arterials, or collector streets, a deceleration lane, a turn lane, larger or reduced turning radius, traffic islands or other devices or designs, including traffic calming devices and designs, may be required to avoid specific traffic hazards which would otherwise be created by the proposed driveway location.

(9) Deceleration lanes are required for subdivision entrances of subdivisions of twenty (20) or more units that provide less sight distance (in feet) than ten (10) times the posted speed limit (in miles per hour). The minimum deceleration lengths shall be as specified below. The Director may vary length requirements based upon a consideration of available sight distances.

Deceleration Lanes

TABLE INSET:

Operating Speed	**Deceleration Lanes**
Subdivision streets	Not required
35 MPH	150’ + 50’ taper
40 MPH	150’ + 50’ taper
45 MPH	150’ + 50’ taper
55 MPH	200’ + 150’ taper

Deceleration lanes located within 75' of an intersection radius may be extended to the intersection.

Section 26: Planting Strips

The City Arborist shall maintain a list of trees that are appropriate for the planting strips, and no trees other than those on the list shall be placed in the planting strips. The City Arborist shall also maintain specifications regarding spacing trees, and the appropriate time for planting. The trees may not count toward the fulfillment of the requirement to plant front yard trees but may fulfill any remaining density tree requirements under the tree protection ordinance, provided the requirements for tree type for planting strips are met.

Part C: Easements

Section 1: Scope

The provisions of this Division apply to easements for or in subdivisions.

Section 2: Permission for dedication required

The applicant must obtain permission from the Director of Community Development for the dedication of utility easements prior to the submission of the dedication.

Section 3: Floodplain easements – On site

Where a subdivision is traversed by a stream, or floodplain, a floodplain easement shall be dedicated to the City. The easement shall conform to the requirements of this Chapter and shall conform substantially to the limits of such stream or floodplain plus additional width as necessary to accommodate future access, but shall not exceed five (5) feet outside the edge of the floodplain.

Section 4: Drainage Easements – Off site

Where drainage system improvements are required on private land outside the subdivision, appropriate drainage rights must be secured by the applicant and indicated on the plat.

Section 5: Pedestrian and bicycle easements and path

Pedestrian and bicycle easements and paths shall be required in subdivision or projects requiring a land development permit to provide circulation or access to schools, parks, libraries, shopping centers, transportation centers and other community facilities. Such easements shall have a paving width of five (5) feet. Such paths shall be constructed according to the specifications set forth in the DeKalb County Standards for Construction and Design Drawings.

Part D: Blocks

Section 1: Generally

The lengths, widths and shapes of blocks in subdivisions shall be determined with due regard to:

(1) Provision of building sites suitable to the special needs of the type of use contemplated or for the conservation of open space or existing historic features;

(2) Zoning requirements as to lot sizes and dimensions;

(3) Needs for convenient access by pedestrians and bicyclists to public transit, nearby schools, or commercial districts, vehicular circulation at safe speeds and adequate access for emergency vehicles; and

(4) Limitations and opportunities of topography to minimize land disturbance and erosion.

Section 2: Desirable maximum and minimum lengths

The dimensions of blocks shall be designed to accommodate and promote vehicular circulation at safe speeds. The desirable maximum block length in a subdivision is one thousand two hundred (1,200) feet and the desirable minimum length is three hundred (300) feet.

Section 3: Mid-block easements and pedestrian paths

In blocks of eight hundred (800) feet or more, the Director of Community Development may require the reservation of a ten-foot easement and the paving of a five-foot wide path through the block to accommodate utilities, drainage-facilities, or pedestrian traffic. Such paths shall be constructed according to the specifications set forth in the City of Dunwoody Standards of Construction and Design Drawings or Dekalb County Standards of Construction and Design Drawings if the same has not been created by the City.

Part E: Lots

Section 1: Generally

The lot size, width, depth, shape and orientation and the minimum building setback, side yard, and rear yard lines in subdivisions shall be in accordance with requirements of the City of Dunwoody Zoning Ordinance.

Section 2: Corner lots

Corner lots for residential use in a subdivision shall have an extra width of not less than fifteen (15) feet more than required for interior lots by the City of Dunwoody Zoning Ordinance for the zoning district within which they are located in order to provide appropriate front building setback from and orientation to both streets.

Section 3: Frontage

Each subdivision lot shall front upon a publicly maintained street.

Section 4: Through lots and reverse frontage lots prohibited

Through lots and reverse frontage lots shall be prohibited in subdivisions except along limited access highways, such as interstate highways. Where it is necessary to provide separation of residential development from major arterials or to overcome specific disadvantages of topography and orientation, the lots fronting such features may be platted in greater depth so that dwellings may be set back an appropriate distance from the major arterial or other feature. Such lots may obtain vehicular access from a rear alley. Lots having access from a public alley shall not constitute a prohibited through lot. A landscape reservation of at least ten (10) feet in width, and across which there shall be no right of vehicular access, may be required along the lot lines of lots abutting any disadvantageous feature or land use where access should be restricted in the public interest.

Section 5: Side lot lines

Side lot lines in subdivisions shall be substantially at right angles or radial to street lines as they extend from the front lot line to the front building line.

Part F: Reservation of Open Spaces

Section 1: Open spaces required; purposes

(a) All residential subdivisions under five (5) acres or consisting of thirty-six (36) or less dwelling units may, and all residential subdivisions greater than five (5) acres or consisting of more than thirty-six (36) dwelling units shall be required to provide open space, in order to achieve the following public purposes:

(1) Conserve open land, including those areas containing historic or cultural resources, or sensitive natural features and wildlife habitats;

(2) Reduce erosion and sedimentation by minimizing land disturbance; and

(3) Preserve and develop an adequate-tree cover.

(b) Open space shall be a minimum of twenty (20) percent of the land in all new subdivision developments.

(c) Open space required by this section may be used in a variety of ways, including natural areas for wildlife and ecological functions, parks, gardens, landscaped medians, squares, village greens, courtyards, recreational space, or recreational facilities, provided the use is consistent with the requirements of this part.

Section 2: Restrictions on open space

No more than twenty (20) percent of the open space area may be covered with an impervious surface. Impervious surfaces may include paved trails, bike paths or multi-use paths, buildings, plazas, swimming pools, or athletic courts. Impervious surfaces in open space may not include sidewalks along public rights of way or parking lots, streets, or other areas for motorized vehicular use.

Section 3: Dedication of parks, open space, recreation areas and conservation easements

Parks, open space, multi-use trails, recreation areas and conservation easements may be offered for dedication to the City by the property owner.

Part G: Sites for Civic Uses

Section 1: Reservation of sites for civic uses

A developer may reserve and offer property within a subdivision as a site for a civic use, including but not limited to public schools, fire stations, police stations, or recreation centers. The developer shall allow a minimum period of one (1) year from the date of submittal of the preliminary plat during which time the proper authorities may authorize acquisition of the property for its intended civic purposes. If the reserved site has not been authorized for acquisition by the proper authorities within one (1) year, the reservation shall terminate unless extended by the developer. If not extended, development of the formerly reserved site must follow the standard plat approval process. An amended final plat for the entire subdivision shall then be processed in the required manner when submitted by the developer.

Division 4: Required Improvements

Part A: General Provisions

Section 1: Scope

This division applies to required improvements for or in subdivisions.

Section 2: Location of required utilities in public rights of way

All required utilities within City rights of way shall be located as shown in the City of Dunwoody Standards of Drawing and Specification, if existing, and if not existing, those shown in the DeKalb County Standards of Drawings and Specifications maintained by the Dekalb County Development Department and as otherwise provided herein.

Part B: Water

Section 1: Certification of final plat

There shall be a certification placed upon the final plat from the chief engineer of the Dekalb County water system, or such other watershed services provider as the City may contract with for provision of water services to the City, after the applicant has complied with the requirements of this part.

Section 2: Right to design water mains

The City, or its designated watershed services provider, shall have the right and privilege to design water mains and appurtenances of the right size and materials in subdivisions. The design will include necessary improvements to the water system, including extensions along the entire roadway frontage of the development.

Section 3: Materials, location of mains

(a) All materials for water mains in subdivisions will conform to specifications of the American Water Works Association.

(b) Water mains will be laid a minimum distance of four (4) feet back of the curbline.

Section 4: Fire hydrants

Fire hydrants will be installed in subdivisions so that all residential property will meet the requirements of the fire prevention code of Dekalb County, if the County continues to provide fire and rescue services to the City, or the fire prevention code of the City should the City create its own Fire Department. The location of fire hydrants shall be reviewed and approved by the

Public Works Director. Additional fire hydrant locations may be required to ensure water quality and air release standards.

Section 5: Water valves

Water valves will be installed in subdivisions to affect a minimum cutoff of mains in case of shutdowns.

Section 6: Stub-out services

Stub-out services will be installed in all cases where necessary to avoid cutting of pavement or sidewalks and will be placed on the lot as specified by the City.

Section 7: Determination of size of mains

Sizes of water mains in subdivisions will be determined by the City to ensure adequate domestic supply and fire protection for the subdivision.

Section 8: Submission of water service data for location of water system

(a) The applicant shall furnish data on the final subdivision plat in digitized form, and/or as required, to the Director of Community Development.

(b) The City shall design on this plat the location and size of all pipe, valves, fire hydrants, fittings and stubs to lots, consistent with design regulations promulgated by the Director of Community Development in conjunction with the City's watershed services provider. It will then furnish to the owner/applicant copies of this plat with a list of materials that will include the total linear feet of main to be extended.

(c) With this information the applicant will take bids from contractors and when the contract is awarded, furnish the City with a copy of the contract.

Section 9: Engineer's or surveyor's certification

The applicant's engineer or surveyor shall furnish the City with an engineer's certificate.

Section 10: Prerequisites to delivery of materials to contractor

(a) No materials to be used for subdivision water improvements will be delivered to the job site until the requirements of Sections 8 and 9 of this Part have been complied with.

(b) No work will commence on the water improvements until DeKalb County water and sewer division inspectors have inspected and approved all materials on the site for compliance with the materials specifications as published by the water and sewer division of the DeKalb County public works department.

(c) Any water line material or appurtenances found not to meet specifications shall be removed from the job site by the contractor prior to commencement of any water line construction activity.

Section 11: Final inspection; cost of labor information to be supplied

Upon completion of the job of installing water improvements in a subdivision, the owner/applicant's engineer and the City's watershed service provider will measure the work done showing station numbers to all valves, fire hydrants and other pertinent fittings including stub locations. The owner/applicant will furnish the City a copy of this report showing the work done. The owner/applicant will furnish the City with a final cost of the labor to install the materials.

Section 12: Material storage and responsibility

It shall be the contractor's responsibility to acquire, properly handle, store and protect all materials. The City shall not be held responsible for loss or damage to any materials. No damaged material shall be utilized in the water line construction.

Section 13: Excavation

(a) Depth. Trenches shall be excavated to a depth sufficient to provide a minimum of three (3) feet of cover over subdivision water mains, and two and one-half (2 1/2) feet over subdivision water service lines. In rock cuts, the excavation shall be of sufficient depth and width to provide a minimum of six (6) inches' earth cushion below and along the sides of the mains.

(b) Sheeting. The contractor shall install sheeting and bracing where necessary to prevent caving, to protect new work and to protect adjacent utility lines, and public and private property.

(c) Blasting. Blasting shall be permitted only with the written approval of the City for each location. The contractor shall provide adequate protection, such as mats, and permit only qualified, experienced personnel to supervise blasting. Approval by the City in no way relieves the contractor from any liability for any damages whatsoever resulting from the blasting operations.

Section 14: Pipe laying

Pipe laying shall conform to the specifications prepared and approved by the Community Development Department in effect at the time a development permit application is received by the Community Development Department. The Director of Community Development is authorized to promulgate specifications and regulations to govern and implement this provision.

Section 15: Backfilling

(a) All backfilling in subdivisions shall be done with material free from roots, stumps and other foreign material. No rock will be permitted within a distance of six (6) inches from the pipe or ground surface. Rock larger than twelve (12) inches in greatest dimension will not be allowed in any part of the trench. All rock larger than twelve (12) inches shall be disposed of by the contractor.

(b) The placing and compaction of all backfill material shall be as follows:

(1) Backfill from bottom of trench to one (1) foot above the top of the pipe shall be compacted in layers not exceeding six (6) inches, after compaction. Backfill along the sides and to the top of the pipe shall be hand tamped with acceptable hand tamps or mechanically operated hand-tampers, vibrators, etc.

(2) From a point one (1) foot above the top of the pipe to the surface of the trench, backfill shall be placed and compacted in layers not exceeding twelve (12) inches in thickness after compaction. The method of compaction in this section of the trench may be by any reasonable method that will give required compaction. After compaction, the dry weight per cubic foot of any six-inch depth of backfill shall be at least ninety-five (95) percent of the maximum dry weight per cubic foot, as determined by the American Association of State Highway Official Method T-99.

(3) The contractor shall restore to the original condition as at the start of the job, all shrubbery, grass, sod, fences, etc., disturbed during the contractor's operations.

Section 16: Pavement replacement

Cuts in existing street pavement and driveways will be patched by the applicant/owner. The applicant/owner shall maintain the cuts in good condition until a permanent patch is made. When necessary to abate dust, mud or potholing, the contractor shall furnish and install crushed rock or cold patch asphaltic concrete to the surface of the trench. Appropriate utility permits must be obtained from the Public Works Director prior to work being initiated.

Section 17: Barricades and lights

The contractor shall furnish and place sufficient barricades and lights to adequately protect the work on subdivision water improvements, and to protect all vehicular and pedestrian traffic. No street shall be completely blocked, without the permission of the Public Works Department.

Section 18: Testing

(a) All subdivision mains, including fire hydrants and service laterals, shall be subject to a minimum of one hundred fifty (150) pounds per square inch, hydrostatic test for a period

of three (3) hours. When static pressure exceeds one hundred (100) pounds per square inch, the test pressures shall be equal to static pressure plus fifty (50) pounds per square inch.

(b) The contractor shall fill the line slowly, taking care to blow off air at fire hydrants or service laterals at high points of line. If a fire hydrant or service lateral is not available at high points, the contractor shall furnish all materials and install one-and-one-half-inch blowoffs to relieve trapped air. After the line has been filled, pressure shall be increased to test pressure with a pump.

(c) A pressure gauge shall be installed on the discharge side of the pump. The pressure shall be maintained for three (3) hours; and during the last hour of the test period, the volume of water required to maintain the pressure will be measured. The leakage, or volume of water required, shall not exceed the requirements of the American Water Works Association Standard Specifications, C-600.87, or latest revision thereof. No line will be accepted until it has passed leakage test requirements. The contractor, at the contractor's option, may cover all joints prior to testing. However, if the water mains do not pass the leakage requirements, the contractor will be required to uncover joints and pipe until all leaks have been located and repaired. All visible leaks shall be repaired, regardless of results of leakage tests.

Section 19: Sterilization of mains

The contractor will furnish all chemicals, feeding equipment and manpower for the sterilization of water mains. The contractor is responsible for the disposal of dose water in accordance with Environmental Protection Division regulations. The contractor must employ a hydric meter to record the quantity of water used and reimburse the City’s watershed services provider for the appropriate amount.

Section 20: Cleanup

A thorough cleanup shall be made before final acceptance of subdivision water improvements. All excess rock shall be removed; private and public property shall be restored to original condition, and all excess water line materials removed from the job site.

Section 21: Service lateral locations

The contractor shall submit an as-built drawing showing the location, lot number and street address for each service lateral installed in a subdivision.

Section 22: Maintenance

(a) The owner/applicant shall maintain all water mains, appurtenances, trenches and other disturbed surfaces for a period of twelve (12) months after approval and acceptance by the City.

(b) The contractor shall be responsible for repairs to any leaking pipe, fittings, etc. Should any trench settle, the contractor shall promptly furnish and place fill to original grade. Should any leak or trench settlement occur under any pavement, the contractor will be held responsible for the cost of replacing the pavement.

Part C: Sewers

Section 1: Where laid; exceptions

(a) Sanitary sewers shall be laid in all streets, service connections installed to property lines, and connections made to trunk line sewers in all subdivisions including subdivisions with private disposal systems.

(b) The developer of a property adjacent to undeveloped and unserved land lying upgradient from the subject property, shall extend the sewer main to the outside boundary of the property being developed in order to allow for the future provision of sewer service to such unserved adjacent property unless waived by the Director of Community Development.

(c) In all developments with private disposal systems, lines shall be laid and temporarily plugged or capped at the points of service connections to the proposed trunk sewer line and individual lot lines in accordance with DeKalb County requirements and specifications.

(d) Corresponding service connections shall be installed and temporarily plugged or capped from each principal structure in such a manner that a proper service connection can be made when permanent sewer service is available. This subsection may be waived by the Director of Community Development based upon service feasibility to the principal structure as determined by the elevation of the structure with reference to the elevation of the proposed sewer line.

(e) The requirements of this section may be waived by the City Council. Applications for this waiver shall be submitted to the Council through the Director of Community Development, who shall schedule the request for a public meeting before the Council. The waiver may be granted by the Council if it finds that the property for which a waiver is sought is in accordance with applicable provisions of this Code and the DeKalb County board of health regulations concerning the minimum lot size for private disposal systems, and if the property is located in any of the following areas:

(1) An area of the City where, due to topographic or soil conditions, public sewer service is not feasible.

(2) An area of the City where the installation of sewer service is not scheduled under the approved capital improvements program of the City or DeKalb County.

(3) An area of the City where the installation of sewer service is not planned to be accomplished within a six-year period.

Section 2: Design

Design of the proposed sewer system within a development shall conform to the specifications prepared and approved by the Department of Community Development in effect at the time a development permit application is received by the Department of Community Development.

Section 3: Filing of plan

Filing of plans shall conform to the specifications prepared and approved by the Department of Community Development in effect at the time a development permit application is received by the Department of Community Development. The lowest minimum finished floor elevation shall be noted for each lot.

Section 4: Materials

Materials shall conform to the specifications prepared and approved by the Department of Community Development in effect at the time a development permit application is received by the Department of Community Development.

Section 5: Construction

Construction shall conform to the specifications prepared and approved by the Department of Community Development in effect at the time a development permit application is received by the Department of Community Development.

Section 6: Comments, recommendations to be marked on preliminary plan

Upon receiving the preliminary plat the, Director of Community Development will compare the proposed subdivision in relation to existing and proposed sewer systems. Comments, recommendations and changes deemed advisable will be marked on the preliminary plat and returned to the Director of Community Development.

Section 7: Certification on final plat

The Director of Community Development shall place certification upon the final plat after the applicant has complied with the sewer system requirements of DeKalb County. Such certification is required prior to final approval by the City Manager.

Section 8: Acceptance

The City or its designated wastewater services provider shall not accept the subdivision sewer project until the applicant has complied with all applicable requirements of the City and DeKalb County.

Section 9: Maintenance

(a) The owner/applicant shall maintain all sewer lines, appurtenances, trenches and other disturbed surfaces for a period of twelve (12) months after approval and acceptance by the City Manager and/or the City's wastewater services provider.

(b) The owner/applicant shall be responsible for repairs to sewer system. Should any trenches settle, the owner/applicant shall promptly furnish and place fill to original grade. Should any leaks or trench settlement occur under any pavement, the contractor will be held responsible for the cost of replacing pavement.

Part D: Streets

Section 1: Standards

(a) Generally. Street improvements shall be provided in each subdivision in accordance with the specifications in this part and the standard plans and specifications available from the City. The term "state transportation department specifications"' shall refer to the State Department of Transportation specifications in effect at the time the work is placed under contract. The references made to these specifications shall control the materials and equipment as well as the construction method of every class of work so applicable unless otherwise noted.

(b) Grading. The construction limits shall be cleared of all trees, stumps, brush and rubbish before grading operations are begun. No trees, stumps, brush or rubbish shall be placed in fill sections within the construction limits. Such debris shall be disposed of in a manner satisfactory to the Director of Community Development. Fill sections shall be placed in six-inch layers with each layer thoroughly compacted with a sheep foot roller or by other approved methods before the next layer is placed, compaction to be not less than ninety-five (95) percent as determined by AASHO, section T-99. Where unsatisfactory material is encountered (namely any material that will not compact properly, including solid rock) an additional twelve (12) inches shall be excavated below the subgrade elevation and backfilled with a select material. Where unstable material is used in fills, the fill shall be left twelve (12) inches below the subgrade elevation. This twelve-inch fill section shall be filled with select material. Streets shall be graded to width of not less than forty-two (42) feet in the center of the right-of-way to provide eight-foot shoulders in accordance with City's standard plan.

(c) Curbing. Header curbing shall be required on all streets and shall be furnished and installed by the applicant unless grassed swales are used for water quality control and approved by the Director of Community Development. The minimum classes and types of curbing permitted will be as follows:

(1) Granite curbing, class D or better.

(2) Other as approved by the Director of Community Development. All curbing shall be placed in firm, well-compacted subgrade, and curbing displaced prior to acceptance for maintenance by the City shall be reset or replaced. Specifications for the granite curbing are available from the City of Dunwoody Department of Community Development.

(d) Base and paving. All roadways shall be paved according to the specifications prepared and approved by the Director of Community development in effect at the time a development permit application is received by the Department of Community Development.

(e) As-built drawings for all new streets shall be submitted to the Department of Community Development depicting a street profile based on the centerline and fifty (50) foot stations.

Section 2: Street signs

(a) The City's standard steel post with horizontal reflectorized street nameplates with four-inch letters shall be furnished and set by the City at all subdivision street intersections.

(b) Street name signs shall have four-inch black letters on reflectorized silver background with black border. Nameplates shall be mounted parallel or nearly parallel to the street. The names shall be marked and visible from both sides. Signposts shall be ten-foot poles with at least three (3) feet well-embedded in the ground.

(c) The applicant shall pay to the City for each street name sign a fee in the amount established by the Director of Community Development and approved by the City Council.

(d) To ensure that all street markers are paid for by the applicant and installed at the proper time, the required street markers will be paid for by the applicant at the time of recording.

(1) For subdivisions recorded under a performance bond, the street marker will not be installed until the paving has been completed.

(2) For subdivisions recorded under a maintenance bond, the Public Works Department will be furnished a plat and a memo requesting that street markers be installed at the time of recording.

Section 3: Road hazards prohibited

Subdivision signs, planter boxes, and other similar permanent structures shall not be located on street rights-of-way and shall not be constructed in a manner which, in the opinion of the City, obstructs driveway sight distance or creates a traffic hazard; detailed plans for these structures shall be submitted to the Director of Community Development.

Section 4: Surface drainage specifications

(a) The size, length and location of all surface drainage pipes or structures shall be shown on the final subdivision plats and shall be subject to the approval of the Public Works Department. All storm drain pipes or culverts carrying stormwater from the street and adjacent property between or through lots shall be extended to at least thirty (30) feet behind the rear of the house. Stormwater must be released into a channel without causing scouring, erosion or resulting sedimentation to the receiving channel. When necessary, the outlet channel shall include structural and vegetative measures to assure non-erosion velocities. This requirement for pipe extension shall only apply to the discharge ends of piped systems.

(1) An exception to extending pipes thirty (30) feet behind the rear of the house may be made for pipes fifty-four (54) inches and larger where the house site is proposed to be more than thirty (30) feet from the center of the drainageway.

(2) An exception to extending pipes thirty (30) feet behind the rear of the house may be granted by the City when soil conditions prohibit erosion.

(3) An exception to extending pipes thirty (30) feet behind the rear of the house may be granted by the City where lots are at least one (1) acre in size, open channels are provided, and neither ponding nor erosion control will result.

(b) Installation, backfilling and compaction shall be in accordance with State Transportation Department specifications, sections 106 and 520. All pipes shall have a minimum cover of one (1) foot and headwalls or inlet basins constructed at the end of each pipe.

(c) The design of drainage structures shall be based on recognized hydrological formulas as outlined in the City of Dunwoody Stormwater Management Manual, or, if one is not in existence, the approved DeKalb County Stormwater Management Manual.

(d) A contour map with an interval of two (2) feet shall be submitted as part of preliminary plats; where available, the DeKalb County two-foot topographic map shall be used. As determined by the Director of Community Development, any lots within the subdivision which are undesirable for building due to bad drainage conditions shall be excluded, and no building shall be permitted thereon until these conditions have been corrected as specified by the Department.

Section 5: Plans, profiles to be approved

Four (4) copies of the complete plans and profiles for subdivision street improvements shall be submitted for review and recommendation of approval or denial by the Public Works Department prior to approval of the final plat.

Section 6: Bonds or escrow required

(a) If, at the time the final plat is submitted for approval, the construction of the street improvements has not been accomplished, then the final plat shall be disapproved. No performance bonds shall be allowed or authorized except the Director of Community Development shall require a performance bond to be filed with the City to ensure that all final road improvements required by this Code are made by the owner or applicant. The City shall accept no road until such time as all road improvements required by the City are made.

(b) After the work has been completed according to the City specifications and duly inspected by the City, then a maintenance bond shall be required equal to ten (10) percent of the estimated construction cost. The proposed maintenance bond shall be reviewed and approved as to form by the City Attorney prior to acceptance by the City. The maintenance bond shall cover the street improvements, drainage system, water system and sewer system. Funds may be placed in escrow with the City in lieu of maintenance bonds.

(c) The applicant shall be required to sign a maintenance agreement with the City, by which the applicant shall agree to maintain the streets, drainage, water quality BMPs, water and sewer systems, and rights-of-way for a period of twelve (12) months. During the applicant maintenance period, the City shall make inspections and instruct the applicant by letter as to what correction must be made.

(d) In case of emergency repairs, which must be made immediately, or required corrections, which are not made within thirty (30) days of notice, the City shall have the authority to make these corrections and recover costs from the applicant. In cases where funds are being held in escrow by the City, the cost of making these corrections shall be deducted from these funds, and the applicant charged with any costs above the amount of escrow funds.

(e) At the end of the twelve-month applicant maintenance period, the City shall make a final inspection and notify the applicant and the bonding company of any corrections to be made. If the work is acceptable, the Director of Community Development shall recommend to the City Attorney that all remaining escrow funds be released.

(f) Provided, however, in the discretion of the Director of Community Development, based upon:

(1) Weather conditions;

(2) Labor market;

(3) Material market; or

(4) Circumstances beyond the control of the applicant or the City unforeseen by either party,

The maintenance period may be extended for a definite period of time sufficient to make the necessary corrections by an agreement in writing executed by the City, the applicant and his/her surety. Provided further, that the applicant shall be responsible for any damages done to work already completed by him to the time of the extension agreement whether or not the City had accepted it.

(g) Maintenance bonds and acceptance by the City of any dedicated improvements shall be as one (1) package upon completion of all improvements, even though the final plat may have been approved prior to completion.

Section 7: Standard plans and specifications available

Standard City plans and specifications referred to in this part are on file and may be obtained from the Community Development Department. The plans are cross sections and construction drawings for a graded street, paved street, driveway section for curbed streets, brick catch basin, barricade for dead-end streets, twenty-four-inch concrete curb and gutter section and standard street marker.

Section 8: Sidewalks and bicycle lanes

(a) Sidewalks shall be required on all sides of street frontage on all new and improved local residential streets in all subdivisions and along the street frontage of all new and improved non-residential developments and as set forth in Division III, Part B, Section 15 of this Article, unless determined by the Planning Commission to be infeasible only due to severe cross-slopes, shallow rock, soil or topographic conditions. At a minimum, however, continuous sidewalks shall be required on at least one (1) side of all new and improved local residential streets. No other variances or exceptions are allowed.

(b) The Director of Community Development or the Planning Commission may require that sidewalks required pursuant to subsection (a) of this section be continued to the nearest major or minor arterial or collector street.

(c) A grassed, planted or landscaped strip, as set forth in Division III, Part B, Section 15 of this Article, shall separate all sidewalks from adjacent curbs, bridges excepted. The Director of Community Development may approve a variable sidewalk location and landscape strip width based on site conditions and future road expansions. Where sidewalks currently exist, new sidewalk construction or re-construction shall be continuous with existing sidewalks.

(d) Sidewalks shall be concrete and a minimum of five (5) feet wide and four (4) inches thick. In non-residential districts, where the Director of Community Development may approve sidewalks to be located immediately behind the curb, such sidewalks shall be six (6) feet in width. Concrete shall be Class "B", as defined by the Georgia Department of Transportation, and have strength of two thousand five hundred (2,500) psi at twenty-eight (28) days. Disturbed areas along sidewalks shall be backfilled, stabilized, and grassed. The required width of a sidewalk may be increased, as determined by the Director of Community Development, based on site conditions to ensure pedestrian safety. See also, Division III, Part B, Section 15 of this Article.

(e) Sidewalks shall be installed at the same time as the building construction, unless an alternative method is approved by the Director of Community Development. Sidewalks shall be completed prior to the issuance of certificate of occupancy for property on which the sidewalk fronts. The sidewalk plan shall be recorded on the final plat and all sidewalks completely installed prior to approval of the final plat.

(f) Sidewalks shall not be cut, removed or closed temporarily without a permit from the Public Works Department. Such permit shall not be issued unless safe, adequate, and convenient provision is made for pedestrian travel through the area that is disrupted. Damage to sidewalks caused during construction or development activity shall be repaired at no cost to the City within thirty (30) days or prior to issuance of a certificate of occupancy, whichever is earlier.

(g) In any "landmark district" or "historic district", as defined by the City, or if the City has not defined same by DeKalb County, where replacement or reconstruction of the sidewalk is deemed necessary, the sidewalk shall be replaced or reconstructed using materials, widths, and designs that are compatible with the historic materials and designs, if any, that exist within the historic district. Design compatibility shall be determined by the City of Dunwoody Historic Preservation Commission or, if one is not established by the City, by the DeKalb County Historic Preservation Commission.

(h) All sidewalk construction and repairs shall provide for wheelchair ramps to and from sidewalks at the intersection of each street corner and crosswalk. Access ramps shall be constructed pursuant to standards approved by the Public Works Department.

(i) No person shall construct a sidewalk on any street in the City without first having obtained a permit to do so from the Public Works Department. Any person constructing a sidewalk on a street, without first obtaining a permit, shall be in violation of this Code, and the Public Works Department shall be authorized to condemn the sidewalk and have it removed and replaced at no cost to the City.

(j) Bicycle lanes shall be required on new or substantially improved major or minor arterials, parkways, or collector streets where the posted speed limit is thirty-five (35) miles per hour or greater. Bicycle lanes may also be required by the Director of Community Development where necessary to provide connections to bikeways in concert with the

City bikeway master plan, if one is established by the City. Bicycle lanes shall be constructed as follows:

(1) Bicycle lanes, where required, shall be at least four (4) feet wide and placed in the outside lane of a roadway, adjacent to the curb or shoulder. When on-street parking is permitted, the bicycle lane shall be at least five (5) feet wide and located between the parking lane and the outer lane of moving vehicles. Bicycle pavement widths shall be in addition to the minimum pavement width required for the road. See also Division III, Part B, Section 15 of this Article.

(2) Bicycle lanes shall be delineated with signs and striping consistent with the latest edition of the manual for uniform traffic control devices, and approved by the Director of Community Development.

(3) Bikeways and bicycle lanes shall be constructed according to the most recent specifications set forth in American Association of State Highway and Transportation Officials (AASHTO) guidelines.

(4) The design, striping and sign system for bicycle lanes shall be coordinated with that of the vehicular road system to provide a safe and continuous route for bicycles. Deceleration lanes shall be striped so that bicycles can safely remain in a lane marked between the deceleration lane and the through traffic lane.

(k) No wall, fence, sign or other structure shall obstruct passage along a sidewalk or bicycle lane.

Section 9: Parking on public right-of-way

(a) For residential projects constructed under the provisions of the zoning ordinance as single-family attached residential projects, wherein title to the single-family unit is held by fee simple ownership, the City may assume maintenance responsibility one (1) year after the release of the subdivision bonds for parking constructed on public rights-of-way, in accordance with minimum City standards. A special parking maintenance district, as authorized by Ga. Const. art. IX, § II, ¶ VI, comprised of all property within such single-family attached residential subdivision, may be established by Resolution of City Council for the maintenance of such parking constructed on the public right-of-way at the time the subdivision plat is finally recorded, provided such plat is so noted as required by subsection (b) of this section.

(b) Final subdivision plats for single-family attached residential projects shall have the following notation when a special district is to be established for City maintenance of parking within the public right-of-way:

"All single-family residential lots on this plat are included in a special taxing district for funding the maintenance of parking provided in the development."

(c) If the City creates a special parking district, as authorized by Ga. Const. art. IX, § II, ¶ VI, revenue to fund City parking maintenance will be obtained by an ad valorem tax levied on all properties within such parking district. Such ad valorem millage will be set annually by the City Council when other ad valorem millage rates are set. No assessment will be made in a special parking district in the calendar year in which it is established.

Section 10: Underground utilities

All utilities are required to be placed underground in all new subdivisions of two (2) or more lots except where no utility improvements are required by this Chapter, or where the Director of Community Development determines underground utilities are infeasible due to shallow rock, high water table, or other similar geologic or hydrologic conditions.

Section 11: Streetlights

Streetlights consistent with Georgia Power specifications, are required in all new subdivisions of two (2) or more lots except where no utility improvements are required by this Chapter. Streetlights shall be provided on the same side of the street as sidewalks.

Part E: Private Sewage Disposal

Section 1: Submission of information with preliminary plat

At the time of submittal of the preliminary subdivision plat and application to the Director of Community Development, the applicant shall submit to the DeKalb County Board of Health the following information when public sewers are not available to the proposed subdivision:

(1) Four (4) copies of a sewer feasibility report;

(2) Four (4) copies of soil data records on forms provided by the Board of Health; and

(3) Four (4) copies of the subdivision analysis record on forms provided by the Board of Health.

Section 2: Contour intervals

Topographic data submitted to the City pursuant to the provisions of this Division shall show contour intervals of two (2) feet; where available, the DeKalb County two-foot topographic map shall be used.

Section 3: Soil Analysis

Soil analysis shall be conducted in accordance with Chapter 13 (Health Regulations), Article 9 (On-site Sewage Disposal) of the DeKalb County Code.

Section 4: Analysis of preliminary plat

(a) Upon receiving the preliminary plat from the Department of Community Development and data required in sections 1-3 of this Part from the applicant, the DeKalb County Board of Health personnel shall make an overall analysis of the subdivision and shall indicate in writing on the preliminary plat the results of this analysis. The plat shall then be returned to the Department of Community Development.

(b) Regarding the preliminary analysis, each lot shall have sufficient area and topographic features to accommodate the installation of an individual sewage disposal system in accordance with regulations applicable to these installations.

(c) Any condition in the area to be subdivided found to be in violation of any health regulation shall be sufficient grounds for disapproval of the preliminary plat.

Section 5: Inspection of lots; signing of final plat

(a) Upon receiving the final plat from the City and when streets have been cut and individual lots are staked and identified, the Board of Health personnel will inspect each lot for adaptability to individual sewage disposal systems.

(b) After the above inspection has been completed, the Board of Health shall render a written report to the Director of Community Development that shall include changes or recommendations or deletions. The final plat shall be signed by the authorized representative of the Board of Health, written report attached, and returned to the City.

Section 6: Issuance of septic tank permits

No septic tank permits shall be issued until four (4) copies of the approved final plat, signed by the City Manager, have been submitted to the Board of Health. The four (4) copies of the approved plat shall be provided by the City.

Section 7: Drainage between lots

Where drainage between subdivision lots is involved and pipe is required, a watertight pipe shall be used and shall extend for a sufficient depth of the lot and not terminate at some point just behind the building line causing pools to be formed or stormwater flooding the area of the septic tank drain field.

Section 8: Facilities discharging into public waters; review of plans

The State Department of Natural Resources is authorized by the Georgia Water Quality Control Act to review plans and specifications of all sewage treatment facilities discharging into any waters of the state.

Section 9: Board of Health recommendations

The Board of Health may reject any or all domestic sewage disposal systems and may recommend in lieu thereof the extension of the public sewerage system or the installation of any approved temporary community sewerage system conforming to the Georgia Water Quality Control Act.

Section 10: Impoundment permit

Where ponds one-tenth (1/10) of an acre or larger are located in a subdivision or adjoin a subdivision, an impoundment permit shall be obtained in compliance with the impounded water regulations of the State Board of Natural Resources.

Section 11: Compliance with Board of Health requirements

All septic tank systems shall conform to the requirements of the Board of Health.

Article IV: Floodplain Management

Division 1: Findings of Fact and Statement of Purpose

Section 1: Findings of fact

(a) The flood hazard areas of the City are subject to periodic inundation which results in loss of property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

(b) These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effects of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss.

Section 2: Statement of purpose

(a) It is the purpose of this Article to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;

(5) Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;

(6) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;

(7) Ensure that potential buyers are notified that property is in an area of special flood hazard; and

(8) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Section 3: Methods of reducing flood losses

(a) In order to accomplish its purposes, this Article includes methods and provisions to:

(1) Restrict or prohibits uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

(4) Control filling, grading, dredging, and other development which may increase flood damage; and

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

Division 2: Definitions

Section 1: Specific definitions

Unless specifically defined below, words or phrases used in this Article shall be interpreted so as to give them the meaning they have in common usage and to give this Article its most reasonable application.

Accessory use means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

Alluvial fan means a geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity floods, debris flows, erosion, sediment movement and deposition, and channel migration.

Apex means the point of highest elevation on an alluvial fan, which on undisturbed fans is generally the point where the major stream that formed the fan emerges from the mountain front.

Appeal means a request for a review of the Floodplain Coordinator's interpretation of any provision of this Article.

Area of shallow flooding means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard. See "Special flood hazard area."

Base flood means a flood which has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood"). Base flood is the term used throughout this Article. It is equivalent to the "intermediate regional floodplain" (IRF), previously used in Dekalb County.

Basement means any area of the building having its floor subgrade i.e., below ground level on all sides.

Building. See "Structure."

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations or storage of equipment or materials.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood, flooding, or flood water means:

(1) A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e., mudflows); and

(2) The condition resulting from flood-related erosion.

Flood boundary and floodway map (FBFM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the floodway.

Flood hazard boundary map means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated the areas of flood hazards.

Flood Insurance Rate Map (FIRM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.

Floodplain or *flood-prone area* means any land area susceptible to being inundated by water from any source. See "Flooding."

Floodplain Coordinator is the individual appointed to administer and enforce the floodplain management regulations.

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations mean this Article and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood-prone areas. This term describes Federal, State or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents (Refer to FEMA technical Bulletins TB 1-93, TB 3-93, and TB 7-93).

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot; also referred to as "regulatory floodway".

Floodway fringe is the area of the floodplain on either side of the regulatory floodway where encroachment may be permitted.

Fraud and victimization as related to Division 6, Variances, of this Article, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City Council will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty (50) to one hundred (100) years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

Functionally dependent use means a use which cannot perform its intended purposes unless it is located or carried out in close proximity to water. The terms include only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and do not include long-term storage or related manufacturing facilities.

Governing body is the local governing unit, i.e., county or municipality, that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.

Hardship as related to Division 6, Variances, of this Article means the exceptional hardship that could result from a failure to grant the requested variance. The City Council

requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a State inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

(4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved State program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

I.R.F. means the intermediate regional flooding delineated in the Dekalb County tax maps. It is based in the first set of FIRM maps and was never upgraded with revised issues as they were released by FEMA. This delineation is no longer valid after February 15, 1995 when Dekalb County’s geographic information system was available. It remains a useful tool as guide when locating parcel in the tax maps but must not be used for a final flood zone determination.

Levee means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

Levee system means a flood protection system which consists of a levee, or levees, and associated structures, such a closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

Lowest flood means the lowest floor of the lowest enclosed area, including basement (see "Basement").

(1) An unfinished or flood resistant enclosure below the lowest floor that is usable solely for parking or vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor provided it conforms to applicable non-elevation design requirements, including, but not limited to:

(A) The wet floodproofing standard in Division 5, Section 6(a)(3) of this Article.

(B) The anchoring standards in Division 5, Section 6(a)(1) of this Article.

(C) The construction materials and method standards in Division 5, Section 6(a)(2) of this Article.

(D) The standards for utilities in Division 5, Section 7 of this Article.

(2) For residential structures, all subgrade enclosed areas are prohibited as they are considered to be basements. This prohibition includes below-grade garages and storage areas.

Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

Manufactured home park or subdivision means a parcel (or contiguous parcels) or land divided into two (2) or more manufactured home lots for rent or sale.

Market value shall be determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the floodplain coordinator, but shall not include economic or other forms of external obsolescence. Use of replacement costs or accrued depreciation factors different from those contained in recognized cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

Mean sea level means, for purposes of the national flood insurance program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

New construction for floodplain management purposes, means structures for which the "start of construction" commenced on or after the effective date of floodplain management

regulations adopted by this community, and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by this community.

Obstruction includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other materials in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One-hundred-year flood or *100-year flood.* See "Base flood."

Public safety and nuisance as related to Division 6, Variances, of this Article means that the granting of a variance must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle means a vehicle which is:

(1) Built on a single chassis;

(2) Four hundred (400) square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light-duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

Remedy a violation means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing state or federal financial exposure with regard to the structure or other development.

Repetitive loss structure means a building covered by a contract for flood insurance that has incurred flood-related damages on two (2) occasions during a ten-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded twenty-five (25) percent of the market value of the building at the time of each such flood event.

Riverine means relating to, formed by, or resembling a river (including tributaries), streams, brooks, etc.

Sheet flow area. See "Area of shallow flooding."

Special Flood Hazard Area (SFHA) means an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on an FHBM or FIRM as zone A, AO, A1-A30, AE, A99 or AH.

State of construction includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab for footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufacture home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building that is principally above ground; this includes a gas or liquid storage tank or a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

Substantial improvement means any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations or State or local health, sanitary, or safety code specifications which have been identified

by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or

(2) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Variance means a grant of relief from the requirements of this Article which permits construction in a manner that would otherwise be prohibited by this Article.

Violation means the failure of a structure or other development to be fully compliant with this Article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this Article is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Watercourse means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Zone A means the special flood hazard areas inundated by the 100-year flood; base flood elevations are not determined.

Zone A1-A30 and zone AE means the special flood hazard areas inundated by the 100-year flood; base flood elevations are determined.

Zone AO means the special flood hazard areas inundated by the 100-year flood; with flood depths of one (1) to three (3) feet (usually sheet flow on sloping terrain); average depths are determined. For areas of alluvial fan flooding, velocities are also determined.

Zone AH means the special flood areas inundated by the 100-year flood; flood depths of one (1) to three (3) feet (usually areas of ponding); base flood elevations are determined.

Zone A99 means the special hazard areas inundated by the 100-year flood to be protected from the 100-year flood by a federal flood protection system under construction; no base flood elevations are determined.

Zone B and zone X (shaded) means areas of 500-year flood; areas subject to the 100-year flood with average depths of less than one (1) foot or with contributing drainage area less than one (1) square mile; and areas protected by levees from the base flood.

Zone C and zone X (unshaded) means areas determined to be outside the 500-year floodplain.

Zone D means areas in which flood hazards are undetermined.

Division 3: General Provisions

Section 1: Lands and structures to which this Article applies

This Article shall apply to all areas of special flood hazards within the jurisdiction of the City, and all new or substantial improvement residential units, all subdivisions, non residential structures, manufactured homes, recreational vehicles, and utilities. This Article will be enforced in areas outside the floodplain where runoff poses a risk similar to the special flood hazard areas.

Section 2: Basis for establishing the areas of special flood hazard

The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the flood insurance study (FIS) date June 15, 1994 and accompanying flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), dated June 15, 1994, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this Article. This FIS and attendant mapping is the minimum area of applicability of this Article and may be supplemented by studies for other areas which allow implementation of this Article and which are recommended to the City Council by the floodplain coordinator. The study, FIRMs and FBFMs are on file at the Department of Public Works or may be found at the Dekalb County Department of Public Works, division of roads and drainage. Areas of special flood hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in a FIS.

Section 3: Compliance

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Article and other applicable regulations. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a violation of this Chapter. Any person who violates this Article or fails to comply with any of its requirements shall, upon conviction thereof, be subject to a fine and/or imprisonment in accordance with Chapter 1 of the City of Dunwoody Code of Ordinances. Each day such violation continues shall be considered a separate offense. Nothing herein shall prevent the City Council from taking such lawful action as is necessary to prevent or remedy any violation.

Section 4: Repetitive loss structure and cumulative substantial damage

A building must be brought into compliance with requirements for new construction if it has incurred flood-related damages on two (2) occasions during a ten-year period in which the cost of repairing the flood damage, on the average, equaled or exceeded twenty-five (25) percent of the market value of the building at the time of each such flood event, or damage of any origin

is sustained whereby the cost of restoring the building to its before damage condition would equal or exceed fifty (50) percent of the market value of the building before the damage occurred.

Section 5: Mandatory purchase of flood insurance

In the event that a property owner chooses not to purchase flood insurance on property at risk, or does not comply with a notice to bring a building into compliance, reducing the community efforts for flood protection, the insurance premium discount for the community's property owners as a community rating system participant, may not apply.

Section 6: Abrogation and greater restrictions

This Article is not intended to repeal, abrogate, or impair any existing easements, covenant, or deed restrictions. However, where this Article and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Section 7: Interpretation

(a) In the interpretation and application of this Article, all provisions shall be:

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

Section 8: Warning and disclaimer of liability

The degree of flood protection required by this Article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Article shall not create liability on the part of the City Council, any officer or employee thereof, the State of Georgia, or the Federal Insurance Administration, Federal Emergency Management Agency, for any flood damages that result from reliance on this Article or any administrative decision lawfully made hereunder.

Section 9: Severability

This Article and the various parts thereof are hereby declared to be severable. Should any section of this Article be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the Article as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

Division 4: Administration

Section 1: Establishment of development permit

A development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in Division 3, Section 2 of this Article. Application for a development permit shall be made on forms furnished by the floodplain coordinator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required.

(1) Application stage:

(A) Site plan, including but not limited to:

(i) For all proposed structures, spot ground elevations at building corners and twenty-foot or smaller intervals along the foundation footprints, or one (1) foot contour elevations throughout the building site; and

(ii) Proposed locations of water supply, sanitary sewer, and utilities; and

(iii) If available, the base flood elevation from the flood insurance study and/or flood insurance rate map; and

(iv) If applicable, the location of the regulatory floodway; and

(B) Foundation design detail, including but not limited to:

(i) Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and

(ii) For a crawl space foundation, location and total net area of foundation openings as required in Division 5, Section 6(a)(3) of this Article and FEMA Technical Bulletins 1-93 and 7-93; and

(iii) For foundations placed on fill, the location and height of fill, and compaction requirements (compacted to 95 percent using the Standard Proctor Test Method); and

(C) Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in Division 5,

Section 6(a)(3)(B) of this Article and FEMA Technical Bulletin TB 3-93; and

(D) All appropriate certifications listed in Division 5, Section 6(a)(4) of this Article; and

(E) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(2) Construction stage:

(A) For all new construction and substantial improvements, the permit holder shall provide to the administrator an as-built certification of the regulatory floor elevation or floodproofing level immediately after the lowest floor or floodproofing is completed. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for non residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

(B) Any work undertaken prior to submission of these certifications shall be at the permit holder's risk. The administrator shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

Section 2: Designation of the ordinance administrator

The Director of Community Development is hereby appointed to administer, implement, and enforce this Article by granting or denying development permits in accord with its provisions.

Section 3: Duties and responsibilities of the floodplain coordinator

(a) The duties and responsibilities of the Floodplain Coordinator shall include, but not be limited to the following:

(1) Permit review. Review all development permits to determine that:

(A) Permit requirements of this Article have been satisfied,

(B) All other required State and Federal permits have been obtained,

(C) The site is reasonably safe from flooding, and

(D) The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this Article, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will increase the water surface elevation of the base flood more than one foot at any point.

(2) Review, use and development of other base flood data.

(A) When base flood elevation data has not been provided in accordance with Division 3, Section 2 of this Article, the Floodplain Coordinator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal or State agency, or other source, in order to administer Division 5. Any such information shall be submitted to the City Council for adoption; or

(B) If no base flood elevation data is available from a Federal or State agency or other source, then a base flood elevation shall be obtained using one (1) of two (2) methods from the FEMA publication "Managing Floodplain Development in Approximate Zone A Areas - A Guide for Obtaining and Developing Base (100-year) Flood Elevations" dated July 1995 in order to administer Division 5:

(i) Simplified method:

a. 100-year or base flood discharge shall be obtained using the appropriate regression equation found in a U.S. Geological Survey publication, or the discharge-drainage area method; and

b. Base flood elevation shall be obtained using the Quick-2 computer program developed by FEMA; or

(ii) Detailed method:

a. 100-year or base flood discharge shall be obtained using the U.S. Army Corps of Engineers' HEC-HMS computer program; and

b. Base flood elevation shall be obtained using the U.S. Army Corps of Engineers' HEC-RAS computer program.

(3) Notification of other agencies. In alteration or relocation of a watercourse:

(A) Notify adjacent communities and the Georgia Department of Water Resources prior to alteration or relocation;

(B) Submit evidence of such notification to the Federal Insurance Administration, Federal Emergency Management Agency; and

(C) Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

(4) Documentation of floodplain development. Obtain and maintain for public inspection and make available as needed the following:

(A) Certification required by Division 5, Section 6(a)(3) and Section 9 of this Article (lowest floor elevations);

(B) Certification required by Division 5, Section 6(a)(3)(C) of this Article (elevation or floodproofing of nonresidential structures);

(C) Certification required by Division 5, Section 6(a)(3)(B) of this Article (wet floodproofing standard);

(D) Certification of elevation required by Division 5, Section 8(b) of this Article (subdivision standards);

(E) Certification required by Division 5, Section 11(a) of this Article (floodway encroachments).

(5) Map determinations. Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazard. Where there appears to be a conflict between a mapped boundary and actual field conditions, grade and base flood elevations shall be used to determine the boundaries of the special flood hazard area. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in subsection (6).

(6) Remedial action. Take action to remedy violations of this Article as specified in Division 3, Section 3 of this Article.

(7) The adopted method for disclosure at the time of sale or rental of a property is accomplished by providing to the interested parties, general public, realtor, insurance, mortgage and engineering consulting firms of an electronic database listing all properties in the floodplain, annually updated, and free of charge. Permits issued for construction in the floodplain shall be forwarded to the City's recorder.

(8) All records pertaining to the provisions of this Article shall be maintained in the Department of Community Development and shall be open for public inspection.

Section 4: Appeals

The City Council shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Coordinator in the enforcement or administration of this Article.

Division 5: Provisions for Flood Hazard Reduction

Section 1: Floodplain management planning and public information

(a) To comply with requirements of the community rating system, the City adopts the following:

(1) A floodplain management plan and progress that will be reported in the annual re-certification process. This plan will be updated for each subsequent two-year period.

(2) Public information shall include, but it is not limited to, elevation certificate repository, map information, outreach projects, hazard disclosure, flood protection, and flood protection assistance.

Section 2: Geographical information system

For all final floodplain determinations the City adopts the geographical information system's maps compiled using the aerial photography taken February 22, 1995 which are available to the public in the GIS's department products office, including, but not limited to: 1" = 200' planimetric/topographic maps, 1" = 600' aerial photograph contact print copies, and 1" = 3000' comprehensive land use plan, survey control monument locations and thoroughfare plan.

Section 3: Reserved

Section 4: Stream dumping penalties

Any natural growth or human-made debris that reduces the carrying and storage capacity of the City drainage system may be a violation of this Article. Any person who dumps log, trash, trees, and similar debris, shall, upon conviction, is subject to a fine and/or imprisonment according to Chapter 1 of the City of Dunwoody Code of Ordinances.

Section 5: Plan review and field inspections of structures

The building code effectiveness grading used by the community rating system required from Dekalb County, in October 1999, to perform plan review and field inspections of one- and two-family dwellings to obtain additional insurance benefits for its citizenry. Plan review and

field inspections of one- and two-family dwellings in the floodplain, as they relate to flood prevention and protection, will be effective [and] start upon approval of this Article.

Section 6: Standards of construction

(a) No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this Article and other applicable regulations. In all areas of special flood hazards the following standards are required:

(1) Anchoring.

(A) All new construction and substantial improvements shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(B) Manufactured homes shall meet the anchoring standards of Section 9 of this Division.

(2) Construction materials and methods. All new construction and substantial improvements shall be constructed:

(A) With flood resistant materials as specified in FEMA Technical Bulletin TB 2-93, and utility equipment resistant to flood damage;

(B) Using methods and practices that minimize flood damage;

(C) With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and

(D) Within zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

(3) Elevation and floodproofing. (See Division 2, Section 1 of this Article, definitions for "basement," "lower floor," "new construction," "substantial damage" and "substantial improvement.")

(A) Residential construction, new or substantial improvement, shall have the lowest floor, including basement:

(i) In an AO zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on

the FIRM, or elevated at least (3) three feet above the highest adjacent grade if no depth number is specified.

(ii) In an A zone, elevated (3) three feet above the base flood elevation; said base flood elevation shall be determined by one (1) of the methods in Division 4, Section 3(a)(2) of this Article.

(iii) In all other zones, elevated (3) three feet above the base flood elevation.

Upon the completion of the structure, the elevation of the lowest flood including basement shall be certified by a registered professional engineer or surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the floodplain coordinator.

(B) Nonresidential construction, new or substantial improvement, shall either be elevated to conform with subsection (a)(3) of this Section or together with attendant utility and sanitary facilities:

(i) Be floodproofed below the elevation recommended under subsection (a)(3) of this Section so that the structure is watertight with walls substantially impermeable to the passage of water;

(ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(iii) Be certified by a registered professional engineer or architect that the standards of this subsection (a)(3) are satisfied. Such certification shall be provided to the floodplain coordinator.

(C) All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement shall follow the guidelines in FEMA Technical Bulletins TB 1-93 and TB-7-93, and must exceed the following minimum criteria:

(i) Have a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwater; or

(ii) Be certified by a registered professional engineer or architect.

(D) Manufactured homes shall also meet the standards in Section 9 of this Division.

(E) Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this Article, shall be undertaken only if the non conformity is not furthered, extended or replaced.

Section 7: Standards for utilities

(a) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

(1) Infiltration of flood waters into the systems, and

(2) Discharge from the systems into flood waters.

(b) On-site waste disposal systems shall be located to avoid impairment to them, or contamination from them during flooding.

Section 8: Standards for subdivisions

(a) All preliminary subdivision proposals shall identify the special flood hazard area and the elevation of the base flood.

(b) All subdivision plans will provide the elevation of proposed structure(s) and pad(s). If the site is filled above the base flood elevation, the lowest floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Coordinator.

(c) All subdivision proposals shall be consistent with the need to minimize flood damage.

(d) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(e) All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

Section 9: Standards for manufactured homes

(a) All manufactured homes that are placed or substantially improved, within zones A1-30, AH, and AE on the community's flood insurance rate map, on sites located:

(1) Outside of a manufactured home park or subdivision,

(2) In a new manufactured home park or subdivision,

(3) In an expansion to an existing manufactured home park or subdivision, or

(4) In an existing manufactured home park or subdivision on a site upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated three feet above the base flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(b) All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within zones A1-30, AH and AE, on the community's flood insurance rate map that are not subject to the provisions subsection (a) above will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either the:

(1) Lowest floor of the manufactured home is three (3) feet above the base flood elevation, or

(2) Manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Coordinator.

Section 10: Standards for recreational vehicles

(a) All recreational vehicles placed on sites within zones A1-30, AH, and AE on the community's flood insurance rate map will either:

(1) Be on the site for fewer than one hundred eighty (180) consecutive days, and be fully licensed and ready for highway use, where a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

(2) Meet the permit requirements Division 4 of this Article and the elevation and anchoring requirements for manufactured homes of Section 9(a) above.

Section 11: Floodways

(a) Located within areas of special flood hazard established in Division 3, Section 2 of this Article are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters, which carry debris, potential projectiles, and erosion potential, the following provisions apply.

(1) Prohibit encroachments, including fill, new construction, substantial improvement, and other new development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood elevation during the occurrence of the base flood discharge.

(2) If subsection (a)(1) above is satisfied, all new construction, substantial improvement, and other proposed new development shall comply with all other applicable flood hazard reduction provisions of Division 5.

Division 6: Variance Procedure

Section 1: Nature of variance

The variance criteria set forth in this Division of the Article are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this article would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristics must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City Council to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this Article are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

Section 2: Appeal board

(a) In passing upon requests for variances, the City Council shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Article, and the:

(1) Danger that materials may be swept onto other lands to the injury of others;

(2) Danger of life and property due to flooding or erosion damage;

(3) Susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the existing individual owner and future owners of the property;

(4) Importance of the services provided by the proposed facility to the community;

(5) Necessity to the facility of a waterfront location, where applicable;

(6) Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

(7) Compatibility of the proposed use with existing and anticipated development;

(8) Relationship of the proposed use to the Comprehensive Plan and floodplain management program for that area;

(9) Safety of access to the property in time of flood for ordinary and emergency vehicles;

(10) Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and

(11) Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(b) Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

(1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance, and

(2) Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the floodplain coordinator in the office of the clerk of Superior Court of Dekalb County in a manner so that it appears in the chain of title of the affected parcel of land.

(c) The Floodplain Coordinator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in its biennial report submitted to the Federal Insurance Administration, Federal Emergency Management Agency.

Section 3: Conditions for variances

(a) Generally, variances may be issued for new construction, substantial improvement, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the procedures of Divisions 4 and 5 of this Article have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

(b) Variances may be issued for the repair or rehabilitation of historic structures (as defined in Division 2, Section 1 of this Article) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

(c) Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.

(d) Variances shall only be issued upon a determination that the variance is the "minimum necessary" considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this Article. For example, in the case of variances to an elevation requirement, this means the City Council need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the City Council believes will both provide relief and preserve the integrity of the local ordinance.

(e) Variances shall only be issued upon a:

(1) Showing of good and sufficient cause;

(2) Determination that failure to grant the variance would result in exceptional "hardship" (as defined in Division 2, Section 1 of this Article) to the applicant; and

(3) Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance (as defined in Division 2, Section 1 of this Article - see "Public safety or nuisance"), cause fraud or victimization (as defined in Division 2, Section 1 of this Article) of the public, or conflict with existing local laws or ordinances.

(f) Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of subsection (a) through (e) above are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.

(g) Upon consideration of the factors of Section 2(a) above and the purposes of this Article, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Article.