

First Reading: _____
Second Reading: _____

ORDINANCE NO. _____

AN ORDINANCE TO AMEND ORDINANCE NO. 12881
CLARIFYING A CLERICAL ERROR AND ADOPTING
LANGUAGE CONSIDERED AND APPROVED BY THE
CHATTANOOGA CITY COUNCIL ON NOVEMBER 11, 2014.

SECTION 1. BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF
CHATTANOOGA, TENNESSEE, that Ordinance No. 12881 be hereby amended clarifying a
clerical error and adopting language considered and approved by the Chattanooga City Council
on November 11, 2014.

SECTION 2. BE IT FURTHER ORDAINED, That this Ordinance shall take effect two
(2) weeks after passage on second reading as provided by law.

Passed on second and final reading: _____

CHAIRPERSON

APPROVED: _____ DISAPPROVED: _____

MAYOR

/mem

ORDINANCE NO. 12881

AN ORDINANCE TO AMEND CHATTANOOGA CITY CODE,
PART II, CHAPTER 31, ARTICLE VIII, SECTIONS 31-301
THROUGH 31-356 RELATIVE TO STORMWATER
MANAGEMENT.

SECTION 1. BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, TENNESSEE, That Chattanooga City Code, Part II, Chapter 31, Article VIII, Sections 31-301 through 31.356 be and the same are hereby deleted in their entirety and the following are substituted in lieu thereof:

ARTICLE VIII. STORMWATER MANAGEMENT

DIVISION 1. GENERALLY

Sec. 31-301. Purpose.

1. It is the purpose of this article to protect, maintain, and enhance the environment of the City of Chattanooga and public health, safety, and general welfare of the citizens of Chattanooga by controlling discharges of pollutants to the Chattanooga Stormwater System and to maintain and improve the quality of the community waters into which the stormwater outfalls flow, including without limitation, the lakes, rivers, streams, ponds, wetlands, sinkholes, and groundwater of Chattanooga.

2. It is further the purpose of this article to enable Chattanooga to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations (40 CFR §122.26) for stormwater discharges. (Ord. No. 9942, § 1, 8-31-93)

3. It is the further purpose of this article to promote public health, safety and welfare through integrated site and landscape development to achieve effective stormwater management and the environmental, economic and social benefits of landscape, trees and their preservation.

Sec. 31-302. Definitions.

For the purpose of this article the following terms, phrases and words and their derivatives, shall have the meaning given herein:

"Abatement" means any action taken to remedy, correct, or eliminate a condition within, associated with, or impacting a drainage system. (Ord. No. 12294, § 2, 10-6-09)

"Accidental Discharge" means a discharge prohibited by this article into the "Community Waters" or to the "Waters of the State" which occurs by chance and without planning or consideration prior to occurrence.

"Agricultural Structures" that are also used for other uses, subject to this article, are not exempt.

"Adjustment" means a modification in a non-residential customer's water quality service fee for certain activities that impact water quality runoff or impacts the City's costs of providing water quality management. (Ord. No. 12294, § 2, 10-6-09)

"Approved Applicant" is that person who signs land disturbance permit applications or applications related to the administration of the Credits and Incentive Manual (CIM). The approved applicant may or may not be the property owner, user, or developer of a property.

"Authorized Agent (approved applicant) Affidavit" is a signed and notarized affidavit that an individual has received approval from a property owner or property owner's representative to act on his/her behalf. The City will require submittal of an executed and notarized affidavit prior to accepting or issuing Stay on Volume credit coupons.

"As Built Plans" means drawings depicting structures, facilities, systems, landscaping, and site conditions as they were actually installed and constructed.

"Best Management Practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of stormwater runoff. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Bioretention" system is a stormwater management practice to manage and treat stormwater runoff using temporary ponding, conditioned soils, organic and mulch layers, stone and plants. Stormwater runoff is treated through the processes of filtration, evapotranspiration, adsorption, nutrient uptake, and other physical and biological processes.

"Brownfield" as defined by the Tennessee Department of Environment Conservation ("TDEC"), is real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substances, pollutants, or contaminants.

"Buffer" see "Water Quality Buffer"

"Clean Water Act" means the Federal Water Pollution Control Act, as amended, codified at 33 U.S.C. §1251, *et seq.*

"Code" means the Chattanooga Municipal Code. (Ord. No. 12294, § 2, 10-6-09)

"Commercial" land use means property devoted in whole or in part to the commerce, that is, the exchange and buying and selling of commodities or services.

"Community Waters" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Chattanooga and the waters into which the Chattanooga Stormwater System outfalls flow.

"Condominium Property" is defined as a lot or a parcel of real estate in which individuals own their units and share joint ownership in common elements with other unit owners. Water Quality fees are assessed according to the following:

- Condominium dwelling units with separate/individual parcels are treated as "Residential" properties;
- Condominium dwelling units without separate/individual parcels, which are part of another parcel or share the same parcel with other units, are treated as "Non-Residential" properties. (Ord. No. 12294, § 2, 10-6-09)

"Credit Coupon" is a coupon issued by the City of Chattanooga to approved applicants for exceeding the Stay on Volume requirement on new and redevelopments, retrofit or offsite mitigation sites. With certain restrictions, it can be applied to meet the onsite Stay on Volume requirement of another site or be traded or sold in an open market. Credit coupons are given in cubic feet and have no monetary face value.

"Credit Coupon Implementation Period" – For two (2) years following adoption of changes to this Article, developments disturbing 1 acre or more may satisfy a percentage of their Stay on Volume obligation through the application of earned or acquired credit coupons with no requirement to prove site infeasibility.

- In the 1st year, beginning December 1, 2014, coupons can be applied "citywide" to meet up to 100% of unmet Stay on Volume.
- In the 2nd year, the maximum application percent, outside of the South Chickamauga watershed, reduces to 50%.
- On December 1, 2016, the implementation period ends and all applicable developments must prove site infeasibility to satisfy their Stay on Volume obligation with a combination of credit coupons, off-site mitigation or mitigation fees.

- In the South Chickamauga Creek watershed, coupons can always be applied, with no proof of hardships, to satisfy Stay on Volume deficiencies above the 1.0” design standard or per the prevailing percentage “implementation period”, whichever is greater.
- In contrast, credit coupons can always be applied, citywide and without percentage restrictions, to meet Stay on Volume obligations in the presence of documented site infeasibilities.
- Total suspended solids treatment is still required on the primary site for any uninstalled Stay on Volume even when credit coupons are applied.

“Credit Coupon Multiplier” – Credit coupons earned (through oversized Stay on Volume practices) on redevelopment or retrofit sites can be applied at a one to one (1:1) ratio (installed:earned) anywhere in the City outside of Combined Sewer System areas to meet another site’s Stay on Volume obligation. Credit coupons, earned similarly, on new developments, can be applied at a 1.5:1 ratio (installed:earned), in the same watershed, to meet another site’s Stay on Volume obligation. This multiplier puts a premium on Stay on Volume practices installed on redevelopment and retrofit sites without eliminating coupon trading for practices installed on new developments.

“Critical Areas” contain sensitive resources such as protected wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, 303d listed streams, high quality streams, sinkholes, previously contaminated sites, and critical habitat areas for endangered species. To protect these areas, the City may require additional performance criteria or controls. These could include, without limitation, increased energy dissipation at outfalls, mass grading restrictions, measures to reduce dangerous landslides resulting from heavy rains, additional construction site and permanent stream buffers to avoid specific wildlife habitat destruction, onsite private septic systems and outdoor trash and chemical storage location restrictions, other related restrictions and even stormwater infiltration restrictions.

“CSO” – A Combined Sewer Overflow is the inadvertent discharge from a Combined Sewer System that occurs prior to its confluence with the Publicly Owned Treatment Works.

“CSS Full Fixture Method” – Applicable to projects in CSS areas disturbing more than an acre that propose a net increase to impervious surface; Same as the CSS Simple Fixture Method, except there is no ceiling to the amount of off-line attenuation storage required. The volume of above or underground attenuation storage is governed by applicable calculations. The developer has the option of choosing the CSS primary method.

“CSS Primary Method” – Same as applicable simple or full fixture methods except any Stay on Volume voluntarily incorporated into the primary site, above the 0.5” minimum baseline for new and significant redevelopments, can result in fee discounts and earned Stay on Volume coupons for overdesign upon application, approval and acceptance of As Built Plans. Regardless of whether Stay on Volume is partially or fully implemented, the site must meet the same peak attenuation goals as the applicable fixture method.

“CSS Simple Fixture Method” – Applicable to projects in CSS areas disturbing between 5,000 square feet and one acre or larger projects proposing no net increase to impervious surface; Q_2 through Q_{25} attenuation is required such that proposed development peak discharges (fixtures + storm) are less than or equal to the recent* existing development peak discharges. The maximum off-line storage required is 25,000 gallons regardless of attenuation calculations. The developer has the option of choosing the CSO primary method. [*Recent* - To adhere to the City’s Long Term CSO Control Plan and the basis of design for CSO treatment facilities, peak fixture discharges from uses existing prior to year 2000, and since abandoned, are assumed to be zero in calculations. For developments in use after 2000, attenuation design calculations can assume the actual, permitted peak fixture discharges when computing attenuation.*]

“CSS” – A combined sewer system conveys both sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single or connected pipe system to a Publicly Owned Treatment Works.

“Detention” is described as the temporary storage of stormwater runoff in a basin, pond, or other structure to control the peak discharge rate by holding the stormwater for a lengthened period of time. (Ord. No. 12294, § 2, 10-6-09)

“Detention Facility” means an area or facility designed to temporarily store excess stormwater. (Ord. No. 12294, § 2, 10-6-09)

“Design Storm Event” means a hypothetical constant intensity storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility.

“Discount” see “Water Quality Fee Discount”

“Easement” means an acquired privilege or right of use that a person, party, firm, corporation, city or other legal entity has in the land of another.

"Equivalent Residential Unit (ERU)" is equal to the average amount of impervious area of residential properties within the City of Chattanooga based on statistical sampling. Each ERU shall have the value assigned by this Article. (Ord. No. 12294, § 2, 10-6-09)

"Erosion Prevention and Sediment Control Plan" or "EPSC Plan" means a written plan, including drawings or other graphic representations, for the control of soil erosion and sedimentation resulting from a land disturbing activity.

“Exceptional Tennessee Waters” are surface Waters of the State of Tennessee that satisfy the characteristics as listed in Rule 1200-4-3-.06 of the official compilation - rules and regulations of the State of Tennessee. Characteristics include waters designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW); waters that provide habitat for ecologically significant populations of certain aquatic or semi-aquatic plants or animals; waters that provide specialized recreational opportunities; waters that possess outstanding scenic or geologic values; or waters where existing conditions are better than water quality standards.

"Facilities" means any man-made or natural conveyance for stormwater, including but not limited to, streets, curbs, gutters, catch basins, inlets, pipes, culverts, ditches, gulleys, canals, flumes, siphons, and stormwater detention facilities that are owned by or maintained in whole or in part by the City of Chattanooga and used for purposes of collecting, transporting, detaining, pumping, treating or disposing of stormwater. "Facilities" shall also mean dams, flood walls, levies, pumping stations and other structures owned by or maintained in whole or in part by the City for flood control. Facilities shall not include road or highway bridges designed for spanning a navigable river or creek. (Ord. No. 12294, § 2, 10-6-09; Ord. No. 12377, § 1, 4-20-10)

"Forestry Roads" that are used to access other land uses, subject to this article, are not exempt.

"Grandfather Clause" is a provision in which previous rules, ordinances or regulations may continue to apply to some existing situations, while new rules will apply to all future cases. Those exempt from the new rule are said to have grandfather or acquired rights. As later defined in this Chapter, the exemption is limited and it may be lost under certain circumstances. The City may use this provision as a compromise out of practicality, to effect new rules without unduly upsetting or burdening the development of land that fully complies with previously established regulations.

"Hardship" is a City accepted site limitation to the full application of the Stay on Volume as described in TNS068063 and in the Rainwater Management Guide. See "Infeasibility" for additional information.

"Hot Area" means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater. Examples might include operations producing concrete or asphalt, auto repair shops, auto supply shops, large commercial parking areas, gas fueling stations and restaurants.

"Impaired Waters" means any segment of surface waters that has been identified by the TDEC as failing to support classified uses. TDEC periodically compiles a list of such waters known as the 303(d) List.

"Industrial" means a business engaged in industrial production or service, that is a business characterized by manufacturing or productive enterprise or a related service business. This term shall include, by way of example but not of limitation, the following: apparel and fabric finishers, blast furnace, blueprint and related shops, boiler works, cold storage plants, contractors plants and storage facilities, foundries, furniture and household good manufacturing, forge plants, foundries, greenhouses, junk yards, manufacturing plants, metal fabricating shops, ore reduction facilities, planning mills, rock crushers, rolling mills, saw mills, smelting operations, stockyards, stone mills or quarries, textile production, utility transmission or storage facilities, warehousing, and wholesaling facilities.

"Infeasibility" To document that a new or redevelopment site is *eligible* for mitigation, documentation must include multiple criteria that would rule out an adequate combination of infiltration, evapotranspiration and reuse. Infeasibility criteria might include lack of available

area to create the necessary infiltrative capacity; a site use that is inconsistent with capture and reuse of stormwater; physical conditions that preclude use of these practices. The determination of infeasibility cannot be based solely on the difficulty or cost of implementing measures.

“Infiltration” is defined as a complex process of allowing runoff to penetrate the ground surface and flow through the upper soil surface. Water infiltrating during a rainfall event is removed from the direct runoff and usually does not contribute to a stream or other tributary’s peak flood flow rate. (Ord. No. 12294, § 2, 10-6-09)

"Impervious" means not allowing the passage of water through the surface of the ground or ground covering or a substantial reduction in the capacity for water to pass through the surface of the ground or ground covering.

"Institutional" means an established organization, especially of a public or eleemosynary character. This term shall include, by way of example but not of limitation, the following: churches, community buildings, colleges, day care facilities, dormitories, drug or alcohol rehabilitation facilities, fire halls, fraternal organizations, golf courses and driving ranges, government buildings, hospitals, libraries, kindergartens or preschools, nursing homes, mortuaries, schools, social agencies, synagogues, parks and playgrounds.

“Land Disturbing Activity” means any land change which may result in soil erosion from water and wind and the movement of sediments into Waters of the State, Community Waters or onto lands and roadways within the community, including, but not limited to, clearing, dredging, grading, excavating, transporting and filling of land.

“Leadership in Energy and Environmental Design” (LEED). A Green Building Rating System, developed by the U.S. Green Building Council for residential and commercial buildings. LEED provides benchmarks for the design, construction and operation of property and covers site makeup, building materials, water and energy efficiency, as well as indoor environmental quality. (Ord. No. 12377, § 1, 4-20-10)

“Long Term Maintenance Plan” is a specific site’s stormwater facility maintenance plan. It shall include required maintenance activities, frequency and schedule of inspections, and records keeping practices to document compliance. It must identify the stormwater, vegetation, and/or water quality components located on, or associated with a property to be maintained.

“Low-Impact Development” or “LID” are stormwater management and design strategies, integrated into the planning and design of a development. LID developments strive to conserve natural features, minimize or eliminate pollutants in storm water through natural processes, and maintain pre-development hydrologic characteristics such as natural flow patterns, surface retention, non-erosive discharge rates and recharge rates.

"Manager" means the person designated by the City to supervise the operation of the stormwater management system and who is charged with certain duties and responsibilities by this article, or his or her duly authorized representative.

“Mobile Home Property” is defined as a lot or a parcel of real estate in which individuals own their units and share joint ownership in common elements with other unit owners. Water Quality fees are assessed according to the following:

Mobile Home dwelling units with separate/individual parcels are treated as “Residential” properties;

Mobile Home dwelling units without separate/individual parcels, which are part of another parcel or share the same parcel with other units, are treated as “Non-Residential” properties. (Ord. No. 12294, § 2, 10-6-09)

"Multi-Family Residential" means an apartment building or other residential structure built for three or more family units, mobile home parks with three or more units or lots under common ownership, and condominiums of three or more units.

"National Pollution Discharge Elimination System" or "NPDES" permit means a permit issued pursuant to Section 402 of the Act (33 U.S.C. §1342).

“Non-Residential Properties” means all properties not encompassed by the definition of “Residential Property.” Non-residential properties include:

- apartment properties;
- condominium dwelling units without separate/individual parcels;
- mobile home parks with rented spaces (parcel not owned);
- commercial property;
- industrial property;
- institutional property;
- governmental property;
- churches;
- schools;
- federal, state, and local properties; and
- any other property not mentioned in this or the list of residential properties below.

(Ord. No. 12294, § 2, 10-6-09)

“Notice of Coverage” or “NOC” is a notice from the NPDES permitting authority to the primary permittee authorizing the discharge of stormwater associated with construction activity under the NPDES program.

“Notice of Intent” or “NOI” is the mechanism used to “register” for coverage under a NPDES Construction General Permit.

“Notice of Termination” or “NOT” is the request by the primary permittee to terminate coverage under the NPDES Construction General Permit. It constitutes notice that the party identified in the “NOT” is no longer authorized to discharge stormwater associated with construction activity under the NPDES program.

"Person" means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

"Permeable" see "Pervious"

"Pervious" defines a natural or engineered surface, material or ground cover that allows for the passage of water into underlying soil layers or media for the purpose of stormwater volume reduction and/or water quality treatment.

"Private Maintenance Responsibility" means that the inspection, maintenance, repair and reconstruction of stormwater control measures and conveyances not located on City right-of-way shall be the responsibility of i) the owner of the property where structures are located; ii) any person or entity that has legally agreed to take responsibility; and iii) the non-City properties served by the structures or conveyances, as determined by reference to site plans, plats, and construction drawings submitted and approved during the development review process.

"Public Stormwater Project Fund" is an account or fund set aside by the City to collect mitigation fee-in-lieu deposits made by owner/applicants. The account will be a subset of the Water Quality Program's existing capital expenditures account. The revenues generated by the mitigation fees will be deposited and periodically used, by the City of Chattanooga, to partially or wholly fund the design, related land acquisition, construction, installation, permitting and perpetual maintenance of publicly owned stormwater best management practices. Such facilities would be constructed offsite, in lieu of onsite privately owned practices that could not be constructed or installed as a result of physical site limitations on the owner/applicant's primary site. Public stormwater project funds may also be used to fund reforestation, riparian restoration or other projects with a direct runoff reduction or water quality benefit at the discretion of the City Engineer. To allow for sufficient funds, the City may pool fees, collected from multiple sites, and install practices upon collection of sufficient funds to initiate desired projects. Public stormwater projects are deemed by the City of Chattanooga as those that have a public benefit for water resources protection or enhancement, stormwater treatment, and/or ecological restoration, and that may have other community benefits.

"Qualified List" –The method by which an owner/engineer/applicant can avoid attending the otherwise mandatory 3-phase submittal process meetings is to make the qualified list. Qualification occurs, at the Site Development Manager's discretion, upon submission of two (2) successful submittals utilizing the Rainwater Management Guide's stay-on-volume method.

"Redevelopment" means the alteration of developed land that result in land disturbance. The term is not intended to include such activities as exterior remodeling, which would not be expected to cause adverse stormwater quality impacts.

"Residential Property" means all single-family, condominium dwelling units with separate/individual parcels, mobile home units with separate/individual parcels and separate City

tax billing accounts, two-family duplex properties, and all agricultural parcels within the City of Chattanooga. (Ord. No. 12294, § 2, 10-6-09)

“Retention Facility” or “Retention Pond” means a facility, which provides storage of stormwater runoff and is, designed to eliminate subsequent surface discharges. (Ord. No. 12294, § 2, 10-6-09)

“Retrofit” is the voluntary expansion, modification, or other upgrading of existing stormwater management strategies to increase groundwater recharge, promote stormwater reuse, promote runoff reduction, and/or improve water quality. Approved applicants may earn credit coupons and/or water quality fee discounts, for the property owner, upon exceedance of baseline stay-on-volume requirements for approved Stay on Volume retrofits to existing sites. Since there is no recognized benefit (fee reduction nor Stay on Volume avoidance) from applying credit coupons to voluntary retrofit sites, it is not allowed.

"Significant Spills" includes, but is not limited to releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4)

“Significant Redevelopment” means the alteration of developed land that results in land disturbances and may result in other site requirements.

“Small Site Controls” – Applicable to non-CSS area, new and redevelopments disturbing between 5,000 square feet and 1 acre of land;

1. Developments proposing no net increase to existing impervious surface are only required to implement either volume or flow based TSS Controls;

2. Developments proposing to increase net impervious surface may implement 1.0” baseline Stay on Volume, recognizing 10% additive Stay on Volume deductions defined in the NPDES permit TNS068063, if applicable, or implement TSS treatment plus two year through twenty five year ($Q_2 - Q_{25}$) peak rate attenuation;

3. TSS and Stay on Volume controls are designed and installed for the full disturbed area. Peak attenuation is to mitigate any proposed net increases to impervious surface or discharge rates.

"Square Footage of Impervious Area" means, for the purpose of assigning an appropriate number of ERUs to a parcel of real property, the square footage of all impervious area using the outside boundary dimensions of the impervious area to include the total enclosed square footage, without regard for topographic features of the enclosed surface. (Ord. No. 12294, § 2, 10-6-09)

“Stay on Volume” or “SOV” is the volume of stormwater runoff, measured in cubic feet, that must be captured and managed onsite as required by the City’s stormwater regulations with no discharge to surface waters or City storm sewers, as calculated by the methodology set forth in the Rainwater Management Guide.

"Storm Sewer" means a sewer, piping or natural structure, which carries stormwater, surface runoff, street runoff, and drainage, but which excludes sanitary sewage and industrial wastes, other than unpolluted cooling water. (Ord. No. 12294, § 2, 10-6-09)

"Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater Management" means the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner to meet the objectives of this article and its terms, including, but not limited to measures that control the increased volume and rate of stormwater runoff and water quality impacts caused by manmade changes to the land.

"Stormwater Management Facilities" are the integrated site systems designed to collect, infiltrate, harvest, evapotranspire, convey, pump, treat or reuse stormwater runoff.

"Stormwater Pollution Prevention Plan" or "SWPPP" is a written plan that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. The SWPPP shall be prepared in accordance with the Tennessee Erosion & Sediment Control Handbook.

"Stormwater Pollutants" include nutrients (nitrogen and phosphorus), bacteria, total suspended solids, and any other substances that can be transported via stormwater and that are identified in this article or by TDEC as requiring regulation.

"Stormwater System" means all facilities owned or maintained by the City for collecting, detaining, conveying, reusing, infiltrating or treating stormwater from any parcel or place upstream or up gradient of any point of discharge to a river or creek not maintained by the City for conveyance of stormwater or flood control. Stormwater system shall also mean all facilities owned by or maintained by the City for purposes of flood control. (Ord. No. 12294, § 2, 10-6-09; Ord. No. 12377, § 1, 4-20-10)

"Stream" means a surface water that is not a Wet Weather Conveyance. [Rule 1200-4-3-.04(20)]

"Stream Determinations" are made by qualified hydrologic professionals, in good standing, using TDEC's hydrologic determination methodology. The developer and his/her qualified professional will bear the burden of proof for a determination that a conveyance is not a stream. If the developer is unsure about the designation of waters of the state, TDEC staff can make the determination. The final approval of this determination of waters-of-the-state will be made by the City. Wetland and stream determination may also include determinations from the United States Army Corps of Engineers.

"Three Phase Submittal Process" – Development submittals are presented and reviewed in three separate phases including the Stormwater Management Concept Plan, Preliminary Stormwater Plan, and Final Stormwater Plan phase as defined later in this Chapter and in the RMG. See definition of "Qualified List" for further instruction.

"Toxic Pollutant" means any pollutant or combination of pollutants listed as toxic in 40 CFR Part 401 promulgated by the Administrator of the Environmental Protection Agency under the provisions of 33 U.S.C. §1317.

"TSS Controls" – BMP's designed for the 2.1" WQv to remove 80% of the total suspended solids from stormwater runoff;

1. Volume based TSS BMP's typically provide some measure of flood control and even treatment of dissolved pollutants through extended detention in a pond or underground storage device;

2. Flow-based TSS BMP's typically provide no measurable flood control protection as these are typically proprietary sediment, trash and debris screening, settling and separation devices.

"Variance" means the modification of the minimum stormwater management requirements contained in this article and the EPSC plan or SWPPP for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this article.

"Water Quality Buffer(s)" New development and significant redevelopment sites are required to preserve and maintain both sides of the streams or other waters located on their site. Water quality buffers shall be clearly marked on construction sites, grading permit applications, and on all phases of stormwater management plans before any clearing or grading can begin.

"Water Quality" means those characteristics of stormwater runoff that relate to the physical, chemical, biological, or radiological integrity of water.

"Water Quality Fee" is defined as a fee assessed to users and contributors of flow to the City's stormwater collection, impounding and transportation system. (Ord. No. 12294, § 2, 10-6-09)

"Water Quality Fee Discount" is a percent reduction to the annual water quality fee, available to non-residential property owners by application. Discounts are awarded for approved controls and practices resulting in an exceedance of the applicable baseline stay-on-volume. Discounts are subject to approval by the City.

"Water Quality Volume" or "WQv" is defined in the RMG. It is the site specific runoff resulting from the 2.1" rainfall event for BMPs that treat both flow rates and volumes.

"Water Quantity" means those characteristics of stormwater runoff that relate to the discharge rate and volume of the stormwater runoff.

"Waters of the State" or simply "Waters" is defined in the Tennessee Water Quality Control Act and means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those

bodies of water confined to and retained within the limits of private property in single ownership which do not combine to effect a junction with natural surface or underground waters.

“Wet Weather Conveyance” means, notwithstanding any other law or rule to the contrary, man-made or natural watercourses, including natural watercourses that have been modified by channelization:

- That flow only in direct response to precipitation runoff in their immediate locality;
- Whose channels are at all times above the groundwater table;
- That are not suitable for drinking water supplies; and
- In which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two (2) months. [Rule 1200-4-3-.04(25)]

Sec. 31-303. Abbreviations.

"CFR" means Code of Federal Regulations.

“CGP” means Construction General Permit.

"NPDES" means National Pollutant Discharge Elimination System.

“TDEC” means Tennessee Department of Environment and Conservation

"T.C.A." means Tennessee Code Annotated.

"U.S.C." means United States Code.

(Ord. No. 9942, § 1, 8-31-93)

Secs. 31-304-31-312. Reserved.

DIVISION 2. NEW DEVELOPMENT AND
REDEVELOPMENT REQUIREMENTS

Sec. 31-313. New Development and Redevelopment Requirements

Permanent Best Management Practices Manual

1. Adoption. The City adopts the following publications, which are incorporated by reference in this ordinance as if fully set out herein: The City of Chattanooga Rainwater Management Guide (“RMG”) and Landscape requirements, most current editions.

2. The City’s RMG includes a list of acceptable BMPs including the specific design performance criteria, operation and maintenance requirements for each stormwater practice and requirements to comply with the goals of the NPDES MS4 permit. The RMG includes City approved BMPs for permanent stormwater management including green infrastructure and water reuse BMPs.

3. The City’s RMG may be updated and expanded from time to time, upon the recommendation of the City Engineer, based on improvements in engineering, science,

monitoring results and local maintenance experience, or changes in federal or state law or regulations. Stormwater facilities that are designed, constructed and maintained in accordance with these RMG criteria will be presumed to meet the minimum water quality performance standards.

4. General Design and Review Process for New Development and Redevelopment:

The design process for stormwater management involves review and approval by City staff at three phases of project development: Stormwater Management Concept Plan, Preliminary Stormwater Plan, and Final Stormwater Plan, as specified in the RMG. Each approved applicant, owner or land developer, subject to the stormwater regulations contained in this Article, shall apply and submit for review and approval the above three (3) phases of plans. Each approval is a required prerequisite for the next phase. Prior to December 1, 2015, the applicant/owner or engineer/designer must attend all three (3) meetings unless he/she has made the “qualified list”. Below is a list of required plan processes, though not inclusive. They are subject to revision by the Site Development Manager:

- A. The Stormwater Management Concept Plan submittal shall contain the required information as provided in the RMG. All required information must be submitted before scheduling the required concept review meeting with the City. Estimates of the SOV, required BMP area(s), and proposed BMP type(s) and dimensions are required to ensure that sufficient and suitable site areas are reserved for BMPs. It is strongly advised that applicants complete calculations to confirm that the proposed BMPs will meet the SOV and water quality requirements as well as any rate control devices necessary to attenuate peak flows. The applicant may be required to revise this plan prior to submission of the Preliminary Stormwater Plan if there are significant changes in design between concept and preliminary plans.

Concept Review Meeting

- (i) The City can provide guidance regarding the appropriate rainfall depth for SOV calculation, applicable buffer and planting and landscape requirements, and any other relevant design standards. Reviewers may also comment on the proposed initial design ideas and evaluate their success in preserving site character and function.
- (ii) Desktop Tree Survey and Analysis.
- (iii) The applicant/owner may be asked to submit a revised Stormwater Management Concept Plan following the concept meeting to reflect any changes or discussion items.
- (iv) Additional concept review meetings are not required, but may be requested by the applicant/owner if desired.

B. The Preliminary Stormwater Plan packages are submitted after a City approved Stormwater Management Concept Plan, wherein site layout and design have been fully established with regard to the intended use of the site. Preliminary Stormwater Plan approval is a required prerequisite for final approval and must provide sufficient design documentation and supporting data and calculations (i.e., soil testing data, stormwater routing and sizing calculations) for the City to determine whether the proposed project will meet RMG requirements. Approval of preliminary plans will not result in the issuance of any permit approval by the City.

(i) Tree Survey and Analysis

C. The Final Stormwater Management Plan includes any design modifications necessary to address City review comments or to meet RMG requirements. The final plan should be submitted after all City comments, provided on prior submittals, have been satisfactorily addressed. It will not be approved until all applicable state and federal or other local agency permits have been obtained and all applicable bonds have been posted. If requirements vary, the most restrictive shall prevail. Example state and federal permits are stream and wetland impacts, and applicable dam safety regulations. Applicants are required to show proof of compliance with these regulations before the City will issue a land disturbance, building, or zoning permit.

5. General design performance criteria for permanent stormwater management:

The following performance criteria shall be addressed for permanent stormwater management at all development sites:

A. The City's stormwater management program, as described in the RMG, imposes requirements for new and redevelopment projects to manage stormwater runoff for volume management, water quality treatment, and peak rate control. LID, practices and strategies such as conservation, preservation, restoration, and green infrastructure measures are recommended to be used to meet stormwater management requirements.

B. The calculations for determining peak rate flows, as found in the RMG, shall be used, at a minimum, for sizing all stormwater facilities.

C. The Small Site Control Method is applicable to non-CSS area, new and redevelopment projects disturbing between 5,000 square feet and one (1.0) acre.

- i. Applicable projects proposing no net increase to impervious surface are required only to implement either volume or flow based TSS Controls.
 - ii. Projects proposing to increase net impervious surface may implement 1.0" baseline SOV, recognizing 10% additive SOV deductions defined in NPDES permit TNS068063, if applicable, OR implement TSS treatment plus two-year through twenty-five year frequency peak rate attenuation.
 - iii. TSS and SOV controls shall be designed and installed for the full disturbed area. Peak rate attenuation (Q_2 through Q_{25}) is to mitigate any proposed net increases to impervious surface or discharge rates.
- D. For projects greater than one acre of disturbance or part of a larger plan of common development that will exceed one acre of disturbance, all new developments located outside the South Chickamauga Creek Watershed and all redevelopment projects, in combination or alone, are required to incorporate runoff reduction measures designed, constructed and maintained, to manage (infiltrate, evapotranspire, harvest and/or use), at a minimum, the first one inch (1.0") of every rainfall event preceded by 72 hours of no measurable precipitation, with no discharge from the project site to surface waters. This first inch of rainfall must be 100% managed with no discharge to surface waters. The required volume to be managed is referred to as the "SOV" as calculated by the method set forth in the RMG.
- i. All Redevelopment Projects shall be eligible for 10% deduction from the 1.0" SOV for each of the following criteria. Deductions are additive up to 50% maximum deduction.
 - 1. Redevelopment;
 - 2. Brownfield redevelopment;
 - 3. Density greater than seven (7) units per acre;
 - 4. Vertical density resulting in Floor to Area Ratio (FAR) of 2 or alternately resulting in greater than 18 units per acre;
 - 5. Mixed Use and Transit Oriented Development within one-half mile of an established transit route.
 - ii. The deductions in this paragraph shall not apply to New Development Projects.
- E. For new developments greater than one acre of disturbance or part of a larger plan of common development that will exceed one acre of disturbance in the South Chickamauga Creek Watershed (as delineated by the City), the first 1.6 inches (1.6") of SOV is the required minimum design standard used to manage (infiltrate, evapotranspire, harvest and/or use) stormwater.

- B. Unmanaged runoff volume must achieve 80 percent total suspended solids (TSS) reduction and the treated water released in accordance with peak discharge requirements.
- C. The water quality volume (WQv) is the runoff resulting from the 2.1” rainfall event for BMPs that treat both flow rates and volumes. Specific requirements for capture, treatment, and release of the WQv are provided in the RMG.

7. Peak Flow Rate and Flood Control Standards

Applicable projects proposing land disturbances must implement measures as necessary to mitigate the post-development peak runoff rates to no greater than pre-development peak runoff rates for the 2-, 5-, 10-, and 25-year 24-hour storm events. In addition to peak rate attenuation, the peak flow rate and maximum water surface elevations must be calculated for the 100-year storm event, per the RMG.

- A. CSS stormwater controls are based on the amount of disturbance and whether the proposed development results in a net increase to impervious surface. The three control methods are the CSS “Simple Fixture,” “Full Fixture” and voluntary “Primary” methods.
- B. BMP and SOV practices can directly reduce peak runoff rates from project sites. Projects may quantify this benefit when calculating peak flow rates, per the RMG.
- C. Detention or retention ponds, and other BMP’s used for peak rate control only, shall be designed in accordance with the current edition of the Chattanooga Hamilton County BMP Manual and the RMG requirements on peak attenuation.
- D. Projects on unmapped watercourses draining fifty (50) acres or more shall be investigated by a professional engineer. The elevation of the 100-year event flood level, as well as the elevations of proposed structures adjacent to setbacks (setbacks measured from the centerline of the unmapped watercourse) shall be determined and included in the final design. All flood investigations, on mapped and unmapped water courses, shall comply with the Federal Emergency Management Agency’s (FEMA) design methodologies and must prohibit adverse flooding impacts to other properties.
- E. All developments installing new stormwater or water quality facilities, retrofitting existing facilities or other stormwater management facilities shall be required to execute an Inspection and Maintenance Agreement for Private Stormwater Management Facilities. It must include a site specific Inspection and Maintenance Plan designating the party or parties

responsible for maintenance and granting the City the right to inspect said facilities. If the responsible party or parties fails to perform maintenance, after being given appropriate notice in writing, the Agreement shall grant authority to the City to perform the required maintenance and bill the responsible party double the amount of the City's cost of maintenance and enforcement.

- F. The owner/operator shall perform annual inspections, at a minimum, in accordance with practices and requirements to ensure that the BMPs are properly functioning. Inspections shall entail visual observations of the BMP performance. Inspections shall be conducted by a person familiar with control measures implemented at a site. Owner/operators shall maintain inspection documentation as the City may require submittal of this documentation.

- G. The owner/operator shall have comprehensive inspections conducted of all stormwater management facilities and practices at least once every five years. Such inspections must be conducted by either a licensed professional engineer or landscape architect. Complete inspection reports for these five year inspections shall include:
 - i. Facility type,
 - ii. Inspection date,
 - iii. Latitude and longitude and nearest street address,
 - iv. BMP owner information (e.g., name, address, phone number, fax, and email),
 - v. BMP condition and functionality descriptions including: vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,
 - vi. Photographic documentation of BMPs,
 - vii. Specific maintenance items or violations to be corrected by the BMP owner along with deadlines and re-inspection dates,
 - viii. Owner/operators shall maintain documentation of inspections. The City may require submittal of this documentation.

- H. Private Property Owner Responsibilities
 - i. The owner(s) of stormwater management facilities and/or BMPs shall ensure their proper operation. All facilities, system components and related components, and all BMPs must be maintained to ensure full functionality per design. The property owner(s) is solely responsible for the cost of maintaining privately-owned facilities and BMPs.

- ii. Property owner(s) shall conduct quarterly (4 per year) self-inspections of the stormwater structures to ensure maintenance and continued functionality, per design. Self-inspection records should be kept, and made available to City inspectors upon request. These should include the date of inspection, inspector's name, BMP condition, and general systems conditions (e.g. trash, sediment, erosion, blockages).

8. Limitations to the installation of runoff reduction measures include, but are not limited to physical site infeasibilities such as:

- A. Where a potential for introducing pollutants into the groundwater exists, unless pretreatment is provided;
- B. Where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff;
- C. Presence of sinkholes or other karst features;
- D. Pre-development infiltrative capacity of soils must be taken into account in selection of runoff reduction measures.
- E. High permanent groundwater table;

9. To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the RMG.

10. Stormwater discharges to Critical Areas (see definition) with sensitive resources may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices. Projects implementing the 1.6" design standard in the South Chickamauga Creek watershed shall be considered compliant with this Section in regards to Total Maximum Daily Loads for sedimentation and habitat alteration and protection of Chickamauga Crayfish.

11. Stormwater discharges from Hot Areas may require the application of specific structural BMP's, pollution prevention practices and or pre-treatment devices. Stormwater from Hot Areas land uses should not be directly infiltrated without pre-treatment.

12. Easements

- A. Storm drainage easements shall be required where the conveyance, storage, or treatment of stormwater is identified on the stormwater management design plan, or where access is needed to structural or non-structural stormwater measures.
- B. Easement widths shall be based on the type of drainage system component, size, and depth.

13. As-Built Plans

All applicants are required to submit as-built plans for permanent stormwater management facilities located on-site after final construction is completed.

- A. As Built Plans must show the final design specifications, meet the criteria in the RMG and per City requirements, and be sealed by a registered professional engineer licensed in Tennessee, registered land surveyor or registered landscape architect.
- B. A final inspection by the City is required before any performance bond or guarantee will be released. If the As Built Plans indicates deviation from design, then a professional engineer or landscape architect must prove performance of the BMP as installed.
- C. The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or bond on the completion of various stages of development. In addition, the certificate of occupancy shall not be granted until corrections to all BMP's have been made and accepted by the City.

14. Grandfathering

Projects submitting complete Land Disturbing Permit applications for New Construction, Addition, Alteration, or Repair/Replacement to the City's Land Development Office before the close of business day November 30, 2014, will be grandfathered under the City of Chattanooga's prior stormwater management regulations. The criteria for determining completeness of permit applications shall be established by the Site Development Manager.

- A. Applicable out parcels served by previously permitted on-site, shared, or regional stormwater management facilities must comply with the requirements in effect at the time the master plan development was originally submitted and/or approved.
- B. The applicant may not be able to rely solely on the information contained in any remaining City records. The burden of proof as to whether applicable outparcels are adequately served by existing controls is on the applicant.
- C. After December 1, 2014, any proposed additional impervious surface, exceeding what was detailed in the original plans or study may either be: 1.) managed under the new runoff reduction standards; 2.) managed with additional controls utilizing previous standards; or 3.) Originally permitted master plan controls must be upsized and/or improved to accommodate the additional proposed impervious surface.

- D. New runoff reduction standards are preferable. Therefore, no part of the grandfathering clause shall preclude the permittee from voluntarily constructing stormwater controls to the more beneficial, new standard.

15. Implementation Date of New Stormwater Regulations

Projects submitted to the City after the close of business day November 30, 2014, that are not deemed Grandfathered as determined by the Site Development Manager will be subject to the runoff reduction methods and standards detailed in this Chapter and in the RMG.

Secs. 31-314 --31-319. Reserved.

DIVISION 3. LAND DISTURBING ACTIVITY
AND EROSION AND SEDIMENTATION CONTROL

Sec. 31-320. Land disturbing activity.

All Land Disturbing Activities shall be in compliance with and permitted under this Division 3. If non-exempt land disturbing activities are planned, the property owner shall apply to the City for a land disturbing permit. If one (1) acre or more of total land area is disturbed, the property owner shall also apply for a land disturbing permit under the "State of Tennessee's General NPDES Permit for Stormwater Discharges Associated with Construction Activity." If a Tennessee General NPDES Permit is applied for, a copy of the NOI shall be sent to the City. To seek coverage under the TDEC General Permit, the NOI shall be submitted to the following:

TDEC address:

Tennessee Dept. of Environment and Conservation
Chattanooga Environmental Field Office
1301 Riverfront Parkway
Suite 206
Chattanooga, TN 37402

City of Chattanooga address:

City of Chattanooga
Land Development Office
Plans Review Services
1250 Market Street, Suite 1000
Chattanooga, TN 37402

(Ord. No. 9942, § 1, 8-31-93)

Applicability

Division 3 of this article shall be applicable to all land development, including, but not limited to, building permits, site plan applications, subdivision applications, and grading applications.

These provisions apply to any new development or redevelopment site within the jurisdiction of the City.

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 12721, § 3, 5-21-13)

Sec. 31-321. Land disturbing activity regulated.

1. It shall be unlawful for any person to conduct or permit to be conducted any Land Disturbing Activity upon land owned or controlled by them (including, but not limited to, clearing, dredging, grading, excavating, transporting and filling of land), whether temporary or permanent, within the City of Chattanooga until a land disturbing permit has been issued by the City, allowing such activity pursuant to the provisions of this article and in accordance with the General NPDES Permit for Stormwater Discharges from Construction Activities from the TDEC. The property owner shall apply for the land disturbance permit.

Below is a list of site practices that are exceptions to the term Land Disturbing Activity:

- A. "Surface mining" as the same is defined in Tennessee Code Annotated Section 59-8-202;
- B. Such minor land disturbing activities as home gardens and individual home landscaping, home repairs, home maintenance work, and other related activities which result in negligible soil erosion;
- C. The construction of single-family residences when built separately on lots within subdivisions which have been issued a permit under this article and have been approved and recorded in the office of the Hamilton County Register, provided that excavation is limited to trenches for the foundation, basements, service and sewer connections, and minor grading for driveways, yard areas and sidewalks. The construction of single-family residences on individual lots, which are not part of a permitted subdivision under this article, is not exempt;
- D. Additions or modifications to existing detached single-family dwellings. This exception may not be applied for contiguous properties that may have been subdivided and/or are attributed to multiple separate owners.
- E. Individual service and sewer connections for single or two - family residences;
- F. Agricultural practices involving the establishment, cultivation or harvesting of products of the field or orchard, preparing and planting of pasture land, farm ponds, dairy operations, and livestock and poultry management practices, and the construction of farm buildings; (Ord. No. 11470, §1, 10 - 14 - 03)

- G. Installation, maintenance and repair of any underground public utility lines when such activity occurs on an existing hard - surface road, street or sidewalk, provided the activity is confined to the area of the road, street or sidewalk which is hard - surfaced and a street, curb, gutter or sidewalk permit has been obtained;
- H. Construction, repair or rebuilding of tracks or other related facilities of a railroad company;
- I. Maintenance and repair to any stormwater BMP deemed necessary by the City.
- J. Any emergency project that is immediately necessary for the protection of life, property, or natural resources as determined by the City.

These activities may be undertaken without a permit; however, the persons conducting these excluded activities shall remain responsible for otherwise conducting those activities in accordance with the provisions of this article and other applicable law including responsibility for controlling erosion and sedimentation.

2. Stormwater Design Manuals.
Adoption.

The City adopts the most current edition of TDEC’s Tennessee Erosion & Sediment Control Handbook (the “Handbook”) as minimum standards for controlling erosion and sedimentation from land disturbing activities.

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 11470, §1. 10-14-03; Ord. No. 11639, § 2, 11-09-04; Ord. No. 12721, § 4, 5-21-13)

Sec. 31-322. Land disturbing permit required.

No Land Disturbing Activity, whether temporary or permanent, shall be conducted within the City of Chattanooga until a land disturbing permit has been issued by the City allowing such activity pursuant to the provisions of this article. Such permit shall be available for inspection by the City on the job site at all times during which land disturbing activities are in progress. Such permit shall be required in addition to any building permit or other permit required upon the site. Each application for the issuance of a land disturbing permit under this article shall be accompanied by a nonrefundable permit fee thirty dollars (\$30.00) per acre developed or a minimum fee of one hundred dollars (\$100.00).

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 12721, § 5, 5-21-13)

Sec. 31-323. Data required in land disturbing permit application.

1. Any application for the issuance of a land disturbing permit under this article shall include, at a minimum, the following:

- A. Site or project name
- B. Property street address or location; tax map, lot number, subdivision name, zip code
- C. Site activity description
- D. Site owner/property owner/applicant or Agent name, mailing address, phone, email, company name (see Sec. 31-320)
- E. Engineer/Contractor: name, mailing address, phone, email, company name, state/county/city license numbers
- F. Type of work
- G. Property occupied/used as zoned
- H. Size of project
- I. Starting and completion estimated dates
- J. Other information as required by the City.

2. Each application for a land disturbing permit shall be accompanied by an EPSC Plan or SWPPP, which shall accurately describe the potential for soil erosion and sedimentation problems resulting from the Land Disturbing Activity and shall explain and illustrate the measures which are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for offsite damage. The plan shall contain a description of the existing site conditions, a description of adjacent topographical features, a description of soil types and characteristics in the area, potential problems of soil erosion and sedimentation, stabilization specifications, stormwater management considerations, a time schedule for completion of the land disturbing activity and for maintenance after completion of the project, clearing and grading limits, and all other information needed to accurately depict solutions to potential soil erosion and sedimentation problems.

3. It is the applicant's responsibility to track the status of the review and make required corrections.

Sec. 31-323.1 EPSC Plan and SWPPP preparation

Any project that consists of a total land disturbance, at and above one (1) acre, also requires a SWPPP and NPDES permit.

Permittees and Approved Applicants are required implement a set of requirements to establish, protect and maintain a construction and permanent Water Quality Buffer during and after construction as defined in this Article.

Sec. 31-323.2 Construction stream buffer zone requirements

1. Construction stream buffer zones shall be designated on the plans and marked off with high visibility safety fencing before land disturbance or construction commences.

2. The construction stream buffer is required to protect Waters of the State located within or immediately adjacent to boundaries of the project as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17).

3. A 30-foot natural riparian construction stream buffer zone shall be left undisturbed adjacent to all streams, to the maximum extent practicable, during construction activities at the site.

4. Construction stream buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the Waters of the State. The buffer zone requirement only applies to new construction sites. The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area.

5. For sites that contain and/or are adjacent to a receiving stream designated as Impaired or Exceptional Tennessee waters, a 60-foot natural riparian construction stream buffer zone adjacent to the receiving stream shall be preserved. The buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-foot criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is at least 30 feet at any measured location.

6. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the Waters of the State.

7. The buffer zone requirement applies to all construction sites. No construction activities or Land Disturbing Activities (including but not limited to: parking, movement of vehicles, storage of materials, clearing, applying gravel, concrete washouts, etc.) shall take place within the buffer zones.

8. Equivalent Buffer Zone BMPs:

A. A justification for use and design of equivalent construction stream buffer zone BMPs shall be included in the EPSC Plan or SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc. This will be approved by the City on case by case basis.

B. This requirement does not apply to any valid ARAP, or equivalent permits issued by federal authorities. Additional buffer zone requirements may be required on a case by case basis depending on slope, land use or other variable.

- C. Delineate the buffer zones, of 30 or 60 foot, with a single row of high visibility safety construction fencing in addition to any silt fencing that may be required to be installed.
- D. Buffer zone exemption based on existing uses
- E. Buffer zones as described above shall not be required along portions of the buffer where certain land uses exist and are to remain in place according to the following:
 - i. A use shall be considered existing if it was present within the buffer zone as of the date of the NOI for coverage under the CGP. Existing uses shall include, but not be limited to, buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the buffer zone that contains the footprint of the existing land use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the buffer zone.
 - ii. If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

Sec. 31-324. General requirements.

No Land Disturbing Activity shall be conducted within the City except in such a manner that:

1. Stripping of vegetation, re-grading, and other development activities shall be conducted so as to minimize erosion. Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than fifteen (15) calendar days prior to grading or earth moving. Construction must be sequenced to minimize the exposure time of cleared surface area.
2. Property owners shall be responsible upon completion of Land Disturbing Activities to leave slopes so that they will not erode. Such methods could include revegetation, mulching or rip-rapping. BMPs should be employed as described in the Handbook. The objective will be to leave the site as erosion-free and maintenance-free as practicable.
3. Natural vegetation shall be retained, protected, and supplemented.
4. Permanent soil stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall be applied as soon as practicable after final grading is reached on any portion of the site. Unpacked

gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface. Soil stabilization refers to measures which protect soil from the erosive forces of wind, raindrop impact and flowing water, and includes the growing of grass, sod, application of straw, mulch, fabric mats, and the early application of gravel base on areas to be paved.

5. A permanent vegetative cover shall be established on disturbed areas not otherwise permanently stabilized.

6. Neighboring persons and property shall be protected from damage or loss resulting from excessive stormwater runoff, soil erosion or deposition upon private property or public streets of water transported silt and debris. Adjacent property owners shall be protected from land devaluation due to exposed bare banks.

7. Erosion and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but must be replaced at the end of the work day or before any precipitation event that could cause erosion and/or deposition of sediments off-site.

8. Structural controls shall be designed and maintained as required to prevent pollution. All surface water flowing toward the construction area shall to the extent practicable be diverted by using berms, channels, or sediment traps as necessary. Erosion and sediment control measures shall be designed according to the size and slope of disturbed or drainage areas, to detain runoff and trap sediment. Discharges from sediment basins and traps must be through a pipe or lined channel so that the discharge does not cause erosion. Muddy water to be pumped from excavation and work areas must be held in settling basins or treated by filtration or coagulation prior to its discharge into surface waters. Waters must be discharged through a pipe or lined channel so that the discharge does not cause erosion and sedimentation.

9. There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge. The stormwater discharge must not cause an objectionable color contrast in the receiving water. The stormwater discharge must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving Stream.

10. When the Land Disturbing Activity is finished and stable perennial vegetation has been established on all remaining exposed soil, the developer shall notify the City of these facts and request termination of the permit issued under this section. The City shall then inspect the site after receipt of such notice, and when advisable may require additional measures to stabilize the soil and prevent erosion. If such requirements are given by the City, the owner or developer shall continue to be covered by the provisions of this section, until a NOT of the permit has been accepted by the City. (Ord. No. 9942, § 1, 8 - 31 - 93)

11. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed no later

than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- A. where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
- B. where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within fourteen (14) days. Steep slopes shall be temporarily stabilized not later than seven (7) days after construction activity on the slope has temporarily or permanently ceased.

12. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have temporarily or permanently ceased on any portion of the site, and will not resume for a period exceeding fourteen (14) calendar days. Soil stabilization (temporary or permanent) of those disturbed areas must be completed as soon as possible, but not later than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately are infeasible, alternative stabilization measures (such as, but not limited to: properly anchored mulch, soil binders, matting) must be employed.

13. Dewatering: Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls include, but are not limited to: weir tank, dewatering tank, gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter, coagulation or other control units providing the level of treatment necessary to comply with permit requirements.

14. Prevent off-site vehicle tracking of sediments and the generation of dust. A stabilized construction access (a point of entrance/exit to a construction site) shall be described and implemented, as needed, to prevent the tracking of mud and dirt onto public roads by construction vehicles.

15. If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be included in the SWPPP.

16. Litter, construction debris, and construction chemicals exposed to stormwater shall be picked up prior to anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control (such as silt fence) should be removed or otherwise prevented from becoming a pollutant source for stormwater discharges.

17. Construction Phasing: See CGP for requirements.

18. Construction Staging: See Handbook and CGP for requirements.
19. Sediment Basins: See Handbook for requirements.
20. The City may require stricter landuse and/or erosion and sediment control requirements for projects discharging into Impaired or Exceptional Tennessee Waters.

Sec. 31-324.1 Erosion prevention and sediment controls inspections

Erosion prevention and sediment controls inspections shall be done according to the Handbook.

1. All active construction sites shall be inspected by permittee or his designee twice weekly (performed at least 72 hours apart), in accordance with the requirements of the CGP by a person that has an active certification completing the “Fundamentals of Erosion and Sediment Control Level I” course.

2. The inspections are done to ensure erosion prevention and sediment controls are not damaged and are effective. It is not the City's intent to penalize proper maintenance and mitigation of failed management practices, but rather to ensure that potential and actual failures are promptly recognized and addressed expeditiously and effectively. During prolonged rainfall, daily checking and repairing is necessary. The permittee shall maintain records of such checks and repairs.

3. A specific person, that has an active certification completing the “Fundamentals of Erosion and Sediment Control Level I” course, shall be designated by owner to be responsible for erosion and sediment controls on each site.

4. Routine inspections are required and copies of the written reports must be kept with the EPSC Plan or SWPPP and provide enough information that a regulator is given a full picture of the management techniques employed onsite, including problems, maintenance needs, and corrective actions taken. These reports need to clearly note the dates that problems or maintenance needs were identified and the dates that these activities were addressed, as well as dates when major grading activities occurred, the dates when construction activities temporarily or permanently ceased on a portion of the site, and the dates when stabilization measures were initiated. Inspection records and rainfall data shall be maintained on or near construction site and accessible.

5. Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event, but in no case more than 7 days after the need is identified. Such modifications shall provide for timely implementation (site description identified and Erosion prevention and sediment control measures) of any changes to the SWPPP but in no case later than fourteen (14) days following the inspection.

6. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in an enforcement action.

7. A rainfall gauge is required on the construction site and should be read at least once a day at approximately the same time to get a 24 hour rainfall depth total. In addition, when a rain event occurs, the approximate beginning and ending time should be documented to provide the rain event duration. The rainfall depth and duration together can be used to determine the storm frequency and related back to the permit and design requirements. Rainfall data should be kept with the field EPSC Plan or SWPPP.

8. Erosion prevention and sediment controls shall be designed to minimize erosion and maximize sediment removal resulting from a 2-year, 24-hour storm at a minimum (or 5-year 24 hour storm associated with Impaired or Exceptional Tennessee Waters), either from total rainfall in the designated period or the equivalent intensity.

9. Quality assurance of erosion prevention and sediment controls shall be done by performing site assessment at a construction site. The site assessment shall be conducted at each outfall involving drainage totaling ten (10) or more acres or five (5) or more acres if draining to an Impaired or Exceptional Tennessee Waters within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment shall be performed per requirements in the current State CGP. The site assessment shall be performed by individuals with the following qualifications:

- a licensed professional engineer or landscape architect;
- a CPESC or
- a person that successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course.

Sec. 31-324.2 Water Quality Buffer

1. A Water Quality Buffer zone is a strip of undisturbed native (indigenous) vegetation and soil that includes trees, shrubs and herbaceous vegetation either original or re-established that borders waters of the state.

2. A Water Quality Buffer shall be applied to ‘waters of the state’ including but not limited to streams, rivers, jurisdictional wetlands, springs, reservoirs or lakes and ponds with hydrologic connectivity (streams leading into and out of the pond or spring input) and sinkholes, adjacent to new development or significant redevelopments. The buffer regulations shall require protection and maintenance of existing buffers, including soils and vegetation, on all existing properties, as determined by the City.

3. Water Quality Buffers zones are most effective when stormwater runoff flows into and through them as shallow sheet flow, rather than in concentrated form such as in pipes, channels, gullies, splays, or wet weather conveyances. Therefore, it is critical that whenever possible, the designs include management practices to the maximum extent practical, that result

in stormwater runoff flowing into and through buffers as shallow, non-erosive sheet flow. When shallow, non-erosive sheet flow is not possible, every effort shall be made to minimize detrimental effects on the water quality buffer.

4. Water Quality Buffer zones protect the physical and ecological integrity of water bodies from surrounding upland activities in the following ways:

- A. filter excess sediment, organic material, nutrients, and other chemicals;
- B. reduce storm runoff velocities;
- C. provide flood protection;
- D. protect channel bank areas from scour and erosion;
- E. shade and cool adjacent water allowing it to hold adequate levels of dissolved oxygen;
- F. provide leaf litter and large woody debris important to aquatic organisms; and
- G. improve stream bank habitat for aquatic organisms;

5. A Water Quality Buffer shall consist of native vegetation along both sides of a stream or around other applicable water resources or waters of the state. The buffer is measured perpendicular from top of bank determined by the break in the slope. The top of bank is the uppermost limit of the active channel, typically indicated by a change in bank slope from steep to gentle. If the top of bank cannot be determined from the above indicator or if there is a dispute in the determination, it can be determined by submitting approved engineering calculations that determine the width of the stream resulting from the two-year frequency storm. The City shall make final determinations of buffer delineations, top of bank, areas where the Water Quality Buffer shall apply and buffer widths, based on the applicant's submitted data.

6. The City may approve alternate Water Quality Buffer widths for special circumstances (e.g., existing land cover or existing physical conditions) that preclude the above requirements.

7. Specifically prohibited uses include, but are not limited to: pavements, structures, parking lots, dumpster storage, material storage, grease-bin storage, vehicle storage/maintenance, animal lots or kennels, or other uses known to contribute runoff or pollutants to waterways.

8. Buffer Widths:

Buffer widths shall be measured from the edge of the water resource to be protected as defined below.

A. Streams:

- i. For drainage basins less than one square mile:

- a. The permanent Water Quality Buffer shall be thirty (30) feet measured perpendicular from the top of bank on both sides with no averaging.
 - b. For sites that contain and/or are adjacent to a receiving stream designated as Impaired or Exceptional Tennessee waters, a sixty (60) foot natural riparian construction stream buffer zone adjacent to the receiving stream shall be preserved during construction. The buffer zone shall be established between the top of stream bank and the disturbed construction area. The sixty (60) foot criterion can be established on an average width basis as long as the minimum buffer width is at least thirty (30) feet at any measured location.
- ii. For drainage basins greater than one square mile, the permanent Water Quality Buffer shall be sixty (60) feet from top of bank on both sides. It can be averaged as long as the minimum is no less than thirty (30) linear feet measured perpendicular from the top of bank on both sides. When the average width method is used, applicant must provide CAD files allowing the measurements to be verified.
 - iii. In accordance with the NPDES permit TNS068063, the Site Development Manager shall develop and apply criteria for determining the circumstances under which averaging may occur. A determination that standards cannot be met may not be based solely on the difficulty or cost associated with implementation.

B. Lakes and ponds with hydrologic connectivity:

The Water Quality Buffer shall be thirty (30) feet from normal pool. If a flood zone study exists or is prepared, elevations of proposed structures adjacent to the lake or pond setback shall be determined and included in the final design.

C. Wetlands

The Water Quality Buffer shall be thirty (30) feet with no disturbance. If the wetland is associated with or within the water quality buffer or other protected waters, then the buffer shall be measured according to the Water Quality Special Buffer Widths defined in this Article.

9. Permanent buffers shall be preserved during development and perpetually afterwards.

- A. During development, buffers shall be clearly marked, on plans and on site, and protected from construction activities.
 - B. The Water Quality Buffer shall be retained in its natural vegetative state or enhanced. No unapproved clearing of existing native vegetation in the streamside buffer or BMPs shall be allowed. The target vegetation is undisturbed mature forest.
10. Water Quality Buffer Allowable Uses
- A. Buffer crossings for utilities and infrastructure: To the extent practical, the number and width of water body crossings shall be limited. Whenever feasible, crossings shall occur at right angles. Developments should coordinate infrastructure, utility and road crossings to attempt to have them occur at the same location.
 - B. Passive recreation and footpaths to approach the river without constructed improvements. A plan must be approved by the City.
 - C. A sidewalk, greenway or other paved trail may be considered, if constructed of pervious concrete or other pervious materials, excluding asphalt, approved by the City, and established on a stable stream area no closer than twenty (20) feet from the top of the bank. No equipment larger than a mini-Bobcat or other similarly sized equipment (specifically tasked with pervious material installation) may enter the buffer. Trees over six (6) inches dbh cannot be disturbed in the buffer area, during construction. The width of the pervious sidewalk, and any clearing as a result of construction, shall be added to the width of the water quality buffer. Protection of the existing vegetation is of prime importance.
 - D. Stormwater channels, as approved by City: vegetated channels and use of dissipating and sheet flow arrangements where appropriate to prevent channelization and erosion in the buffer from stormwater runoff adjacent to the buffer from BMPs or any other aspect of the site.
 - E. Landscaping or other related re-vegetation using native vegetation to address erosion, damaged vegetation, restoration, remove exotic species, or other problems. Landscaping, bank stabilization, or other developer proposed restorations to restore a natural stream corridor habitat shall be submitted as a Landscape Management Plan to the City as a supplement to the Land Disturbance Permit. Developers must obtain any related local, state, TVA or federal permits. The City must approve the specific requirements of such plan prior to the approval of a Stormwater Management Preliminary Plan or issuance of a Land Disturbance Permit and before any work or proposed restoration on the buffer takes place.

- F. Removal of individual trees that are in danger of falling, causing damage to dwellings or other structures, or blocking the stream.

11. Water Quality Buffers shall be placed in open space easements and recorded with the deed for the property before Certificate of Occupancy is issued.

12. Water Quality Special Buffer Widths. Water Quality Buffer widths shall vary depending on the presence of certain water pollution hazards. The following special buffer widths shall apply:

- A. Solid waste landfills, outdoor recycling or processing facilities require 150 feet.
- B. Salvage yards or automobile recyclers require 150 feet.
- C. When wetlands, sinkholes or other water resources are wholly or partially located within a stream or the streamside buffer edge, the streamside buffer width shall be extended by the width of the water resource.
- D. If more than one of the aforementioned is applicable, the greater width adjustment shall apply.
- E. Onsite, private septic system drain fields should not automatically be located at the outer edge of property lines adjacent to undisturbed buffers. To the maximum extent possible, drain fields should be located to increase their separation from protected stream side areas.

13. Water Quality Buffer Width Reductions, Clearing Activities, and Crossings.

- A. Special Buffer Widths may be reduced in conjunction with targeted restoration plans that make comparable improvements to water quality. Restoration plans may include stream bank restoration, re-vegetation, habitat improvements, or other bioengineering methods. The City shall consider such requests upon receipt of a Landscape Management Plan detailing comparable improvements. Special buffer reductions will only be considered for specific areas of an overall development.
- B. View Corridor: Limited clearing and pruning to establish a view corridor may be permitted with an approved Landscape Management Plan stamped by a registered Landscape Architect. The Plan must leave adequate vegetation in the view corridor to maintain the buffer's function.
 - i. Preferential practices for view enhancement are crown raising, crown lowering, or crown thinning in lieu of tree removal. Any

removal of trees shall be in accordance with the City of Chattanooga Municipal Code. The SWPPP or EPSC plan shall demonstrate both effective erosion prevention and sediment control and forestry practices.

- ii. Removed trees must be replaced. Replacement by shrubs or small trees may be allowed if native plants, approved on the Landscape Management Plan, are used.
- iii. A Notice of Violation and/or Civil Penalty, as set forth in Section 31-346 shall be issued if clearing exceeds approved Plans. The landowner shall re-plant that segment of the cleared buffer at his/her own expense.

C. The City may allow new driveways, road crossings or other access through or across water quality buffer zones on a case-by-case basis. The necessity of buffer access must be demonstrated. Additionally, it must be shown that the buffer zone will not be excessively impacted. Driveway or road crossing shall be constructed perpendicular to the stream or buffer with careful detail to protecting trees and vegetation and minimizing site grades.

D. Roadways and lots shall be designed and aligned so streams are either to the rear or to the side of individual lots, and not along the front. Such stream crossings may require federal, state, and/or local permits.

14. Development Plan and Construction Activity Requirements

A. The parameters and boundaries of the Water Quality Buffer shall be delineated by the applicant and clearly indicated on all three phases of project development plans, on landscape management plans, preliminary plats, final plats, permits and official maps as follows:

- i. Show the extent of any Water Quality Buffer on the subject property and clearly label as “water quality buffer” including required width.
- ii. Provide a note to reference the water quality buffer, labeled as: *“There shall be no clearing, grading, construction, storage, or disturbance of vegetation except as permitted in writing by the City of Chattanooga’s Site Development Manager.”*
- iii. Provide a note to reference protective covenants governing all water quality buffer areas, labeled as: “Any Water Quality Buffer is subject to protective covenants recorded in the Register of Deeds

(Hamilton County). Disturbance and use of these areas are restricted. Severe penalties apply.”

15. Water Quality Buffer areas shall be protected during all development activities. Construction layout surveys shall include approved fencing and labeling. To insure adequate visibility, a combination of fencing and flagging is required. Signs shall persist before and throughout construction to prevent entry of equipment, materials storage and stockpiling.

16. All Water Quality Buffers shall be placed in open space lots and be maintained.

17. Variance Procedures

A. The applicant shall submit a written request to the Site Development Manager conveying specific reasons and hardships necessitating the variance. It must offer mitigation for the variance relief if granted, and include any other information necessary to evaluate the request. The City may require an alternative analysis.

B. The City shall have the authority to grant appeals provided they are consistent with the objectives and policies identified in this Article.

C. Variance requests shall be reviewed and may be granted using the following criteria:

i. Projects or activities where it can be demonstrated that strict compliance with the ordinance would result in practical difficulty. Each of the following criteria must be satisfied to show practical difficulty:

(a) The problem is not self-created.

(b) The plight of the landowner is due to the property's unique physical conditions.

(c) Compliance will unreasonably prevent use of the property for a permitted purpose or would render conformity with such restrictions unnecessarily burdensome.

(d) The repair and maintenance of public improvements where avoidance and minimization of adverse impacts to wetlands and associated aquatic ecosystems have been addressed.

(e) Those projects or activities serving a public need and/or deemed to be of economic importance to the City, specifically associated with the Tennessee River or associated with or contiguous to the City's Greenway

Master Plan, to where no feasible alternative is available. Development along the Tennessee riverfront and the City's greenway system generate economic, social, and cultural benefits that improve the economy and quality of life for an entire region. The intent of this variance is to recognize that Chattanooga's riverfront is one of the greatest assets within the City. Thoughtful alternate measures will ensure that enhancements to the riverfront will protect its unique ecosystem, enhance urban redevelopment, and expand recreational opportunities.

- (f) Riverfront buffer variances that accommodate economic development along the areas identified in this Section will be considered. Alternate measures might include urban design principles that are respectful of the river by sustaining public access, maintaining view corridors, regulating height and bulk of structures, and permitting a diversity of uses.
 - (g) Development submittals that propose such improvements to areas identified in this Section and increase their value to Chattanooga's citizens and visitors will be encouraged. Successful riverfront development variances will be complementary to and compatible with other successful development projects in Chattanooga. Variances will ensure that our riverfront continues to be a vital and valued component of downtown Chattanooga's urban landscape.
- ii. The Site Development Manager may also consider the following:
- (a) The relationship between the proposed use and the comprehensive Land Use Plan;
 - (b) The safety of access to the property in times of flood for ordinary and emergency vehicles; and
 - (c) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such a sewer, gas, electrical, water systems, and streets and bridges.
- iii. Whether issuance of a variance is the minimum necessary so as not to destroy the character and design of an historic building or feature.

- iv. The decisions of the Site Development Manager are final and conclusive, but may be reviewed by the City Engineer.

18. Other Requirements

- A. For new and redevelopments, the project shall be evaluated for stream and stream bank conditions. The project shall address the following to ensure the preservation and propagation of the buffer area:
 - i. Stream bank stabilization and/or restoration
 - ii. Additional water quality protection
 - iii. Channel erosion
 - iv. Stream pollution
 - v. Habitat degradation
 - vi. The enhancement of the successional process such as active reforestation and removal of invasive exotic plants, trash and debris.

19. Conflict with Other Regulations:

Where the standards and management requirements of the Water Quality Buffer are in conflict with other laws, regulations, and policies regarding streams, steep slopes, erodible soils, wetlands, floodplains, timber harvesting, land disturbance activities, or other environmental protective measures, the more restrictive requirements, as determined by the City, shall apply.

Sec. 31-325. Landfilling requirements in certain residential areas.

1. It shall be unlawful for any person to fill any land in any property which is within one hundred (100) feet of any R-1 Residential Zone, RT-1 Residential Townhouse Zone, RZ-1 Zero Lot Line Residential Zone, R-T/Z Residential Townhouse/Zero Lot Line Zone or R-2 Residential Zone or which is itself zoned in one of these categories without first obtaining a land disturbing activity permit.

For the purposes of this subsection, the act of filling shall be any site where raising the elevation shall require seventy-five percent (75%) or more of the materials used for filling the land to be hauled over surface roads from non-contiguous parcels of land.

2. A land disturbing activity permit for properties zoned in these categories shall be subject to the following additional restrictions:

- A. Fill material must be comprised only of suitable materials such as dirt, bricks, concrete without exposed rebar and/or wire, stones or similar inert materials; provided that no organic or contaminated materials are allowed;

- B. Maximum height of fill shall be two (2) feet above roads or 100 year flood elevation;
 - C. Fill must not interfere with the free drainage of adjoining properties; any fill placed within five (5) feet of a property line requires submission of a drainage plan;
 - D. All fill placed within any area that may be used for construction of a building under the applicable zone must be properly placed and compacted in accordance with the current building codes adopted by the City of Chattanooga;
3. Fill slopes shall be required to adhere to the following:
- A. Fill slopes three horizontal to one vertical [3:1 (H:V)] or flatter may be placed no closer than two feet to the adjoining property line and/or easement;
 - B. Slopes steeper than 3:1 (H:V) must be designed by a professional soils engineer registered to practice in the State of Tennessee and shall be placed no closer than five feet to the adjoining property line and/or easement;
 - C. Where slopes utilize retaining walls, the face of the retaining wall may be placed no closer than one foot to the adjoining property line and/or easement;
 - D. Any combination of retaining wall height plus the slope height which exceeds the building code requirements for a non-engineered wall shall be designed by a professional engineer registered to practice in the State of Tennessee; and
 - E. All retaining walls shall be engineered in accordance with the current building code as adopted by the City of Chattanooga.
4. Except where existing stormwater conveyances are adequate for any increase in drainage, appropriately sized on-site retention facilities shall be provided; and
5. Filling of the property must be completed, including capping the fill with a minimum of four inches (4") of topsoil and stable perennial vegetation, within one (1) year of the permit issue date, at which time the permit shall become null and void unless a valid extension is granted in writing by the Site Development Manager, or his designee.
- A. Applications for extension must be made in writing to the Site Development Manager.

- B. The Site Development Manager may consider any history of complaints and the frequency of such complaints relative to the existing permit when determining if an extension is warranted.
- C. The Site Development Manager will be final authority in determining whether to issue an extension.

6. For lots with a width or depth greater than five hundred feet (500') the above restriction shall only apply to the area within one hundred fifty feet (150') of the property line.

7. Each application for permit, with the required fee therefor, shall be filed with the Site Development Manager and in addition to the requirements of Section 31-321, shall contain the following information:

- A. Written approval of the request for a permit from the owners of the property;
- B. The character and description of the fill materials to be deposited;
- C. The rate at which the fill materials are expected to be deposited on a weekly or monthly basis;
- D. Equipment to be used; and
- E. The date upon which the applicant desires the permit to be issued.

8. The Site Development Manager may impose conditions upon the issuance of a permit which are reasonably calculated to eliminate excessive noise, scattering of dust or dirt, scattering of materials, to prevent nuisances and to prevent obstruction of public streets or interference with traffic.

9. A second land disturbing activity permit application will only be considered in conjunction with a building permit on the property.

10. An additional twenty-five dollar (\$25.00) fee shall be charged for any application for a permit to fill property.

11. Where any filling work for which a permit is required is started prior to obtaining said permit, the fee herein specified shall be doubled but the payment of such double fee shall not relieve any person from fully complying with the requirements of this Code in the execution of the work nor from any other penalties prescribed herein.

12. Any person filling property at the time of the enactment of this provision shall to the extent practical comply with all provisions in this section.
(Ord. No. 10708, § 1, 6-2-98; Ord. No. 12100, §1, 3-25-08)

Sec. 31-325.1. Timber Removal Requirements - Applicability.

The intent is to prevent detrimental impacts of stormwater runoff on nearby property. Site clearing for any use other than forestry without approved plans and/or land disturbing permits is not allowed. It is the further intent to appropriately document timber removal for the purpose of forest harvest operations.

These Timber Removal Requirements apply to the removal of timber from a site such that:

1. Sites will not be developed within the subsequent three (3) years after such timber removal; and
2. Requirements are applicable to sites one acre in size or larger and where five thousand (5,000) square feet or more of the tree canopy is going to be harvested, cut, or removed within a one (1) year period; or
3. Site is having timber harvested, cut, or removed for the purpose of conducting Forestry Land Management Practices.

These Timber Removal requirements are not to be construed as eliminating other permit requirements in this Chapter for land development

Sec. 31-325.2. Timber Removal Requirements - Exemptions.

1. Special exceptions may be granted if undue hardship can be proven.
2. Such application for exception shall be made to the Municipal Forester and shall show:
 - A. the special conditions peculiar to the property that would cause the undue hardship;
 - B. how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;
 - C. that the granting of the modification will not confer on the landowner a special privilege that would be denied to other applicants;
 - D. that the modification request is not based on conditions or circumstances that are the result of actions by the applicant;
 - E. that the request does not arise from a condition relating to land or building use, either permitted or legally nonconforming, on a neighboring property; and
 - F. that the granting of a modification will not adversely affect water quality.

Sec. 31-325.3 Removal - Definitions.

DBH (Diameter at Breast Height) – shall mean the total cross sectional diameter in inches of a tree measured at a height of four and one-half (4½) feet above ground level.

Forestry Land Management Practices - shall mean the practice of controlling forest establishment, composition and growth, as set forth by the Tennessee Department of Agriculture's Division of Forestry's, "Forestry Best Management Practices".

Municipal Forester - means an employee of the City of Chattanooga who manages the City's Urban Forestry Program.

Re-Vegetation Management Plan - shall mean a site plan drawn to scale that shows in graphic and text form all the necessary re-planting and/or re-growth requirements.

Slash - shall mean unutilized wood debris.

Steep Slope - shall mean any parcel or group of contiguous parcels with 1 acre or more of a minimum thirty percent (30%) slope.

Timber - means a tree of a size greater than a four-inch (4") diameter at a height of five (5) feet from ground level.

Tree Canopy - shall mean the effective radial circumference area of a mature tree's vegetative cover, including all branches and leaves. The canopy can be conveyed in values of percentage area of total land space being assessed or by numerical measurement.

Timber Removal - means the cutting of timber and/or removal of forest products including logs, pulpwood, or chips.

Tree Protection Area (TPA) - shall mean the area set aside for the express purpose of removing no trees.

Tree Removal Area - shall mean the location indicated on a site plan and physically marked on the ground designating an area set aside for the express purpose of removing trees.

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

Sec. 31-325.4. Permit.

1. For sites pursuant to Section 31-325.1, a Timber Removal Permit is required prior to any timber removal.

2. The Timber Removal Permit is effective for one hundred eighty (180) days for the cutting, removal or harvesting of timber and the permit is effective for an additional twelve (12) months for the exclusive purpose of re-vegetation. If the timber removal activity is not

completed during the one hundred eighty (180) days, a new Timber Removal Permit must be applied for. One permit extension of up to ninety (90) days may be granted at the discretion of the Municipal Forester.

3. Each application for the issuance of a timber removal permit under this article shall be accompanied by a non-refundable permit fee of thirty dollars (\$30.00) per acre affected or a minimum fee of fifty dollars (\$50.00).

4. The Timber Removal Permit Application will include information which includes, but is not limited to:

- A. Applicant's name, address and contact information.
- B. Names and addresses of the owner of the subject parcel and the contractor/subcontractors who shall perform the timber removal activity.
- C. Address and location of subject parcel.
- D. A statement setting forth the nature, extent and purpose of the timber removal activity, including the size of the area for which the permit shall be applicable and a schedule for the starting and completion of the timber removal activity.
- E. Type of removal method to be used (i.e. clear-cut, shelterwood, selective cut)
- F. The proposed method of disposal of all slash/unutilized wood debris, which will provide for either chipping or burning (provided such burning is approved by the Air Pollution Control Board).
- G. Ingress and egress locations.
- H. Additional information as may be required by the City.

5. The Re-vegetation Management Plan, as defined in Sec. 31-325.4, must be submitted and approved before a Timber Removal Permit and a Timber Removal Notice Sign is issued.

6. A Timber Removal Notice Sign must be posted twenty-one (21) days prior to approval of tree removal activity.

7. No development that would require approval, such as the issuance of a land disturbance permit, a building permit of the subject parcel shall be permitted per Section 31-325.1.1. The non-development period shall begin after the permitted timber removal is completed.

8. All required permits must be in place before harvesting or tree removal begins.

9. An Inspection and Management Plan shall be developed, executed and recorded with the Hamilton County Deeds Office, designating the time period that the site cannot be developed (issued a land disturbance permit or building permit) per Section 31-325.1.1.

10. The executed Inspection and Management Plan shall be recorded before the Timber Removal Permit will be issued.

Sec. 31-325.5. Re-Vegetation Management Plan.

The Re-Vegetation Management Plan shall identify and demonstrate the following:

1. The location of the mandated undisturbed buffer around the perimeter and any other tree protection areas, including types of existing vegetation and trees.
2. Location of tree removal areas.
3. Location of re-vegetation areas and types of trees/ vegetation to be planted. Re-vegetation with trees is to have a density of 10'x 10' for pine, white pine, other softwoods and all hardwoods.
4. Additional information as may be required by the City.

Sec. 31-325.6. Provisions.

1. The Forestry Best Management Practices as established by the Tennessee Division of Forestry must be utilized.
2. The use of a Master Logger is strongly encouraged.
3. At completion of the required re-vegetation, a final inspection must be requested.

Sec. 31-325.7. Bond.

No person shall be issued a permit for or engage in timber removal as set out in this chapter without first posting a surety bond not to exceed one hundred dollars (\$100.00) per acre of land to be cut/cleared.

Upon the satisfactory final inspection at the completion of the required re-vegetation, the amount of surety posted shall be returned/released.

Sec. 31-325.8. Violations.

If the City determines that violations of these requirements have occurred, the Timber Removal Permit may be revoked and/or citations issued as otherwise authorized by City Code. Each day a violation continues is a separate violation.

Sec. 31-325.9. Conflict.

Where the standards and management requirements of this ordinance are in conflict with other city, state or federal laws, regulations, and policies regarding streams, steep slopes,

erodible soils, wetlands, floodplains, timber removal, or other environmental protective measures, the more restrictive shall apply.

DIVISION 4. GENERAL REQUIREMENTS APPLICABLE TO
ALL PERMITS ISSUED UNDER THIS ARTICLE

Sec. 31-326. Maintenance and submittal of records.

Appropriate proof and records of compliance with the provisions of the Chattanooga Land Disturbing Permit will be maintained in the office of the designated contact person and be made available for review at any time by the Manager. A copy of the records of compliance will be sent yearly on the anniversary date of the permit to the Manager.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-327. Transfer of permit.

A Chattanooga Land Disturbing Permit may be transferred only upon the filing of an amendment to the permit application or an amended or restated application containing all changes from the original application providing there are no changes in the operation of the facility which may affect the quantity or quality of the stormwater runoff. If there are to be any changes in the operation of the facility which may affect the quantity or quality of stormwater runoff, then the new owner or operator shall re-apply for a Chattanooga Land Disturbing Permit prior to the beginning of operation of the facility. The filing of an amended or restated application shall be treated as an interim permit allowing the continued operation of the facility pending review of the application by the Manager, which shall remain in force until the application shall be approved or denied by the Manager.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-328. Signatory requirements.

1. All applications and reports required by this article to be submitted to the Manager shall be signed as follows:

- A. Corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.
- B. Partnership or sole proprietorship: by a general partner or the proprietor.
- C. Municipality, State, Federal, or other public facility: by either a principal executive officer or the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Any person signing any document above shall make the following certification: "I certify under the penalty of law that I have personally examined and am familiar with the information submitted in the attached document; and based on my inquiry of those individuals immediately responsible for obtaining the information. I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and civil penalty."
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-329. Reserved.

DIVISION 5. MONITORING AND INSPECTION

Sec. 31-330. Monitoring.

The Manager shall periodically monitor the quantity of, and the concentration of pollutants in stormwater discharges from the areas and locations designated in the Chattanooga Stormwater Management Plan.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-331. Detection of illicit connections and improper disposal.

1. The Manager shall take appropriate steps to detect and eliminate illicit connections to the Chattanooga Stormwater System, including the adoption of a program to screen illicit discharges and identify their source or sources.

2. The Manager shall take appropriate steps to detect and eliminate improper discharges, including programs to screen for improper disposal and programs to provide for public education, public information, and other appropriate activities to facilitate the proper management and disposal of used oil, toxic materials and household hazardous waste.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-332. Inspections.

1. The Manager or his designee, bearing proper credentials and identification, may enter and inspect all properties for regular periodic inspections, investigations, monitoring, observation, measurement, enforcement, sampling and testing, to effectuate the provisions of this article and the stormwater management program. The Manager or his designee shall duly notify the owner of said property or the representative on site and the inspection shall be conducted at reasonable times.

2. Upon refusal by any property owner to permit an inspector to enter or continue an inspection, the inspector shall terminate the inspection or confine the inspection to areas concerning which no objection is raised. The inspector shall immediately report the refusal and the grounds to the Manager. The Manager may seek appropriate compulsory process.

3. In the event the Manager or his designee reasonably believes that discharges from the property into the Chattanooga Stormwater System may cause an imminent and substantial threat to human health or the environment, the inspection may take place at any time and without notice to the owner of the property or a representative on site. The inspector shall present proper credentials upon reasonable request by the owner or representative.

4. At any time during the conduct of an inspection or at such other times as the Manager or his designee may request information from an owner or representative, the owner or representative may identify areas of its facility or establishment, material or processes which contains or which might reveal a trade secret. If the Manager or his designee has no clear and convincing reason to question such identification, the inspection report shall note that trade secret information has been omitted. To the extent practicable, the Manager shall protect all information which is designated as a trade secret by the owner or their representative. (Ord. No. 9942, § 1, 8-31-93)

Secs. 31-333 -- 31-339. Reserved.

DIVISION 6. ENFORCEMENT AND ABATEMENT

Sec. 31-340. Unauthorized discharge a public nuisance.

Discharge of stormwater in any manner in violation of this article or of any condition of a permit issued pursuant to this article or a stormwater discharge permit issued by the State of Tennessee is hereby declared a public nuisance and shall be corrected or abated. (Ord. No. 9942, § 1, 8-31-93)

Sec. 31-341. Illicit discharge and illegal dumping.

The following direct or indirect discharges into "Community Waters" or "Waters of the State" are prohibited and shall be unlawful:

1. Sewage dumping or dumping of sewage sludge;
2. Chlorinated swimming pool discharge;
3. Discharge of any polluted household wastewater, such as but not limited to laundry washwater and dishwater, except to a sanitary sewer or septic system;
4. Leaking sanitary sewers and connections, which shall have remained uncorrected for seven days or more;
5. Leaking water lines shall have remained uncorrected for seven days or more;
6. Commercial, industrial or public vehicle wash discharge;
7. Garbage or sanitary waste disposal;

8. No dead animals or animal fecal waste shall be directly discharged or discarded into the "Community Waters";

9. No non-stormwater discharges shall be discharged into the "Community Waters", except pursuant to a permit issued by the State of Tennessee or the City of Chattanooga;

10. No dredged or spoil material shall be directly or indirectly discharged or discarded into "Community Waters;"

11. No solid waste shall be directly or indirectly discharged or discarded into "Community Waters;"

12. No chemical waste shall be directly or indirectly discharged or discarded into "Community Waters;"

13. No wrecked or discarded vehicles or equipment shall be discharged or discarded into "Community Waters."
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-342. Prohibition of pollutant discharge not covered by the NPDES Program.

1. A permit is a license to conduct an activity which is regulated by the Clean Water Act, the Water Pollution Control Act (T.C.A. § 69-3-101, *et seq.*) or this article.

2. Every person who is or who is planning to carry out any of the activities requiring a permit shall obtain such a permit prior to carrying out such activities.

3. It shall be unlawful for any person to carry out any of the following activities, except in accordance with the conditions of a valid permit:

- A. The alteration of the physical, chemical, radiological, biological, or bacteriological properties of any waters of the state or community waters;
- B. The construction, installation, modification, or operation of any treatment works or part thereof, or any extension or addition thereto;
- C. The increase in volume or strength of any wastes in excess of permissive discharges specified under any existing permit;
- D. The development of a natural resource or the construction, installation, or operation of any establishment or any extension or modification thereof or addition thereto; the operation of which will or is likely to cause an increase in the discharge of wastes into the waters of the waters of the state or would otherwise alter the physical, chemical, radiological,

biological or bacteriological properties of any waters of the state in any manner not already lawfully authorized;

- E. The construction or use of any new outlet for the discharge of any wastes into the waters of the state;
- F. The discharge of sewage, industrial wastes or other wastes into waters, or a location from which it is likely that the discharged substance will move into waters;
- G. The discharge of sewage, industrial wastes, or other wastes into a well or a location that is likely that the discharged substance will move into a well, or the underground placement of fluids and other substances which do or may affect the waters of the state.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-343. Accidental discharges.

1. In the event of any discharge or a hazardous substance in amounts which could cause a threat to public drinking supplies, a "significant spill", or any other discharge which could constitute a threat to human health or the environment, the owner or operator of the facility shall give notice to the City's Water Quality Manager by calling 3-1-1 and the field office of Tennessee Department of Environment and Conservation as soon as practicable, but in no event later than the close of business on the day following the accidental discharge or the discharger becomes aware of the circumstances. If an emergency response by governmental agencies is needed, the owner or operator should also call 911 immediately to report the discharge. A written report must be provided within five days of the time the discharger becomes aware of the circumstances, unless this requirement is waived by the Manager for good cause shown on a case-by-case basis, containing the following particulars:

- A. a description of the discharge;
- B. the exact dates and times of discharge, and
- C. steps being taken to eliminate and prevent recurrence of the discharge.

2. The discharger shall take all reasonable steps to minimize any adverse impact to the "Community Waters" or the "Waters of Tennessee," including such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the business or activity of the facility in order to maintain water quality and minimize any adverse impact that the discharge may cause.

3. It shall be unlawful for any person to fail to comply with the provisions of this section.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-344. Administrative enforcement remedies.

1. *Notification of Violation.* Whenever the Manager finds that any permittee or any person discharging stormwater has violated or is violating this article, or a Stormwater permit or order issued hereunder, the Manager or his agent may serve upon said user written notice of the violation. Within ten (10) days of the receipt date of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Manager. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

2. *Consent Orders.* The Manager is hereby empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the industrial user to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraph (4) below.

3. *Show Cause Hearing.* The Manager may order any person who causes or contributes to violation of this article or Stormwater permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any principal executive, general partner or corporate officer.

4. *Compliance Order.* When the Manager finds that any person has violated or continues to violate this article or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specified time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.

5. *Cease and Desist Orders.* When the Manager finds that any person has violated or continues to violate this article or any permit or order issued hereunder, the Manager may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

- A. Comply forthwith; or
- B. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-345. Unlawful acts, misdemeanor.

It shall be unlawful for any person to:

1. violate any provision of this article;
2. violate the provisions of any permit issued pursuant to this article;
3. fail or refuse to comply with any lawful notice to abate issued by the Manager, which has not been timely appealed to Stormwater Regulations Board, within the time specified by such notice; or
4. violate any lawful order of the Stormwater Regulations Board within the time allowed by such order shall be guilty of a misdemeanor; and each day of such violation or failure or refusal to comply shall be deemed a separate offense and punishable accordingly. Any person found to be in violation of the provisions of this article shall be punished by a fine of not less than twenty-five dollars (\$25.00) nor more than five hundred dollars (\$500.00) for each offense. (Ord. No. 9942, § 1, 8-31-93)

Sec. 31-346. Civil penalty.

1. Any person who does any of the following acts or omissions shall be subject to a civil penalty of up to five thousand dollars (\$5,000.00) per day for each day during which the act or omission continues or occurs:
 - A. Who fails to obtain any permit required;
 - B. Violates the terms or conditions of a permit issued pursuant to a pretreatment program;
 - C. Violates a final determination or order of the Stormwater Regulations Board; or
 - D. Violates any provisions of this article.
2. Any civil penalty shall be assessed in the following manner:
 - A. The Manager may issue an assessment against any person or permittee responsible for the violation;
 - B. Any person against whom an assessment has been issued may secure a review of such assessment by filing with the Manager a written petition setting forth the grounds and reasons for his objections and asking for a hearing in the matter involved before the Stormwater Regulations Board and if a petition for review of the assessment is not filed within thirty (30)

days after the date the assessment is served, the violator shall be deemed to have consented to the assessment and it shall become final;

- C. Whenever any assessment has become final because of a person's failure to appeal the Manager's assessment, the Manager may apply to the appropriate court for a judgment and seek execution of such judgment and the court, in such proceedings, shall treat a failure to appeal such assessment as a confession of judgment in the amount of the assessment;
- D. In assessing the civil penalty the Manager may consider the following factors:
 - i. Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
 - ii. Damages to the city, including compensation for the damage or destruction of public stormwater facilities, and also including any penalties, costs and attorneys' fees incurred by the city as the result of the illegal activity, as well as the expenses involved in enforcing this article and the costs involved in rectifying any damages;
 - iii. Cause of the discharge or violation;
 - iv. The severity of the discharge and its effect upon public stormwater facilities and upon the quality and quantity of the receiving waters;
 - v. Effectiveness of action taken by the violator to cease the violation;
 - vi. The technical and economic reasonableness of reducing or eliminating the discharge; and
 - vii. The economic benefit gained by the violator.

3. The Stormwater Regulations Board may establish by regulation a schedule of the amount of civil penalty which can be assessed by the Manager for certain specific violations or categories of violations.

4. Any civil penalty assessed to a violator pursuant to this section may be in addition to any civil penalty assessed by the Commissioner of Environment and Conservation for violations of T.C.A. §69-3-115; however, the sum of penalties imposed by this section and by §69-3-115 shall not exceed ten thousand dollars (\$10,000.00) per day for each day during which the act or omission continues or occurs.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-347. Judicial proceedings and relief.

1. The Manager may initiate proceedings in any court of competent jurisdiction against any person who has or is about to:

- A. violate the provisions of this article;
- B. violate the provisions of any permit issued pursuant to this article;
- C. fail or refuse to comply with any lawful order issued by the Manager, which has not been timely appealed to the Stormwater Regulations Board, within the time allowed by this article;
- D. violates any lawful order of the Stormwater Regulations Board within the time allowed by such order.

2. Any person who shall commit any act or fail to perform any act declared unlawful under this article shall be guilty of a misdemeanor, and each day of such violation or failure shall be deemed a separate offense and punishable accordingly.

3. The Manager with consent of the Mayor may also initiate civil proceedings in any court of competent jurisdiction seeking monetary damages for any damages caused to publicly owned stormwater facilities by any person, and to seek injunctive or other equitable relief to enforce compliance with the provisions of this article or to enforce compliance with any lawful orders of the Manager or the Stormwater Regulations Board.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-348. Disposition of damage payments and penalties; special fund.

All damages collected under the provisions of sections 31-346 and civil penalties collected under section 31-347, following adjustment for the expenses incurred in making such collections, shall be allocated and appropriated to the stormwater system for the administration of its program.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-349. Reserved.

DIVISION 7. FEES

Sec. 31-350. Levied.

For the purpose of operating the stormwater program of the City and the payment of the costs and expenses appurtenant, incident or necessary thereto for the construction, extension, enlargement, or acquisition of necessary stormwater facilities or flood control improvement, including replacement thereof, and for the operation and maintenance thereof, there hereby is imposed a water quality fee upon the owner of property now served directly or indirectly by the city's storm sewer system at the rates set forth in this division.
(Ord. No. 9942, § 1, 8-31-93)

Sec. 31-351. Property owners to pay charges.

The owner of each lot or parcel which directly or indirectly uses the stormwater system maintained by the City shall pay the water quality fees and charges as provided in this division. The owner of record as determined by the records of the Assessor of Property for Hamilton County as of October 1 shall be liable for payment of the water quality fees for that calendar year; providing nothing herein shall preclude the proration of fees between property owners. (Ord. No. 9942, § 1, 8-31-93; Ord. No. 10670, § 1, 2-24-98)

Sec. 31-352. Rate Structure.

1. A water quality fee shall be assessed to the owner of each and every lot and parcel of land within the corporate City limits which directly or indirectly uses the stormwater system of the City and that contains impervious area. This fee is not related to the drinking water and/or sewer service and does not rely on occupancy of the premises to be in effect and is hereinbefore provided, and in the amount determinable as follows:

2. For any such property, lot, parcel of land, building or premises that directly or indirectly uses the stormwater system of the City, such fee shall be based upon the size of impervious area situated thereon.

3. All properties having impervious area within the City of Chattanooga will be assigned an Equivalent Residential Unit (ERU) or a multiple thereof, with all properties of having impervious area receiving at least one (1) ERU.

4. **Residential properties.** All residential properties will be assigned one (1) ERU. A flat rate fee will apply to all residential properties.

5. **Non-residential properties.** Non-residential properties will be assigned an ERU multiple based upon the properties' individually measured impervious area (in square feet) divided by 3,200 square feet (1 ERU). This division will be calculated to the first decimal place and rounded according to mathematical convention.

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 12294, § 3, 10-6-09)

Sec. 31-353. Billing procedure.

1. The water quality fees shall become effective at the rates hereinafter imposed, shall be billed annually by the City Treasurer at the same time that the city's real property taxes are mailed, and shall be due and payable at the same time as property taxes, October 1 of each year.

2. The water quality fee shall be designated as a separate item on the property tax bill.

3. The water quality fee shall be paid in person or by mail at the City Treasurer's Office and shall become delinquent as of the next February 1 following the billing. Any unpaid water quality fee shall bear interest at the legal rate if it remains unpaid after March 1.

(Ord. 12366, 3-9-10)

4. Pursuant to section 13, Public Chapter Number 257, T.C.A. §68-221-1112, each bill that shall contain water quality fees shall contain the following statement in bold-faced type:

"THIS FEE HAS BEEN MANDATED BY CONGRESS"

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 12366, 3-9-10)

Sec. 31-354. Schedule of Fees.

1. Residential Properties. The annual water quality fee per ERU as of the adoption of this ordinance shall be set at a flat rate of \$115.20.

2. Nonresidential Properties. The annual water quality fee per ERU as of the adoption of this ordinance shall be set at \$115.20 per ERU; provided however:

3. Fees; contracts. Persons, including, but not limited to, owners and operators of agricultural land, whose stormwater runoff is not discharged into or through the stormwater or flood control facilities, or both, of the municipality shall be exempted from payment of the graduated stormwater user fee authorized by this section.

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 10111, § 4, 9-20-94; Ord. No. 12294, § 3, 10-6-09; Ord. No. 12377, § 2, 4-20-10)

Sec. 31-355. Correction of erroneous billing.

1. Any owner or duly authorized agent may contest the accuracy of the water quality fees imposed by this article by lodging a protest with the Manager of the Water Quality Division of the Department of Public Works without payment of the water quality fee on or before December 31 in the year for which billing is received. The Manager shall develop and maintain appropriate forms for the lodging of such protest, but any written protest shall be sufficient provided that it sets forth with particularity the nature of any errors allegedly committed in the computation of such bill. A protest may be filed after December 31, but it must be preceded by or accompanied by payment of the water quality fees as billed which will be considered a payment under protest. Interest on any delinquent portion of the fees as adjudicated by that Board shall accrue from the date of the Manager's written decision.

(Ord. No. 12347, 2-9-10)

2. The Manager shall duly consider all notices of protest as soon as practicable, and when he or she shall agree with all or any portion of the protest shall adjust the billing in accordance with such factors as are in this article. The Manager shall refund any erroneous billing for the year involved in the protest and when the conditions in the previous years also warrant an agreement, the Manager shall adjust the previous two (2) years' fees for a total of three (3) years of adjustment of erroneous fees.

3. If the Manager disapproves the protest in whole or in part, he or she shall notify the owner or duly authorized agent as soon as practicable. In no event shall there be more than a ninety (90) day delay in resolving any protest. In the event more than ninety (90) days elapses

following the filing of the protest without a decision having been rendered by the Manager, the protest shall be deemed to have been denied.

4. If the owner disagrees with the administrative ruling of the Manager concerning a protest which was timely filed, the owner may within thirty (30) days following the date of the decision of the Manager appeal the bill and the Manager's administrative determination to the Stormwater Regulations Board by filing a notice of appeal to said board in care of the Administrator of the Department of Public Works, Development Resource Center, 1250 Market Street, Suite 2100, Chattanooga, Tennessee, 37402, with a copy of said notice provided to the Manager. The Manager shall develop and maintain forms appropriate for filing the notice of appeal, but no particular form for such an appeal shall be required providing that the appeal sets forth with particularity the nature of the owner's complaint.

5. If a notice of appeal to the Stormwater Regulations Board is timely filed, the board shall schedule a time and place within which to consider the appeal. The hearing on such appeals shall be informal, but the owner and Manager will each be given the opportunity to present documentary evidence in support of their position and will be given the opportunity to address the board. The board shall receive such evidence relating to the matter as may be necessary to resolve the dispute, and shall render such determinations and issue such orders as the law and facts of the case may require.

(Ord. No. 9942, § 1, 8-31-93; Ord. No. 10670, § 2, 2-24-98; Ord. No. 12336, § 3, 12-15-09; Ord. No. 12347, 2-9-10)

Sec. 31-356. Water Quality Credits and Incentives.

The following sections describe the components of the City's Credits and Incentives Program. The Credits and Incentives Program is to be administered under the provisions of the Credits and Incentives Manual in conjunction with the RMG. Discounts approved for properties under the prior system of provisions as enacted October 9, 2009 (Ord. No. 12294, § 3, 10-6-09) may continue to receive discounts until December 31, 2039 pursuant to the requirement of this Section.

Sec. 31-356.1. Adjustments to Water Quality Fee.

1. A property owner's addition of impervious areas or failure to maintain previously earned fee reductions will increase water quality fees on non-single-family residential service charges. Decreases to non-single-family fees occur via removal of impervious areas, or through installation of approved on-site runoff reduction BMP's that exceed the site's required stay-on-volume. The application of credit coupons will not reduce water quality fees.

2. Upon application by any approved applicant adequately supported by documentation, the applicant shall be entitled to a discount as provided in this section and further described in the City's Credit and Incentive Manual.

A. Discounts are only offered to non-single-family residential properties.

- B. Discounts for new and redevelopments correspond to each 1% exceedance of the applicable stay-on-volume up to a maximum recognized fee discount.
- C. Discounts for retrofits correspond to each 0.1-inch exceedance of the applicable stay-on-volume up to a maximum recognized fee discount.
- D. The minimum recognized discount is 10%.
- E. The maximum discount is determined by the applicable development category under which the SOV was installed.
 - i. 40% for new development
 - ii. 60% for redevelopment
 - iii. 70% for retrofit

3. Properties that submit a complete application for a discount prior to the close of business on November 30, 2014, may continue to be eligible for discounts under the prior system of provisions. These discounts may continue until December 31, 2039 provided no unapproved changes are made to the practices or BMPs that are the basis for the discount, all applicable forms are submitted on time, and the practices or BMPs maintain compliance with City standards.

- A. Sites receiving a discount for the installation of a LID retrofit under the prior system of provisions are exempt from the December 31, 2039 sunset date and may continue to receive a discount under the prior system of provisions provided they continue to meet all maintenance and submittal requirements.
- B. If properties participating in the prior system of provisions choose to apply under the provisions of this ordinance, then they will be treated like retrofit sites in regard to the SOV baseline, maximum discounts, and potential mitigation credits.

4. Proper BMP maintenance is required to receive the discounts provided in this section. Maintenance shall be performed according to the City's RMG. Annually, the owner must submit documentation to the City that the BMPs have been properly maintained and serviced. Failure to provide this documentation will result in the suspension or forfeiture of the discount.

5. Any property owner applying or reapplying for discounts must have a recorded Inspection and Maintenance Agreement for Private Stormwater Management Facilities designating the party or parties responsible for maintenance and granting the City the right to inspect said facilities. An inspection and maintenance plan specific to the site must be recorded with the Register of Deeds along with this Agreement.

6. If a discount has been forfeited, then the property owner may choose to reapply under the guidelines of this Section after one year.

7. The approved applicant shall apply for discounts pursuant to this section.

- A. Applications shall be accompanied by proper documentation demonstrating the accuracy of the claim. To the extent that the City is satisfied that discounts are warranted by the circumstances, the bill shall be reduced as provided herein. If the fees shall have been previously paid, the City can refund or credit future billings to the extent warranted by the discount.
- B. Applications must be approved by the City by March 1 in order to be applied to the previous year's fee.
- C. The City shall act upon discount applications within ninety (90) days of the receipt thereof. In the event the application is not acted upon within this time, the application shall be deemed to have been denied.

Sec. 31-356.2. Credit Coupons.

1. An approved applicant shall be entitled to a credit coupon, upon application and documentation that adequately supports a case for credit to be issued as provided in this section and further described in the Credits and Incentives Manual.

- A. Credit coupons are earned in units of cubic feet of SOV for exceeding the applicable SOV standard on new and redevelopments, retrofits, or offsite mitigation sites.
- B. Earned credits are issued after certified As Built Plans are approved.
- C. Credits are issued to the approved applicant as a paper credit coupon.
- D. The maximum credit that can be earned is the difference between the applicable SOV standard and the volume resulting from a 2.1-inch rainfall event. A 2.1-inch rainfall event is the specified water quality volume identified in the RMG.

2. Subject to certain stipulations, credit coupons may be sold, transferred, or applied in the amount of the coupons individually or in any combination.

- A. Credit coupons have no monetary face value.
- B. Earned and unapplied coupons do not have an expiration date.
- C. The City will not replace or re-issue lost credit coupons. The coupon holder assumes all risk of theft, fire and every form of loss.
- D. The City will track credit coupons issued and redeemed for the purpose of NPDES compliance reporting.
- E. The City will split credit coupons to facilitate the sale and transfer of credit coupons. Original credit coupons must be surrendered to the City.
- F. The City will not track ownership changes as a result of the sale or transfer of credit coupons.

- G. The City will not coordinate, assist, or negotiate the transaction for the transfer of coupons between a willing seller and a potential buyer.
3. The application of acquired or earned credit coupons is subject to the following rules and stipulations:
- A. Without demonstrating hardship, the application of credit coupons is limited to that portion of the required SOV as defined under “credit coupon implementation period” in the definitions section of this Article.
 - B. The use or application of credit coupons is restricted to the amount necessary to achieve compliance with the applicable SOV standard.
 - C. Credit Coupon redemption shall be governed by the Credit Coupon Multiplier as follows:
 - i) Credit coupons earned through oversized Stay on Volume practices on redevelopment or retrofit sites can be applied at a one to one (1:1) ratio anywhere in the City outside of Combined Sewer System areas to meet another site’s Stay on Volume obligation.
 - ii) Credit coupons earned through oversized Stay on Volume practices on new developments, can be applied at a 1.5:1 ratio (installed:earned), in the same watersheds
 - D. Credit coupons cannot be applied or used to meet the SOV requirement for offsite mitigation projects.
 - E. Retrofitting existing sites for SOV is voluntary so that applicants may earn credit coupons and/or reduce the property owner’s water quality fee. The application of coupons at retrofit sites would accomplish neither, and is therefore not allowed.
 - F. The request for use of credit coupons is incumbent on the applicant and must be submitted with the project’s preliminary plan submittal.
 - G. Credit coupons may be used or applied within any watershed within the City of Chattanooga per the City’s “site infeasibilities” and “credit coupon implementation period” definitions and stipulations.
 - H. The city-wide use and application of credit coupons is subject to periodic review and adjustment.
 - I. The owner or transferee surrenders the applied credit coupon(s) with final As Built Plan certification. The City retires the used coupon(s) and issues a new coupon for any residual SOV not applied.

4. When using or applying credit coupons, peak rate controls and water quality treatment (TSS) must still be met on site.

5. All credits shall be subject to any changes in federal or state law and regulation, or changes to the City's National Pollutant Discharge Elimination System (NPDES) Permit that increase restrictions on stormwater discharges.

Sec. 31-356.3. Offsite Mitigation and Mitigation Fees.

The City will consider the following alternatives for sites that have proven to be technically infeasible to achieve the stay-on-volume performance standard according to the RMG. Economic hardship, site program density (lack of space for BMPs), and other similar conditions imposed solely by the site design are not presumed to be a basis for site infeasibility. Acceptable reasons for qualifying for offsite mitigation and/or mitigation fees are defined in this Article, in the City's RMG and in the Credits & Incentives Manual.

1. Offsite Mitigation

A. Approved applicants may elect to perform offsite mitigation.

- i. The intent of the applicant must be made at the concept plan review and confirmed at the preliminary plan submission.
- ii. The selection and acquisition of the property to be used for offsite mitigation are the responsibility of the applicant.
 - (a) Offsite mitigation may be performed or installed on redevelopment and/or retrofit sites.
 - (b) These sites may have their own SOV requirement plus have to accommodate any offsite mitigation volumes. Installed volumes exceeding the 2.1" design standard will not earn offsite mitigation volumes, fee reductions or credit coupons.
 - (c) Offsite mitigation SOV cannot be installed at new-development sites.
 - (d) Offsite mitigation is permitted only within the same City-defined watershed as the primary site.
 - (e) The City, at its discretion, may offer an available City-owned or managed site, within the same watershed, for offsite mitigation subject to mutually agreeable terms and

conditions. The approved applicant is under no obligation to utilize any site offered or recommended by the City.

- iii. Preliminary and final plans for both the primary and the mitigation site are required concurrently.
- iv. The offsite mitigation location must achieve 150 percent of the primary site's SOV not achieved through either on-site installation or credit coupon application.
- v. Offsite mitigation projects may receive credit coupons for volumes that exceed the prescribed SOV up to 2.1" total. These property owners may apply for water quality fee discounts subject to the rules of these sections.
- vi. Offsite mitigation must be completed within three (3) years of project approval.

B. The applicant is required to post a surety bond in an amount equal to the equivalent mitigation fee, based on the value per cubic foot defined in this Article multiplied by the primary development site's unachieved SOV.

- i. The bond will be required before final plans are approved.
- ii. Once the As Built Plan is approved, the bond will be released if all required SOV has been installed. The bond will be called for payment for that portion of SOV that was not met.

2. Mitigation Fees

A. Approved applicants may request to pay an in-lieu-fee into a City-managed fund. If accepted, the City can utilize funds to acquire related property, plan, design, construct and maintain public stormwater projects. Use of a mitigation fee is subject to the stipulations provided in this section and further described in the Credits & Incentives Manual.

B. The mitigation fee may be paid on applicable new and redevelopments for the required or prescribed SOV not achieved onsite.

- i. Applicants/owners must obtain City approval for payment of a mitigation fee in lieu of managing the SOV onsite. The City may agree to receipt of mitigation fees if stormwater management cannot be more fully implemented on a site.
- ii. Mitigation fees are assessed at a rate of \$45.00 per cubic foot. This rate is 1.5 times the average construction cost of \$30 per cubic

foot, based on research by the City. This methodology is stipulated in the City's MS4 permit issued by TDEC. This rate is subject to periodic review and adjustment.

- iii. Final mitigation fees are determined after approval of the final plans. Fifty (50) percent is due and payable to the City prior to the issuance of a Land Disturbing Permit. The balance is due and payable with receipt of the certified As Built plan prior to issuance of a Certificate of Occupancy.

SECTION 2. BE IT FURTHER ORDAINED That this Ordinance shall become effective immediately from and after its passage.

Passed on second and final reading: _____

CHAIRPERSON

APPROVED: _____ DISAPPROVED: _____

MAYOR

VLM/kac/mem