

First Reading: \_\_\_\_\_  
Second Reading: \_\_\_\_\_

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE TO AMEND CHATTANOOGA CITY CODE, PART II, CHAPTER 31, ARTICLE VIII, DIVISION 1, GENERALLY, SECTIONS 31-302 AND 31-303; AND DIVISION 3, LAND DISTURBING ACTIVITY AND EROSION AND SEDIMENTATION CONTROL, SECTIONS 31-320, 31-321, 31-322, 31-323 AND 31-324 RELATIVE TO STORMWATER MANAGEMENT.

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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, Division 1, Generally, Section 31-302 be and the same is hereby renumbered to Section 31-303 and the following Section 31-302 is hereby inserted in lieu thereof:

**Sec. 31-302. Same - Abbreviations.**

“ARAP” means Aquatic Resources Alteration Permit

“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)

SECTION 2. BE IT FURTHER ORDAINED that the renumbered Section 31-303 is amended by deleting said section in its entirety and substituting the following in lieu thereof:

**Sec. 31-303. 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" means structures that are also used for other uses, subject to this article and which are not exempt from obtaining a land disturbing permit.

"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)

"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.

"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" 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)

"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 designed to store excess stormwater. (Ord. No. 12294, § 2, 10-6-09)

"Equivalent Residential Unit (ERU)" is a value, equal to 3,200 square feet of measured impervious area and is equal to the average amount of impervious area of residential properties within the City of Chattanooga. (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” means roads that are used to access other land uses, subject to this article, and which are not exempt from obtaining a land disturbing permit.

“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 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.

"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)

"Low Impact Development" (LID) is a term used to describe a land planning and engineering design approach to managing stormwater runoff. (Ord. No. 12377, § 1, 4-20-10)

"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 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 TDEC to the primary permittee.

“Notice of Intent” or “NOI” is the mechanism used to “register” for coverage under a general permit.

“Notice of Termination” or “NOT” is primary permittee’s wish to terminate coverage under the TDEC’s CGP and must be submitted by the form provided in Appendix B of CGP.

"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.

"Pollution Prevention Plans" means a written site specific plan to eliminate or reduce and control the pollution of stormwater through designed facilities, sedimentation ponds, natural or constructed wetlands, and best management practices.

“Redevelopment” means the alteration of developed land that results 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)

"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)

"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)

"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 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 System" means all facilities owned or maintained by the City for collecting, detaining, conveying, 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)]

"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.

"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" 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 Quantity" means those characteristics of stormwater runoff that relate to the 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)]

SECTION 3. BE IT FURTHER ORDAINED that Section 31-320 is amended by deleting said section in its entirety and substituting the following in lieu thereof:

**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 Field Office  
540 McCallie Avenue, Suite 550, 5th Floor  
State Office Bldg  
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.

SECTION 4. BE IT FURTHER ORDAINED that Section 31-321 is amended by deleting said section in its entirety and substituting the following in lieu thereof:



**Sec. 31-321 Land Disturbing Activity regulated.**

(a) 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:

- 1) "Surface mining" as the same is defined in Tennessee Code Annotated Section 59-8-202;
- 2) 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;
- 3) 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;
- 4) 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.
- 5) Individual service and sewer connections for single or two - family residences;
- 6) 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)
- 7) 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;
- 8) Construction, repair or rebuilding of tracks or other related facilities of a railroad company;
- 9) Maintenance and repair to any stormwater BMP deemed necessary by the City.
- 10) 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.

(b) Stormwater Design Manuals.

Adoption.

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

SECTION 5. BE IT FURTHER ORDAINED that Section 31-322 is amended by deleting said section in its entirety and substituting the following in lieu thereof:

**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. (Ord. No. 9942, § 1, 8 - 31 - 93)

SECTION 6. BE IT FURTHER ORDAINED that Section 31-323 is amended by deleting said section in its entirety and substituting the following in lieu thereof:

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

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

- 1) Site or project name
- 2) Property street address or location; tax map, lot number, subdivision name, zip code
- 3) Site activity description
- 4) Site owner/property owner/applicant or Agent name, mailing address, phone, email, company name (see Sec. 31-320)
- 5) Engineer/Contractor: name, mailing address, phone, email, company name, state/county/city license numbers
- 6) Type of work
- 7) Property occupied/used as zoned
- 8) Size of project
- 9) Starting and completion estimated dates
- 10) Other information as required by the City.

(b) 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.

(c) 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.

- (a) EPSC Plan or SWPPP shall take in consideration and contain at a minimum:
- 1) A Plan with stabilization specifications and all other information needed to accurately depict solutions to potential soil erosion and sedimentation problems. The plan BMPs shall meet and be consistent with and no less stringent than the Handbook requirements and shall be approved by the City prior to the issuance of the land disturbing permit. The use of uniform coding symbols on plans from the Handbook, Chapter 7, with legend, is required.
  - 2) Site development plan with the proposed construction area clearly outlined;
  - 3) Boundaries of the permitted area;
  - 4) Topographic information for the site and the adjacent properties (to determine run-on and watershed boundaries);
  - 5) Approximate slopes anticipated after major grading activities;
  - 6) Areas of soil disturbance, including an outline of areas which are not to be disturbed;
  - 7) Location of major structural and nonstructural controls;
  - 8) Location of areas where stabilization practices are expected to occur;
  - 9) Location and boundaries of buffer zones, if any, established to protect Waters of the State located within the boundaries of the project;
  - 10) Locations of surface waters including wetlands, sinkholes, and careful identification on the map of outfall points for stormwater discharges from the site;
  - 11) Locations of other permit boundaries, such as ARAP, TVA 26A or COE permits, including locations of stream realignments or mitigation areas;

- 12) Locations of temporary and permanent stormwater management structures;
- 13) Locations of stockpile and/or borrow areas;
- 14) For site disturbances more than five (5) acres, at least three (3) separate EPSC Plan sheets shall be developed. Three stages shall be identified. The first Plan sheet should reflect the conditions and erosion prevention and sediment control measures necessary to manage stormwater runoff, during the initial land disturbance (initial grading). The second Plan sheet shall reflect the conditions and the erosion prevention and sediment control measures necessary to manage stormwater runoff from interim land disturbance activities. The third Plan sheet shall reflect the conditions and erosion prevention and sediment control measures necessary to manage stormwater runoff, erosion and sediment at final grading.
- 15) For site disturbances less than five (5) acres, at least two (2) separate EPSC Plan sheets shall be developed. At least two stages shall be identified, with associated erosion prevention and sediment control measures addressed. The plan stages shall be addressed separately in plan sheets, with each stage reflecting the conditions and erosion prevention and sediment control measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance (initial grading) and the conditions and erosion prevention and sediment control measures necessary to manage stormwater, erosion and sediment at final grading.
- 16) Construction details with dimensions, cross sectional views and/or plan views with enough information for the contractor to understand how to install the practice.

(b) The SWPPP shall be developed per requirements of the currently adopted Handbook and current CGP.

(c) Where a SWPPP includes structural, hydraulic or hydrologic design, it must be prepared by a Tennessee licensed registered engineer or landscape architect. A Certified Professional in Erosion and Sediment Control (CPESC) or a person that successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course can develop the narrative portion. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer’s specifications (where applicable).

(d) The EPSC Plan for non-exempt sites less than one (1) acre shall be prepared by a person who has successfully completed the TDEC “Level I Fundamentals of course Erosion Prevention and Sediment Control for Construction Sites” course or a CPESC.

(e) Plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Board of Architectural and Engineering Examiners.

(f) Engineering design of sediment basins and other sediment controls must be included in the SWPPP for construction sites involving drainage to an outfall totaling 10 or more

acres (5 acres discharging to an impaired or Exceptional Tennessee Waters per requirements in the current CGP).

(g) The construction-phase erosion prevention controls shall be designed to eliminate (or minimize if complete elimination is not possible) the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site to the maximum extent practicable.

(h) BMPs are required for phases of common development including individual building lots and out-parcels regardless of who owns or operates the individual sites. This includes typical and any unique lots.

(i) BMPs shall be applied to, and maintained on any and all land disturbing support activities including, but not limited to any borrow, fill, clearing, grading, equipment staging areas, stockpile/disposal/storage areas containing erodible material, or other similar construction activities that result in a non-exempt land disturbance. These areas of support activities shall be identified in the EPSC Plan or SWPPP.

(k) Permittees are required to submit a copy of the NOI, EPSC Plan or SWPPP and NOC to the City before issuing a land disturbing permit.

(l) Permittees are required to develop and implement a set of requirements to establish, protect and maintain Construction Stream Buffer Zone. (see Sec. 31-324.1 construction stream buffer zone requirements).

(m) When steep slopes and/or fine particle soils are present at the site, additional erosion prevention and sediment controls may be required.

(n) Delineate any on-site wetlands and identify all Waters of the State located on and within 200 feet of the project site.

SECTION 7. BE IT FURTHER ORDAINED that Section 31-324 is amended by deleting said section in its entirety and substituting the following in lieu thereof:

**Sec. 31 - 324. General requirements.**

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

a) 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.

b) 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.

c) Natural vegetation shall be retained, protected, and supplemented.

d) 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.

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

f) 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.

g) 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.

h) 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 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.

i) 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.

j) 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)

k) 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:

- (1) 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
- (2) 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.

l) 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.

m) 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 or other control units providing the level of treatment necessary to comply with permit requirements.

n) 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.

o) 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.

p) 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.

q) Construction Phasing: See CGP for requirements.

r) Construction Staging: See Handbook and CGP for requirements.

s) Sediment Basins: See Handbook for requirements.

t) 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.

a) All active construction sites shall be inspected by permittee or his designee twice weekly (with 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.

b) 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.

c) 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.

d) 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.

e) 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.

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

g) 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.

h) 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.

i) 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 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 Construction stream buffer zone requirements**

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

b) 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).

c) 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.

d) 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.

e) The 30-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 more than 15 feet at any measured location.

f) 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 more than 30 feet at any measured location.

g) 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 applies to all construction sites.

h) 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.

#### **Equivalent Buffer Zone BMPs:**

A justification for use and design of equivalent construction stream buffer zone BMPs shall be included in the EPSC Plan or SWPPP. A justification for use and a design of equivalent 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.

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.

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.

#### Buffer zone exemption based on existing uses

Buffer zones as described above shall not be required to portions of the buffer where certain land uses exist and are to remain in place according to the following:

1) 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.

2) 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.

**SECTION 8.** 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