


ORDINANCE

AN ORDINANCE OF THE COMMISSION OF KNOX COUNTY, TENNESSEE, TO REPEAL AND REPLACE KNOX COUNTY CODE, CHAPTER 26, ARTICLE VI, "STORMWATER MANAGEMENT," TO COMPLY WITH THE RECENTLY ADOPTED STATE OF TENNESSEE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4). (Ord. No. O-07-12-101, adopted 1-28-08; Ord. No. O-12-11-102, adopted 12-17-12; and Ord. No. O-13-3-102, adopted 4-29-13)

ORDINANCE: O-24-7-101

REQUESTED BY: ENGINEERING & PUBLIC WORKS

PREPARED BY: KNOX COUNTY LAW DIRECTOR'S OFFICE

APPROVED AS TO FORM AND CORRECTNESS: 
DIRECTOR OF LAW

APPROVED 1ST READING: July 22, 2024
DATE

APPROVED 2ND READING: August 26, 2024
DATE

APPROVED EMERGENCY: _____
(YES) (NO)

VETOED: _____
DATE

VETO OVERRIDE: _____
DATE

MINUTE BOOK _____ PAGE _____

WHEREAS, the Knox County Commission (the "Commission") previously adopted a Stormwater Management Ordinance for Knox County, which regulations have been codified at Chapter 26, Article VI, Sec. 26-151 *et seq.* of the Knox County Code; and

WHEREAS, Knox County desires to adopt updated stormwater management regulations in order to comply with the recently adopted State of Tennessee National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewer System (MS4).

NOW THEREFORE BE IT ORDAINED BY THE COMMISSION OF KNOX COUNTY AS FOLLOWS:

SECTION 1. The Knox County Code, Chapter 26, Article VI entitled "Stormwater Management" is hereby repealed and replaced with a new Article VI entitled "Stormwater Management" to read as shown on Exhibit A attached hereto and fully incorporated herein by reference.

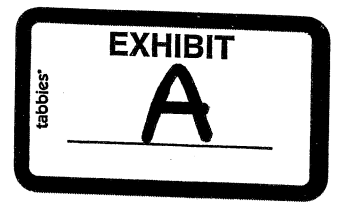
SECTION 2. This Ordinance shall take effect as provided by the Charter of Knox County, Tennessee, the public welfare requiring it.

Jerry C Hill 8/26/24
Presiding Officer of the Commission Date

Sherry Witt 8/27/24
County Clerk Date

Approved: [Signature] 8/28/24
County Mayor Date

Vetoed: _____
County Mayor Date



ARTICLE VI. - STORMWATER MANAGEMENT

DIVISION 1. - GENERALLY

Sec. 26-151. - Title and administration.

- (a) This article shall be cited as the Knox County Stormwater Management Ordinance and shall replace in its entirety Ordinance No. O-07-12-101, adopted January 28th 2008, as amended. As of the date of adoption of this article, all references to previous stormwater management ordinances cited in other county codes or regulations shall be regarded as a reference to this article.
- (b) This article shall apply to all areas located within the jurisdiction of the county.
- (c) The director of the county department of engineering and public works (the director) and the staff under the director's supervision shall administer the provisions of this article. The director shall, with the approval of the county mayor, establish written regulations and technical guidelines as may be necessary to enforce the terms of this article. These regulations and technical guidelines shall be filed in the department of engineering and public works office and shall be made available to the public.

(Ord. No. O-07-12-101, § 2(§ 1), 1-28-08)

Sec. 26-152. - Definitions.

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage, and to give this article the most reasonable application.

1% (100yr) flood elevation means the elevation of the 1% (100yr) flood at any given location.

0.2% (500yr) flood elevation means the elevation of the 0.2% (500yr) flood at any given location

100% (1yr), 50% (2yr), 20% (5yr), 10% (10yr), 4% (25yr), 1% (100yr), and 0.2% (500yr) frequency storm are defined by the most current NOAA Atlas Precipitation Frequency Data Server (PFDS)

Active channel means the area of the stream that is most subject to water flow and that includes the portion of the channel below the top-of-bank.

Aquatic Resource Alteration Permit (ARAP) means a permit issued by the Tennessee Department of Environment and Conservation for physically altering Waters (streams and wetlands) of the state.

As-built certification means as-built, field-verified plans signed and sealed by a registered professional engineer and/or a registered land surveyor, both licensed to practice in the state, which shows physical information about the development or redevelopment for purposes of verifying adherence to the approved stormwater management plan(s).

Base flood elevation (BFE) is the 0.2% (500yr) flood elevation at any given location.

Best management practices (BMP or BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, structural controls and other management practices designed to prevent or reduce the pollution of waters of the United States. BMPs may include structural devices or non-structural practices.

Blue-line stream means any stream that is shown on a 7.5-minute USGS quadrangle map, unless determined otherwise by the Tennessee Department of Environment and Conservation.

Board of zoning appeals (BZA) means a group of nine citizens appointed by the County Commission to hear appeals and decide appeals and variances as authorized in section 6.60 of the county zoning ordinance.

CFR means Code of Federal Regulations.

Channel means a natural or man-made watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water.

Clearing means in the definition of discharges associated with construction activity, clearing does not refer to clearing of vegetation along roadways, highways or power lines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. Clearing typically refers to removal of vegetation and/or disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to a wide area of land disturbance in anticipation of non-construction activities; for instance, cleared forested land in order to convert forest land to pasture for wildlife management purposes.

Commencement of construction or commencement of land disturbing activities means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

Construction (or construction project) means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

Construction related wastes means refuse or unused materials that can result from construction activities. Construction related wastes can include, but are not limited to, unused building and landscaping materials, chemicals, litter, sanitary waste, and concrete truck washout.

Conveyance means the capacity of a channel or a pipe to carry stormwater.

Covenants for permanent maintenance of stormwater facilities and stormwater control measures, (also titled covenants for permanent maintenance of stormwater facilities and best management practices), means a legal document executed by the property owner, or a homeowners' association as owner of record, and recorded with the county register of deeds which guarantees perpetual and proper maintenance of stormwater facilities and stormwater control measures.

County means Knox County, Tennessee.

Cross drain means a pipe used to convey stormwater from one side of a county road to another. A cross drain can also be called a culvert.

Development means any land change that alters the hydrologic or hydraulic conditions of any property. Often referred to as "site development." Development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities, roads and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering landforms, or construction or demolition of a structure on the land.

Director means the director of the county department of engineering and public works or designee.

Discharge means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the stormwater system by any means intentional or otherwise.

Disturbed area means portion of any site that has been altered from existing conditions, including but not limited to the following: providing access to a site, clearing of vegetation, grading, earth moving, providing utilities and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Drainage basin means the area contributing stormwater runoff to a single point.

Drainage system means the system of pipes, channels, culverts, and ditches that convey stormwater from and through public and private land in the county.

Erosion means the removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

Excavation means a cavity or hole in the land surface that is caused by the cutting, digging, or scooping and removal of soil, rock, or other materials.

Exceptional Tennessee waters means surface waters of the State of Tennessee that satisfy characteristics of exceptional Tennessee waters as listed Chapter 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.

FEMA means the Federal Emergency Management Agency, which administers the National Flood Insurance Program (NFIP).

Filling means any deposit or stockpiling of dirt, rocks, stumps, or other natural or man-made solid waste material.

Flood means water from a river, stream, watercourse, lake or other body of standing water that temporarily overflows and inundates adjacent lands and which may affect other lands and activities through increased surface water levels, and/or increased groundwater level.

Flood fringe means that portion of the special flood hazard area lying outside the floodway.

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

Flood insurance study (FIS) means the official report provided by the Federal Emergency Management Agency. The report contains elevations of the base flood, floodway widths, flood velocities, and flood profiles.

Floodplain means any land area susceptible to being inundated by water from any source. Floodplains that have been studied for purposes of flood insurance documentation are typically assigned a recurrence interval (i.e., the 1% (100yr)

floodplain) which defines the magnitude of the flood event that causes the inundation in the floodplain to a specified flood elevation. The 1% (100yr) floodplain is the area subject to inundation during the 1% (100yr) flood.

Flood proofing means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the 1% (100yr) flood without cumulatively increasing the water surface elevation more than one foot.

Floodway encroachment means any obstruction, fill, construction, improvement, or other alteration that changes the hydraulic characteristics of the regulatory floodway.

Grey Water means non-industrial waste water generated from domestic processes such as wash water from kitchen, bathroom and laundry sinks, tubs, and washers (this does not include toilets).

Hotspot means an area where the land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

Human occupancy means any portion of any enclosed structure wherein humans principally live, work, or sleep such as mobile homes, residential activities, basements, health care facilities, restaurants, office buildings, etc.

Illicit discharge means any discharge to the stormwater system that is not composed entirely of stormwater and not specifically exempted in sections 26-312—26-316.

Impervious area means impermeable surfaces which prevent the percolation of water into the soil including, but not limited to, pavement, parking areas and driveways, packed gravel or soil, or rooftops.

Land disturbance permit means a permit issued by the county authorizing the commencement of land disturbing activities.

Land disturbing activity means any activity on a property that results in a change in the existing soil (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, logging and/or tree chipping operations (unless exempted under Tennessee State Law), haul roads associated with the development, and excavation.

Letter of map revision (LOMR) means a letter written by FEMA that officially revises the FIS and FIRM.

Manmade depression means a concave area in the land surface created by human excavation or a manmade feature (such as a depression caused by water erosion at the end of a culvert). Manmade depressions may be circumscribed by one or more closed (generally circular) contours on KGIS topographic contour maps; however, they are often difficult to discern from sinkholes without further onsite inspections or geotechnical study. Due to the prevalence of sinkholes in Knox County and their risks to the stability of proximal structures, one or more closed contours depicted on KGIS topographic contour maps are considered by the director to be sinkholes until they are definitively determined to be manmade depressions. See also *sinkhole*.

Municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels, and storm drains) designed or used for

collecting or conveying stormwater. However, sanitary and combined sewers are not included in the definition of the municipal separate storm sewer system.

National pollutant discharge elimination system (NPDES) means the program administered by the United States Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States.

Natural resources conservation service (NRCS) means an organization within the U.S. Department of Agriculture that has published standard drainage procedures in the form of Technical Release No. 55. Formerly known as the Soil Conservation Service (SCS).

No rise means a floodway encroachment that causes no increase to the base flood elevation, and to the 1% (100yr) floodway width and water surface elevation.

Outfall means the terminus of a stormwater system where the contents are released into a larger public or private stormwater management system, or into a stream.

Owner or operator means any party associated with a construction project that meets either of the following two criteria:

- (1) The party has operational or design control over construction plans and specifications of a project or portion(s) thereof, including the ability to authorize modifications to those plans and specifications (this will typically be the owner or developer); or
- (2) The party has day-to-day operational control of those activities at a project or portion(s) thereof, which are necessary to ensure compliance with a stormwater pollution prevention plan (SWPPP) for the site or other permit conditions, e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions. (This will typically include the general contractor and would also include erosion control contractors.)

At different phases of a construction project, different types of persons may satisfy the definition of "operator". There are typically multiple operators for a single project.

Priority construction activity means land disturbing activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.

Peak discharge means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event. Also, the maximum discharge computed for a given design flood event.

Person means any individual, firm, corporation, partnership, association, organization or entity, including governmental entities, or any combination thereof.

Redevelopment means the improvement of a lot or lots that have been previously developed.

Riprap means a combination of large stone, cobbles and boulders used to line channels, stabilize stream banks, and reduce runoff velocities.

Runoff means the water resulting from precipitation that is not absorbed by the soil. Also can be referred to as stormwater runoff.

Sanitary sewer means a system of underground conduits that collects and delivers wastewater from toilets, sinks and

other plumbing fixtures to a wastewater treatment plant.

Sediment means solid material, either inorganic (mineral) or organic, that is in suspension, is being transported, or has been moved from the site of origin by wind, water, gravity, or ice as a product of erosion.

Sewage means human wastes carried by water from residences, buildings, industrial establishments or other places, together with such industrial wastes, stormwater or other water as may be present; or any substance discharged from a sanitary sewer collection system.

Sinkhole means a concave area in the land surface that forms naturally by the dissolution of soluble, carbonate bedrock by water which creates a subsurface network of cavities and voids. Sinkholes are formed when the land surface collapses and sinks into the cavities and voids. This natural process can be exacerbated by human activities that alter the natural terrain and surface and ground water hydrology, such as land disturbing activities, construction practices, and land development. Such activities can destabilize karst terrain and increase the potential hazards to developed properties, including land surface settling, sinkhole throat collapse, new sinkhole formation, and localized, but damaging, floods. Sinkholes may be circumscribed by one or more closed (generally circular) contours on KGIS topographic contour maps. The extent of a sinkhole includes the uppermost closed contour, the area spanning all descending contours within, and the sinkhole throat. See also sinkhole throat.

Sinkhole throat (informal usage) means the outlet(s) within a sinkhole that allows runoff from the sinkhole's watershed to discharge from the surface of the sinkhole (usually at its lowest ground surface elevation) into the ground. Sinkhole throats may not be readily apparent as they can be hidden beneath overlying soil and vegetation; however throats can also be readily visible, with some having large, cavernous dimensions.

Small lot, for purposes of a building permit, means a construction site that results in the disturbance of less than one acre of land and is not part of a larger common plan of development or sale that would disturb one acre or more.

Special flood hazard area (SFHA) means an area having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards and shown on a flood hazard boundary map or flood insurance rate map as zone A, AO, A1-30, AE, A99 or AH.

Stabilization means all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- (1) A perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion.
- (2) Equivalent permanent stabilization measures such as the use of riprap; permanent geotextiles; hardened surface materials including concrete, asphalt, gabion baskets or Reno mattresses have been employed.
- (3) For construction projects on land used for agricultural or silvicultural purposes, permanent stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

Stormwater means runoff from rain, snow or other forms of precipitation, which results in surface runoff and drainage.

Stormwater management facilities means structures and constructed features designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the stormwater system. Stormwater management facilities include vegetative or structural measures, or both, to control the increased volume, rate, and quality of stormwater

runoff caused by manmade changes to the land.

Stormwater control measure means a stormwater management facility that is designed, constructed, and maintained, for the purpose, solely or in part, of stormwater quality treatment.

Stormwater management plan means an engineering study for the design of the drainage system for a proposed development that includes a map showing the extent of the land development activity, a stormwater pollution prevention plan (SWPPP), stormwater control plan, and may contain as-built certifications and Covenants for Permanent Maintenance of Stormwater Facilities and Stormwater Control Measures. The stormwater management plan also includes sufficient hydrologic calculations to determine the impact of the development on stormwater discharges.

Stormwater management manual means a document prepared and maintained by the county department of engineering which contains design standards and criteria, technical specifications and guidelines, maintenance guidelines, methodology for engineering computations, and other supporting documentation to be used as the technical guidance for implementation of the provisions of this article.

Stormwater master plan means an engineering and planning study for the drainage system of a watershed that consists of a plan for stormwater management in the watershed. Stormwater master plans can address flooding problems, water quality problems, potential stormwater capital improvements, land use patterns, and regulatory issues for existing and future conditions.

Stormwater Pollution Prevention Plan (SWPPP) means a written plan required by the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities (TN-CGP) 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. In order to effectively reduce erosion and sedimentation impacts, best management practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

Stormwater system means the system of roadside drainage, roadside curbs and gutters, curb inlets, swales, catch basins, manholes, gutters, ditches, pipes, lakes, ponds, sinkholes, channels, creeks, streams, storm drains, stormwater control measures, and similar conveyances and facilities, both natural and manmade, located within the county which are designated or used for collecting, storing, or conveying stormwater, or through which stormwater is collected, treated, stored or conveyed, whether owned or operated by the county or other person.

Stream, for the specific purpose of water quality buffers, means a linear surface water conveyance that can be characterized with either perennial or ephemeral base flow and:

- (1) Has published floodplain elevations that have been computed as part of an approved flood study;
- (2) Is identified as a blue line on a 7.5-minute USGS quadrangle, unless otherwise designated by TDEC; or
- (3) Is identified by the property owner as a stream; or
- (4) Is or has been identified by the county, USACE, or TDEC as a stream.

Structure means anything constructed or erected such that the use of it requires a more or less permanent location on or in the ground. Such construction includes, but is not limited to, objects such as buildings, towers, smokestacks, overhead transmission lines, carports and walls.

TDEC means the Tennessee Department of Environment and Conservation.

Top of bank means the uppermost limit of the active channel of a stream containing normal flows, usually marked by a break in slope.

Total maximum daily load (TMDL) a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the source(s) of the pollutant.

Transporting means any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized on an approved plan.

USACE means United States Army Corps of Engineers.

Utility, public or private means any agency which under public franchise or ownership, or under certification of convenience and necessity provides the public with electricity, natural gas, steam, communication, rail transportation, water, sewage collection, or other similar service.

Vegetation means [the] collection of plant life, including trees, shrubs, bushes, and grass.

Wastes, industrial/commercial means liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

Wastes, other means decayed wood; sawdust; shavings; fallen bark; fallen leaves; lawn clippings; animal wastes; used or previously applied lime; garbage; trash; refuse, loose used paper, paper products, plastic containers, or metal containers; ashes, offal, discarded tar; discarded paint; discarded or uncontained solvents; used, discarded, or spilled petroleum products, antifreeze, motor vehicle fluids; used or discarded tires, gas tanks, or chemicals; or any other used, uncontained, or unpackaged, or disposed of materials which may discharge to or otherwise enter the stormwater system.

Waters or waters of the state mean any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon the state 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 or effect a junction with natural surface or underground waters.

Water quality buffer means a legally-platted, use-restricted, permanent strip of perennial vegetation adjacent to streams, rivers, naturally occurring wetlands, ponds and lakes that contains dense vegetation made up of grass, shrubs and/or trees.

Watercourse means a channel, natural depression, gully, stream, creek, pond, reservoir or lake in which stormwater runoff and floodwater flows either regularly or infrequently. This includes major drainageways for carrying urban stormwater runoff.

Watershed means a region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water.

Wetlands means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life

in saturated soil conditions. Wetland determination shall be made by the United States Army Corps of Engineers, and/or the state department of environment and conservation, and/or the natural resources conservation service.

(Ord. No. O-07-12-101, § 2(§ 2), 1-28-08; Ord. No. O-12-11-102, § 1, 12-17-12)

Sec. 26-153. - Authority of the director.

- (a) The county department of engineering and public works has the authority to promulgate rules, regulations, and guidance consistent with this article in order to carry-out the meaning and intent of this article in a stormwater management manual. The stormwater management manual, as amended, shall be implemented consistent with other provisions of this article through the approval and enforcement of the stormwater management plan. Stormwater quality or quantity control methods, designs or technologies not provided in the stormwater management manual, as amended, may be submitted for approval if it is proven that such methods, designs or technologies will meet or exceed the water quality and quantity control requirements set forth in the stormwater management manual, as amended, and this article. The county department of engineering and public works will revise and append the stormwater management manual to satisfy state or federal regulatory water quality or quantity requirements, or as research and development in the area of stormwater management provides improved knowledge of new or existing stormwater quality or quantity control methods, designs or technologies. This article emphasizes that the county stormwater manual is the basis for design for all projects affecting stormwater in the county. A role of the director is to enforce said design. Thus the county stormwater manual shall be enforceable consistent with other provisions of this article.
- (b) The director shall have the authority to prepare, or have prepared, master plans for drainage basins and to establish regulations or direct capital improvements to carry out said master plans.
- (c) In the event that the director determines that a violation of any provision of this article has occurred, or that work does not have a required plan or permit, or that work does not comply with an approved plan or permit, the director may issue a notice of violation to the permittee or property owner and/or any other person or entity having responsibility for construction work performed at a site development, at which time the penalty provisions of this article shall be implemented.
- (d) The director shall have authority to establish reasonable fees for permits issued and services provided by the county department of engineering and public works under the county stormwater management ordinance. The fee for construction general permits shall be at least 80 percent of the amount charged by the Tennessee Department of Environment and Conservation for construction general permits on May 15, 2013. The director may increase the fee for a construction general permit from time to time. Any increase in the construction general permit fee charged by the director shall be effective 30 days after notice of the increase is served on the county commission.

(Ord. No. O-07-12-101, § 2(§ 3), 1-28-08; Ord. No. O-13-3-102, § 1, 4-29-13)

Sec. 26-154. - Severability.

- (a) Each separate provision of this article is deemed independent of all other provisions herein so that if any provision or provisions of this article shall be declared invalid, all other provisions thereof shall remain

enforceable.

- (b) If any provisions of this article and any other provisions of law impose overlapping or contradictory regulations, or contain any restrictions covering any of the same subject matter, that provision which is more restrictive or imposes higher standards or requirements shall govern.

(Ord. No. O-07-12-101, § 2(§ 13), 1-28-08)

Sec. 26-155. - Responsibility.

Conformance with this article is a minimum requirement and does not relieve the property owner, utility, facility operator, lessee, tenant, contractor, permittee, the equipment operator and/or any other person or entity doing work from applying sound judgment and taking measures which go beyond the scope of the requirements of this article where necessary. Nor does this article imply a warranty or the assumption of responsibility on the part of the county for the suitability, fitness or safety of any structure with respect to flooding, water quality, or structural integrity. This article is a regulatory instrument only, and is not to be interpreted as an undertaking by the county to design and structure or facility.

(Ord. No. O-07-12-101, § 2(§ 14), 1-28-08)

Sec. 26-156. - Variances.

- (a) Variances to the requirements of this article shall be handled by the county board of zoning appeals as defined under section 6.60 of the county zoning ordinance, titled board of zoning appeals.
- (b) The board of zoning appeals shall not approve variances that cause the county to be in violation of any state or federal NPDES permit.

(Ord. No. O-07-12-101, § 2(§ 15), 1-28-08)

Sec. 26-157. - Penalties and appeals.

- (a) Violations of this article shall be cause for the requirement for corrective action(s), the issuance of a stop work order, withholding of a permit, withholding of permit inspections, withholding of a certificate of occupancy, and/or civil penalties and/or damage assessments as set forth below.
- (b) Any person who violates the provisions of this article shall be subject to a civil penalty of not less than \$250.00 or more than \$5,000.00 per day for each day of each violation. Each day of violation may constitute a separate violation. The county shall give the alleged violator reasonable notice of the assessment of any civil penalty. The county may also recover all damages proximately caused to the county by such violations.
- (c) In assessing a civil penalty, the following factors may be considered:
 - (1) The harm done to the public health or the environment;
 - (2) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
 - (3) The economic benefit gained by the violator;
 - (4) The amount of effort put forth by the violator to remedy this violation;
 - (5) Any unusual or extraordinary enforcement costs incurred by the municipality;
 - (6) The amount of penalty established by ordinance or resolution for specific categories of violations; and

- (7) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
- (d) In addition to the civil penalty in subsection (b), the county may also assess damages proximately caused by the violator to the county which may include any reasonable expenses incurred in investigating and enforcing violations of this part, or any other actual damages caused by the violation.
- (e) Notice shall be served upon the alleged violator either by personal service or certified mail. Where such methods are a known, reliable method of communication, notice may be additionally served by fax or regular mail. Upon receipt of notice from the county of the assessment of a civil penalty and/or damages, the alleged violator may request a meeting with the director of engineering and public works. Said request must be made in writing and received by the county within ten business days after the date of the notice. The meeting shall be held within ten business days of the request for the meeting. Within ten business days after the meeting, the county shall issue a second notice to the alleged violator of its decision. If the alleged violator is dissatisfied with the decision of the county, the alleged violator may appeal said civil penalty or damage assessment to the county board of zoning appeals. Said appeal must be received by the board within 30 days after the date of the second notice. The appeal shall be heard by the board at its next regularly scheduled meeting following receipt of the appeal. If a timely appeal of the second notice of damage assessment or civil penalty is not filed with the board, the violator shall be deemed to have consented to the damage assessment or civil penalty and it shall become final. If the alleged violator files a timely appeal with the board and the violator is dissatisfied with the decision of the board, the alleged violator may appeal the decision of the board pursuant to T.C.A. § 27-8-101. Said appeal must be filed within 30 days after the decision of the board.
- (f) Whenever any damage assessment or civil penalty has become final because of a person's failure to appeal the damage assessment or civil penalty, the county may apply to the appropriate chancery court for a judgment and seek execution of such judgment. The court, in such proceedings, shall treat the failure to appeal such damage assessment or civil penalty as a confession of judgment.

(Ord. No. O-07-12-101, § 2(§ 16), 1-28-08)

Secs. 26-158—26-170. - Reserved.

DIVISION 2. - STORMWATER MANAGEMENT REQUIREMENTS

Sec. 26-171. – Exempt developments.

It is acknowledged that any exemptions are reviewed by the director and should not be construed as an opportunity to circumvent the letter and spirit of the county stormwater ordinance. It is also not the intent of the county government to place undue and unreasonable hardships on individual business and property owners.

- (1) Responsibilities of exempt developments.
 - a. The exemptions listed in subsection (2) shall not be construed as releasing the owner or operator of these developments from onsite drainage improvements that may be required in accordance with building and construction codes, nor from compliance with sections 26-176, 26-177 and 26-312—26-316, nor from providing adequate erosion prevention and sediment control measures to protect adjoining property owners and the public right-of-way.
 - b. Developments that conform to the criteria in subsection (2) are exempt from the requirements for

a stormwater management plan. However, the owner or operator must submit a small lot erosion prevention and sediment control plan, in accordance with section 26-173 of this article, prior to obtaining a building permit.

- (2) *Exemptions.* The following proposed developments and redevelopments are exempt from the requirements for a land disturbance permit and stormwater management plan:
- a. Any proposed new development or redevelopment that conforms to all of the following criteria:
 1. Does not alter a drainage channel;
 2. Disturbs less than one acre of land ;
 3. Is not part of a larger common plan of development or sale that would disturb one acre or more;
 4. Does not discharge stormwater to a sinkhole or is not located in a sinkhole or where sinkholes are entirely or partially present.
 5. Adds less than 10,000 square feet of new impervious surface
 - b. Minor land disturbing activities such as home gardens and individual home repairs, landscaping, or maintenance work;
 - c. Individual utility service connections, unless such activity is carried-out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a land disturbance permit would otherwise be required by the regulation;
 - d. Installation, maintenance or repair of individual septic tank lines or drainage fields, unless such activity is carried out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a land disturbance permit would otherwise be required by the regulation;
 - e. Installation of posts or poles;
 - f. Farm operations as defined in Tennessee Code Annotated §43-26-102;
 - g. Timber activities unrelated to the clearing of land for purposes of development of property not otherwise exempted by part (2) a above;
 - h. Emergency work to protect life or property, and emergency repairs, provided that the land area disturbed shall be shaped and stabilized in accordance with the requirements of this regulation as soon as practicable.

(Ord. No. O-07-12-101, § 2(§ 4.1), 1-28-08)

Sec. 26-172. - Stormwater management plan requirements.

- (a) General requirements.
 - (1) The owner or operator of land development activities not exempted under section 26-171 must submit a stormwater management plan.
 - (2) No building permit shall be issued until the required stormwater management plan is approved by the department of engineering and public works.

- (3) The stormwater management plan shall include the specific required elements that are listed and/or described in the county stormwater management manual, as amended. Additional information shall be provided as necessary to allow an adequate review of the site conditions.
 - (4) Stormwater management plans, including stormwater pollution prevention plans (SWPPP) shall be prepared and stamped by an engineer, landscape architect, or architect competent in civil and site design and licensed to practice in the state with the following conditions:
 - a. Portions of the stormwater management plan, including portions of the stormwater pollution prevention plan (SWPPP), that require hydraulic or hydrology calculations and design shall be prepared and stamped by a professional engineer competent in civil and site design and licensed to practice in the state.
 - b. The SWPPP shall be prepared and stamped in accordance with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities.
 - c. All roads and joint permanent easements that are required to be designed and built to public road standards shall be prepared and stamped by a professional engineer competent in civil and site design and licensed to practice in the state.
 - (5) The stormwater management plan shall be subject to any additional requirements set forth in the minimum subdivision regulations, zoning ordinance, or other county regulations.
 - (6) When existing or documented flooding problems are present, the director has authority to condition the approval of a grading or building permit upon the compliance with additional requirements, including but not limited to detention, conveyance facilities, or other stormwater management solutions required to reduce the adverse impact of the proposed development on other properties or on the subject development.
- (b) Conformity to plans.
- (1) The approved stormwater management plan, upon which subsequent permits may be issued by the county, shall be adhered to during grading and construction activities.
 - (2) The approved SWPPP shall be adhered to by all operators associated with the construction project, or portions thereof, during grading and construction activities.
 - (3) Under no circumstance is an owner or operator for a construction project, or portions thereof, allowed to deviate from the project's approved stormwater management plan or SWPPP without prior approval of a plan amendment by the director.
 - (4) The director shall require that an approved stormwater management plan be amended if it is determined that the approved plan is inadequate.
- (c) Additional requirements for land disturbance permits.
- (1) The owner or operator of land development activities not exempted by section 26-171 must obtain a land disturbance permit prior to commencing land disturbing activities.
 - (2) Land disturbing activities performed in accordance with the approved plan shall commence within one year from the issue date of the land disturbance permit, or the land disturbance permit will become null and void and the plan must be resubmitted for approval.
 - (3) The land disturbance permit application shall contain a SWPPP, which shall be prepared in accordance

with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities. The SWPPP can be included with the overall stormwater management plan or can be a stand-alone plan.

- (4) Where there are multiple owners or operators associated with the same construction project that is subject to the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities, all owners or operators shall secure coverage under the State of Tennessee permit. It is the responsibility of the land disturbance permittee(s) to ensure all owners or operators obtain coverage under the State of Tennessee permit and to provide proof of coverage upon the director's request.
 - (5) The director may request additional information as deemed necessary to protect streams and adjacent properties from erosion and off-site sedimentation.
- (d) Pre-construction meeting.
- (1) Attendance at a pre-construction meeting with the county department of engineering and public works prior to issuance of a land disturbance permit is required for owners and operators of developments or redevelopments that are priority construction activities, as defined in this article.
 - (2) Owners and operators of land development activities not listed in subsection 26-172(d)(1) may be required to attend a pre-construction meeting when coordination with adjacent construction activities is needed or when conditions indicate a higher than normal risk for pollutant discharges.

(Ord. No. O-07-12-101, § 2(§ 4.2), 1-28-08; (Ord. No. O-12-11-102, §§ 2—4, 12-17-12)

Sec. 26-173. - Building permit requirements for small lots.

- (a) The small lot erosion prevention and sediment control plans shall be prepared in accordance with the requirements stated in the county stormwater management manual, as amended.
- (b) The director has the discretion to require a full stormwater management plan for small lots as set forth in this division as they deem necessary to protect adjacent or downstream properties, the public stormwater drainage system, and streams.
- (c) All areas of construction, including, but not limited to, areas of bare soil, vehicle wash pads, construction materials and waste storage areas, and concrete truck washout areas, shall be managed to prevent soil erosion and the discharge of sediment and other construction related wastes from the lot.

(Ord. No. O-07-12-101, § 2(§ 4.3), 1-28-08)

Sec. 26-174. - Performance bonds.

- (a) Prior to issuance of a land disturbance permit, a performance bond which guarantees satisfactory completion of land disturbing activities shall be provided for said activities.
- (b) Prior to plat approval, a performance bond which guarantees satisfactory completion of new development or redevelopment projects shall be provided for construction of site roadways and the stormwater management system.
- (c) Performance bonds shall name the county as beneficiary and shall be guaranteed in the form of a surety bond, cashier's check, or letter of credit from an approved financial institution or insurance carrier. The surety bond,

cashier's check, or letter of credit shall be provided in a form and in an amount to be determined by the county department of engineering and public works. The actual amount shall be based on submission of plans and estimated construction, installation or potential maintenance and/or remediation expenses.

- (d) The director may refuse brokers or financial institutions the right to provide a surety bond, letter of credit, or cashier's check based on past performance, ratings of the financial institution, or other appropriate sources of reference information.
- (e) A performance bond is not required for small lots, as defined by this article, except when deemed necessary by the director based on site conditions and the adverse impact on downstream conditions or other properties.

(Ord. No. O-07-12-101, § 2(§ 4.4), 1-28-08)

Sec. 26-175. - Stormwater system criteria.

(a) *General.*

- (1) The provisions set forth in this section are not applicable to developments that have an approved stormwater plan prior to the date of adoption of this article.
- (2) Where such criteria exist, all stormwater facilities and systems, including those designed and constructed for stormwater quality treatment, and/or channel protection, and/or overbank flood protection, and/or extreme flood protection, shall be designed and constructed in accordance with the criteria, standards, and specifications presented in this article and in the county stormwater management manual, as amended.
- (3) The portions of the new development or redevelopment on which stormwater management facilities and systems are or will be located shall be shown on the plat and recorded with the deed as permanent drainage or water quality easements.
- (4) Stormwater control measures shall not be designed for, or installed within, public rights-of way or on public property without the prior request or approval of the director.
- (5) Banks of all streams, channels, ditches and other earthen stormwater conveyances shall be left in a stabilized condition upon completion of the project. No actively eroding, bare or unstable vertical banks shall remain. Placement of riprap and other hard armor as the sole bank protection method on blue line streams is only allowed when vegetative bank stabilization alternatives are not technologically feasible.
- (6) The director has the authority to require additional stormwater system standards for developments where;
 - a. they have determined, through stormwater master plans, engineering studies, history of existing or documented flooding or erosion problems, or engineering judgment, that additional restrictions are needed to limit adverse impacts of the proposed development ;
 - b. there is potential for discharges that may jeopardize the continued existence of listed or proposed threatened or endangered species or their critical habitat, as defined under the federal Endangered Species Act or other applicable state law or rule.
- (7) All hydrologic and hydraulic computations utilized in the design of stormwater treatment and control facilities must be performed using the calculation methods presented in the county stormwater

management manual, as amended, unless equivalent methods are pre-approved by the director.

- (8) All hydrologic and hydraulic computations utilized in the design of stormwater facilities must be prepared by a registered engineer proficient in the field of hydrology and hydraulics and licensed to practice engineering in the state.
- (9) The director may waive or modify any of the stormwater system criteria provided in this section if adequate stormwater quality treatment, and/or channel protection, and/or overbank flood protection, and/or extreme flood protection is suitably provided by a downstream or shared off-site stormwater facility, or if engineering studies determine that installing the required stormwater management facilities would not be in the best interest of Knox County.

(b) Stormwater quality treatment.

- (1) Stormwater quality treatment may be waived for developments not exempted by 26-171(2)(a) that will add less than 20,000 square feet of new impervious surfaces.
- (2) Stormwater runoff from the development or redevelopment site must be treated prior to discharge from the development or redevelopment site in accordance with the stormwater treatment standards, criteria, and design specifications for stormwater control measures provided in the county stormwater management manual, as amended.
- (3) Stormwater control measures that are not included in the county stormwater management manual, as amended, may be approved for the treatment of stormwater quality on a case-by-case basis provided the following conditions are met:
 - a. The stormwater control measure, as applied to the site, meets the stormwater treatment standard published in the county stormwater management manual, as amended. The director may require the applicant proposing the stormwater control measure to provide an engineering study to support this requirement.
- (4) Additional watershed or site-specific stormwater quality treatment requirements may be established by the director, to satisfy local or state NPDES, TMDL or other regulatory water quality requirements.

(c) *Downstream channel protection.*

- (1) Downstream channel protection may be waived for developments not exempted by 26-171(2)(a) that will add less than 20,000 square feet of new impervious surfaces.
- (2) The channel protection volume (the runoff volume from 75% of 100% (1yr) frequency, 24-hour storm) shall be captured and discharged over no less than a 24-hour period.
- (3) Downstream channel protection can be provided by an alternative approach in lieu of controlling the channel protection volume subject to prior approval by the director. Sufficient hydrologic and hydraulic analysis that shows that the alternative approach will offer adequate channel protection from erosion must be presented in the stormwater management plan.

(d) *Overbank and extreme flood protection.*

- (1) Overbank and extreme flood protection may be waived for developments not exempted by 26-171(2)(a) that will add less than 20,000 square feet of new impervious surfaces.
- (2) Overbank flood protection shall be provided such that the calculated peak discharge of stormwater runoff resulting from the 100% (1yr), 50% (2yr), 10% (10yr), and 4% (25yr) return frequency, 24-hour

duration storm events shall be no greater after development or redevelopment of the site than that which would result from the same 1yr (100), 50% (2yr), 10% (10yr) and 4% (25yr) return frequency, 24-hour duration storms on the same site prior to development or redevelopment.

- (3) Extreme flood protection shall be provided such that the calculated peak discharge of stormwater runoff resulting from a 1% (100yr) frequency, 24-hour duration storm shall be no greater after development or redevelopment of the site than that which would result from a 1% (100yr) frequency, 24-hour duration storm on the same site prior to development or redevelopment.
 - (4) A downstream hydrologic analysis shall be performed to determine if the proposed development or redevelopment causes an increase in peak discharge as compared to pre-development runoff rates for the same site, or has the potential to cause downstream channel and streambank erosion. This analysis must be done for the 100% (1yr), 50% (2yr), 10% (10yr), and 4% (25yr) return frequency, 24-hour duration storm events, at the outfall(s) of the site, and at each downstream tributary junction and each public or major private downstream stormwater conveyance structure to the point(s) in the stormwater system where the area of the portion of the site draining into the system is less than or equal to ten percent of the total drainage area above that point.
 - (5) If peak discharge increases are identified in the ten percent downstream analysis area, as defined in subsection (d)(3), downstream flood protection shall be provided such that calculated peak discharges for the 100% (1yr), 50% (2yr), 10% (10yr), and 4% (25yr) return frequency, 24-hour duration storm events after development or redevelopment are no greater after development or redevelopment of the site than that which would result from the same duration storms in the same downstream analysis area prior to development or redevelopment. These criteria must be applied throughout the ten percent downstream analysis area.
 - (6) Downstream flood protection can be provided by downstream conveyance improvements and/or purchase of flow easements in lieu of peak discharge controls subject to prior approval by the director and satisfaction of the following requirements:
 - a. Sufficient hydrologic and hydraulic analysis must be presented that shows that the alternative approach will offer adequate protection from downstream flooding for all potentially affected downstream property owners.
 - b. The applicant is responsible for submittal and approval of any necessary CLOMR prior to construction, and a LOMR upon completion of construction.
 - c. The applicant is responsible for all state and federal permits that may be applicable to the site including TDEC NPDES and ARAP permits, US Army Corps of Engineers section 404 permits, and TVA section 26A permits.
 - d. Developments and redevelopments that do not cause an increase in peak discharges are not exempt from conformance with water quality treatment and downstream channel protection requirements stated in subsections (b) and (c), respectively.
- (e) *Pipes, channels, and other stormwater components.*
- (1) The design of the stormwater system, excluding stormwater facilities for water treatment, channel protection, and overbank, extreme and downstream flood protection shall be based on the 4% (25yr) frequency storm. This criterion shall be applied to both closed conduit and open channel components.

Minor systems that discharge to sinkholes must be designed to safely carry the 1% (100yr) frequency storm event.

- (2) All drainage systems shall be designed to ensure that no habitable finished floor elevations are flooded for the 0.2% (500yr) frequency storm, and that no structures are located within the vertical projection of the ten-year floodplain line (i.e., located within the ten-year floodplain).
- (3) Pipe material specifications are as follows:
 - a. Reinforced concrete or dual wall high density polyethylene pipe is required for pass through drainage.
 - b. Reinforced concrete pipe is required for locations within stormwater detention or retention ponds and their outlet structures.
 - c. Reinforced concrete pipe is required for location in public rights of way for all streets classified as "minor collectors" and above. For other pipe installations within public rights of way (i.e., local, residential streets), reinforced concrete, dual wall high density polyethylene, or aluminized corrugated metal pipe may be used. Other metal pipe materials, including corrugated metal, are not permitted. At no less than 30 days after the time of installation, visual inspection and deflection testing will be performed on all pipes and certified in accordance with TDOT Standard Specifications for Road and Bridge Construction including Supplemental Specifications - Section 607.09 of the Standard Specifications for Road and Bridge Construction dated March 1, 2006, to ensure structural integrity. All pipes with deflections greater than 5 percent of the nominal pipe diameter, undue misalignment, or poor joint construction shall be replaced by the contractor at his expense.
 - d. It shall be the responsibility of the property owner to provide all necessary design, date, and installation details for construction to ensure failure of cross drains, pipes, culverts or drainage systems will not occur, and prevent flooding or potential property damage on adjacent properties or rights-of-ways.
 - e. Final pipe design specification must be indicated in the stormwater management plan and approved by the director.

(Ord. No. O-07-12-101, § 2(§ 4.5), 1-28-08)

Sec. 26-176. - Special pollution abatement permits.

- (a) A special pollution abatement permit shall be required for the following land uses, which are considered pollutant hotspots:
 - (1) Vehicle, truck or equipment maintenance, fueling, washing or storage areas including but not limited to: automotive dealerships, automotive repair shops, and car wash facilities;
 - (2) Parking lots over 400 spaces or parking areas greater than 120,000 square feet;
 - (3) Recycling and/or salvage yard facilities;
 - (4) Restaurants, grocery stores, and other food service facilities;
 - (5) Commercial facilities with outside animal housing areas including animal shelters, fish hatcheries, kennels, livestock stables, veterinary clinics, or zoos;

- (6) Other producers of pollutants identified by the director by information provided to or collected by him/her or his/her representatives, or reasonably deduced or estimated by him/her or his/her representatives from engineering or scientific study.
- (b) The director has the authority to require a special pollution abatement permit for land uses or activities that are not identified by this article as hotspot land uses, but are deemed by the director to have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in storm water.
- (c) Technical requirements for the permit shall be based on the provisions and guidelines set forth in the county stormwater management manual, as amended.
- (d) Best management practices specified in the special pollution abatement permit must be appropriate for the pollutants targeted at the site and approved by the director for use in the county, as set forth in subsections 26-175(b)(2) and (b)(3).
- (e) A special pollution abatement permit will be valid for a period of five years, at which point it must be renewed. At the time of renewal, any deficiency in the management method must be corrected.

(Ord. No. O-07-12-101, § 2(§ 4.6), 1-28-08)

Sec. 26-177. - NPDES permits.

Persons or entities who hold NPDES general, individual and/or multi-sector permits shall provide either a copy of such permit or the permit number assigned to them by the state department of environment and conservation to the director no later than 60 calendar days after issuance of the permit.

(Ord. No. O-07-12-101, § 2(§ 4.7), 1-28-08)

Secs. 26-178—26-190. - Reserved.

DIVISION 3. - FLOODPLAIN AND SINKHOLE REQUIREMENTS

Sec. 26-190. –Applicability.

This division is applicable to all new developments and redevelopments that require a Land Disturbance permit, small lot grading permit, or building permit.

Sec. 26-191. – General requirements.

- (a) Uses permitted within the flood fringe shall be in accordance with article 3.70 county zoning ordinance. Uses permitted within the floodway shall be in accordance with article 5.70 floodway zone of the county zoning ordinance. The regulations and controls set forth in this section shall be applied to all areas within the 500-year floodplain as designated on the adopted FEMA flood insurance rate maps (FIRM) in the jurisdiction of the county.
- (b) No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this section and other applicable regulations including the county zoning ordinance.

- (c) This section is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, or existing ordinances and regulations. However, where the provisions of this section and another regulation conflict or overlap, that provision which is more restrictive or imposes higher standards or requirements shall prevail. It is required that the director be advised of any such regulatory conflicts upon submittal of the stormwater management plan.

(Ord. No. O-07-12-101, § 2(§ 5.1), 1-28-08)

Sec. 26-192. – Administration.

The director is responsible for administering and implementing the provisions in this section. The director shall maintain a copy of the latest flood insurance study (FIS) and flood insurance rate maps (FIRM) and make these documents available for inspection.

(Ord. No. O-07-12-101, § 2(§ 5.2), 1-28-08)

Sec. 26-193. – Floodplain development requirements.

(a) General requirements.

- (1) A floodplain development permit is required for any development or alteration to the natural drainage system within the 0.2% (500yr) floodplain in the county. The director shall approve said permit based on the requirements herein and the required engineering calculations stipulated by the director. All activities that take place within the 0.2% (500yr) floodplain must conform to the regulations set forth in the county flood damage prevention ordinance.
- (2) Persons responsible for property developments that are determined to be in the 0.2% (500yr) floodplain of the county shall prepare and submit a floodplain development permit application. A stormwater management plan, as provided for in division 2, may also be required. As-built elevations of all structures in the floodplain shall be certified on a FEMA elevation certificate. A registered land surveyor in the State of Tennessee shall certify the as-built elevations of all structures in the floodplain.
- (3) The applicant is responsible for all state and federal permits that may be applicable to the site including state permits for the NPDES and ARAP, US Army Corps of Engineers section 404 permits, and TVA section 26A permits. Proof of permit coverage (if applicable) is a requirement for permit coverage by the county.

(b) Flood fringe fill requirements.

- (1) Construction fill that alters the conveyance and storage capacity of the natural floodplain is prohibited in the flood fringe one-half the linear distance between the floodway line and the 100yr (1%) floodplain line.
- (2) The director will authorize individual exceptions to subsection (1) only where:
 - a. A drainage study prepared by a registered professional engineer in the state shows a rise of less than 0.1 feet in flood elevations as a result of the fill within 0.5 miles (upstream and downstream) of the proposed development; or
 - b. A grading plan prepared for the site shows that alteration in the storage capacity of the natural floodplain is mitigated by removal of an equal, or greater, volume of soil elsewhere in the

floodplain located on the site. If this option is used, a drainage study by a registered professional engineer in the state is required to determine if the cut and fill activities will cause a rise in flood elevations greater than 0.1 feet within 0.5 miles (upstream and downstream) of the proposed development.

- (c) *Structure requirements.* Any new or substantially improved structure proposed to be constructed in the floodplain shall meet the following special conditions:
- (1) The flood protection elevation shall be established as the existing 500 (0.2%) flood elevation or the future 1% (100yr) flood elevation (if available) whichever is higher.
 - (2) The minimum finished floor elevation (FFE) intended for human occupancy shall be equal to or higher than one foot above the flood protection elevation. Those portions of such structures not intended for human occupancy shall be either equal to or higher than the flood protection elevation. All other related facilities thereto such as electrical equipment, water service and sanitary sewer connections shall be either equal to or higher than the flood protection elevation or shall be flood proofed to the flood protection elevation.
 - (3) The director will authorize individual exceptions to subsection (2) only where it can be shown that flood proofing is acceptable from an engineering standpoint.
- (d) *Post construction requirements.* The applicant must provide as-built certification for all new or substantially improved structures constructed in the 0.2% (500yr) floodplain. As-built certification will include, at a minimum, the lowest finished floor elevation, the lowest adjacent grade elevation, and the elevation of any electrical equipment. The Director may request more as-built information as needed. The applicant must also provide finished floor elevation certificates for all habitable structures constructed in the floodplain. A registered land surveyor in the State of Tennessee must certify these elevation certificates.

(Ord. No. 0-07-12-101, § 2(§ 5.3), 1-28-08)

Sec. 26-194. – Flood proofing measures.

- (a) *General flood proofing requirements.* Flood proofing measures such as the following shall be designed consistent with the 0.2% (500yr) flood elevation for the particular area, and flood velocities, forces and other factors associated with the 0.2% (500yr) flood elevation. The director shall require that the applicant submit a plan or document certified by a registered professional engineer or architect in the state that the flood proofing measures are consistent with the flood protection elevation for the particular area. Flood proofing measures include:
- (1) Anchorage to resist flotation and lateral movement.
 - (2) Installation of watertight doors, bulkheads and shutters.
 - (3) Reinforcement of walls to resist water pressures.
 - (4) Use of paints, membranes or mortars to reduce seepage of water through walls.
 - (5) Addition of mass or weight to structures to resist flotation.
 - (6) Installation of pumps to lower water levels in structures.
 - (7) Construction of water supply and waste treatment systems to prevent the entrance of floodwaters.

- (8) Pumping facilities for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.
 - (9) Construction to resist rupture or collapse, caused by water pressure or flotation debris.
 - (10) Cutoff valves on sewer lines or the elimination of gravity flow basement drains.
- (b) *Residential flood proofing.* Flood proofing of new residential structures in the county shall be prohibited.

(Ord. No. O-07-12-101, § 2(§ 5.4), 1-28-08)

Sec. 26-195. – Developments within floodways.

Encroachments within the floodways (floodway encroachments) shall be prohibited except where it can be shown by a registered professional engineer in the state that the proposed development will have "no rise" on the existing base flood elevations and floodway elevations. Floodway boundaries can be modified, with approval of the director, through the letter of map revision (LOMR) process outlined in 44 CFR Part 65.

(Ord. No. O-07-12-101, § 2(§ 5.5), 1-28-08)

Sec. 26-196. – Developments in SFHAs without base flood elevations.

- (a) *Areas requiring flood studies.* Persons responsible for property developments that are determined to be in the SFHAs of the county, but where no base flood data has been provided or where no floodways have been provided (unnumbered A zones), must prepare and submit a floodplain development permit as outlined in section 26-193. If the project is greater than 50 lots or five acres, the applicant shall provide base flood elevation and floodway data in accordance with FEMA contractor standards.
- (b) *Floodway data not available.* If floodway data are not prepared, no encroachments, including fill material or structures shall be located within a distance of the stream-bank equal to five times the width of the stream at the top of bank, twenty feet or the width of the water quality buffer, whichever is greater, unless certification by a registered professional engineer in the state is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (c) *Base flood elevations not available.* If base flood elevations are not available, the director shall provide guidance on minimum FFE requirements.

(Ord. No. O-07-12-101, § 2(§ 5.6), 1-28-08)

Sec. 26-197. – Developments in unstudied areas.

Persons responsible for property developments greater than the lesser of 50 lots or five acres that are outside the SFHA, but adjacent to stream channels that have a contributing drainage area of one square mile or greater, shall provide base flood elevation and floodway data according to FEMA contractor standards. For areas with a drainage area less than one square mile or smaller developments, the provisions in subsections 26-196(b) and (c) shall apply.

(Ord. No. O-07-12-101, § 2(§ 5.7), 1-28-08)

Sec. 26-198. - Requirements for sinkholes.

- (a) Excavating, filling, or obstructing a natural spring, sinkhole, sinkhole throat or other natural outlet to a sinkhole is prohibited, unless expressly approved by the director. Altering a sinkhole to provide overbank and extreme flood retention may be approved if in compliance with Knox County Stormwater Management Manual [Section 8.5]. In the event such activities are requested by a property owner, a report describing in full detail why the prohibited activity(s) should be allowed and the methods, materials, quantities, schedule, and erosion prevention and sediment control measures to be employed. Geotechnical, hydrogeological, and stormwater/flood studies may also be required for activity approval. All requested reports and studies must be prepared by a professional engineer licensed by the State of Tennessee and be accepted and approved by the director prior to approval of a land disturbance permit.
- (b) Property owners are encouraged to limit the placement of impervious surfaces as much as possible on properties that are located near sinkholes. Impervious area reduction techniques and other Better Site Design measures are discussed in detail in the county stormwater management manual, as amended.
- (c) Minimum floor elevations shall be no less than (1) foot above identified overflow elevation.
- (d) The use of explosive is prohibited within the fifty (50) foot building setback area required by Section 3.06.B. of the Knoxville–Knox County Subdivision Regulations when less impactful methods can be used to avoid causing collapse of underground caverns. When explosives cannot be avoided, their use shall adhere to the requirements of the State Fire Marshall’s office.
- (e) No person shall place, or cause to be placed, any substances or objects other than stormwater runoff in any sinkhole or sinkhole watershed, in such a way so as to allow such substances or objects to be washed into a sinkhole throat during storm events.
- (f) A permanent easement shall be established from at least five (5) feet outside the uppermost closed contour and extending through each descending contour therein (i.e., through the entire extent of the sinkhole). For sinkholes that span across development boundaries, the easement shall extend through the descending contours within to the intersecting development boundary. The easement shall be shown on the plat.
- (g) Within the easement:
 - (1) Construction, land disturbing activities, and the use of mechanized equipment are prohibited within the easement except when such disturbances are approved by the director in keeping with Sec. 26-198(a).
 - (2) The area shall be protected from soil erosion and sediment discharges during land disturbing activities to prevent a reduction in storage volume and clogging. The sinkhole shall not be used as a sediment basin or other sediment capture practice.
- (h) Developments that will, after construction, discharge stormwater to one or more sinkholes, including developments located in the following areas, shall comply with the sinkhole drainage and flood requirements established in the county stormwater management manual, as amended. Calculations necessary to satisfy these requirements shall be performed by a professional engineer registered in the State of Tennessee.
 - (1) Ten Mile Creek watershed (Within HUC060102010207)
 - (2) Sinking Creek watershed (Within HUC060102010207)
 - (3) Dead Horse Lake/Dutchtown Road sinkhole area (HUC060102010208 east of I-140)
 - (4) Luttrell Road sinkhole area (Within HUC060102010201)
 - (5) Any area of known or, in the judgement of the director, suspected active karst processes including but

not limited to sinkhole formation or flooding.

- (i) The Director has authority to condition the approval of a permit upon the compliance with additional requirements, including but not limited to sinkhole volume and sinkhole flood elevation analysis, measures to avoid and/or protect the sinkhole throat, detention, conveyance facilities, or other stormwater management solutions required to reduce the adverse impact of the proposed development on other properties or on the subject development.

(Ord. No. O-07-12-101, § 2(§ 5.8), 1-28-08)

Sec. 26-199. - Requirements for manmade depressions.

Manmade depressions shall be considered in the drainage design of the development.

(Ord. No. O-07-12-101, § 2(§ 5.8), 1-28-08)

Sec. 26-200. - Degree of flood protection.

The degree of flood protection intended to be provided by this article is considered reasonable for regulatory purposes, and is based on engineering and scientific methods of study. Larger floods may occur on occasions, or the flood height may be increased by man-made or natural causes, such as bridge openings restricted by debris. This article does not imply that areas outside the 0.2% (500yr) floodplain or land uses permitted within such areas will always be totally free from flooding or flood damages. Nor shall this article create a liability on the part of, or a cause of action against the county or any officer or employee thereof for any flood damages that may result from implementation of this article.

(Ord. No. O-07-12-101, § 2(§ 5.9), 1-28-08)

Secs. 26-201—26-220. - Reserved.

DIVISION 4. - WATER QUALITY BUFFERS

Sec. 26-221. - General requirements for proposed developments.

- (a) Applicability and general requirement. Owners of proposed developments for which a stormwater management plan is required. They shall establish water quality buffers as set forth herein on streams, rivers, naturally occurring wetlands, ponds and lakes that are located within the legal boundaries of said developments.
- (b) Water quality buffers shall meet the minimum standards established in the county stormwater management manual, as amended. Buffers that do not meet the minimum standards prior to the commencement of land disturbing activities shall be restored during said activities to achieve the standards. Vegetation restoration requirements are provided in the county stormwater management manual. Restoration designs shall be shown on the stormwater management plan.
- (c) Buffers shall be protected from disturbance, soil erosion, and discharges of sediment and other construction related wastes during land disturbing and construction activities. All areas of the water quality buffer shall be left in a stabilized condition upon completion of land disturbing and construction activities. No actively eroding, bare or unstable areas shall remain.

- (d) Permanent markers, in the form of signage approved or provided by the director, may be required to identify the boundary of a water quality buffer. Such markers shall be installed prior to recording of the final plat.
- (e) Water quality buffers shall be placed into a permanent easement that is recorded with the plat. The easement shall be clearly identified and labeled as "Water Quality Buffer" on the plat, and all land development, construction, and as-built plans. The plat shall also include the note "No introduction of impervious surfaces in the water quality buffer."

(Ord. No. O-07-12-101, § 2(§ 6.1), 1-28-08)

Sec. 26-222. - General requirements for water quality buffers.

- (a) Applicability: This section applies to owners of water quality buffers after land development is complete.
- (b) Water quality buffers shall be protected and maintained in keeping with the standards and requirements set forth in the stormwater management manual, as amended. Buffers that were platted prior to the date of adoption of this ordinance may continue to be maintained in keeping with County requirements in place at the time of platting.
- (c) Water quality buffers shall be protected from soil erosion and discharges or dumping of sediment or other pollutants into the buffer.
- (d) Replacement of a buffer's permanent boundary markers may be required for markers that have been removed or destroyed.
- (e) Prohibited Uses. The following land uses and activities are prohibited in the water quality buffer:
 - (1) The placement of impervious surfaces;
 - (2) Concentrated animal lots, kennels, dog parks, and similar uses;
 - (3) The use, cleaning, maintenance, storage, or parking of motorized vehicles or equipment;
 - (4) Storage of liquid, solid, or gaseous materials of any kind;
 - (5) Dumping, handling, or storage of any waste material, including landscaping debris;
 - (6) Any other use to have potential to discharge pollutants into the water quality buffer

(f) (Ord. No. O-07-12-101, § 2(§ 6.6), 1-28-08)

Secs. 26-227—26-250. - Reserved.

DIVISION 5. - EROSION PREVENTION AND SEDIMENT CONTROL

Sec. 26-251. - Off-site sedimentation prevention.

In keeping with section, adequate erosion prevention and sediment control measures shall be employed consistent with guidance materials referenced herein for all land disturbing activities, including those exempted in section 26-171 to minimize erosion and prevent off-site sedimentation. Land disturbing or construction

activities that do not employ erosion prevention and sediment controls and cause off-site sedimentation or sediment discharges to waters of the state or onto adjacent properties may be subject to enforcement.

(Ord. No. O-07-12-101, § 2(§ 7.1), 1-28-08)

Sec. 26-252. - General requirements.

- (a) Operators shall implement appropriate erosion prevention and sediment control best management practices.
- (b) The design, installation, maintenance and inspection of erosion prevention and sediment control design standards and best management practices shall be performed in accordance with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities, the TDEC erosion and sediment control handbook, and the county stormwater management manual, as amended. Where the provisions of this section, the county stormwater management manual, as amended, or; another regulation conflict or overlap, that regulation which is more restrictive or imposes higher standards or requirements shall prevail.
- (c) Additional requirements for discharges into impaired or exceptional Tennessee waters that are defined in the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities shall be implemented for all priority construction activities located in the county, as defined by this article.
- (d) The director may require more stringent standards or best management practices than those established by the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities for priority construction activities or where there is potential for discharges that may jeopardize the continued existence of listed or proposed threatened or endangered species or their critical habitat, as defined under the federal Endangered Species Act or other applicable state law or rule.
- (e) Discharges from sediment basins and traps must be through a pipe or a conveyance lined with rip-rap or other stabilized spillway so that the discharge does not cause erosion.
- (f) Sediment laden water to be pumped from excavation and work areas must be held in settling basins or filtered prior to its discharge into surface waters. Water must be discharged onto a stabilized outlet point so that the discharge does not cause erosion and sedimentation.
- (g) For installation of any waste disposal systems on site, or sanitary sewer or septic system, the plan shall provide for the necessary sediment controls. Owners or operators must also comply with applicable state and/or local waste disposal, sanitary sewer or septic system regulations for such systems, to the extent that these are located within the permitted area.

- (h) Construction site operators shall control other construction related wastes, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality in conformance with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities.
- (i) Construction materials generated and buried onsite shall meet section 4.8 of the county zoning ordinance.
- (j) All discharges from a site shall leave the property at non-erosive velocities and volumes.
- (k) The portion of the performance bond pertaining to erosion prevention and sediment control shall be released only after final stabilization has been achieved in conformance with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities.
- (l) The director shall have the authority to impose more stringent criteria to achieve final stabilization than required by the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities for release of the erosion prevention and sediment control portion of the performance bond if site is a priority construction activity, has an elevated potential for erosion or off-site damages, or has caused past damages off-site due to sediment discharges.
- (m) Riparian buffer zones shall be preserved in conformance with the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities.

(Ord. No. O-07-12-101, § 2(§ 7.2), 1-28-08; Ord. No. O-12-11-102, § 5, 12-17-12)

Secs. 26-253—26-270. - Reserved.

- (a) DIVISION 6. - AS-BUILT CERTIFICATIONS; MONITORING AND INSPECTIONS

Sec. 26-271. - As-built certifications.

- (a) Prior to the release of a bond, an as-built certification shall be provided to the director, showing that all drainage structures or facilities, facility volumes, size, slopes, locations, elevations, and hydraulic structures have been field verified, represent the as-built field conditions, and comply with the approved stormwater management plan(s). Features such as roadway lines, grades, cross slopes, locations, contours, and elevations shall be provided to verify approved plans as required by the director. Other contents of the as-built certification must be provided, in accordance with the policies stated in the county stormwater management manual, as amended.

- (b) As-built certifications shall include sufficient design information to show that stormwater facilities will operate as This shall include the existing (or before site development) peak flow discharges, the after site development peak discharges, and/or volumes of stormwater runoff based on the proposed site development, as well as all necessary computations used to determine the reduced peak flow rates for the design storms.
- (c) The as-built certification must be stamped by the appropriate design professional required to stamp the original stormwater management plan, as stated in section 26-171, and/or a registered land surveyor licensed to practice in the state.

(Ord. No. O-07-12-101, § 2(§ 8), 1-28-08)

Sec. 26-272. - Monitoring and inspections—Right-of-entry.

- (a) The director may enter upon any property which discharges or contributes, or is believed to discharge or contribute, to stormwater runoff or the stormwater system, stream(s), natural drainageway(s) or via any other private or public stormwater management system during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this article.
- (b) Failure of a property owner to allow such entry onto a property for the purposes set forth in subsection (a) shall be cause for the issuance of a stop work order, withholding of a certificate of occupancy, and/or civil penalties and/or damage assessments in accordance with section 26-157.

(Ord. No. O-07-12-101, § 2(§ 9.1), 1-28-08)

Sec. 26-273. - Same—During grading or construction.

During grading or construction, site inspections shall be performed in accordance with following requirements:

- (1) The owner or operator shall conduct site inspections in accordance with the requirements stated in the state general NPDES permit for discharges of stormwater associated with construction activities. The director has the authority to impose more stringent inspection requirements as necessary for purposes of water quality protection and public safety.
- (2) Site inspection documentation shall be maintained on-site during normal working hours by the owner or operator or designee and shall be made available for review by the director immediately upon request.
- (3) The following areas and items must be inspected as set forth in subsection (1):
 - a. All disturbed areas that are not stabilized;
 - b. Any areas used for storage of materials that are exposed to precipitation;
 - c. Borrow or waste areas associated with the construction activity;

- d. Temporary and permanent stormwater management facilities;
- e. Locations where vehicles enter and exit the site;
- f. Stormwater outfall locations;
- g. Erosion prevention and sediment control measures; and
- h. Structural and non-structural stormwater management facilities and stormwater control measures.

(Ord. No. O-07-12-101, § 2(§ 9.2), 1-28-08)

Sec. 26-274. - Same—After construction.

Once the site has been stabilized and construction has ceased, routine inspections for the stormwater management facilities and stormwater control measures are required, based on the guidance provided in the operations and maintenance plan and "covenants for permanent maintenance of stormwater facilities and stormwater control measures" for the property, as set forth in division 7. Routine inspections are the responsibility of the property owner, or the owner(s) of the stormwater management facility(s) and stormwater control measure(s).

(Ord. No. O-07-12-101, § 2(§ 9.3), 1-28-08)

Secs. 26-275—26-290. - Reserved.

DIVISION 7. - MAINTENANCE REQUIREMENTS

Sec. 26-291. - General.

- (a) The director may order corrective actions to erosion prevention and sediment control measures, stormwater management facilities, and/or the stormwater system as are necessary to properly maintain the stormwater systems within the county for the purposes of flood prevention, channel protection, water quality treatment and/or public safety. If the property owner(s) fails to perform corrective actions ordered by the director, the director shall have the authority to order corrective action, to be performed by the county or others. In such cases where a performance bond exists, the county shall utilize the bond to perform the corrective actions. In such cases where a performance bond does not exist, the property owner shall reimburse the county for double its direct and related expenses. If the property owner fails to reimburse the county, the county is authorized to file a lien for said costs against the property and to enforce the lien by judicial foreclosure proceedings.
- (b) This article does not authorize access to private property by the property owner or site operator. Arrangements concerning removal of sediment on adjoining property must be settled by the owner or operator with the adjoining landowner.

(Ord. No. O-07-12-101, § 2(§ 10.1), 1-28-08)

Sec. 26-292. - During grading or construction.

- (a) The owner or operator shall at all times properly operate and maintain all erosion prevention and sediment control measures, stormwater management facilities, and related appurtenances which are installed or used by the property owner to achieve compliance with this article.
- (b) The owner or operator shall maintain erosion prevention and sediment control and construction site measures in the manner specified by the state of general NPDES permit for discharges of stormwater associated with construction activities and the TDEC erosion and sediment control handbook, as amended, by qualified personnel that are provided by the owner or operator of the land disturbing activity. Other technical guidance for site environmental controls are provided or referenced in the stormwater management manual, as amended.
- (c) If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize off-site impacts. Fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets. Owners and operators shall not initiate remediation/restoration of a stream without consulting TDEC first, and such activities shall be performed in accordance with all county, state, and federal laws and regulations.

(Ord. No. O-07-12-101, § 2(§ 10.2), 1-28-08)

Sec. 26-293. - After construction.

- (a) The owner(s) of stormwater management facilities and/or stormwater control measures shall at all times properly operate and maintain all facilities and systems of stormwater treatment and control (and related appurtenances), and all stormwater control measures in such a manner as to maintain the full function of the facilities or stormwater control measures which are installed or used by the property owner(s) to achieve compliance with this article. Maintenance of privately-owned stormwater management facilities shall be performed at the sole cost and expense of the owner(s) of such facilities.
- (b) Prior to release of the performance bond, the property owner shall provide the county with an accurate as-built certification, a final operations and maintenance plan, which shall include an executed legal document entitled "covenants for permanent maintenance of stormwater facilities and stormwater control measures". The property owner shall record the operations and maintenance plan in the office of the county register of

deeds. The location of the stormwater facility(s) and stormwater control measures, the recorded location of the covenants document, and inspection and maintenance guidance that outlines the property owner's responsibility shall be shown on a plat that is also recorded in the office of the county register of deeds.

- (c) Developments and redevelopments that have received approval of a stormwater management plan after the effective date of this article shall maintain stormwater management facilities and stormwater control measures in accordance with the maintenance guidance provided in the operations and maintenance plan and the covenants for permanent maintenance of stormwater facilities and stormwater control measures.
- (d) The operations and maintenance plan shall specify the minimum inspection and maintenance requirements to be performed at necessary intervals by the property owner(s). The operations and maintenance plan shall be prepared in accordance with the requirements stated in the county stormwater management manual, as amended.
- (e) In order to provide access to stormwater and/or water quality facilities by personnel, vehicles and equipment, the property owner(s) shall provide an unobstructed, traversable 12-foot wide access within a minimum 20-foot wide easement from a public street, driveway, or joint permanent easement in strict accord with the stormwater management plan and any conditions required by the director.
- (f) The covenants for permanent maintenance of stormwater facilities and stormwater control measures shall grant the county permission to enter the property to inspect any stormwater facility or stormwater control measures for proper functioning, maintenance and protection from disturbances (if applicable).
- (g) The removal of sediment and/or other debris from stormwater management facilities and stormwater control measures shall be performed in accordance with all county, state, and federal laws. Requirements for sediment removal and disposal are presented in the county stormwater management manual, as amended. The director may stipulate additional requirements if deemed necessary for public safety.

(Ord. No. O-07-12-101, § 2(§ 10.3), 1-28-08)

Secs. 26-294—26-310. - Reserved.

DIVISION 8. - PERMIT CONTROLS AND STORMWATER SYSTEM INTEGRITY; NON-STORMWATER DISCHARGES

Sec. 26-311. - Permit controls and stormwater system integrity.

- (a) Any alteration, improvement, or disturbance to existing drainage channels, pipes, or other stormwater systems owned or operated by Knox County shall be prohibited without authorization from the director. This does not include alterations that must be made in order to maintain the intended performance of the drainage system.

- (b) Other state and/or federal permits that may be necessary for construction in and around streams and/or wetlands shall be approved through the appropriate lead regulatory agency prior to submittal of a stormwater management plan to the county.
- (c) Any non-permitted drainage system, construction or fill located within a floodplain shall, upon written notice from the director, be removed at the property owner's expense.

(Ord. No. O-07-12-101, § 2(§ 11), 1-28-08)

Sec. 26-312. - Non-stormwater discharges—Illicit discharges.

Except as hereinafter provided, all non-stormwater discharges into the municipal separate storm sewer system of the county are prohibited and are declared to be unlawful.

(Ord. No. O-07-12-101, § 2(§ 12.1), 1-28-08)

Sec. 26-313. - Same—Prohibitions.

No person shall:

- (1) Connect, or allow to be connected, any sanitary sewer to the stormwater system.
- (2) Cause or allow an illicit discharge to the municipal separate storm sewer system, or any component thereof, or onto driveways, sidewalks, parking lots, sinkholes, county property, or other areas draining to the municipal separate storm sewer system. Illicit discharges include, but are not limited to:
 - a. Sewage discharges or overflows, including sanitary sewer overflows (SSOs);
 - b. Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;
 - c. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.;
 - d. Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;
 - e. Discharges of wash water from the cleaning or hosing of impervious surfaces in industrial and commercial areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards, and outdoor eating or drinking areas, etc.;
 - f. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

- g. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
- h. Discharges of sediment, or construction-related wastes, etc.;
- i. Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash
- j. Disposal of materials such as litter, trash, debris, and yard waste

(Ord. No. O-07-12-101, § 2(§ 12.2), 1-28-08)

Sec. 26-314. - Same—Allowable discharges.

- (a) The following discharges shall not be in violation of this article:
 - (1) Water line flushing;
 - (2) Landscape irrigation;
 - (3) Diverted stream flows or rising groundwater;
 - (4) Infiltration of uncontaminated groundwater [as defined at 40 CFR 35.2005(20)] to separate storm drains;
 - (5) Pumping of uncontaminated groundwater;
 - (6) Discharges from potable water sources, foundation drains, uncontaminated air conditioning condensation, irrigation waters, springs, water from crawl space pumps, or footing drains;
 - (7) Lawn watering;
 - (8) Individual non-commercial car washing on residential properties; or car washing of less than two consecutive days in duration for a charity, non-profit fund raising, or similar non-commercial purpose;
 - (9) Flows from riparian habitats and wetlands;
 - (10) Dechlorinated swimming pool discharges;
 - (11) Incidental street wash water from street cleaning equipment designed for cleaning paved surfaces and limiting waste discharges;
 - (12) Street deicing for public safety;
 - (13) Any activity authorized by a valid NPDES permit; and
 - (14) Any flows resulting from firefighting.
 - (15) Waste temporarily staged for scheduled collection
- (b) Discharge due to water line flushing through a direct connection to the waters of the state is prohibited. Persons responsible for water line flushing activities are required to de-chlorinate discharges before such

discharges come in contact with waters of the state.

- (c) If the director finds that any activity, including but not limited to any of the activities listed in this section, are found to cause or may cause sewage, industrial wastes, other wastes, or other non-stormwater discharges to be discharged into the stormwater system, the director shall so notify the person performing such activities, and shall order that such activities be stopped or conducted in such a manner as to avoid the discharge of sewage, industrial wastes or other wastes into the stormwater system. The director may require submittal of a stormwater pollution prevention plan if the activity, or actions taken to cease the activity, have the potential to cause further releases of pollution or non-stormwater discharges to the stormwater system.

(Ord. No. O-07-12-101, § 2(§ 12.3), 1-28-08)

Sec. 26-315. - Same—Notification and monitoring requirements.

- (a) As soon as any person has knowledge of any illicit spills or discharges to the stormwater system in violation of this article, such person shall immediately notify the department of engineering and public works of this discharge. If such person is directly or indirectly responsible for such discharge or responsible for the operation of the system or business, then such person shall also take immediate action to ensure the containment and cleanup of such discharge and shall confirm such notification with a written report to the director within three calendar days. At a minimum, the written report for any illicit discharge shall include:
 - (1) Date and time of the discharge;
 - (2) Location of the discharge;
 - (3) Material or substance discharged;
 - (4) Duration and rate of flow;
 - (5) Total volume discharged;
 - (6) Total volume recovered;
 - (7) Cause or reason for the discharge;
 - (8) Remediation and containment action taken;
 - (9) Material Safety Data Sheets (MSDS) for the discharged material;
 - (10) Action taken to prevent further discharges;
 - (11) Description of any environmental impact.
- (b) The director may require any person engaging in any activity or owning any property, building or facility (including but not limited to a site of industrial activity) to undertake such reasonable monitoring of any discharge(s) to the stormwater system operated by the county and to furnish periodic detailed reports of such

discharges.

(Ord. No. O-07-12-101, § 2(§ 12.4), 1-28-08)

Sec. 26-316. - Same—Illegal dumping.

It shall be illegal for any person to intentionally dump liquids or solids that are considered priority pollutants by the U.S. Environmental Protection Agency (EPA) on the ground where there is potential exposure to rain or stormwater and potential for the pollutant to reach the municipal separate storm sewer system of the county.

(Ord. No. O-07-12-101, § 2(§ 12.5), 1-28-08)