ORDINANCE 24 - 02

AN ORDINANCE TO CREATE AND ADOPT A STORMWATER ORDIANCE FOR PURPOSES OF COMPLIANCE WITH STATE-MANDATED STORMWATER MANAGEMENT FOR THE CITY OF CROSS PLAINS, TENNESSEE.

WHEREAS, Tennessee Code Annotated, Section 68-221-1101 provides for municipalities to facilitate compliance with the Water Quality Act of 1977, section 405 of the Water Quality Act of 1987, and section 402(p) of the Clean Water Quality of Act of 1977 regulating stormwater discharges to protect water quality); and

WHEREAS, the City of Cross Plains has determined that it is in the best interest of its citizens and the lands within its corporate boundaries as well as surrounding lands to regulate discharge of stormwater to establish a system of drainage facilities and to fix and require a payment of fees for the privilege of discharging stormwater and in order to construct and operate a system of drainage facilities for stormwater management and flood control; and

WHEREAS, it is in the best interest of the City of Cross Plains to be empowered with a Stormwater Ordinance which provides for those enumerated powers in Tennessee Code Annotated, section 68-221-1105.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS FOR THE CITY OF CROSS PLAINS, TENNESSEE TO CREATE TITLE 21, CHAPTER 1 OF THE CITY OF CROSS PLAINS MUNICIPAL CODE ENTITLED STORMWATER ORDINACE AND THE SAME IS ADOPTED AS FOLLOWS.

STORMWATER ORDINANCE

Article

1	General Provisions
2	Definitions
3	Land Disturbance Permit
4	Stormwater Management Standards
5	Erosion Prevention and Sediment Control Performance Standards
6	Post Construction
7	Illicit Discharges
8	Floodway/Floodplain
9	Enforcement
10	Penalties
11	Appeals

Appendix A

Article 1 General Provisions

(1) Purpose

It is the purpose of this Ordinance to:

(a) Protect, maintain, and enhance the environment of the City of Cross Plains (City), as well as the overall well-being, safety, and public health of its residents. This entails regulating the release of pollutants into the City's stormwater system and enhancing the quality of the waters receiving these stormwater outflows. These receiving waters encompass various bodies such as lakes, rivers, streams, ponds, wetlands, and the groundwater of the City;

(b) Enable the City to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges;

(c) Allow the City to exercise the powers granted in Tennessee Code Annotated § 68-221- 1105, which provides that, among other powers cities have with respect to stormwater facilities, is the power by ordinance or resolution to:

(i) Exercise general regulation over the planning, location, construction, operation and maintenance of stormwater facilities in the City, whether or not owned and operated by the City;

(ii) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;

(iii) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;

(iv) Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;
(v) Issue permits for stormwater discharges, or the construction, alteration, extension, or repair of stormwater facilities;
(vi) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
(vii) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
(viii) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(2) Authority

The Administering entity shall administer all provisions of this chapter unless noted otherwise.

(3) Jurisdiction

This Ordinance shall govern all properties within the corporate limits for the City of Cross Plains, Tennessee.

(4) Right of entry

Designated City staff or representatives shall have right-of-entry, at reasonable times, on or upon the property of any person subject to this chapter and access to any permit/document issued hereunder. City staff shall be provided ready access to all parts of the premises for purposes of inspection, monitoring, sampling, inventory, records examination and copying, and performance of any other duties necessary to determine compliance with this chapter.

Designated City staff shall have the right to set up on the property of any person subject to this chapter such devices, as are necessary, to conduct sampling and/or flow measurements of the property's stormwater operations or discharges.

The City has the right to determine and impose inspection schedules necessary to enforce the provisions of this chapter.

(5) Administering entity

Designated City staff or representatives shall administer the provisions of this chapter.

(6) Conflicting standards

If any provisions of this chapter 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.

(7) **Stormwater management ordinance**

The City has adopted this Stormwater Ordinance with the intended purpose of safeguarding property and public welfare by regulating stormwater drainage and requiring temporary and permanent provisions for its control. It should be used as a planning and engineering implement to facilitate the necessary control of stormwater.

Article 2 Definitions

For the purpose of this chapter, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

"As built plans" are drawings depicting the elevation, location, and material of stormwater facilities as they were actually constructed.

"Aquatic Resource Alteration Permit (ARAP)" physical alterations to properties of the waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). ARAP means a permit issued pursuant to T.C.A. § 69-3-108 of the Act, which authorizes the alteration.

"Best Management Practices" or "BMPs" are the physical, structural, and/or managerial practices that, when used alone or in combination, prevent or reduce pollution of water, that have been approved by the City of Cross Plains, and that have been incorporated by reference into the Stormwater Ordinance as if fully set out therein.

"Borrow Pit" is an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity.

"Buffer Zone or Water Quality Riparian Buffer" is a permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

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

"Clearing" refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities. Clearing, grading, and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams, 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. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).

"Civil penalty" Administrative Penalties - under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

"Commencement of construction" the initial disturbance of soils associated with clearing, grading, excavating or other construction activities.

"Common plan of development or sale" is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

"Construction" means the erection, building, acquisition, alteration, reconstruction, improvement or extension of stormwater facilities; preliminary planning to determine the economic and engineering feasibility of stormwater facilities; the engineering, architectural, legal, fiscal and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary in the construction of stormwater facilities; and the inspection and supervision of the construction of stormwater facilities.

"Costs of construction" means costs reasonably incurred in connection with providing capital improvements related to stormwater facilities or any portion thereof, including but not limited to the costs of (1) acquisition of all property, real or personal, and all interests in connection therewith including all rights-of-way and easements therefor, (2) physical construction, installation and testing, including the costs of labor, services, materials, supplies and utility services used in connection therewith, (3) architectural, engineering, legal and other professional services, (4) insurance premiums taken out and maintained during construction, to the extent not paid for by a contractor, for construction and installation, (5) any taxes or other charges which become due during construction, (6) expenses incurred by the City of Cross Plains or on its behalf with its approval in seeking to enforce any remedy against any contractor or sub-contractor in respect of any default under a contract relating to construction, (7) principal of and interest of any bonds, and (8) miscellaneous expenses incidental thereto.

"Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

"Design storm event" means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility. The estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee. Other data sources may be acceptable with prior written approval by TDEC Water Resources Division. Rainfall hydrograph used shall have a Type-II distribution.

"Developed property" means real property that has been altered from its natural state by the creation or addition of buildings, structures, pavement or other impervious surfaces, or by the alteration of the property that results in a meaningful change in the hydrology of the property during and following rainfall events.

"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 municipal separate storm sewer system.

"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.

"Exceptional Tennessee Waters" are surface waters designated by the Tennessee Department of Environment and Conservation as having the characteristics set forth at Tennessee Rules, Chapter 0400-40-03-.06(4). Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.

"Fiscal year" means July 1 of a calendar year to June 30 of the next calendar year, both inclusive.

"Illicit connections" means illegal and/or unauthorized connections to the municipal stormwater system whether or not such connections result in discharges into that system.

"Illicit discharge" means any discharge to the municipal storm sewer system that is not composed entirely of stormwater and not specifically exempted under Article 7, Section 3.

"Impervious surface" is a surface that is compacted or covered with material that is resistant to infiltration by water, including, but not limited to, most conventionally surfaced streets, roofs, sidewalks, patios, driveways, parking lots, and any other oiled, graveled, graded, compacted surface, or any other surface which impedes the natural infiltration of surface water.

"Impervious surface area" is the number of square feet of horizontal surface covered by buildings, and other impervious surfaces. All building measurements shall be made between exterior limits of the structure, foundations, columns, or other means of support or enclosure.

"Injection well" is a natural surface depression that has been altered in order to direct fluids into the hole opening. Injection Wells are regulated under TDEC's Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone).

"Land disturbance" is a change in the existing soil cover (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, and excavation.

"Maintenance" means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.

"Municipal ownership" see "public ownership".

"National Pollutant Discharge Elimination System permit" or "NPDES permit" means a permit issued pursuant to 33 U.S.C. 1342.

"Off-site facility" means a structural BMP located outside the subject property boundary described in the development plan.

"On-site facility" means a structural BMP located within the subject property boundary described in the development plan.

"Operator" in the context of stormwater associated with construction activity, means any person associated with a construction project that meets either of the following two criteria:

(a) This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically considered the owner or developer of the project or a portion of the project, and is considered the primary permittee; or
(b) This person has day-to-day operational control of those activities at a project which is necessary to ensure compliance with a Stormwater Pollution Prevention Plan (SWPPP) for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee and is considered a secondary permittee. It is anticipated at different phases of a construction project, different types of parties may satisfy the definition of "operator".

"Park land" means all real property owned by federal, state and/or local governments that have been designated by such governmental entity for use as a public park.

"Person" means any and all persons, natural or artificial, including any individual, firm or association, and any municipal or private corporation organized or existing under the laws of this or any other state or country.

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

"Property" means real property.

"Property owner" is the property owner of record as listed in the City's and/or county's tax assessment roll. A property owner includes any individual, corporation, firm, partnership, or group of individuals acting as a unit, and any trustee, receiver, or personal representative.

"Private ownership" is all facilities privately owned and maintained.

"Public ownership" or "Municipal ownership" is all facilities having been dedicated to and accepted by the City of Cross Plains, Robertson County, State of TN, or Federal Government.

"Rainfall event" is defined as any occurrence of rain preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.

"Redevelopment" means building or constructing new infrastructure in an area that has previously been built or constructed on, and the old infrastructure is to be replaced with new.

"Runoff" means that portion of the precipitation on a drainage area that is discharged from the area.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is not absorbed by the surface to the total amount of water that falls during a rainstorm.

"Sediment" means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

"Sediment basin" A temporary basin consisting of an embankment constructed across a wet weather conveyance, an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, , impoundment, permanent pool, primary spillway,

secondary or emergency spillway and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., waters with unavailable parameters, Exceptional TN Waters, or waters with available parameters).

"Sinkhole" means a cavity in the ground providing a route for surface water to disappear underground.

"Stabilization" means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.

"Stormwater" means precipitation runoff, snow melt runoff, surface runoff, and street wash waters related to street cleaning or maintenance, infiltration, and drainage.

"Stormwater facilities" or "Stormwater flood control facilities" means all natural and manmade conveyances and structures for which the partial or full purpose or use is to convey surface water within the jurisdictional boundaries of the city. This includes all natural conveyances for which the city has assumed a level of maintenance responsibility, to which the city has made improvements, against the flooding of which the city must make provisions to protect public and private property, or for which the city is accountable under federal or state regulations for protecting the water quality within its jurisdictional boundaries.

"Stormwater management" means the planning, acquisition, design, construction, regulation, improvement, repair, rehabilitation, maintenance, and operation of property, facilities and programs relating to water, flood plains, flood control, grading, erosion, conservation, riparian buffers and sediment control.

"Stormwater management plan" means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.

"Stormwater runoff" means flow on the surface of the ground, resulting from precipitation.

"Stormwater system" or "System" means all stormwater facilities, stormwater drainage systems and flood protection systems of the City and all improvements thereto that operate to, among other things, control discharges and flows necessitated by rainfall events; and incorporate methods to collect, convey, store, absorb, inhibit, treat, prevent or reduce flooding, over drainage, environmental degradation and water pollution or otherwise affect the quality and quantity of discharge from such system.

"Stream" means surface water that is not a wet weather conveyance. [Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(20)]

"Structural BMPs" means devices that are constructed to provide control of stormwater runoff.

"Surety" is a Letter of Credit or other acceptable form of assurance for the completion of improvements, as deemed acceptable by the City Attorney.

"Surface waters" are waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, ponds, wetlands, marshes and sinkholes.

"Stormwater Pollution Prevention Plan (SWPPP)" is a written site-specific plan required by the Tennessee Construction General Permit (CGP) that includes a narrative pollution prevention plan and graphical erosion and sediment control plan. In its basic form, the plan contains a site map, a description of construction activities that could introduce pollutants to stormwater runoff, a description of measures or practices to control these pollutants, and erosion and sediment control plans and specifications. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook (latest edition).

"Take of an endangered species" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.

"Tennessee Erosion and Sediment Control (TDESC) Handbook" is a guidance issued by the Division of Water Resources for the purpose of developing Stormwater Pollution Prevention Plans and Erosion and Sediment Control Plans required by the Construction General Permit CGP.

"Temporary stabilization" is achieved when vegetation or non-erodible surface has been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease.

"Treatment chemicals" are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are **polyacrylamide-chitosan (PAM**–CS).

"Turbidity" is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.

"Undeveloped property" means property that is in its natural state and has not been developed; does not have impervious surfaces on it.

"User(s)" means for developed non-exempt property the person listed as receiving utility service or, if there is no such service or person listed, the property owner. It may also mean the property owner of the property with multiple utility services accounts on such property.

"Vacant" is a property on which there is no structure for which a certificate of occupancy has been issued.

"Watercourse" means a manmade or natural hydrologic feature with a defined linear channel which discretely conveys flowing water, as opposed to sheet-flow. [Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(24)]

"Waters with unavailable parameters" means any segment of surface waters that has been identified by the TDEC as failing to support one or more classified uses. Unavailable parameters exist where water quality is at, or fails to meet, the levels specified in water quality criteria in Rule 0400-40-03-.03, even if caused by natural conditions. In the case of a criterion that is a single response variable or is derived from measurement of multiple response variables, the unavailable parameters shall be the agents causing water quality to be at or failing to meet the levels specified in criteria. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (https://tdeconline.tn.gov/dwr/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html.

"Water quality riparian buffer" means a permanent strip of natural perennial vegetation adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing the risk of any potential sediments, nutrients, or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

"Waters of the State" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership that do not combine or effect a junction with natural surface or underground waters. [T. C. A. § 69-3-103]

"Wetland(s)" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

"Water quality treatment volume (WQTV)" is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the 1-year 24-hour design storm. The WQTV is further determined by the type of treatment provided.

"Wet weather conveyances" are man-made or natural watercourses, including natural watercourses that have been modified by channelization: that flow only in direct response to precipitation runoff in their immediate locality; whose channels are at all times above the groundwater table; that are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple

populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. [Rules and Regulations of the State of Tennessee, Chapter 0400-40-3-.04(3)]

Article 3 Land Disturbance Permit

(1) General

The Land Disturbance Permit process is designed to track all applicable land disturbance activities and ensure they are monitored for compliant erosion prevention and sediment controls, and the absence of illicit discharges leaving the site, and compliance with any applicable TDEC Construction General or Individual Permits, TDEC Aquatic Resources Alteration Permits (ARAP), and any other relevant permits. Tracking of these activities allows inspection, and in cases of non-compliance, enforcement actions to be taken.

(2) Applicability

A Land Disturbance Permit shall be required for any land disturbing activity meeting any of the following requirements:

(a) Land disturbance of greater than 1 acre.
(b) Change in elevation of property greater than 1 foot or more.
(c) Land disturbance of less than an acre, if such activities are part of a larger common plan of development, even though multiple, that is a part of separate and distinct land development activities that may take place at different times on different schedules.
(d) Any land disturbance that requires coverage under a TDEC Construction General Permit.
(e) Any disturbance that requires coverage under a TDEC ARAP.
(f) Any disturbance requiring a TDEC Underground Injection Well Permit.
(g) Any disturbance that the City determines that discharges from the site are causing, contributing to, or are likely to contribute to a violation of a state water quality standard.

(3) Exemptions

The following land disturbance activities are exempt from the requirements of obtaining a Land Disturbance Permit as long as appropriate state and federal permits are obtained:

(a) Surface mining as is defined in Tennessee Code Annotated Section 59-8-202.
(b) Such minor land disturbing activities as home gardens and individual home landscaping, home repairs, home additions or modifications, home maintenance work, and other related activities that result in no soil erosion leaving the site.
(c) Agricultural practices involving the establishment, cultivation or harvesting of products in the field or orchard, preparing and planting of pastureland, farm ponds, dairy operations, livestock and poultry management practices, and the construction of farm buildings.

(d) Any project carried out under the technical supervision of the NRCS, TDOT, TDEC, or ACOE.

(e) Installation, maintenance, and repair of any underground public utility lines when such activity occurs on an existing hard surface road, street, or sidewalk which is hard surfaced and such street, curb, gutter or sidewalk construction has been approved.

(f) Construction, repair or rebuilding of tracks or other related facilities of a railroad company.

(g) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.

These activities may be undertaken without a Land Disturbance Permit; however, the persons conducting these excluded activities shall remain responsible for conducting these activities in accordance with provisions of this Ordinance and other applicable regulations including responsibility for controlling sediment, illicit discharges, and runoff.

(4) Supplemental Permit

In cases where a separate owner/operator will be working within an area already covered by an existing Land Disturbance Permit, a supplemental Land Disturbance Permit shall be obtained. The application fee is waived for any supplemental permit. All site operators are required to obtain a supplemental Land Disturbance Permit prior to work commencing. Where applicable, prior to issuance of the supplemental Land Disturbance Permit, the applicant must show coverage under the site's NPDES Construction general permit. Once covered by a permit, all site operators are to be considered as co-permittees, if their involvement in the construction activities affects the same project site and are held jointly and severally responsible for complying with the terms of the permit.

(5) Application

Application for Land Disturbance Permit shall be made to the City of Cross Plains. No land disturbing activities shall take place prior to approval of the Land Disturbance Permit application.

(6) Permit Requirements

The following are conditions of Land Disturbance Permit coverage. Any violation of these conditions will make the permit holder subject to all enforcement actions and penalties outlined in Articles 9 and 10 of this Ordinance.

(a) Submittal and approval by the City of Cross Plains of Grading, Drainage, & Erosion Prevention and Sediment Control plans.

(b) Compliance with the site's TDEC Construction general permit, TDEC ARAP, TDEC Underground Injection Well Permit, Cross Plains Floodplain Development Permit, and other Federal or State permits where applicable.

(c) Compliance with approved erosion prevention and sediment control plan and EPSC performance standards outlined in Article 5.

(d) Implementation and maintenance of appropriate erosion prevention and sediment control best management practices.

(e) Construction site operators are required to implement appropriate erosion prevention and sediment control measures and best management practices. EPSC requirements shall meet the Tennessee's CGP design storm(s), be consistent with the TDEC ESC Handbook (latest edition) best management practices and with the requirements of this ordinance.

(f) Where site assessments are required by the CGP, the operator shall provide a copy of the assessment to the City.

(g) Twice-Weekly inspections of the site and the BMP's/SCM's must be performed by an individual who has either received certification under the Level I Fundamentals of Erosion Prevention and Sediment Control course or has other credentials identified as equivalent within this ordinance.

(h) Landscaping and stabilization requirements.

a. Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be stabilized. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:
    i. where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
    ii. where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days.

b. for steep slopes of 35% or more, stabilization measures shall be initiated within 7 days Construction buffer zones. Construction buffer zones shall be those water quality buffers and buffer zones as defined in Section 6 of Article 4 below and shall meet the requirements in this ordinance and, where appropriate in the TN CGP. The criteria for the width of the construction buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark." Construction buffers are not primary sediment control measures and shall not be relied on as such. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. The designer/operator must comply with the vegetation requirements and the permissible land uses set forth for buffers in the TN CGP. Where it is not practicable to maintain a construction water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used.

c. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as properly anchored mulch, soil binders or matting must be employed.

(i) Notice of Termination (NOT) the operator shall provide the City with a copy of the NOT when it is issued by TDEC.

(j) As built plans (record drawings). All applicants are required to submit actual as built plans certified by the design engineer for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A certification by the design engineer certifying that SCM's will function within original design parameters as constructed shall be included. A final inspection by the City is required before any performance security or performance bond will be released. The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMP's/SCM's have been made and accepted by the City. Refer to Article 6 section 3 for more information.

(k) Equipment manufacturer startups. No bonds or securities shall be released until any equipment to be maintained by the City passes any specified manufacturer startup procedure. The warranty period shall not commence prior to the equipment passing any specified manufacturer startup procedure.

(7) Land Disturbance Surety

Prior to the issuance of a permit for any land disturbance activity affecting more than five (5) acres, the applicant shall be required to provide a Land Disturbance Surety to the City of Cross Plains to guarantee completion of all land and grade stabilization measures and improvements as shown by the approved grading plan. For smaller areas when potentially hazardous soil or drainage conditions exist due to types of soils, steep grades, floodplain development or nearby lakes, streams or large drainage ditches, the applicant may be required, at the discretion of the City of Cross Plains, to provide a surety as agreed upon by the City to guarantee completion of all land and grade stabilization measures and improvements as shown by the approved plan.

(8) Permit Duration

Every Land Disturbance Permit shall expire and become null and void when one of the following has occurred:

(a) Six months of no activity has occurred.
(b) Final Stabilization of the site per the approved plans has occurred.
(c) Issuance of the TDEC Notice of Termination.
(d) Three years from issuance of Permit.
(e) In the case of public infrastructure, acceptance by the City of Cross Plains has occurred. In cases of expiration of the Land Disturbance Permit, a permit may be

re-issued with no additional fee, if the plan and scope of the project submitted on the original Land Disturbance Permit does not change significantly.

Article 4 Stormwater Management Performance Standards

(1) General

In order to address stormwater management for new development and redevelopment and to prevent or minimize water quality impacts, performance standards are set forth comprising of runoff reduction, pollutant removal, and runoff quantity requirements. Stormwater shall be managed such that post development hydrology does not exceed the pre-development hydrology at the site, in accordance with the performance standards contained in this section.

(2) Applicability

The following stormwater performance standards apply to all new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development.

(3) Stormwater Design and BMP Manuals

(a) The City adopts as its stormwater design and best management practices (BMP) manual the following publication, which is incorporated by reference in this ordinance as if fully set out herein:

(i) The latest edition of the City of Nashville Stormwater Management Manual (Volumes 1- 4) *
(ii) The latest edition of the Tennessee Erosion and Sediment Control Handbook (TDESC)
(iii) The latest edition of the TDOT Manual for Management of Stormwater Discharges Associated with Construction Activity

*The City may grant stormwater variances from certain requirements as necessary. The process for applying for a variance shall begin with contacting the City Manager.

In the event of conflicting standards, the most stringent requirement shall apply.

(4) Downstream Flooding Performance Criteria

(a) To prevent downstream flooding, post development flow rates for the 2-year thru 100- year 24-hour storm events must be controlled to release at rates equal to or less than that of pre-development flows, with an emergency overflow capable of handling the 100-year discharge.
(b) Downstream flood protection provided by an alternative approach may be considered instead of controlling the 2-year through 100-year 24 hour storms; provided that sufficient hydrologic and hydraulic analysis shows that the alternative approach will offer adequate flooding protection for downstream

properties. Flooding protection provided by an alternative approach must be approved by the City of Cross Plains.

(5) General Performance Criteria

(a) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.

(b) Stormwater discharges from hot spots may require the application of specific structural BMPs and pollution prevention practices.

(c) If hydrologic or topographic conditions warrant greater control than that provided by these performance standards, the City may impose any and all additional requirements deemed necessary to control the volume, timing, rate, and treatment of runoff.

(d) Requirements for design storm for all waters as well as special conditions for unavailable parameters waters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000).

(e) Waste Control Construction site operators are required to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.

(6) Water Quality Buffers

A permanent water quality buffer zone (setback measured from the top of water body bank) shall be required along all wetlands, streams, and sinkholes as defined in this ordinance, for new development and redevelopment projects as outlined below:

(a) Drainage areas less than 1 square mile: Minimum of 30' average width. The buffer shall in no case be less than 15' but must average 30'.

(b) Drainage areas greater than 1 square mile: Minimum of 60' width. The 60' width can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30' at any measured location

(c) For redevelopment projects that have existing encroachments into the prescribed buffer, the portion of the existing encroachment that contains a footprint within the buffer is exempt, if no modification to the existing use of the encroachment is to occur and does not violate the objectives of Article 4 (2). If a modification to the existing use of the encroachment is to occur, buffer widths outlined above shall apply.

(d) If the existing encroachment is to remain in use, the encroachment amount shall be factored into the average buffer width in determining the buffer width.

(e) Work within the Water Quality Buffer is allowable for the following types of work:

(i) Work covered and approved by an ARAP or CGP permit approved by TDEC.

(ii) Construction/maintenance of greenways and parks.

(7) Sinkhole/Injection Well Policy

(a) A TDEC injection well permit is required for any use or modification of a sinkhole/injection well.
(b) Drainage calculations shall be submitted for any development in or around sinkholes.
(c) Minimum standards for flood management around sinkholes are based on the 100-year 24 hour design storm, assuming plugged conditions (zero cfs outflow) for the sinkhole.
(d) Post developed flows and volume shall not exceed predeveloped flows and volume entering into a sinkhole. Concentrated flows are not allowed to enter a sinkhole.
(e) Any "capping" of a sinkhole shall be done under the direction and approval of the City. Drainage formerly entering the capped sinkhole shall be accounted for and meet the standards outlined in 4(3) above.

Article 5 Erosion Prevention and Sediment Control Performance Standards

(1) General

In order to address construction site runoff management for new development and redevelopment and to prevent or minimize pollutants from construction activities, performance standards are set forth comprising of erosion prevention and sediment control requirements.

(2) Applicability

The performance standards outlined in this Article shall be implemented in any new development and redevelopment project that disturbs greater than one acre, including projects less than one acre that are part of a larger common plan of development along with any project that requires a Land Disturbance Permit as outlined in Article 3 of this Ordinance.

(3) Erosion Prevention and Sediment Control (EPSC) Design and BMP Manuals

(a) The City adopts as its EPSC design and best management practices (BMP) manuals the most current versions of the following publications, which are incorporated by reference in this ordinance as if fully set out herein:

(i) TDEC Erosion and Sediment Control (TDESC) Handbook (most current edition)
(ii) TDOT Manual for Management of Stormwater Discharges Associated with Construction Activity

(4) General Performance Criteria for EPSC Management

The following performance criteria shall be addressed for EPSC management at all sites:

(a) All construction site operators shall implement appropriate EPSC best management practices (BMP). All BMPs shall be consistent with those described in the above referenced design and BMP manuals and meet the current TDEC Construction General Permit requirements.

(b) EPSC design must meet the requirements for design storms and special conditions for impaired waters as outlined in the latest TDEC Construction General Permit.

(c) All construction site operators shall control waste materials including but not limited to; discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste to avoid adverse impacts to water quality.

(d) If hydrologic, soil, or topographic conditions warrant greater control than that provided by these performance standards, the City of Cross Plains may impose any and all additional requirements deemed necessary to control the discharge of sediment or other illicit discharges to water of the state.

All applicable sites not meeting these criteria are subject to all enforcement actions and penalties outlined in Articles 9 and 10 of this Ordinance.

Article 6 Post Construction

(1) General

To ensure the long-term maintenance and effectiveness of stormwater facilities, a surety for completion, as-built plans, and maintenance and inspection programs are required for new and existing development.

(2) Surety

Depending on the type and size of the development, the City may hold a surety to ensure the completion of the development to City Standards. The amount of the surety will be determined by the City based on the cost to complete the stormwater facilities. All sureties must contain automatic renewal provisions in language satisfactory to the City. Before the final release of the Surety; all stormwater, EPSC, and stabilization measures must be completed, stabilized, and functioning to the satisfaction of the City.

(3) As-Built Plans

Prior to the release of the surety for completion of the stormwater facilities, As-Built Plans are to be submitted for any stormwater facilities after final construction is completed. The plan must show the final constructed facilities will function as approved to meet the performance standards outlined in this ordinance. Plans shall be stamped by a Tennessee licensed surveyor. Any discrepancy between the final constructed facilities and the approved design shall be noted on the

As-Built Plan. Where required by the City, updated calculations stamped by a Tennessee licensed engineer shall be submitted and approved by the City, showing the as-constructed facilities will function adequately to meet the performance standards of the Stormwater Ordinance.

Both digital CAD and paper copies shall be provided in the Tennessee State Plane Coordinate system, NAD83, and NAVD88. The following shall be shown in the plan:

1. Invert elevation, top of casting elevation, slope, location, and material of all pipes, drainage inlets/outlets, junctions, etc.
2. Size and material of all outlet dissipation pads.
3. Ditch size, slope, and materials.
4. Top of berm elevations on all drainage facilities.
5. Volume of all detention/retention facilities.
6. Location and description of all permanent stormwater BMPs (i.e. rain garden, pervious pavement, buffer, etc.)

(4) Existing Stormwater Management Facilities Maintenance and Inspection

The City may, to the extent authorized by state and federal law, enter and inspect private property to determining if there are illicit non-stormwater discharges and to verify that all stormwater management facilities are functioning within design limits. These inspections may be performed randomly or in response to complaints or violations.

Article 7 Illicit Discharges

(1) Applicability

This section shall apply to all water generated on developed or undeveloped land entering the City's separate storm sewer system, including water generated by Hot Spots.

(2) Prohibition of Illicit Discharges

No person shall introduce or cause to be introduced into the storm sewer system any discharge that is not composed entirely of stormwater. Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxins. The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as described as follows:

(a) Uncontaminated discharges from the following sources:

(i) Water line flushing or other potable water sources
(ii) Landscape irrigation or lawn watering with potable water (iii)Diverted stream flows
(iii) Rising groundwater
(iv) Groundwater infiltration to storm drains (vi)Pumped groundwater
(v) Discharges from potable water sources
(vi) Foundation or footing drains (ix)Lawn watering
(vii) Crawl space pumps

(viii) Air conditioning condensation
(ix) Springs
(x) Non-commercial washing of vehicles;
(xi) Natural riparian habitat or wetland flows;
(xii) Swimming pools (if de-chlorinated - typically less than one PPM chlorine)
(xiii) Street wash water
(xiv) Firefighting activities
(xv) Any other uncontaminated water source.

(b) Discharges specified in writing by the City as being necessary to protect public health and safety.
(c) Dye testing
(d) Discharges authorized by the TDEC Construction General Permit, which comply with Section 3.5.9 of the same:

(i) dewatering of work areas of collected stormwater and groundwater (filtering or chemical treatment may be necessary prior to discharge);
(ii) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves the site;
(iii) water used to control dust in accordance with section 3.5.5;
(iv) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;
(v) routine external building washdown that does not use detergents or other chemicals;
(vi) uncontaminated groundwater or spring water; and
(vii) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.)

(3) Prohibition of Illicit Connections

The construction, use, maintenance or continued existence of illicit connections to the sewer system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(4) Reduction of Stormwater Pollutants by the use of Best Management Practices

Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section.

(5) Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has

information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into stormwater, the storm sewer system, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the City in person or by telephone, fax, or email, no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the City within three (3) business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

(6) No Illegal Dumping Allowed

No person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the City.

Article 8 Floodway/Floodplain

All provisions of the City of Cross Plains Municipal Floodplain Ordinance as outlined in 44 Code of Federal Regulations (CFR) Part 60 of the shall be followed.

Article 9 Enforcement

(1) General

In order to enforce the provisions of this ordinance, the City of Cross Plains shall have the Authority to issue Verbal Warnings, Notices of Violation, Stop Work Orders suspending construction activities, suspend the issuance of building permits, withhold approval of plans, and impose Civil Penalties.

(2) Applicability

The provisions of this article shall be applicable to all new and existing construction, existing residential, commercial and industrial developments, hot spots, and any such property or facility which causes violations of the provisions of this ordinance.

Article 10 Penalties

(1) Violations

Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to

this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City of Cross Plains, shall be guilty of a civil offense.

(2) Penalties

Under the authority provided in Tennessee Code Annotated § 68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of Cross Plains of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(3) Measuring Civil Penalties

In assessing a civil penalty, the City of Cross Plains may consider:

(a) The harm is done to the public health or the environment;
(b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
(c) The economic benefit gained by the violator;
(d) The amount of effort put forth by the violator to remedy this violation;
(e) Any unusual or extraordinary enforcement costs incurred by the City;
(f) The amount of penalty established by ordinance or resolution for specific categories of violations; and
(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) Recovery of Damages and Costs

In addition to the civil penalty in subsection (2) above, the City may recover:

(a) All damages proximately caused by the violator to the City, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.
(b) The costs of the City's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

(5) Referral to TDEC.

In accordance with the City's Enforcement Response Plan and the NPDES Permit requirements, the City may also notify TDEC of violations.

(6) Other Remedies

The City may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(7) Remedies Cumulative

The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

(8) Appeals

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the City's governing body.

(1) Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

(2) Public hearing. Upon receipt of an appeal, the City's governing body, or other appeals board established by the City's governing body shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days' notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the governing body of the city shall be final.

(3) Appealing decisions of the City's governing body. Any alleged violator may appeal a decision of the City's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

Property classifications and rates for review fees: See fee schedule

THIS ORDIANCE SHALL TAKE EFFECT FIFTEEN (15) DAYS FROM AND AFTER THE FINAL PASSAGE, THE PUBLIC WELFARE REQUIRING IT.

_____

Mayor,

_____

City Recorder,

Passed First Reading:_____

Passed Second Reading:_____