

CITY OF BERRY HILL STORMWATER ORDINANCE

PREPARED BY:

JOHN CHLARSON, P.E.
PUBLIC WORKS AND ENGINEERING CONSULTANT

AND

SIDNEY D. HEMSLEY, J.D.
SENIOR LEGAL CONSULTANT

MUNICIPAL TECHNICAL ADVISORY SERVICE
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STORMWATER ORDINANCE

Section 1. General Provisions.

- (1). Purpose. It is the purpose of this ordinance to:
 - (a) Protect, maintain, and enhance the environment of the City of Berry Hill and the public health, safety and the general welfare of the citizens of the city, by controlling discharges of pollutants to the city's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the city.
 - (b) Enable the City of Berry Hill to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR §122.26 for stormwater discharges.
 - (c) Allow the City of Berry Hill to exercise the powers granted in Tennessee Code Annotated §68-221-1105, which provides that, among other powers municipalities have with respect to stormwater facilities, is the power by ordinance or resolution to:
 - (1) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the municipality, whether or not owned and operated by the municipality;

- (2) 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;
- (3) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;
- (4) Review and approve plans and plats for stormwater management in proposed subdivisions, commercial developments, and any proposed land disturbing activities requiring a grading permit;
- (5) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;
- (6) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
- (7) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
- (8) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(2). Administering Entity. The City of Berry Hill shall administer the provisions of this ordinance through the City Manager, or his designee.

Section 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.

- (1) *"As built drawings"* means drawings depicting conditions as they were actually constructed.
- (2) *"Best management practices"* or *"BMPs"* are physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, that have been approved by the City of Berry Hill, and that have been incorporated by reference into this ordinance as if fully set out therein.
[NOTE: See § 5(1) for recommended BMP manual.]
- (3) *"Brownfield"* means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.
- (4) *"Channel"* means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.
- (5) *"Community water"* means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Berry Hill.

- (6) *“Contaminant”* means any physical, chemical, biological, or radiological substance or matter in water.
- (7) *“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.
- (8) *“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.
- (9) *“Disturb”* means to alter the natural or predeveloped ground surface in such a way that the erosion potential of the ground surface is increased.
- (10) *“Easement”* means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, municipality or other legal entity has in the land of another.
- (11) *“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.
- (12) *“Erosion prevention and sediment control (EPSC) plan”* means a written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.
- (13) *“Exceptional Tennessee Waters”* are surface waters of the State of Tennessee that satisfy the characteristics as listed in Rule 1200-4-3-.06 of the official compilation – rules and regulations of the State of Tennessee. Characteristics include waters within state or national parks, wildlife refuges, wilderness or natural areas; State or

Federal Scenic Rivers; Federally-designated critical habitat; waters within areas designated as Lands Unsuitable for Mining; waters with naturally reproducing trout; waters with exceptional biological diversity or: other waters with outstanding ecological or recreational values as determined by the department.

- (14) *“Final Stabilization”* means that all soil disturbing activities at the site have been completed and either of the two following criteria is met:
- (a) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the native background vegetative cover for the area 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, or
 - (b) 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.
- (15) *“Hotspot”* means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.
- (16) *“Illicit connections”* means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.
- (17) *“Illicit discharge”* means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under §4(3).

- (18) “*Inspector*” means a person that has successfully completed (has a valid certification from) the “Fundamentals of Erosion Prevention and Sediment Control Level I” course or equivalent course. An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:
- (a) oversee the requirements of other construction-related permits, such as Aquatic Resources Alteration Permit (ARAP) or Corps of Engineers permit for construction activities in or around waters of the state;
 - (b) update field SWPPPs;
 - (c) conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed; and
 - (d) inform the permit holder of activities that may be necessary to gain or remain in compliance with the Tennessee NPDES Construction General Permit and other environmental permits.
- (19) “*Land disturbing activity*” means any activity on property that results in 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.
- (20) “*Maintenance*” means any activity that is necessary to keep a stormwater facility or stormwater system component 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.

- (21) *“Maintenance agreement”* means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
- (22) *“Municipal separate storm sewer system (MS4)”* (*“Municipal separate stormwater system”*) means the conveyances owned or operated by the municipality for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.
- (23) *“National Pollutant Discharge Elimination System permit”* or *“NPDES permit”* means a permit issued pursuant to 33 U.S.C. 1342.
- (24) *“Off-site facility”* means a structural BMP located outside the subject property boundary described in the permit application for land development activity.
- (25) *“On-site facility”* means a structural BMP located within the subject property boundary described in the permit application for land development activity.
- (26) *“Peak flow”* means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
- (27) *“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.
- (28) *“Priority construction activity”* means those construction activities that disturb 1

acre or more and require coverage under the Tennessee NPDES Construction Stormwater General Permit and discharge directly into or immediately upstream of waters of the state recognized as impaired (for siltation or habitat alteration) or Exceptional Tennessee Waters.

- (29) “*Registered Engineer*” and “*Registered Landscape Architect*” means an engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-602, Tennessee Code Annotated, to practice in Tennessee.
- (30) “*Runoff*” means that portion of the precipitation on a drainage area that is discharged from the area.
- (31) “*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.
- (32) “*Sediment basin*” means a temporary basin consisting of an embankment constructed across a wet weather conveyance, or an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, 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., impaired, high quality waters or unimpaired).
- (33) “*Sedimentation*” means soil particles suspended in stormwater that can settle out of runoff and disrupt the natural flow of a stream or the stormwater system.

- (34) *“Stabilization”* means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.
- (35) *“Stormwater”* means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.
- (36) *“Stormwater management”* means the programs to maintain quality and quantity of stormwater runoff to pre-development levels.
- (37) *“Stormwater management facilities and practices”* means the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.
- (38) *“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.
- (39) *“Structural BMPs”* means devices that are constructed to provide control of stormwater runoff.
- (40) *“Surface water”* includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.
- (41) *“Tennessee Department of Environment and Conservation (TDEC) Level I & Level II Trained Individual”* means an individual who has successfully completed the Level I Fundamentals course and the Level II Design Principles for Erosion Prevention and Sediment Control at Construction Sites course conducted by the Tennessee Water Resources Research Center.

- (42) *“TMDL” or “Total Maximum Daily Load”* in this ordinance generally refers to a study that quantifies the amount of a pollutant that can be assimilated in a water body, identifies the sources of the pollutant, and recommends regulatory or other actions to be taken to achieve compliance with stream water quality conditions.
- (43) *“Waste load allocation” or “WLA”* is the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs are contained in TMDLs.
- (44) *“Waters” or “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 which do not combine or effect a junction with natural surface or underground waters.
- (45) *“Water quality buffer”* means a setback from the top of water body’s bank of undisturbed vegetation, including trees, shrubs and herbaceous vegetation; enhanced or restored vegetation; or the re-establishment of native vegetation bordering streams, ponds, wetlands, springs, reservoirs or lakes, which exists or is established to protect those water bodies. The goal of the water quality buffer is to preserve undisturbed vegetation that is native to the streamside habitat in the area of the project. Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy cover, as well as stormwater infiltration, filtration and evapotranspiration.
- (46) *“Watercourse”* means a permanent or intermittent stream or other body of water,

either natural or man-made, which gathers or carries surface water.

- (47) *“Watershed”* means all the land area that contributes runoff to a particular point along a waterway.

Section 3. Erosion Prevention and Sediment Control.

- (1). Land disturbing activities. All land disturbing activities shall employ adequate erosion prevention and sediment control measures to minimize erosion and prevent off-site sedimentation in conformance with the provisions of this ordinance and guidance materials referenced herein. Land disturbing or construction activities that do not employ erosion prevention and sediment controls in conformance with this ordinance and that cause off-site sedimentation or sediment discharges to Waters of the State or onto adjacent properties shall be in violation of this ordinance.
- (2). Permanent stabilization. All previously disturbed areas shall be permanently stabilized with groundcover sufficient to restrain erosion. Permanent stabilization is required to achieve final stabilization.
- (3). Tennessee NPDES Construction General Permit. The provisions set forth in the most recent finalized version of the Tennessee Department of Environment and Conservation’s NPDES Construction General Permit also apply to land disturbing activities within the City of Berry Hill totaling one (1) acre or more of land disturbance. Where the City’s stormwater ordinance includes additional measures or controls beyond those required by the Construction General Permit, the City’s stormwater ordinance will be in effect for the affected land disturbing activities.

- (4). Impaired or exceptional Tennessee waters. The requirements for the design storm and special conditions related to impaired waters or exceptional Tennessee waters shall be consistent with the current effective Tennessee Construction General Permit (TNR10000).

Section 4. Land Disturbance Permits.

- (1). When required.
- (a) Every person will be required to obtain a land disturbance permit from the City of Berry Hill according to Table 1:

Table 1	
Disturbed area (acre)	Permitting requirements
0.50-0.99	<ul style="list-style-type: none"> • EPSC Plan • Stormwater management plan • Hydrology/hydraulic calculations required to demonstrate no increased peak flows compared to existing conditions
≥ 1.0	<ul style="list-style-type: none"> • Notice of Coverage required from TDEC • EPSC Plan • Stormwater management plan • Hydrology/hydraulic calculations required to demonstrate no increased peak flows compared to existing conditions • Water quality buffers identified and protected

Note: A pre-application meeting with the City is encouraged prior to applying for a land disturbance permit.

For sites with disturbed areas less than 0.50 acre, a land disturbance permit is not required. However, sites with disturbed areas between 0.25 - 0.49 acre will require an EPSC Plan and one (1) non-structural water quality control measure such as disconnected roof drains allowed to flow over pervious surface(s). No hydrology/hydraulic calculations will be required if there is not increase in impervious area compared to existing conditions.

In addition, the following activities may also be required to obtain a

land disturbing permit:

- (1) Land disturbing activity of less than one-half (0.5) acre of land if such activity is part of a larger common plan of development that affects one-half (0.5) or more acre of land;
 - (2) Land disturbing activity of less than one-half (0.5) acre of land, if in the discretion of the City of Berry Hill such activity poses a unique threat to water, or public health or safety;
 - (3) The creation and use of borrow pits.
- (b) Land disturbance permit applications shall not be approved unless the following conditions are met:
- (1) For residential and non-residential developments, the requirements of Table 1 apply. Forms provided in Appendix A of this ordinance must be completed and submitted with the land disturbance permit application. These forms may be altered as deemed necessary by the City Manager, or his designee to modify the information required to be provided by the applicant provided that such modification preserves the intent of this ordinance and does not alter the design criteria or the water quality standards contained therein.
 - (2). Building permit. No building permit shall be issued until the applicant has obtained a land disturbance permit where the same is required by this ordinance.
 - (3). Exemptions. The following activities are exempt from the permit requirement:
 - (a) Any emergency activity that is immediately necessary for the protection of life,

property, or natural resources.

- (b) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
- (c) Any logging or agricultural activity that is consistent with an approved farm conservation plan or a timber management plan prepared or approved by the appropriate federal or state agency.
- (d) Additions or modifications to existing single family structures provided that the land to be disturbed measures less than one-quarter (0.25) acre and poses no unique threat to water, or public health or safety.
- (e) Or for other comparable activities as determined by the City Manager, or his designee.

(4). Review and approval of application.

- (a) The City of Berry Hill and/or its designated consultant will review each application for a land disturbance permit to determine its conformance with the provisions of this ordinance. Within 30 days after receiving an application, the City of Berry Hill or its designated engineering consultant shall provide one of the following responses in writing:
 - (1) Approval of the permit application;
 - (2) Approval of the permit application, subject to such reasonable conditions as may be necessary to secure substantially the objectives of this ordinance, and issue the permit subject to these conditions; or
 - (3) Denial of the permit application, indicating the reason(s) for the

denial.

(b) If the City of Berry Hill has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the City of Berry Hill. However, the applicant shall be allowed to proceed with his land disturbing activity so long as it conforms to conditions established by the City of Berry Hill.

(c) No development plans will be released until the land disturbance permit has been approved.

(5). Permit duration.

Every land disturbance permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance, or is not complete within eighteen (18) months from the date of the commencement of construction.

(6). Notice of construction.

The applicant must notify the City of Berry Hill ten (10) working days in advance of the commencement of construction. A pre-construction meeting with the City is required for priority construction sites.

(7). Site Assessment.

For all sites with land disturbance of one (1) acre or more, quality assurance of EPSC measures will be done by performing site assessment at the site. The site assessment shall be conducted at each outfall involving drainage totaling 10 or more acres, or at each outfall involving drainage totaling 5 or more acres if draining to an impaired or exceptional quality waters as defined in the most recent finalized version of the Tennessee NPDES

Construction General Permit. This site assessment must be performed within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment shall be performed by individuals with the following qualifications: a registered professional engineer or landscape architect; a Certified Professional in Erosion and Sediment Control (CPESC); or a person that has successfully completed the TDEC Level II course.

(8). Changes to Approved Site Plans.

The applicant must submit revised plans to the City of Berry Hill for review and approval if changes are proposed to the originally approved site plans. The term “Site Plans” includes EPSC plans, stormwater management plans, and other plans detailing proposed construction for a site. The revised plans must be submitted prior to changes being implemented in the field.

(9). Inspections and Maintenance.

(a) Right of Entry. The City Manager, or his designee, 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 facility during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this ordinance.

(b) EPSC inspections. The land disturbance permit holder shall perform routine inspections as follows:

- (1) Routine inspections shall be conducted by a qualified inspector.
- (2) Disturbed areas shall be inspected in conformance with the conditions of

the Tennessee NPDES Construction General Permit.

(3) Inspections shall be documented using the inspection forms required by the Tennessee NPDES Construction General Permit and the documentation provided to the City of Berry Hill when requested.

(4) All erosion prevention and sediment control measures shall be inspected to ensure that they are functioning as designed.

(c) All erosion prevention and sediment control measures shall be maintained by the land disturbance permit holder to ensure that they are functioning as designed. Failure to maintain measures constitutes a violation of this ordinance.

(d) Permanent stormwater management facilities inspections. Permanent stormwater management facilities shall be inspected by the land disturbance permit holder on a regular basis during construction and by the landowner after construction has been completed to ensure that they are functioning as designed.

(1) Inspections shall be documented and documentation provided to the City of Berry Hill when requested.

(2) Permanent stormwater facilities shall be maintained by the land disturbance permit holder during construction and by the landowner after construction has been completed to ensure that they are functioning as designed.

(10). Performance bonds.

(a) The City of Berry Hill may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation

performance security or performance bond shall be the total estimated construction cost of the structural BMPs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment or rejection by the City of Berry Hill. Alternatively the City of Berry Hill shall have the right to calculate the construction cost estimates.

- (b) The performance security or performance bond shall be released in full only upon submission of as-built drawings and written certification by a registered professional engineer licensed to practice in Tennessee that the structural BMP(s) have been installed in accordance with the approved plan and other applicable provisions of this ordinance. The City of Berry Hill will make a final inspection of the structural BMP(s) to ensure that they are in compliance with the approved plan and the provisions of this ordinance. Provisions for a partial pro-rata release of the performance security or performance bond based on the completion of various development stages can be made at the discretion of the City of Berry Hill.

Section 5. Stormwater System Design and Management Standards.

(1). Stormwater design or BMP manual.

- (a) Adoption. The municipality adopts as its stormwater design and best management practices (BMP) manual the following publications (current editions), which are incorporated by reference in this ordinance as is fully

set out herein:

- (1) TDEC Erosion and Sediment Control Handbook
- (2) TDEC Manual for Post Construction [Entitled *Guide to the Selection & Design of Stormwater Best Management Practices (BMPs)*]
- (3) City of Berry Hill Supplemental BMP Manual

(b) These manuals include a list of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. These manuals may be updated and expanded from time to time, at the discretion of the governing body, upon the recommendation of the City of Berry Hill, based on improvements in engineering, science, monitory and local maintenance experience. Stormwater facilities that are designed, constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

(2). General performance criteria for stormwater management. Unless exempt, the following performance criteria shall be addressed for stormwater management at all sites:

- (a) All site designs requiring a stormwater management plan according to §4(1) of this ordinance or as otherwise required by the City of Berry Hill shall control the peak flow rates of stormwater discharge associated with design storms specified in the BMP manual or this ordinance and reduce the generation of post construction stormwater runoff to pre-construction levels. Runoff reduction is the preferred control practice as it can achieve both volume control and pollutant removal. These practices should seek to utilize pervious areas for stormwater treatment and

to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.

- (b) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the **BMP** manual.
- (c) Stormwater discharges to critical areas with sensitive resources (i.e., recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
- (d) Stormwater discharges into streams impaired by sediment or into streams with an approved TMDL may be subject to additional performance criteria.
- (e) Stormwater discharges from “hot spots” may require the application of specific structural **BMPs** and pollution prevention practices.
- (f) Prior to or during the site design process, applicants for land disturbance permits shall consult with the City of **Berry Hill** to determine if they are subject to additional stormwater design requirements.
- (g) The calculations for determining peak flows as found in the **BMP** manuals identified in §5(1)(a) shall be used for sizing all stormwater facilities. Other hydrological methods of determining peak runoff may be substituted; however, they will be subject to the City of **Berry Hill**’s engineering consultant’s review for appropriateness.

(3). Minimum control requirements.

- (a) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified in the Appendix unless the City of **Berry Hill** has granted

the applicant a full or partial waiver for a particular BMP under §4.

- (b) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Berry Hill may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
- (4). Stormwater management plan requirements. The stormwater management plan shall include sufficient information to allow the City of Berry Hill to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal the stormwater management plan shall address all items on the Stormwater Management Plan checklist, found in Appendix A. Failure to fully complete the Stormwater Management Plan checklist could be considered an incomplete submittal and result in plan disapproval.
- (5). Erosion Prevention and Sediment Control Plan requirements. The Erosion Prevention and Sediment Control (EPSC) plan shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. The plan shall address all items on the EPSC Plan checklist. Failure to fully complete the EPSC checklist could be considered an incomplete submittal and result in plan disapproval. The plan preparer credentials are based on the project's land disturbance area, and are summarized in Table 2.

Table 2	
Disturbed area (acre)	EPSC Plan Preparer Credentials
0.25-0.49	<ul style="list-style-type: none"> • Tennessee Erosion Prevention and Sediment Control Level I Certification • Plans and specifications including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with Tennessee Code Annotated, Title 62, Chapter 2
0.50-0.99	<ul style="list-style-type: none"> • Narrative portion of the EPSC Plan may be prepared by an individual with working knowledge of EPSC measures, such as Certified Professional in Erosion and Sediment Control (CPESC) or an individual who has completed the Tennessee Fundamentals of Erosion Prevention and Sediment Control for Construction Sites Workshop (TDEC Level II Training) • Plans and specifications including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with Tennessee Code Annotated, Title 62, Chapter 2
≥ 1.0	<ul style="list-style-type: none"> • Narrative portion of the EPSC Plan may be prepared by an individual with working knowledge of EPSC measures, such as Certified Professional in Erosion and Sediment Control (CPESC) or an individual who has completed the Tennessee Fundamentals of Erosion Prevention and Sediment Control for Construction Sites Workshop (TDEC Level II Training) • Plans and specifications including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with Tennessee Code Annotated, Title 62, Chapter 2

Section 6. Post Construction.

- (1). As built drawings. All applicants are required to submit actual as built drawings for any permanent stormwater 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 final inspection by the City of Berry Hill is required before any performance security or performance bond will be released. The City of Berry Hill 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 BMPs have been made and accepted by the City of Berry Hill.

(2). 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 revegetated according to a schedule approved by the City of Berry Hill. The following criteria shall apply to revegetation efforts:
 - (1) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over seventy percent (70%) of the seeded area.
 - (2) Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
 - (3) Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year

immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.

- (4) Prior to releasing the performance bond, final stabilization with a permanent ground cover must be established over the entire site.
 - (b) In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.
- (3). Inspection of stormwater management facilities. Periodic inspections of facilities shall be performed as provided for in §6(7).
- (4). Records of installation and maintenance activities. Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation of the stormwater facility, and of all maintenance and repairs to the facility, and shall retain the records for at least three (3) years. These records shall be made available to the City of Berry Hill during inspection of the facility and at other reasonable times upon request.
- (5). Failure to meet or maintain design or maintenance standards. If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this ordinance, the City of Berry Hill, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management

facility becomes a danger to public safety or public health, the City of Berry Hill shall notify in writing the party responsible for maintenance of the stormwater management facility.

Upon receipt of that notice, the responsible person shall have ten (10) days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the City of Berry Hill may take necessary corrective action. The cost of any action by the City of Berry Hill under this section shall be charged to the responsible party.

(6). Waivers.

(a) General. Every applicant required to submit a stormwater management plan as stated in §4(1) or as otherwise required by the City of Berry Hill shall provide for permanent stormwater management as required by this ordinance. Requests to waive the permanent stormwater management plan requirements shall be submitted to the City of Berry Hill Board of Commissioners for approval.

(b) Conditions for waiver. The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions applies:

- (1) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this ordinance.
- (2) Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the City of Berry Hill.
- (3) Provisions are made to manage stormwater by an off-site facility. The off-site facility must be in place and designed to provide the level of stormwater

control that is equal to or greater than that which would be afforded by on-site practices. Further, the facility must be operated and maintained by an entity that is legally obligated to continue the operation and maintenance of the facility. The determination that standards cannot be met on site shall not be based solely on the difficulty or cost of implementing measures.

(c) Downstream damage, etc. prohibited. In order to receive a waiver, the applicant must demonstrate to the satisfaction of the City of Berry Hill that the waiver will not lead to any of the following conditions downstream:

- (1) Deterioration of existing culverts, bridges, dams, and other structures;
- (2) Degradation of biological functions or habitat;
- (3) Accelerated streambank or streambed erosion or siltation;
- (4) Increased threat of flood damage to public health, life or property.

(d) Land disturbance permit not to be issued where waiver requested. No land disturbance permit shall be issued where a waiver has been requested until the waiver is granted. If no waiver is granted, the plans must be resubmitted with a stormwater management plan.

(7). Permanent Stormwater Facilities Maintenance Agreement:

(a) The owner of property to be served by an on-site permanent stormwater management facility, including those required in §5(2) must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owner and all subsequent property owners.

(b) The maintenance agreement shall:

- (1) Assign responsibility for the maintenance and repair of the stormwater

facility to the owner of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.

- (2) Provide for periodic inspections by the property owner for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this ordinance. At a minimum, the periodic inspections must be performed annually and must be performed by a person familiar with the control measures implemented at the site.
- (3) Provide for a comprehensive inspection of all permanent stormwater management facilities and practices by the property owner for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this ordinance. The comprehensive inspection must be performed at minimum once every five years, and must be performed by either a professional engineer or landscape architect. Complete inspection reports for the comprehensive inspections must include the following items:
 - (i) Facility type;
 - (ii) Inspection date;
 - (iii) Latitude and longitude and nearest street address;
 - (iv) BMP owner information (e.g., name, address, phone number, fax and email);
 - (v) A description of BMP condition including: vegetation and soils, inlet and outlet channels and structures; embankments, slopes and safety benches; spillways, weirs, and other control structures; and any

- sediment and debris accumulation;
- (vi) Photographic documentation of BMPs; and
 - (vii) Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and re-inspection dates.
- (4) The agreement shall also provide that the City of Berry Hill may require additional inspections to be conducted by a registered professional engineer licensed to practice in the State of Tennessee who will submit a sealed report of the inspection to the City of Berry Hill, and that the cost of such inspections shall be paid by the property owner. It shall also grant permission to the city and its agents to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.
- (5) Provide that the minimum maintenance and repair needs include, but are not limited to: the removal of silt, litter and other debris, the cutting of grass, grass cuttings and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities. It shall also provide that the property owner shall be responsible for additional maintenance and repair needs consistent with the needs and standards outlined in the BMP manual.
- (6) Provide that maintenance needs must be addressed in a timely manner, on a schedule subject to the review and/or amendment by the City of Berry Hill. At a minimum, the BMP owner must initiate corrective action within 30 days of notice.

- (7) The maintenance agreement must require that the property owner and all subsequent property owners provide verification of maintenance for the stormwater BMPs. This verification must include one or more of the following:
- (i) The owner/operator's signed statement accepting responsibility for maintenance with a provision for transferring maintenance responsibility if the property is legally transferred to another party.
 - (ii) Written conditions in the sales or lease agreement that requires the recipient to assume responsibility for maintenance.
 - (iii) Written project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of runoff reduction and pollutant reduction stormwater BMPs.
 - (iv) Any other legally enforceable agreement that assigns permanent responsibility for maintenance of runoff reduction and pollutant reduction stormwater BMPs, including, but not limited to a BMP permit tracking system developed by the MS4 authority.
- (8) The owner or operator must maintain documentation of these inspections.
- (c) If the property or BMP owner fails to maintain or repair the stormwater management facility within 30 days of notice by the City, the City of Berry Hill shall perform the maintenance and repair at its expense, and bill the same to the property owner. The City of Berry Hill's cost of performing the maintenance shall be a lien against the property.

Section 7. Adequate Stormwater Facilities.

- (1). Right of Entry. The City Manager, or his designee, or his designee, 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 facility during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this ordinance.
- (2). Inspection of stormwater facilities. The City of Berry Hill may, to the extent authorized by state and federal law, establish inspection programs to verify that all stormwater management facilities, including those built before as well as after the adoption of this ordinance, are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the municipality's NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the

condition of drainage control facilities and other BMPs.

(3) Stormwater Facilities.

(a) Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP manual and on a schedule acceptable to the City of Berry Hill.

(1) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.

(2) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, etc., to prevent erosion.

(3) Trash, junk, rubbish, etc. shall be cleared from drainage ways.

(4) Stormwater runoff shall be controlled to the extent reasonable to prevent pollution of local waters.

(b) Requirements for existing problem locations. The City of Berry Hill shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problem affecting such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance.

(c) Appeals. Corrective measures imposed by the City Manager, or his designee under this section are subject to appeal under §12 of this ordinance.

Section 8. Illicit Discharges.

(1). Scope. This section shall apply to all water generated on developed or undeveloped land

entering the municipality's separate storm sewer system.

- (2). Prohibition of illicit discharges. No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater. Additionally, contaminated stormwater runoff from entities designated as “hot spots” to the City of Berry Hill’s municipal separate storm sewer system is prohibited. 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:
- (1) Water line flushing,
 - (2) Landscape irrigation,
 - (3) Diverted stream flows,
 - (4) Rising ground waters,
 - (5) Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow),
 - (6) Uncontaminated pumped groundwater,
 - (7) Discharges from potable water sources,
 - (8) Air conditioning condensate,
 - (9) Irrigation water,
 - (10) Springs,
 - (11) Water from crawl space pumps,

- (12) Footing and foundation drains,
 - (13) Lawn watering,
 - (14) Individual residential car washing,
 - (15) Flows from riparian habitats and wetlands,
 - (16) Dechlorinated swimming pool discharges,
 - (17) Street wash water, and
 - (18) Discharges or flows from fire fighting activities.
- (b) Discharges specified in writing by the City of Berry Hill as being necessary to protect public health and safety.
 - (c) Dye testing is an allowable discharge if the City of Berry Hill has so specified in writing.
- (3). Prohibition of illicit connections.
- (a) The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited.
 - (b) 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 the source of an illicit discharge, shall remove the illicit discharge by implementing, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the municipal separate 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 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 municipal separate 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 of Berry Hill in person or by telephone or facsimile 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 of Berry Hill 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 3 years.

Section 9. Water Quality Buffers.

- (1). Scope. A water quality buffer shall be established, protected, and maintained along all community waters in areas of new development and redevelopment which disturb one (1) acre or more of land,. Every attempt should be made for development and redevelopment activities not to take place within the buffer zone.
- (2). Buffer extent. The minimum buffer extents specified below shall be used in areas of new

development where a land disturbance permit is required as defined in §4.

- (a) Community waters with drainage areas less than 1 square mile will require buffer widths of 30 feet minimum. Community waters with drainage areas greater than 1 square mile will require buffer widths of 60 feet minimum. The 60-foot criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location. The buffer shall be measured perpendicular from the top of bank on each side of the community water channel; around the perimeter of a pond or lake identified as a community water measured as perpendicular to the contour at which normal pool is located; and measured around the perimeter of a wetland identified as a community water.
- (b) The water quality buffer is to remain undisturbed except for the following disturbances which are allowed subject to approval by the City Manager, or his designee including the approval of an erosion prevention and sediment control plan:
 - (1) Limited disturbances to remove and/or plant trees or vegetation, as required to maintain the overall health of vegetation in the buffer area.
 - (2) Removal of individual trees that are in danger of falling, causing damage to dwellings or other structures, are dead or diseased, or have been heavily damaged by storms. The root wad or stump should be left in place, where feasible, to maintain soil stability.

- (3) Disturbances necessary for the construction of utility access areas and approved stream crossings as long as the crossings are perpendicular or as near to perpendicular as possible to the channel.
 - (4) Disturbances as required to establish and/or restore buffer areas in accordance with an approved Buffer Enhancement Plan.
- (c) Any approved disturbance of the water quality buffer shall be revegetated in kind and/or enhanced subject to the requirements of §6(2)(a) of this ordinance and approval of the City Manager, or his designee. The vegetative target for the inner zone is mature, moderately dense forest (i.e., trees) with woody shrubs and understory vegetation. Where forest vegetation has the potential to impact traffic safety or limit access, areas immediately surrounding approved stream crossings and utility access areas may be vegetated with dense grasses.
- (d) The City of Berry Hill will determine whether or not alternative buffer widths will be available. A determination that water quality buffer widths cannot be met on site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria, such as: type of project, existing land use and physical conditions that preclude the use of these practices.

Section 10. Enforcement.

- (1). Enforcement authority. The City Manager, or his designee or his designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.

(2). Notification of violation.

- (a) Written Notice. Whenever the City Manager or his designee finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the City Manager, or his designee may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the City Manager, or his designee. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.
- (b) Consent Orders. The City Manager or his designee is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.
- (c) Show Cause Hearing. The City Manager, or his designee may order any person who violates this ordinance or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice

of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

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

(e) Cease and Desist Orders. When the City Manager or his designee finds that any person has violated or continues to violate this ordinance or any permit or order issued hereunder, the director may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

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

(3). Conflicting standards. Whenever there is a conflict between any standard contained in this ordinance and in the BMP manual adopted by the municipality under this ordinance, the strictest standard shall prevail.

Section 11. Penalties.

- (1). Violations. Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City of Berry Hill, shall be guilty of a civil offense.
- (2). Penalties. Under the authority provided in Tennessee Code Annotated §68-221-1106, the municipality declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the City of Berry Hill of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) or such lesser amount as may be allowed by law 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 Manager, or his designee may consider:
 - (a) The harm 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 municipality;
 - (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 municipality may recover;
 - (a) All damages proximately caused by the violator to the municipality, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this ordinance, or any other actual damages caused by the violation.
 - (b) The costs of the municipality's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this ordinance.
- (5). Other remedies. The municipality may bring legal action to enjoin the continuing violation of this ordinance, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.
- (6). 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.

Section 12. 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 ordinance may appeal said penalty or damage assessment to the municipality'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 municipality'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 municipality shall be final.

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

APPENDIX A

City of Berry Hill, Tennessee
 Land Disturbance Permit Application
 General Information Form



Application Date:	
Applicant:	
Name:	
Address:	
Phone:	
E-mail:	
Property Owner: (If different from applicant)	
Name:	
Address:	
Phone:	
E-mail:	
Property:	
Address:	
Map & Parcel Number:	
Legal Description including Benchmark:	
EPSC Plan Preparer:	
Name:	
Address:	
Phone:	
E-mail:	
CPESC No.:	
TDEC Level 1 Certification Date:	
Storm Water Management Plan Preparer: (If different from EPSC Plan Preparer)	
Engineer's Name:	
Address:	
Phone:	
E-mail:	

City of Berry Hill, Tennessee
Land Disturbance Permit Application
General Information Form



Contractor and Subcontractors:			
(Performing land disturbing activity)			
Name:			
Address:			
Phone:			
E-mail:			
Name:			
Address:			
Phone:			
E-mail:			
Project Information:			
Type of project: (circle one)	Residential:	New	Addition
	Commercial:	New	Addition
Total area of subject property:		Area to be disturbed:	
Note: If disturbed area = 1 acre or more, include a copy of the TN Construction General Permit Notice of Intent (NOI) submitted to TDEC and the Storm Water Pollution Prevention Plan (SWPPP).			
Is a sinkhole present?	Yes or No	Other state, federal, or other appropriate permits required?	Yes or No
Note: If so, provide a copy of any permits received from TDEC for sinkhole improvement.		Note: If so, attach a copy of the permits or applications for the permits.	
Are streams located within the property boundaries?	Yes or No		
Note: If so, locate streams on all plans and provide buffers as required by the current storm water ordinance.			

Submit 2 copies of the plans and supporting documentation with this General Information Form. Plans must be accompanied by the following completed checklists:
Checklist 1 – General Plan Information
Checklist 2 – EPSC Plan
Checklist 3 – Storm Water Management Plan

Applicant's Name:	
Application Date:	



CHECKLIST 1

General Plan Information

Item #	The following information must be provided on each plan or in support of each plan submitted to the City of Berry Hill for review:	Included	Not Applicable
1	Topographic Map of subject property with contour intervals of at least two (2) feet set to scale of 1" = 50' (or other more appropriate scale as approved by the City of Berry Hill) including sufficient surrounding topography and structures to ascertain adjacent off-site drainage patterns		
2	Existing contours and conditions (i.e. existing topography and showing the outline of existing structures and pavement indicating any pavement or structures to be removed)		
3	Proposed contours and conditions (i.e. proposed topography tying into existing topography and showing the outline of proposed structures and pavement)		
4	Breakdown of existing and proposed impervious surfaces in table format		
5	Locations of existing drainage ways such as ditches, pipes, streams, intermittent streams, and wet weather conveyances, showing water quality buffers if applicable, within and adjacent to the property		
6	Locations of utility, roadway, and drainage easements within the property		
7	Designated floodways and floodplains, showing elevations		
8	Approximate limits of proposed land disturbing activity (i.e. a boundary line encompassing the location(s) of the proposed land disturbance activity)		
9	Proposed drainage network		

Applicant's Name:	
Application Date:	



CHECKLIST 2

EPSC Plan

Item #	The following items must be provided for all EPSC Plans:	Included	Not Applicable
1	Proposed erosion prevention & sediment control measures including calculations and construction details for installation (TDEC Sediment and Erosion Control Handbook should be used as a reference for design).		
2	Proposed construction sequence		
3	Seeding specifications, including temporary and permanent seed, soil amendments, mulch, seeding schedule and/or sod specifications and planting schedule.		
4	Construction Exit		
5	Pollution prevention measures, such as concrete washout areas and debris and trash management practices.		
6	Note requiring temporary stabilization of disturbed soils in compliance with Section 3.5.3.2 of the Tennessee General NPDES Permit for Discharges of Storm Water Associated with Construction Activities		
7	Water quality buffer limits		

Applicant's Name:	
Application Date:	



CHECKLIST 3

Stormwater Management Plan

Item #	The following items must be provided for on all stormwater management plans:	Included	Not Applicable
1	Locations of proposed drainage network and supporting hydrologic/hydraulic calculations ¹		
2	Proposed construction sequence		
3	Proposed permanent stormwater quantity and quality management BMP(s)		
4	Where BMPs are employed that rely on infiltration as a primary mechanism, a geotechnical study will be required to verify infiltration rates.		
5	Pre- and post-developed hydrologic and hydraulic stormwater runoff calculations must be provided which compare pre-development runoff rates to post-development runoff rates for the 2- through 100-year storm events.		
6	Where an increase in the post-developed runoff rate is realized, a detailed downstream analysis will be required, and the increase in stormwater runoff must be mitigated. The downstream analysis must be conducted on all components of the receiving system to the point at which the total subject site represents 10% or less of the encompassing watershed. The analysis shall be performed for the 2- through 100-year storm events. (The City may request analysis of a shorter duration storm event as well). The analysis shall evaluate the effects of the post-developed flow increase on downstream receiving properties and structures including but not limited to roadside swales, culverts, curb and area drains, etc. The analysis shall demonstrate no adverse impacts upon the downstream receiving properties and structures including adequate hydraulic capacity of the structures. Mitigation of increased flows can consist of onsite detention, longer onsite flow lengths, and/or infiltration.		
7	Land disturbances between 0.25 – 0.49 acre shall incorporate, at a minimum, one non-structural water quality improvement measure such as disconnected roof drains, sheet flow of impervious surface runoff, or vegetated filter strips.		
8	Land disturbances of 0.50 acre or more shall incorporate structural or non-structural post-construction stormwater BMP(s) from the <i>Tennessee Guide to the Selection & Design of StormWater Best Management Practices (BMPs)</i> or other appropriate technical guidance manual.		

Applicant's Name:	
Application Date:	



Item #	The following items must be provided for on all stormwater management plans:	Included	Not Applicable
9	Include a Maintenance Agreement for all permanent stormwater management facilities to ensure their continued performance. These plans must identify the parts or components of the stormwater management facility that need to be maintained and the equipment and skills or training necessary to complete the maintenance. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan, per the ordinance. A permanent elevation benchmark shall be identified in the plans to assist in the periodic inspection of the facility.		
10	Infiltration basins, detention ponds, bioretention areas or rain gardens, and other comparable BMPs that the City Building Official deems necessary must be contained within a maintenance easement. Maintenance easements must be recorded on the plat and must completely encompass all components of each BMP as well as the access to the BMP.		
11	All permanent stormwater facilities must be located in drainage easements.		

Note:

¹ The design of minor stormwater management systems, defined as ditches, drains, pipes, etc., which collect the initial stormwater runoff shall be based on the 10-year storm frequency. The design of the major stormwater management system, defined as large storm sewers, major culverts, bridges, etc., which collect flow from the minor system shall be based on the 100-year storm frequency.