

Section 1. General Provisions

1.1. FINDINGS OF FACT

It is hereby determined that:

- (1) Land development activities and associated increases in site impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, sediment transport and deposition;
- (2) This stormwater runoff contributes to increased quantities of water-borne pollutants;
- (3) Illicit and non-stormwater discharges to the storm drain system can contribute a wide variety of pollutants to waterways, and the control of these discharges is necessary to protect public health and safety and water quality;
- (4) Improper design and construction of stormwater best management practices (BMPs) can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;
- (5) Clearing and grading during construction increases soil erosion and add to the loss of native vegetation;
- (6) Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;
- (7) Substantial economic losses can result from these adverse impacts on the waters of the County;
- (8) Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;
- (9) The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.
- (10) Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of stormwater runoff from development.

1.2 INTENT AND PURPOSE

The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within Boone County. This ordinance seeks to meet that purpose through the following objectives:

- (1) To protect the safety and welfare of citizens, property owners, and businesses by minimizing the negative impacts of increased stormwater discharges from new land development and redevelopment.
- (2) To control the rate, quality and volume of stormwater originating from development and redevelopment sites so that surface water and groundwater are protected and flooding and erosion potential are not increased.
- (3) To encourage responsible development to occur in Boone County
- (4) To control nonpoint source pollution and stream channel erosion.
- (5) To maintain the integrity of stream channels and networks for their biological functions, drainage, and natural recharge of groundwater.
- (6) To protect the condition of state (and U.S.) waters for all reasonable public uses and ecological functions.
- (7) To provide long-term responsibility for and maintenance of stormwater BMPs.
- (8) To establish legal authority to carry out all the inspection and monitoring procedures necessary to ensure compliance with this ordinance.
- (9) To enable Boone County Public Works to comply with the National Pollution Discharge Elimination System permit and applicable federal and state regulations.

1.3 APPLICABILITY

This ordinance shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Section 1.4. These provisions apply to any new development or redevelopment site within Boone County that meets one or more of the following criteria:

- (1) Land development that disturbs 1 acre or more.
- (2) Redevelopment that creates or adds three thousand (3,000) square feet or more of impervious cover.
- (3) Land development in or near an ecologically and/or environmentally sensitive area (as defined in Section 4.7) that disturbs more than 3000 square feet.
- (4) Land development activities that are smaller than the minimum applicability criteria set forth above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

1.4 EXEMPTIONS

The following activities are exempt from this ordinance:

- (1) Projects that are exclusively for agricultural and silvicultural uses. Agricultural or silvicultural roads that are used to access other lands subject to this ordinance are not exempt. Agricultural structures that are used for other uses subject to this ordinance are not exempt.
- (2) Maintenance and repair to any stormwater BMP deemed necessary by Boone County Public Works.
- (3) Any emergency project that is immediately necessary for the protection of life, property, or natural resources.
- (4) Linear construction projects, such as pipeline or utility line installation that does not result in the creation of impervious cover or land disturbance greater than one acre, as determined by Boone County Public Works. Such projects must be designed to minimize the number of stream crossings and width of disturbance, and are subject to County erosion and sediment control practices.
- (5) Any part of a land development that was approved by Boone County Planning Department prior to the effective date of this ordinance.

1.5. LEGAL AUTHORITY

These regulations are adopted pursuant to the authority granted in 64.907, 64.825 – 64.885, Revised Statutes of Missouri.

1.6. COMPATIBILITY WITH OTHER PERMIT AND ORDINANCE REQUIREMENTS

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.7. LIMITATIONS ON LIABILITY.

Floods from stormwater runoff may occur which exceed the capacity of stormwater drainage facilities constructed and maintained under this chapter. This chapter does not guarantee that property will be free from stormwater flooding or flood damage. This chapter shall not create a liability on the part of, or cause of action against, the County or any officer or employee thereof for any flood damage. This chapter does not purport to reduce the need or the necessity for obtaining flood insurance.

Section 2. Definitions

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

"Applicant" means a property owner or agent of a property owner who has filed an application for a permit.

"Bankfull" An established river stage/elevation at a given location along a river which is intended to represent the maximum safe water level that will not overflow the river banks or cause any significant damage within the river reach.

"Best Management Practice (BMP)" Activities, practices and procedures which control soil loss and reduce or prevent water quality degradation caused by nutrients, animal wastes, toxins, organics and sediment in the runoff. BMPs may either be structural (grass swales, terraces, retention and detention ponds, and others); or non-structural (disconnection of impervious surfaces, directing downspouts onto grass surfaces, ordinances and educational activities).

"Boone County Stormwater Design Manual" means the engineering and/or project review document maintained by Boone County Public Works containing technical standards and specifications, policies, procedures, and other materials deemed appropriate to assist with compliance with the provisions of this ordinance as adopted **DATE, 2009**.

"Building" means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 160 square feet of area.

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

"Clearing" means any activity which removes the vegetative surface cover through disturbance of the root zone.

"County Commission" means the Boone County Commission.

"County" is Boone County, Missouri.

"Dedication" means the deliberate appropriation of property by its owner for general public use.

"Detention" is the temporary storage of storm runoff in a stormwater BMP with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

“Developer” is a person directing or participating in the direction of improvements on and/or to land, including, but not limited to, the owner of the land, a general contractor or a commercial agent engaged for such activity.

“Development” A change in the zoning, intensity of use or allowed use of any land, building, structure or premises for any purpose. The subdivision or severance of land. The construction, erection or placing of one or more buildings or structures on land or use of land or premises for storage of equipment or materials. Making of an addition, enlargement or alteration to a building or structure, in, on, over or under land, which has the effect of increasing the size or usability thereof. Land disturbance activities such as but not limited to site-grading, excavation, drilling, removal of topsoil or the placing or dumping of fill and installation of drainage works. The use of the term shall include redevelopment in all cases unless otherwise specified in these regulations.

“Director” The Boone County Director of Public Works or Boone County Director of Planning and Building Inspection or his/her designee, as determined by the County Commission.

“Drainage Facility” is a man-made structure or natural watercourse used for the conveyance of stormwater runoff. Examples are channels, pipes, ditches, swales, catch basins and street gutters.

“Easement” means a legal right granted by a landowner to a grantee allowing the use of private land for conveyance or treatment of stormwater runoff and access to stormwater practices.

“Environmentally Sensitive Area” is any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem; or an area of land that contributes water to the habitat of an aquatic animal that is rare or valuable; or an area of land with increased vulnerability (presence of karst features, steep terrain, highly erodible soils) where the proposed human activities would likely cause disproportional damage to the environment; or as defined in Section 4.6.

“Erosion and Sediment Control Plan” is a plan designed to minimize the loss of soil and prevent discharge of sediment from a site during, and after construction activities.

“Flood Routing Path” is that part of the major storm drainage system that carries the runoff that exceeds the capacity of the designed drainage facilities. Essentially, the complete drainage system of an urban area contains two (2) separate drainage elements. The storm sewers collect the frequent events while surface drainage-ways must be provided for the major flow from more intense storms, or the event of clogging.

“Grading” means excavation or fill of material, including the resulting condition thereof.

“Groundwater Management Area” is a geographically defined area that may be particularly sensitive in terms of groundwater quantity and/or quality by nature of the use or movement of groundwater, or the relationship between groundwater and surface water, and where special management measures are deemed necessary to protect groundwater and surface water resources. Example includes the Devils Icebox Recharge Area.

“Hazardous Materials” means any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

“Illegal Discharge” means any direct or indirect non-storm water discharge to the storm drain system, except as exempted by this ordinance.

“Illicit Connections” means either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system. These include but are not limited to any conveyances that allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency. Illicit connections also includes any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

“Impaired Waters” means those streams, rivers and lakes that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.

“Impervious Cover” includes those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc).

“Industrial Stormwater Permit” means a National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

“Infill Development” means land development that occurs within designated areas based on local land use, watershed, and/or utility plans where the surrounding area is generally developed, and where the site or area is either vacant or has previously been used for another purpose.

“Infiltration” means the process of percolating stormwater into the subsoil.

"Infiltration Facility" means any structure or device designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade.

"Land Development" means a human-made change to, or construction on, the land surface that changes its runoff characteristics.

"Land Disturbing Activity" means any activity that changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity that bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

"Land Disturbance Permit" – an authorization for the permittee to develop land and conduct activities in accordance with County ordinances and erosion and sediment control practices outlined in an approved Stormwater pollution prevention plan.

"Landowner" the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights to the land.

"Maintenance Agreement" is a legally recorded document that acts as a property deed restriction, and that provides for long-term maintenance of stormwater BMPs.

"Motorized Equipment" vehicles or equipment which are motorized except this definition shall not apply to equipment used for the farming of land, or normal yard maintenance.

"Municipal Separate Storm Sewer System (MS4)" a publicly-owned facility by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage ditches/channels, reservoirs, and other drainage structures.

"National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit" a permit issued by the State under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the State, whether the permit is applicable on an individual, group, or general area-wide basis.

"Non-Stormwater Discharge" any discharge to the storm drain system that do not originate from precipitation events, such as but not limited to septic system discharges, floor drains, and laundry or commercial car wash facilities.

"Non-Structural Measure" a stormwater control and treatment technique that uses natural processes, restoration or enhancement of natural systems, or design approaches to control runoff and/or reduce pollutant levels. Such measures are used in lieu of or to supplement structural practices on a land development site. Non-structural measures include, but are not limited to: minimization and/or disconnection of impervious surfaces;

development design that reduces the rate and volume of runoff; creation, restoration or enhancement of natural areas such as riparian zones, wetlands, and forests; and on-lot practices such as rain barrels, cisterns, and vegetated areas that intercept rainfall and surficial runoff.

"Nonpoint Source Pollution" pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

"Ordinary High Water Mark" – That line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding area.

"Off-Site Facility" means a stormwater BMP located outside the subject property boundary described in the permit application for land development activity.

"On-Site Facility" means a stormwater BMP located within the subject property boundary described in the permit application for land development activity.

"Owner" the owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a piece of land. As used herein, owner also refers to, in the appropriate context: (i) any other person authorized to act as the agent for the owner; (ii) any person who submits a stormwater management concept or design plan for approval or requests issuance of a permit, when required, authorizing land development to commence; and (iii) any person responsible for complying with an approved stormwater management construction plan.

"Perimeter Control" means a barrier that prevents sediment from leaving a site either by filtering sediment-laden runoff, or diverting it to a sediment trap or basin.

"Permanent Stormwater BMP" a stormwater best management practice (BMP) that will be operational after the construction phase of a project and that is designed to become a permanent part of the site for the purposes of managing stormwater runoff.

"Person" means a natural person, corporation, partnership or other entity.

"Phasing" is the clearing a parcel of land in distinct phases, with the stabilization of each phase before the clearing of the next.

"Point source" is any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, separate storm sewer or vessel or

other floating craft from which pollutants are, or may be, discharged. (Code of State Regulations – 10 CSR 20-2)

“Pollutant” means anything that causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Predevelopment: The time period prior to a proposed or actual development activity at a site. Predevelopment may refer an undeveloped site or a developed site that will be redeveloped or expanded.

“Professional Engineer” – a licensed engineer who is registered with and authorized to practice engineering in the state of Missouri

“Professional Geologist” is a licensed geologist who is registered with and authorized in the state of Missouri.

“Receiving Stream or Channel” means the body of water or conveyance into which stormwater runoff is discharged.

“Recharge” means the replenishment of underground water reserves.

“Redevelopment” means a change to previously existing, improved property. This includes but is not limited to the demolition or building of structures, filling, grading, paving; including the conversion of gravel areas to pavement, or excavating. Redevelopment excludes ordinary maintenance activities such as remodeling of buildings on the existing footprint, resurfacing and/or repaving of existing paved areas, and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution.

“Responsible Party” means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns that is named on a stormwater maintenance agreement as responsible for long-term operation and maintenance of one or more stormwater BMPs.

“Riparian Zone / Riparian Buffer” is the land adjacent to streams, rivers, and lakes that actively interfaces with the waterbody through physical and chemical processes. Riparian zones filter nutrients and sediments, increase streambank stability, and provide shade that reduces stream temperatures

“Runoff Reduction (RR)” is defined as the total annual runoff volume reduced through canopy interception, soil infiltration, evaporation, transpiration, rainfall harvesting engineered infiltration or extended filtration.

“Sediment Control” means measures that prevent eroded sediment from leaving the site.

“Sensitive Area” means areas containing features that are of critical importance to the protection of ecological or environmental resources, and include bluffs, caves, sinkholes, springs, and wetlands.

“Sinkhole Cluster Area” any area that contributes surface water to a sinkhole which is located in a group of two (2) or more sinkholes grouped within 500 feet.

“Sinkhole Drainage Area” means the land area around a sinkhole that contributes surface water directly to the sinkhole(s).

“Sinkhole” means any closed depression formed by removal (typically underground) of water, surficial soil, rock, or other material. The existence of a sinkhole shall be as indicated by the closed depression contour lines on the topographical maps of the county or as may be determined by a field survey. Its actual limits may, however, be determined by field measurements with concurrence of the Director. Sinkholes may be either circular in plan or irregular, depending upon structural control.

“Sinkhole Ponding Elevation” means the maximum elevation of either the elevation as determined by using currently accepted methods of the Natural Resource Conservation Service (formerly Soil Conservation Service) to calculate the total volume of runoff from the sinkhole drainage area to the sinkhole utilizing an eight (8) inch rainfall and no sink outlet or the historical elevation or the published flood elevation. NOTE: Overflow conditions will establish maximum ponding elevation.

“Stabilization” means the use of practices that prevent exposed soil from eroding.

“Start of Construction” means the first land-disturbing activity associated with a development, including land preparation such as clearing, grading and filling; installation of streets and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

“Stop Work Order” means an order issued that requires that all construction activity on a site be stopped except as necessary to remedy the issue(s) for which the order was issued.

“Stormwater” means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation (such as rain or snow), and resulting from such precipitation.

F. **Landscape Plan:** The design of vegetative stormwater BMPs shall include a landscape plan detailing both the vegetation in the BMP and the maintenance requirements, and who will manage and maintain the vegetation.

(3) **Channel Protection Criteria:** The stormwater system shall be designed so that post-development discharges will not erode natural channels or steep slopes. This will protect in-stream habitats and reduce in-channel erosion. The applicant shall use either Tier 1 or Tier 2 performance standards, as applicable, to meet this criterion.

A. **Tier 1 Performance criteria:** sites having less than 5 acres of land disturbance OR less than 20% imperviousness on the entire tract shall apply the following performance standards:

1. Wherever practical, maintain sheet flow to riparian buffers or vegetated filter strips. Vegetation in buffers or filter strips must be preserved or restored where existing conditions do not include dense vegetation .
2. Energy dissipaters and level spreaders must be used to spread flow at outfalls.
3. On-site conveyances must be designed to reduce velocity through a combination of sizing, vegetation, check dams, and filtering media (e.g., sand) in the channel bottom and sides.
4. If flows cannot be converted to sheet flow, they must be discharged at an elevation that will not cause erosion or require discharge across any constructed slope or natural steep slopes.
5. Outfall velocities must be non-erosive from the point of discharge to the receiving channel or waterbody where the discharge point is calculated.

B. **Additional criteria for Tier 2 sites:** Sites greater than 5 acres of land disturbance OR greater than 20% imperviousness on the entire track shall apply the performance standards in subsection (A), in addition to the following performance standards:

Site design techniques that decrease runoff volumes and peak flows. This shall be accomplished by controlling the post-development peak discharge rate to the pre-development rate.

This criterion shall be met for the post-development 2-year, 24-hour storm event, (or equivalent storm runoff volume using other methodologies). The release rate shall be equal to or less than the pre-development 1-year, 24-hour storm event. Boone County will give credit for the application Runoff Reduction and WQV measures towards meeting the storage requirements.

OR

In an effort to encourage micro-detention and utilize stormwater BMPs to detain stormwater, the difference (increase) in the runoff volume that is predicted due to the development during the 2-year event will be stored and released at no more

than 0.1 cfs/acre; providing that 75% of the water leaving the site drains through at least one storage basin, and that the volume stored accounts for the added runoff from the entire disturbed site.

(4) **Flood Control Criteria:** Downstream overbank flood and property protection shall be provided by controlling the post-development peak discharge rate to the pre-development rate. This criterion shall be met for the 25-year, 24 hour storm event on property zoned REC, REC-P, C-O, C-N, C-G, C-GP, M-L, M-LP, M-G, M-GP.

Stormwater BMPs that impound water shall demonstrate that the 100-year storm can safely pass through the structure without overtopping or creating damaging conditions downstream.

The Director may waive some or all of the requirements of this section as specified in (A), (B), (C) and (D) below:

- A. **Discharge to Large Waterbody:** The land development discharges directly to a flood plain, major river or waterbody and the Director determines that waiving the flooding criteria will not harm public health and safety. The applicant shall secure drainage easements from any downstream property owners across whose property the runoff must flow to reach the flood plain, major river or waterbody. The applicant shall also demonstrate that any piped or open-channel system in which the runoff will flow has adequate capacity and stability to receive the project's runoff plus any off-site runoff also passing through the system.
- B. **Insignificant Increases in Peak Flow:** The land development results in insignificant increases in peak flow rates, as determined by the Director.
- C. **Alternative Criteria Provided:** The land development is subject to a floodplain study that recommends alternative criteria for flood control.
- D. **Increases in Downstream Peak Flows or Flood Elevations:** The Director determines that complying with the requirements of this section will result increases in peak flows or downstream flooding conditions due to coincident peaks from the site and the contributing watershed or another factor.
- E. **Documentation for Waiver:** When seeking a waiver in accordance with either (1), (2), (3) or (4) above, the applicant shall demonstrate that stormwater discharges will not unreasonably increase the extent, frequency, or duration of flooding at downstream properties and structures or have an unreasonable adverse effect on streams, aquatic habitats, and channel stability. In making its determination to allow full or partial waivers, the Director shall consider cumulative impacts and the land development's adherence to the land use plans and policies of Boone County, including the promotion of infill and redevelopment in particular areas.

4.5. REDEVELOPMENT CRITERIA

Land development that qualifies as redevelopment shall meet one of the following criteria:

- (1) **Reduce Impervious Cover:** Reduce existing site impervious cover by at least 20%.
- (2) **Provide Treatment:** Provide runoff reduction or water quality treatment for at least 20% of the site's pre-development impervious cover and 100% of any new impervious cover, not to exceed 150% of the total new impervious. This can be accomplished through stormwater BMPs designed in accordance with the criteria in Sections 4.2 through 4.3 and the Boone County Stormwater Design Manual.
- (3) **Apply Innovative Approaches:** Utilize innovative approaches to reduce stormwater impacts across the site. Examples include green roofs and pervious parking materials.
- (4) **Provide Off-Site Treatment:** Provide equivalent stormwater treatment at an off-site facility within the same watershed and as immediately downstream of the site as feasible.
- (5) **Address Downstream Issues:** Address downstream channel and flooding issues through channel restoration, increase in existing system capacity and/or other off-site remedies.
- (6) **Combination of Measures:** Any combination of (1) through (5) above that is acceptable to Boone County Public Works.

4.6 ENVIRONMENTALLY SENSITIVE AREAS: ENHANCED CRITERIA

This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, in or draining to an environmentally sensitive area that disturbs more than 3000 square feet.

- (1) These provisions apply to any stormwater discharge or drainage on new development or redevelopment sites within Boone County that meets one or more of the following criteria:
 - A. Within 1000 feet of and draining to a losing stream*, Outstanding National or State Resource Water*
 - B. Within 100 feet of a Class P Stream*, or Type 1 stream per the Stream Buffer Regulations
 - C. Within 1000 feet of and draining to, or changes the site hydrology of, a jurisdictional wetland as defined by the U.S. Army Corps of Engineers; or
 - D. Runoff that discharges to a groundwater point recharge feature such as a sinkhole or other direct conduit to groundwater such as a cave.

*See listings in Missouri Water Quality Standards 10 CSR 20-7.031. This information is also provided in the Boone County Stormwater Design Manual – Appendix C.

- (2) **Land Disturbance Permit Threshold Lowered:** When any of the above conditions exist, permitting related to land disturbance, stormwater management and water quality control will be required for any land disturbance greater than 3000 square feet.
- (3) **General Stormwater Management:** Drainage patterns for proposed development must be designed to protect sensitive areas from the effects of runoff from developed areas, and to maintain the drainage areas of groundwater recharge features in a natural state. Special controls must be used where necessary to avoid the effects of erosion, sedimentation, and/or high rates of flow.
- (4) **Buffer zone limitations and prohibitions:** The natural vegetative cover must be retained within a buffer zone described in this section. All construction activities including grading and filling are prohibited. Additionally, wastewater disposal or irrigation is prohibited.
- (5) **Buffer zone widths:** The following buffer widths are required to reduce construction activities and retain the natural vegetative cover in unique and environmentally sensitive areas throughout the County.
 - A. Point Recharge Feature (Sinkholes): For a point recharge feature, the buffer zone coincides with the topographically defined drainage area, except that the width of the buffer zone from the edge of the sensitive area shall not be less than 150 feet, or greater than 300 feet from the sinkhole eye.
 - B. Wetlands: For a wetland, the buffer zone shall be at least 50 feet.
 - C. Outstanding Resource Waters/Losing Streams: For national or state outstanding resource waters, the buffer zone shall be twice that of the stream buffer requirement. (Chapter 26 Boone County Zoning Regulations)
 - D. Other Features: For other environmentally sensitive areas, the buffer zone shall be at least 50 feet.
- (6) **Wetland Protection:** Wetlands meeting the Army Corps of Engineers definition of a jurisdictional wetland must be protected in all watersheds. Protection methods for wetlands include:
 - A. Appropriate setbacks that preserve the wetlands or wetland functions;
 - B. Wetland mitigation, including wetland replacement;
 - C. Wetland restoration or enhancement.

The Director may approve the removal and replacement of a wetland as approved by the U.S. Army Corps of Engineers or the elimination of setbacks from a constructed wetland that is primary use is for water quality control.

(7) Sinkhole/Cave Protection:

- A. **Sinkhole Evaluation:** The developer/owner of any development that will discharge runoff to a sinkhole shall submit a Sinkhole Evaluation during the pre-application meeting or preliminary plat/plan review. A professional engineer or professional geologist must complete a sinkhole evaluation, with the following information.
- i. Drainage area map
 - ii. Details of the drainage path of the discharge from the development to the sinkhole (offsite sinkholes)
 - iii. Sinkhole boundary map based on topography
 - iv. Geological Evaluation
- B. **Geological Evaluation:** A professional geologist or a professional engineer with a demonstrated expertise in geotechnical applications is required to prepare a geologic evaluation of off-site sinkholes to determine the structural integrity of the geology, and the stability of the formation. The geological evaluation shall provide the following information:
- i. Identification of all sinkholes as depression or collapse sinkholes.
 - ii. A map of the topographic rim (highest closed contour) of all depression sinkholes, based on a 2-foot contour interval or less.
 - iii. A map of all depression and collapse sinkholes contributing to the groundwater recharge of the area.
 - iv. A map showing no-build areas for buildings and other structures based on topographic and geologic rims of depression and collapse sinkholes.
 - v. Detail of proposed stabilization of collapse sinkholes, if applicable.
- C. **Sinkhole or Cave-Related Non-Buildable Areas:** The Director may, based upon the topography, geology, soils, and history of the sinkhole(s) and/or cave(s) (such as past filling) and the engineer's storm water analysis, establish sinkhole or cave-related non-buildable areas. No grading or installation of parking areas, streets or other infrastructure shall be permitted within the said non-buildable area unless otherwise authorized by the Director.

This non-buildable area shall follow the limits of the sinkhole in most cases. However, the non-buildable area may be expanded or contracted by action of the Director where warranted, due to the nature of the specific sinkhole or cave, the underlying geology, soils, drainage, and any related information, such as depth to bedrock.

In sinkhole cluster areas, the Director may require the developer to provide recommendations from a consulting engineer and a consulting hydrogeologist, based upon substantial and state-of-the-art field studies and evaluation of the specific sinkhole or cave system. These studies shall be submitted to Boone County Public Works.

- D. Development in Sinkhole Drainage Areas without Discharge to Sinkhole:** Development may occur in the immediate sinkhole drainage area if the developer provides alternative surface drainage away from the sinkhole, while keeping the water in the same surface drainage basin, and providing that the water shall not go into another sinkhole drainage area off the applicant's property. The immediate sinkhole drainage area (or portion thereof) which cannot be provided with an alternative drainage system can be deleted from the development area for calculations utilizing this information to meet regulatory requirements.
- E. Development in Sinkhole Drainage Areas with Discharge to Sinkhole:** For portions of the sinkhole drainage area where alternative surface drainage methods cannot be provided, the sinkhole can be used for limited surface runoff drainage of a proposed development if the following conditions are met:
- i. That the runoff from the development area is either completely retained in a retention basin or detained in a detention basin. The flow rate out of the above basins shall be regulated so that it is no greater than the flow rate into the sinkhole of the development area prior to development.
 - ii. Enough runoff is diverted from the sinkhole drainage area so that the development of the remaining area does not increase the total quantity or deteriorate the water quality of runoff into the sinkhole. Where additional runoff is anticipated, a consulting engineer and hydrogeologist shall evaluate and show the effect of any additional quantity of runoff to the sinkhole and sinkhole system. The Director shall review the study findings and make a determination that the plan is acceptable.
 - iii. Where the sinkhole outlet is off site, either the runoff leaving the subject property must be shown to be no greater in flow or in quantity than that which existed before development, or easements must be obtained from owners of property where any increase in flow or quantity of water must go to reach the sinkhole outlet. Easement areas shall be approved by the Director based upon the developer's engineer's calculations of the proposed ponding elevation.
- F. Filling in sinkholes and sinkhole drainage areas:**
- i. No street shall be placed below an elevation of at least one (1) foot above the sinkhole ponding elevation and only when collapse of the sinkhole will not adversely affect the road.

- ii. No increase in the ponding elevation will be allowed by grading or filling without a storm water analysis approved by the Director.
- iii. It shall be unlawful for any person to place, dump or deposit trash, debris, rubbish, brush, leaves, grass clippings, yard waste, hazardous waste or similar materials within a sinkhole.

G. Grading or alteration of land near or over Sinkhole: The alteration of land in a sinkhole by means of grading or the use of motorized equipment without a permit is a violation of this ordinance.

Section 5. Construction Site Runoff Control

5.1. GENERAL

Grading, erosion control practices, sediment control practices, and waterway crossings shall be adequate to prevent transportation of sediment from the site. The design and construction guidance in the Boone County Stormwater Design Manual shall be followed insofar as it is applicable. Other pollutants shall be controlled as necessary to prevent potential discharge to waters of the State.

5.2. CLEARING AND GRADING

- (1) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other County regulations.
- (2) Clearing techniques that retain natural vegetation and retain natural drainage patterns shall be used to the maximum extent practicable.
- (3) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- (4) Cut and fill slopes shall be *no greater than 3:1*, except as approved by the County to meet other community or environmental objectives.
- (5) Phasing shall be required on all sites disturbing greater than *thirty* acres, with the size of each phase to be established at plan review.
- (6) Other measures may be required in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains.

5.3. EROSION CONTROL

- (1) Soil must be stabilized within 14 days of clearing or inactivity in construction, unless otherwise authorized, and shall be effectively maintained throughout the duration of any inactivity.
- (2) Soil stockpiles must be stabilized or covered at the end of each work day unless otherwise protected from allowing sediment to leave the site.

- (3) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- (4) Techniques that divert upland runoff past disturbed slopes shall be employed.

5.4. SEDIMENT CONTROLS

- (1) Sediment controls shall be provided in the form of settling basins or sediment traps or tanks, and perimeter controls.
- (2) Where possible, settling basins shall be designed in a manner that allows adaptation to provide long term stormwater management.
- (3) Adjacent properties shall be protected by the use of a vegetated buffer strip, in combination with perimeter controls wherever possible.

5.5. WATERWAYS AND WATERCOURSES

- (1) When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided, and an approval obtained from the U.S. Army Corps of Engineers and the Missouri Department of Natural Resources if deemed a jurisdictional stream.
- (2) When in-channel work is conducted, the channel shall be stabilized before, during and after work.
- (3) Stabilization adequate to prevent erosion must be provided at the outlets of all pipes and paved channels.

5.6. CONSTRUCTION SITE ACCESS

- (1) A temporary access road or driveway shall be provided at all sites.
- (2) Regardless of the amount of land disturbance at a particular site, it shall be the responsibility of the permit holder and/or property owner to ensure streets open to the public surrounding a permitted site are kept free of debris and sediment throughout construction. Upon notification that a problem exists, the permit holder and/or property owner shall remedy the issue within 24 hours.

5.7. CONTROL OF OTHER CONSTRUCTION POLLUTANTS

- (1) **Concrete Truck Washout:** Concrete truck washout shall not discharge surplus concrete or drum wash water on the site in such a manner that promotes contact with storm waters or natural streams discharging from the site.
- (2) **Construction Waste:** All construction waste material shall be collected, deposited, and stored in a manner to prevent contact with storm waters discharging from the site and shall be disposed of by a licensed solid waste management contractor. No waste shall be buried on the site.

- (3) **Sanitary Waste:** A licensed sanitary waste management contractor shall collect all sanitary waste from portable units that will be maintained on a regular basis for any site that cannot provide other means of sanitary waste disposal.
- (4) **Petroleum Products:** All construction equipment and vehicles shall be monitored for leaks and receive regular preventative maintenance to ensure proper operation and reduce the risk for leaks or spills. Petroleum products shall be stored in clearly labeled and tightly sealed containers or tanks. Fuel or oil contaminated soil shall be removed and disposed of properly.
- (5) **Fertilizers:** Fertilizers shall be applied following manufacturer's recommendations. Fertilizers shall be stored in a covered area or in watertight containers. Partially used products shall be properly sealed and stored to avoid spills or leaks.
- (6) **Hazardous materials:** Storage areas for hazardous materials such as oils, greases, paints, fuels, and chemicals, shall be provided with secondary containment to ensure that spills in these areas do not reach waters of the State. All hazardous waste materials shall be disposed of according to state regulation or the manufacturer's recommendations.

Section 6. Ongoing Maintenance for Stormwater BMPs

6.1. General Maintenance Requirement

All stormwater facilities and BMPs shall be maintained in accordance with the approved and recorded stormwater maintenance agreement and stormwater maintenance plan. If no maintenance agreement or plan is in place, the owner shall maintain the facility as it was designed in order to continue the mitigation of stormwater quantity and quality impacts. This maintenance shall include removal of overgrown vegetation, repair of erosion, repairs to any inlet/outlet structures, and removal of excess silt or any other maintenance deemed necessary to provide said mitigation. The design of stormwater facilities shall incorporate maintenance accommodation and long-term maintenance reduction features.

6.2. Maintenance Responsibility

The responsible party named in the recorded stormwater maintenance agreement (**Section 3.7**) shall maintain in good condition and promptly repair and restore all structural and non-structural stormwater facilities and BMPs and all necessary access routes and appurtenances (grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices) in order to maintain the mitigation of stormwater quantity and quality impacts. Such repairs or restoration and maintenance shall be in accordance with the approved stormwater management construction plan, the stormwater maintenance agreement, and the stormwater maintenance plan.

6.3. INSPECTION BY BOONE COUNTY PUBLIC WORKS

The County shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If the site has security measures in force that require proper identification and clearance before entry into its premises, the responsible party shall make the necessary arrangements to allow access to representatives of the County.

Unreasonable delays in allowing the County access to a permitted facility is a violation of a storm water discharge permit and of this ordinance.

If the County has been refused access to any part of the premises from which stormwater is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the County may seek issuance of a search warrant from any court of competent jurisdiction.

6.4. RECORDS OF MAINTENANCE ACTIVITIES

The responsible party shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least five (5) years. These records shall be made available to the Director during inspection of the facility and at other reasonable times upon request.

6.5. FAILURE TO PROVIDE ADEQUATE MAINTENANCE

In the event that the stormwater BMP has not been maintained and/or becomes a danger to public safety or public health, the Director shall notify the responsible party by registered or certified mail. The notice shall specify the measures needed to comply with the maintenance agreement and the maintenance plan and shall specify that the responsible party has thirty (30) days or other time frame mutually agreed to between the Director and the responsible party, within which such measures shall be completed. If such measures are not completed, then the Director shall pursue enforcement procedures pursuant to Section 9 of this Ordinance.

If a responsible person fails or refuses to meet the requirements of an inspection report, maintenance agreement, or maintenance plan the Director, after thirty (30) days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the practice in proper working condition. The Director may assess the responsible party of the practice for the cost of repair work which shall be a lien on the property, or

prorated against the beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by Boone County.

6.6. REQUIRED EASEMENTS

Whenever improvements to land are made, easements for the stormwater management facilities including structural facilities, engineered channels and overflow paths, shall be provided across private property. Easements through existing developments shall be obtained as deemed necessary. Drainage easements shall include access from a convenient public street or parking lot. Minimum dimensions are as follows:

1. Where a storm drain consists of a closed conduit, the width shall be the greater of fifteen (15) feet or the sum of the conduit diameter and twice the cover depth over the conduit.
2. The stormwater drainage system easements shall contain the overflow from the 100 year (1% annual chance) storm event and shall indicate the highest expected water surface elevation of said event.
4. Access easements to and around detention/retention facilities shall be a minimum of fifteen (15) feet wide with cross slopes to be safely accessible by a vehicle unless otherwise approved by the Director.

6.7. INTERFERENCE AND DAMAGE

No person shall damage, discharge or place any substance into the drainage system which will or may cause obstruction to flow or other interference with the operation of the stormwater drainage system. Any person violating this section or damaging the stormwater drainage system shall be liable to the County for all expense, loss or damage incurred by the County due to such violation or damage, in addition to any other penalties set forth herein.

Section 7. Illicit Discharge Detection and Elimination

7.1. GENERAL

- (1) **Purpose:** This ordinance is adopted pursuant to the authority granted in 64.907, 64.825 – 64.885, Revised Statutes of Missouri and are intended to regulate non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:
 - A. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user
 - B. To prohibit Illicit Connections and Discharges to the MS4
 - C. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance
- (2) **Applicability:** This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted.
- (3) **Ultimate Responsibility:** The standards set forth in this article and promulgated pursuant to this article are minimum standards. Compliance with this article does not insure that there will be no contamination, pollution or unauthorized discharge of pollutants into the waters of the United States. This article shall not create liability on the part of the County or any agent or employee of the County for any damages that result from any discharges, reliance on this article or any administrative decision made under this article.
- (4) **Stormwater Pollution Prevention:** Any owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs 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 storm water associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

7.2. PROHIBITIONS

- (1) **Illegal Discharges:** It shall be unlawful for any person to discharge or cause to be discharged into the municipal separate storm sewer system or into any watercourse any material other than stormwater. The following discharges are exempt from the prohibitions established by this article:
- A. Waterline flushing or other potable water sources;
 - B. Landscape irrigation or lawn watering;
 - C. Diverted stream flows;
 - D. Rising groundwater;
 - E. Groundwater infiltration;
 - F. Uncontaminated pumped groundwater;
 - G. Foundation or footing drains excluding active groundwater de-watering systems;
 - H. Crawlspace pumps, air conditioning condensation;
 - I. Springs;
 - J. Non-commercial washing of vehicles;
 - K. Natural riparian habitat or wetland flows;
 - L. Swimming pools if de-chlorinated to less than 1 ppm chlorine;
 - M. Fire fighting activities;
 - N. Other water not containing pollutants;
 - O. Discharges specified by the County as necessary to protect public health and safety;
 - P. Dye testing if notification is given to the County before the test; and
 - Q. Any non-storm water discharge permitted under an NPDES permit, waiver or waste discharge order issued to the discharger and administered under the authority of the Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the municipal separate storm sewer system.
- (2) **Illicit connections:**
- A. It shall be unlawful for any person to construct, use, maintain or have an illicit connection.
 - B. This section expressly applies to illicit connections made in the past even if the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) **Waste disposal prohibitions:** It shall be unlawful for any person to place, deposit or dump or to cause or allow the placing, depositing or dumping any refuse, rubbish, yard waste, paper litter or other discarded or abandoned objects, articles

and accumulations containing pollutants into the municipal separate storm sewer system or into any waterway.

- (4) **Connection of sanitary sewer prohibited:** It shall be unlawful for any person to connect a line conveying sewage to the municipal separate storm sewer system or to allow such a connection to continue.
- (5) **Industrial or construction activity discharges:** It shall be unlawful for any person subject to an industrial activity or construction NPDES storm water discharge permit to fail to comply with all provisions of such permit.

7.3. 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 or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said 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 said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the County in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the County within three business days of the phone 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 years.

7.4. REGULATIONS AND MONITORING

- (1) The County Commission may, by ordinance, adopt standards identifying best management practices (BMP) for any activity, operation or facility which may cause or contribute to pollution of storm water, the storm drain system, waters of the state or waters of the United States. These standards shall be on file at Boone County Public Works. It shall be unlawful for any person undertaking any activity or owning or operating any facility subject to such standards to fail to comply with the standards.
- (2) The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal separate storm sewer system or water courses through the use of structural and non-structural BMPs. Any person responsible for property which is or may be the source of an illicit discharge may be required to implement additional structural and non-structural BMPs to prevent further discharge. 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 provisions of this section. These BMPs shall be a part of the storm water pollution prevention plan as necessary for compliance with the requirements of the NPDES permit.

Section 8. Permits

8.1. Promulgation of Rules

The Director may promulgate rules governing the issuance of the permits required by this section and may produce forms to effectuate the intent of this ordinance.

8.2. Stormwater Discharge Permit

- (1) **Authorization to Discharge to MS4:** If runoff from a land development will flow to a municipal separate storm sewer system (MS4) or other publicly-owned storm sewer system, then the applicant shall obtain authorization from the system's owner to discharge into the system. The applicant must demonstrate that the system has adequate capacity for any increases in peak flow rates and volumes.
- (2) **Permit Required:** No stormwater drainage facility shall be constructed, altered or reconstructed without a stormwater discharge permit. To obtain a permit, the application form provided by the County shall be completed and plans must be submitted for review and approval of the Director. All such construction shall comply with the general requirements and design procedures, as set forth in this chapter, and the criteria of the Boone County Stormwater Design Manual.
- (3) Prior to the issuance by the County of a permit for any type of construction, the property owner, the developer or their agent shall have a stormwater management plan approved by the County in accordance with Section 3. The property owner, developer or their agent shall, at his own expense, submit necessary plans, designs and specifications to the County for review and approval. This plan shall:
 - Include a pre- and post-development hydrologic analysis of the site
 - Identify pollutants of concern for each area of the site
 - Identify pollution prevention measures
 - Identify controls that provide treatment and reduce stormwater volumes and velocities
 - Identify any environmentally sensitive areas and provide a plan for protection of these areas per this chapter
 - Identify Low Impact Development opportunities that can best mimic the natural hydrology of the site and filter pollutants from the runoff.
 - Provide for long term operation and maintenance of controls

- (4) Provisions of this section for plan requirement shall be waived provided no land is disturbed and no trees, shrubs, grass or vegetation is destroyed or removed for construction, reconstruction, repair or alteration of any building provided the improvement does not alter or increase the flow of water.
- (5) The post-construction stormwater management plan shall show the location of any environmentally sensitive features (as listed in Section 4.6), the sensitive feature's drainage area, any sinkhole cluster area, or portions of such items, along with ground contours, a hydrologic analysis of the drainage area and significant physical features on the property, and detailed information on the work to be performed in or near the sensitive area.

Upon review of the information presented by the applicant, the site, and such other information as may be available, the Director may issue a permit for work to be performed in or near the sensitive area. All work shall be performed in accordance with the permit. The Director may designate certain areas where grading or construction equipment is not permitted or is otherwise limited.

8.3. Land Disturbance Permit

- (1) **Applicability:** No clearing, grading, borrowing or filling of land resulting in a land disturbance greater than one acre shall commence prior to obtaining a land disturbance permit. All such work shall also comply with an approved erosion and sediment control plan in conjunction with an approved site development plan. Additionally, no person shall engage in the grading of land in excess of 3000 square feet or the use of motorized equipment in or near a sinkhole, losing stream, cave, spring, wetland or other environmentally sensitive area without first securing a permit from the Director.
- (2) **Individual Lots Not Separate Land Development:** Residential, commercial or industrial developments shall apply these stormwater management criteria to land development as a whole. Individual residential lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project.
- (3) **Expiration:** Every approval under this subsection for clearing, grading, borrowing or filling of land shall expire within two (2) years from the date of issuance. This permit may be renewed for up to two (2) years by submitting a written request for an extension to the Director with the appropriate fee as listed in Section 8.5.

8.4. Performance Bond or Guarantee

- (1) **Performance Bond or Guarantee Required:** Upon approval of the Storm Water Pollution Prevention Plan (SWPPP) and prior to issuance of a Land Disturbance Permit, the developer shall post a security in the form of a cash bond, cash or

equivalent of not less than 150% of the value of all erosion and sediment control measures, which are part of the SWPPP. For land disturbance permits where no other security is required, the only type of security which will be accepted will be a cash bond. For land disturbance permits where other security is established for public improvements, the erosion control security may be added to the security for public improvements. If the bond, or other security document is placed in default, or the insurance is terminated or not maintained at a satisfactory level, then no additional permits or approvals, including building permits, shall be issued for the developer's property located in the development for which the security was given, until the improvements are completed to the satisfaction of the County.

- (2) **Term of Performance Bond or Guarantee:** Any portion of the deposit not expended or retained by the County hereunder shall be refunded to the applicant within sixty (60) days of the closing of the Land Disturbance Permit, after soil and drainage conditions are stabilized to the satisfaction of the County
- (3) **Term Extended for Initial Maintenance:** At the discretion of the Boone County Public Works, the performance bond or guarantee may be extended beyond the time period specified above to cover a reasonable period of time for testing the practices during storm events and for initial maintenance activities. For the purposes of this section, the time shall not exceed 2 years.
- (4) **Partial Release of Bond:** The County shall have the discretion to adopt provisions for a partial pro-rata release of the performance bond or guarantee on the completion of various stages or phases of development.

8.5. Fees

The County has the ability to require a fee to support local plan review, inspection and program administration. Each developer/owner seeking a land disturbance or stormwater discharge permit shall pay a fee upon submittal of the plans, in amounts according to the schedule set forth below.

- (1) Stormwater Discharge Permit: \$50.00
- (2) Major Amendment to a Stormwater management construction plan: \$25.00
- (3) Land Disturbance Permit: \$150.00
- (4) Land Disturbance Permit Renewal: \$50.00

8.6. Inspection

- (1) The County may periodically inspect development sites. Through such periodic inspections, the County shall ensure that the Stormwater Pollution Prevention Plan (SWPPP) is properly implemented and any necessary amendments thereto made in order to protect the environment and the public's health, safety and welfare. The erosion and sediment control measures for the site must be maintained by the

developer until the site is stabilized. Also through such periodic inspections the County shall ensure that the post-construction management plan is properly implemented. The stormwater infrastructure improvements shall be maintained by the responsible party (per Section 6) until the infrastructure is accepted by the County.

- (2) The permittee shall notify the County at least two (2) working days before the start of site clearing.
- (3) The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved erosion and sediment control plan(s) or in the Stormwater Pollution Prevention Plan (SWPPP). The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures and/or maintenance of existing measures. All inspections shall be documented in written form and kept readily on site.

Section 9. Violations, Enforcement and Penalties

9.1 VIOLATIONS AND PENALTIES FOR PERMITS

- (1) The County may suspend or revoke any permit associated with the site or any permit associated with the person(s) holding the permit(s) for the site for non-compliance with the Land Disturbance Permit or Stormwater Discharge Permit.
- (2) **Procedure:**
 - A. Upon discovery of a violation of this article, the contractor will be notified and given up to seven (7) days to remedy the violation in a Land Disturbance Permit or up to forty-five (45) days for a Stormwater Discharge Permit. Extensions of time may be granted in the Director's sole discretion.
 - B. If the violation has not been remedied within the time frame set forth in the notice, a stop work order may be issued and the permit(s) will be suspended. The stop work order shall state the reason for the order and the conditions under which the order and suspension will be lifted.
 - C. Any person who shall continue to engage in activity for which a permit is required after having been served with a stop work order, except in such work as that person is directed to perform to remove a violation or unsafe condition, shall be a violation of this ordinance.
 - D. After two (2) stop work orders of a permit for the same site for similar violations, the permit(s) shall be revoked. All applicable procedures will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.
 - E. If the stop work order has not been lifted through compliance with its terms within thirty (30) days from the date of its issuance, the permit shall be revoked. All applicable procedures will have to be followed for re-issuance of

the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.

- F. A person aggrieved by a decision to revoke any permit provided for herein may appeal the revocation to the Boone County Board of Adjustment.
- (3) Engaging in activity requiring a permit without first obtaining such permit shall be a violation of this ordinance.

9.2. ADMINISTRATION, PENALTIES AND REMEDIES

- (1) **Responsibility for Administration:** The provisions of this chapter shall be administered and enforced by the Director. The Director shall prescribe forms for attainment of the purposes of this chapter and for the proper enforcement thereof. The Director may delegate the administration of this chapter, or any part thereof, subject to limitations of the ordinances of the County, to duly qualified employees, deputies or agents of the County.
- (2) **Interpretation:** The provisions of this chapter shall be the minimum requirements for the protection of the public health, safety and general welfare and shall be liberally and broadly construed and applied to the greatest extent permitted by law in order to promote and protect the public health, safety and welfare. These regulations are not intended to conflict with, abrogate or annul any other rule, law or regulation. Where any provisions of these regulations impose restrictions different from those imposed by any other regulation, rule or law, the provision which is more restrictive or imposes a higher standard shall control. These regulations are intended to be construed harmoniously and consistently with each other, the Boone County Stormwater Design Manual, and all other applicable rules, laws and regulations.
- (3) **Severability:** If any part or provision of these regulations is declared invalid or unconstitutional then the remainder of these regulations shall not be declared invalid or unconstitutional but shall remain in full force and effect to the greatest extent permitted by law.
- (4) **Penalties and Remedies:** Any owner, lessee, tenant, occupier of land or other person who violates any provision of these regulations shall be deemed guilty of a misdemeanor and shall be upon conviction punished as provided by law. In addition, any person permitting, aiding, abetting or concealing a violation of this ordinance shall be deemed guilty of a misdemeanor and shall be upon conviction punished as provided by law. Each day a violation of these regulations continues shall constitute a separate offense. The penalty provided in this section shall not be construed to be exclusive but is intended to be supplemental and in addition to any other remedy provided by law or at equity. The County may institute in the circuit

court of the County any appropriate action or proceedings to prevent any unlawful activity proscribed in this ordinance or to correct any violations of this ordinance.

9.3. VARIANCES

- (1) **General:** Where undue hardships or practical difficulties may result from strict compliance with this chapter, the developer may file an application for a variance. Said applications shall be directed to the Boone County Board of Adjustment organized and existing under the zoning regulations of Boone County, Missouri, which shall have the jurisdiction and shall be charged with the duty of hearing and deciding applications for variances from the strict application of the provisions of this ordinance. The Board may grant a variance only if it finds after public hearing and upon competent and substantial evidence that the applicant meets the following criteria:
 - A. The variance shall not have the effect of nullifying the intent and purpose of this stormwater ordinance;
 - B. The granting of the variance will not be detrimental to the public safety, health or welfare, or injurious to other property or improvements.
 - C. The conditions upon which the request for a variance is based are unique to the property for which the variance is sought, are not applicable generally to other property, and are not self-imposed.
 - D. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if this chapter was strictly interpreted and carried out.
- (2) **Conditions:** In recommending variances and exceptions, staff may recommend and the Board may require such conditions as will, in the judgment of each, secure substantially the objectives of the standards or requirements of this chapter.
- (3) **Application:** An application for a variance shall be submitted at the time of filing for a preliminary plat or for application for a building permit, whenever possible. The application shall be on forms provided by the County and shall state fully the grounds for the request and all facts relied upon by the practitioner. The application shall be filed with the Director and after review thereof the Director shall make a recommendation to the Board to grant or deny the application and state the reasons for his or her recommendation. Either the applicant or the Director may appeal or seek judicial review of any decision of the Board as provided by law.