

**BOONE COUNTY
STORMWATER ORDINANCE
REVISIONS**

MARCH 6, 2025

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- Proposed Changes to Zoning Regulations
- Section 2 Definitions
- Section 28 Stormwater Ordinance
- Summary of Changes

COMPREHENSIVE STORMWATER ORDINANCE

- Effective April 15, 2010
- Revised January 21, 2025



Section 28.1.3
Stormwater
Management
Applicability

2010 ORDINANCE LANGUAGE

(1) Land development that disturbs
1 acre or more.

2025 ORDINANCE LANGUAGE

(1) All new development.

(5) See Section 28.8.3 for Land
Disturbance Permit applicability.

Section 28.2

Definitions

- Moved to Section 2 Boone County Zoning Regulations
- Changed definitions of Building, County Commission, Director, and Grading to match Boone County Zoning Regulations Section 2 definitions
- Added definitions for Clean Fill, Common Plan of Development, Common Promotional Plan, and Losing Stream
- Revised definitions for Phasing, Redevelopment, and Riparian Zone/Riparian Buffer

REDEVELOPMENT DEFINITION

2025 Redevelopment: (within the context of Section 28 of the Bone County Zoning Regulations, see Section 28.4.5) A change to previously existing, improved property. This includes but is not limited to the expansion of existing structures or existing paved areas, filling, grading, paving; including the conversion of gravel areas to pavement. 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.

SECTION 28.3.6 COORDINATION WITH OTHER APPROVALS AND PERMITS

- (1) Approval of Other Permits: Unless exempt, no stormwater discharge permit or building permit shall be issued for land development without approval of a stormwater management construction plan **and all applicable financial securities, agreements, easements, permits, etc.**



SECTION 28.3.7 MAINTENANCE AGREEMENT AND PLANS

- (1) Responsible Party: The owner shall be responsible for the operation and maintenance of **any measures required by the stormwater management construction plan** and shall pass such responsibility to any successor owner, unless such responsibility is accepted by the County.

SECTION 28.4.1 GENERAL STORMWATER MANAGEMENT CRITERIA

- (6) Location of Stormwater Facilities on Lots: Stormwater facilities within residential subdivisions that serve multiple lots and/or a combination of lots and roadways shall be on a lot owned and maintained by an entity of common ownership, unless an alternative arrangement is approved by the Director. **The lot containing the stormwater facility shall have road frontage and provide vehicular access to the stormwater facility.** Stormwater practices located on individual lots shall be placed within an easement and either maintained by the lot owner or maintained by an entity of common ownership.

SECTION 28.4.1 GENERAL STORMWATER MANAGEMENT CRITERIA:

(7) Prohibited Location of Stormwater BMPs: Stormwater BMPs shall not be located in locations that present conflicts such as utility easements, access easements, rights-of-way, etc.



SECTION 28.4.4(2) WATER QUALITY PROTECTION

- B. Vegetated Filter Strips: Up to 25% of a site's total impervious surface may discharge in a sheet flow condition through established vegetation such as may exist in a vegetated stream buffer without otherwise being treated. If stormwater treatment credit is to be acquired by means of sheet flow through established vegetation, the area of established vegetation is to remain undisturbed.

**SECTION 28.4.4(3)
CHANNEL PROTECTION
CRITERIA
CHANGED TO
STORMWATER FLOW
AND RELEASE RATE
CRITERIA**



28.4.4(3) STORMWATER FLOW AND RELEASE RATE CRITERIA

- A. Tier 1 Performance Criteria: Sites having less than five (5) acres of land disturbance **AND** less than 20% imperviousness on the entire tract shall apply the following performance standards...
- B. Additional Criteria for Tier 2 Sites:
- Added **Channel Protection Criteria** subheading to 3rd paragraph
 - Moved Flood Control Criteria from 28.4.4(4) to 4th paragraph.
Removed, "...on property zoned REC, REC P, CO, CN, CG, C-GP, ML, ML-P, MG, M-GP."

28.4.4(3) STORMWATER FLOW AND RELEASE RATE CRITERIA;

- B. 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, and the difference (increase) in the runoff volume that is predicted due to the development during the 25-year event will be stored and released at no more than 0.17 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.

Section 28.4.4(4) The Director may waive some or all of the requirements of this section as specified in (A), (B), (C) and (D) below:



28.4.4(5) For residential subdivisions that do not fall under the Tier 2 requirements, water quality treatment will be required for all paved, shared drives. Any known downstream flooding problems shall be addressed, or detention will be required.



Section 28.4.5 Redevelopment Criteria

28.4.5(2)B. Runoff reduction may be used instead of water quality treatment on land zoned Residential, Transition or Agriculture where the lot size is at least 2.5 acres and impervious cover is less than 10%.

Section 28.4.5 Redevelopment Criteria:

28.5.1(7) Redevelopment projects are not subject to stormwater detention requirements unless there are known downstream issues per Section 28.4.5.1(5).



SECTION 28.4.5 REDEVELOPMENT CRITERIA;

28.5.2 Redevelopment projects that will exceed at 50% increase in impervious surface will be subject to stormwater detention requirements (Sections 28.4.4(1), 28.4.4(2), and 28.4.4(3)) for all new impervious surface.



28.4.6(1) Provisions that apply to any stormwater discharge in an environmentally sensitive area:

- D. Runoff **source within 1,000 feet of,** and discharging to a groundwater point recharge feature such as a sinkhole or other direct conduit to groundwater; or



28.4.6(1) Provisions that apply to any stormwater discharge in an environmentally sensitive area;

E. Runoff that discharges within an identified cave recharge area with permeable soils, as determined by the Director.

28.4.6(2) LAND DISTURBANCE PERMIT THRESHOLD LOWERED

When any of the above conditions exist, permitting related to land disturbance, stormwater management and water quality control ([Sections 28.4.4\(2\) and 28.4.4.3\(B\) – Tier 2 criteria](#)) will be required for any land disturbance 3,000 square feet or greater.

28.4.6(5) BUFFER ZONE WIDTHS

D. Losing Streams: For losing streams, the buffer zone shall be twice that of the stream buffer requirements (Section 26 Boone County Zoning Regulations), regardless of if the drainage area is 50 acres or more.





28.4.6(7) SINKHOLE/CAVE PROTECTION

A. Sinkhole Evaluation:

- ii. Details of the drainage path of the discharge from the development to the sinkhole (**onsite** or offsite sinkholes)



28.4.6(7) SINKHOLE/CAVE PROTECTION:

- B. Geological Evaluation: ...evaluation of onsite or offsite sinkholes...
- iii. A map of all depression and collapse sinkholes downstream from and within 1,000 feet of the development area contributing to the groundwater recharge of the area.

28.4.6(7) SINKHOLE/CAVE PROTECTION-

- D. Development in Sinkhole Drainage Areas without Discharge to Sinkhole: **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.**

28.4.6(7) SINKHOLE/CAVE PROTECTION,

- E. Development in Sinkhole Drainage Areas with Discharge to Sinkhole:
- i. Stormwater discharges or drainage that meets criteria from Section 28.4.6.1.
 - iii. The runoff entering the sinkhole 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 up the developer's engineer's calculations of the proposed ponding elevation.



28.4.6(7) SINKHOLE/CAVE PROTECTION;

- F. Filling in sinkholes and sinkhole drainage areas:
- i. It shall be unlawful for any person to place, dump, **discharge** or deposit trash, debris, rubbish, brush, leaves, grass clippings, yard waste, hazardous waste **or any water quality pollutants into** a sinkhole.

SECTION 28.5.2 CLEARING AND GRADING

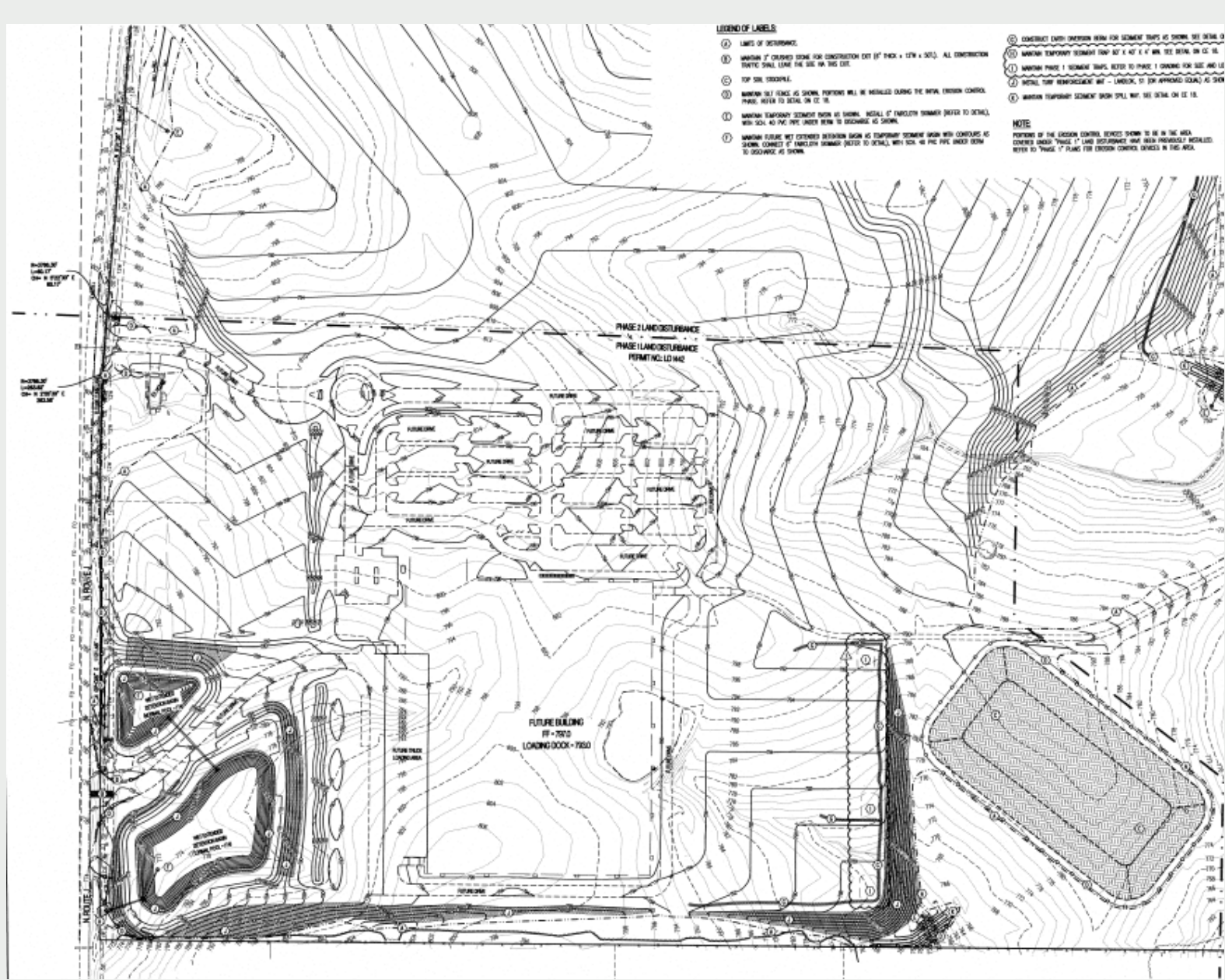
- (5) Other measures may be required in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains. The permit holder and/or property owner is/are responsible for removal of any sediment or other construction debris tracked onto public streets by construction vehicles or obstructing storm drains.

SECTION 28.5.3 CLEAN FILL

- (1) No actively used clean fill site shall be left in a rough or unleveled condition for more than 14 consecutive days.
- (2) Any clean fill site which does not receive clean fill for 30 days shall be considered an inactive fill site.
- (3) Inactive fill sites must be stabilized with temporary stabilization measures within 14 consecutive days of becoming an inactive fill site.

SECTION 28.5.4 PHASING REQUIREMENTS

- (1) "Phasing" means clearing of a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.
- (2) Phasing shall be required on all sites disturbing greater than 30 acres, with the size of each phase to be established at plan review.
- (3) All phases of land disturbance shall be clearly delineated with a contrasting line type and boldness and be numbered.



SECTION 28.5.4 PHASING REQUIREMENTS:

(4) The area of each phase shall be indicated on the phasing plan.

SECTION 28.5.4 PHASING REQUIREMENTS,

- (5) All projects, regardless of acreage, which continue beyond or begin after November 1 through March 31, may, at the Director's discretion, be subject to further phasing restrictions, including, but not limited to:
- a. Limited area of allowable land disturbance;
 - b. Additional erosion and sediment control practices;
 - c. Dormant seeding at higher application rates;
 - d. Additional mulching at higher application rates;

SECTION 28.5.4 PHASING REQUIREMENTS-

- e. Additional temporary sedimentation basins;
- f. Use of approved erosion control blanket;
- g. Any other erosion control strategy necessary to protect the site.

Completed areas must be reviewed and approved by Resource Management prior to opening additional area within a future phase, as shown on the most current approved phasing plan.

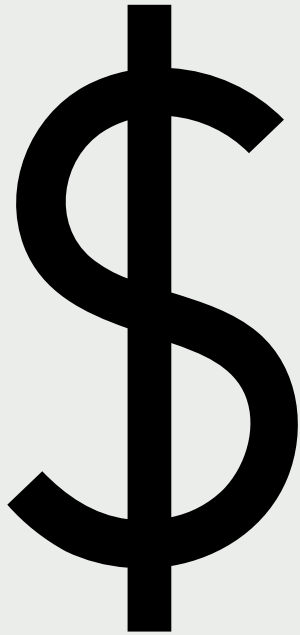
SECTION 28.6.6 REQUIRED EASEMENTS

- (1) Width of closed stormwater conduit changed from the greater of **15 feet** to **16 feet** or the sum of the conduit diameter and twice the cover depth over the conduit.

- (3) Access easements to and around **stormwater BMP facilities** shall be a minimum of **16 feet** wide with **longitudinal slopes not to exceed 6:1 (H:V)** and cross slopes **not to exceed 16:1 (H:V)** unless otherwise approved by the Director.

SECTION 28.8.3 LAND DISTURBANCE PERMIT

(3) State of Missouri Permit Required: the permit applicant must obtain a land disturbance permit from the State of Missouri Department of Natural Resources for any site where 1 acre or more of land will be disturbed, before beginning any site work authorized by a County permit. This requirement also applies to land disturbance by a developer (or a contractor working on their behalf), regardless of type of development on sites of less than 1 acre that are part of a common plan of development or common promotional plan.



SECTION 28.8.4 EROSION AND SEDIMENT CONTROL FINANCIAL SECURITY

- (1) Financial Security Required: **Removed the list of acceptable financial securities** and replaced with, **“in a form that is acceptable to the County Commission.”**
- (1) **For land disturbance permits where no other security is required, the only type of security which will be accepted will be a cash bond.**

SECTION 28.8.5 PERMANENT STORMWATER BMP FINANCIAL SECURITY

- (1) Pursuant to Section 1.7.5 of the Subdivision Regulations of Boone County, MO, in order to permit the developer to obtain final acceptance of the subdivision final plat and to assure the County of final completion of required permanent stormwater BMP improvements, the developer may post a financial security of not less than 150% of the value of permanent stormwater BMP measures, which are part of the SWPPP.

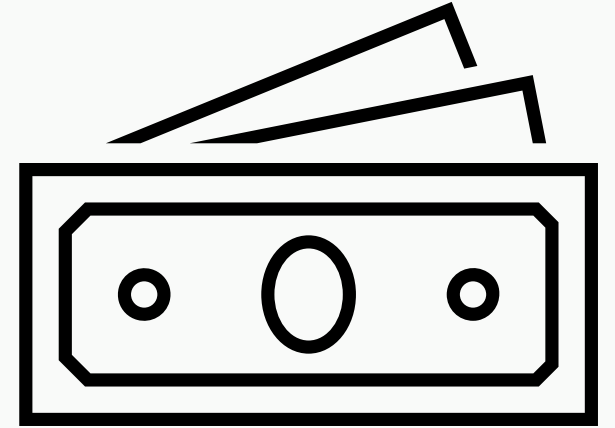


SECTION 28.8.5 PERMANENT STORMWATER BMP FINANCIAL SECURITY:

(2) Term of Financial Security: Any portion of the security not expended or retained by the County hereunder shall be refunded to the applicant within 60 days of closing the Land Disturbance Permit, after stormwater improvements are completed in compliance with these regulations.

SECTION 28.8.6 FEES

The county has the ability to require fees 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 **as determined by the County Commission.**



SECTION 28.9.1 VIOLATIONS & PENALTIES FOR PERMITS

(2) Procedure:

A. Stormwater Discharge Permit remediation changed from 45 days to 14 days.

(3) Engaging in activity requiring a permit without first obtaining such permit shall be a violation of this ordinance. A permit fee of twice the amount of the required permit(s) will be assessed.

SECTION 28.9.3 TEMPORARY ABEYANCE OF DEVELOPMENT APPROVALS AND PERMITS

This section is not in effect at this time

THANK YOU

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