

Amendments to Chapter 88.05 of the Story County Land Development Regulations for Erosion Control

4. Construction Site Erosion and Sediment Control. Sedimentation and erosion pollute water, degrade land, cause the loss of native vegetation and habitats, and impair drainage. Development activities cause land to become susceptible to erosion and sedimentation by wind and water. The following requirements shall apply to development and land disturbance activities in Story County to mitigate the impacts of erosion and sedimentation, protect public and private property, and to protect natural resources and preserve their functions. Erosion control. Any development that will “disturb” an area of one or more acres is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for its storm water discharge.
- A. Any development that disturbs one or more acres is required to obtain a National Pollutant Discharge Elimination System (NPDES) Permit from the Iowa Department of Natural Resources.
- B. A. Any development that is not required to obtain an NPDES permit shall submit the following information in addition to other applicable development permit applications or, if no development permits are applicable, a grading permit and the following information:
- (1) A site plan showing the area to be disturbed, any slopes, watercourses, floodplain, other features prone to erosion, and the location of Erosion and Sediment Control Best Management Practices (BMPs) selected to meet the requirements of this Chapter;
 - (2) Other information necessary to illustrate conformance with the Erosion and Sediment Control Requirements in this Chapter including a construction/grading schedule and schedule for the installation of erosion and sediment control BMPs. For example, a schedule of when grading will occur and when temporary erosion control BMPs will be installed or a schedule of staging activities.
 - (3) The party responsible for maintenance and their contact information if different from the property owner or permit applicant.

~~Stormwater discharge permit shall provide temporary sediment barriers to filter runoff so sediment stays on the site. As soon as vegetation is removed by construction activity, sediment barriers shall be used extensively in drainage ditches, waterways, and on the contour. The sediment barrier must be maintained until the project is completed and placed back into a vegetative state. Sediment barriers shall be spaced in accordance with Table 88 3. The following are acceptable materials for sediment barriers:~~

- ~~(1) Silt Fence. A silt fence shall be designed to allow water to pass through while retaining the sediment on the site. The maximum drainage area flow to a silt fence should not exceed one fourth acre per 100 feet of fence. Silt fences should be placed as close as possible to the undisturbed soil and shall use steel posts.~~

- (2) ~~Compost Filter Tubes. The particle size shall be selected in light of the soil gradations that are to be retained by the device. These devices should be installed along the contour, as with silt fences. Compost tubes shall not be placed on slopes in excess of a 10 percent grade. Spacing shall be determined to allow the bottom of the next higher tube to be seen from the one being installed below, and shall be placed at least five feet from the toe of a slope to provide for the formation of a sediment basin. The tubes shall be staked and additional compost placed in front of each tube to enhance the ability to collect sediment.~~
- (3) ~~Wattles. Wattle locations shall be established in the same manner as compost tubes, but installed in shallow trenches (two to four inches deep). Excavated materials shall be placed on the upstream side of the wattle to initiate sediment collection. The wattles shall be staked with wooden stakes and left in place during the establishment of vegetation on the slope.~~

Table 88-3 Maximum Sediment Barrier Spacing

F FENCE SPACING ON SLOPES	
Slope	Sediment Interval (feet)
33%)	
25%)	
20%)	
(10%)	
20:1 (2%)	
33%)	
25%)	
20%)	

F FENCE SPACING IN DITCHES	
Ditch Grade (%)	Approximate Spacing (feet)

COMPOST TUBE SPACING	
Slope	Approximate Spacing (feet)
(10%) 20:1 (5%)	

(5%) — 50:1 (2%)	
:1 (2%)	

TITLE SPACING	
Letter	Approximate Spacing (feet)
1 (50%)	
50% — 4:1 (25%)	
1 (25%)	

C. Erosion and Sediment Control Requirements.

(1) General Requirements. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter.

- a. Erosion and sediment control BMPs shall be installed following the Iowa Statewide Urban Design and Specifications (SUDAS) Design Manual Chapter 7 and Standards Manual Division 9 or other professionally accepted design criteria.
- b. Maintenance of erosion and sediment control BMPs shall occur to keep the BMPs functioning in an effective manner.
- c. Minimize Disturbed Area.
 - i. The area of land to be disturbed shall be minimized and staging shall be used to minimize the area disturbed at a given time, as practical. The limits of the development including staging and equipment storage areas shall be delineated/flagged/fenced on the site to protect areas that are not proposed to be disturbed.
 - ii. Natural plant covering shall be retained and protected to the maximum extent practicable and as consistent with developing the site.
- d. Stabilize Disturbed Areas.
 - i. All areas, including stockpiles, shall have temporary erosion control stabilization BMPs within fourteen (14) days after the area is no longer actively being worked. Temporary erosion

control stabilization BMPs may include temporary seeding, geotextiles, mulches, vegetative filter strips.

- ii. Within fourteen (14) days of achieving final grade, final stabilization shall occur through erosion control final stabilization BMPs (seeding, sodding). Temporary erosion control stabilization BMPs may be used if not feasible to establish permanent cover within the seven days.

(2) Requirements for Sites with Sensitive Features. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where watercourses, floodplain, slopes, or other features prone to erosion are proposed to be disturbed or where work may affect adjacent properties.

- a. An undisturbed buffer zone shall be provided in accordance with the following minimum buffer sizes measured from the edge of a watercourse/feature. These buffer zones are encouraged to be revegetated where existing native vegetation does not exist. Standards for native revegetation may be used following the following the Iowa Stormwater Management Manual or other professionally accepted BMPs. For assistance identifying features to be protected by a buffer, maps are available on the Story County website under watershed planning.

- i. Wetlands, priority wetlands, lakes, reservoirs, and environmentally sensitive areas – 100 feet

- ii. Priority Streams – 75 feet

- iii. Secondary and Other Streams – 50 feet

- b. Development in the floodplain is discouraged. Any proposed development in the floodplain shall be done in accordance with the adopted Floodplain Management Ordinance (codified in Chapter 80 of this Code of Ordinances) or other State or Federal requirements.

- c. Perimeter sediment control BMPs shall be in place prior to disturbing activities when the disturbed areas are above or on a slope to site borders, watercourse, or environmentally sensitive areas. Perimeter sediment control BMPs may be removed after final stabilization of the area above the BMP. The timing and/or installation of the perimeter control installations may be adjusted to accommodate short-term activities such as the passage of vehicles or to accommodate disturbing activities required to install the

controls. Perimeter sediment control BMPs may include filter berms, filter socks, wattles, temporary earth diversion structures, vegetative filter strips, and silt fences.

- d. Disturbed slope lengths shall be broken up into several smaller slopes by installing silt fence, filter berms, filter socks, or other flow diversion sediment control BMP as needed to prevent concentrated flow.

(3) Requirements for Treatment of Topsoil. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where topsoil is stripped or otherwise disturbed and its removal and/or disturbance is not required for the function of the proposed project.

- a. Practices to reduce compaction including reducing passes made over an area with heavy equipment and not using heavy equipment when soil is wet shall be used.
- b. Topsoil that is removed but may be used for restoration after development activities cease shall be preserved on-site where possible. Topsoil shall be respread or restored to create a healthy soil profile following the methods for Soil Quality Management and Restoration in the Iowa Stormwater Management Manual Chapter 5 Section 6 Soil Quality Management and Restoration or other professionally accepted methods.

(4) Construction Site Standards. The following requirements apply to all developments required to submit information on Erosion and Sediment Control in accordance with this Chapter where the site does not have an existing stabilized entrance or where a concrete truck will be used.

- a. A stabilized entrance shall be designed to minimize tracking of sediment or other debris off the site and/or in the road right-of-way and shall be installed prior to land disturbing activities.
- b. Concrete waste must be contained in washout areas installed following the Iowa Statewide Urban Design and Specifications (SUDAS) in Division 11 Section 11,050 or other professionally accepted design criteria.

D. Inspections and Responsibility.

(1) In no instance shall acceptance of the Erosion and Sediment Control plans and/or approval of the grading permit by Story County be construed as approval of the design, construction, or concurrence by Story County that all criteria have been satisfied. Story County shall not be liable for any damages resulting from erosion

and sedimentation.

- (2) An inspection for compliance with submitted erosion and sediment control plans and requirements of this chapter shall be conducted by Planning and Development Staff as part of the required foundation location inspection for a zoning permit or if no development permits are applicable, as part of the grading permit and corresponding inspection after BMPs have been installed but prior to the commencement of land disturbing activities.
 - (3) Temporary erosion and sediment controls shall not be removed until the Planning and Development Staff have determined that the site has been permanently stabilized through a final inspection for a zoning permit, or if no zoning permit is required, an inspection once final stabilization is completed.
 - (4) The applicant or owner of the site agree to provide for access to the BMP and the land it serves at reasonable times for periodic inspection by County or County's designee to ensure that the BMP is maintained in proper working condition to the requirements of this chapter.
 - (5) Any amendments or changes to the submitted Grading Permit or Erosion and Sediment Control information shall be communicated to the Planning and Development Department and submitted prior to their implementation on-site. All amendments shall comply with the requirements for Erosion and Sediment Control in this chapter.
 - (6) If a responsible party fails or refuses to meet the requirements of the approved plan or any provision of this ordinance or in the event that the erosion or sediment control BMP becomes a danger to public safety or public health, the County shall notify the party responsible for maintenance of the erosion or sediment control BMP in writing following the procedure for Notice of Violations in Chapter 93 of the Story County Land Development Regulations. Depending on the severity of the violation, the permitted timeframe to submit a compliance schedule may be reduced. If the violator does not correct/abate the violation or provide an acceptable schedule to correct/abate the violation or does not comply with the schedule, a citation for a County infraction may be issued in accordance with Chapter 93 of the Story County Land Development Regulations.
- E. Exemptions. The following exemptions to the Erosion and Sediment Control requirements may apply; however, such uses shall not be exempt from adopted Floodplain Management Ordinance (codified in Chapter 80 of this Code of Ordinances) or other State or Federal requirements.
- (1) Agricultural. Except to the extent required to implement Section 335.2, Code of Iowa, the grading permit application and Erosion and Sediment Control requirements shall not apply to development that is primarily adapted, by reason of nature or area, for use for agricultural purposes, while so used.

- (2) County Engineer. The County Engineer shall not be required to submit a grading permit application for the maintenance and/or construction of public roads and public road right-of-way.

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