

## **Section 151-8.19 Erosion and Sediment Control Regulations**

### **A. Title, Purpose, Scope, Adoption of Kansas City Metropolitan Chapter of the American Public Works Association (“KC-APWA”) Regulations, and Performance Surety**

#### **1. Title**

These regulations shall be known by short title as the “Clay County Erosion and Sediment Control Regulations”, may be cited as such and will be referred to herein as “this section”.

#### **2. Purpose**

The purpose of this section is to control soil erosion on land that is undergoing land disturbance activities for non-agricultural uses and to prevent sediment and soil erosion from being transported onto adjacent property and into streams, rivers, lakes, ponds, or other areas as required by the Federal Clean Water Act (33 U.S.C. § 1251 *et seq.* as amended to date). The Federal Clean Water Act implemented a National Pollutant Discharge Elimination System (“NPDES”) program by federal law that Clay County is obligated to develop, implement, and enforce minimum erosion and sediment control standards.

Soil is most vulnerable to erosion and sediment pollution caused by the power of water and wind during the construction process. This eroded soil endangers water resources by reducing water quality, and causes siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches, and the dredging of water bodies. In addition, clearing and grading methods during construction often causes the loss of native vegetation necessary for terrestrial and aquatic habitat, and to provide a healthy living environment.

This section is intended to do the following:

- a. Protect and enhance the water quality of watercourses, water bodies, and wetlands.
- b. Minimize soil erosion and sedimentation caused by land disturbance activities.
- c. Reduce maintenance costs of public and private improvements and services.
- d. Promote and protect the public's health, safety, and general welfare.

The property owner is responsible for the land disturbance activities including the protection of downstream and adjacent properties from siltation and erosion. All necessary steps shall be taken to prevent sediment and soil erosion from being transported onto adjacent properties and into streams, rivers, lakes, ponds or other areas.

These standards shall apply after the date of passage by the County Commission to preliminary plats, Building Permit submittals or Land Disturbance (LD) permit applications.

**3. Adoption of KC-APWA Sections 5100, 2100, 2150, 2400, the Division III Standard Drawings, and the MARC/APWA Manual of Best Management Practices for Stormwater Quality by Reference**

All design, construction and maintenance standards shall be in accordance with the most current standards as published by the KC-APWA of Sections 5100 (*Erosion and Sediment Control-Design Criteria*), 2100 (*Grading and Site Preparation*), 2150 (*Erosion and Sediment Control-Specifications*), 2400 (*Seeding and Sodding*), the KC-APWA Division III Standard Drawings, and the MARC/APWA Manual of Best Management Practices for Stormwater Quality (collectively referred to as the Clay County "**Design Manual**") is hereby adopted by reference as the design, construction and maintenance standards for Erosion and Sediment Control, except as amended.

- a. The following amendment shall apply:
  - i. The Director may approve variances from specific requirements of the County's Design Manual when the Director deems it appropriate and justified by engineering standards.

**4. Scope of Authority**

Any person, firm, corporation or business proposing to develop land within Clay County which will disturb one (1) or more acres over the life of the project or are part of a larger common plan of development or sale that will disturb one (1) or more acres over the life of the project, must obtain a Land Disturbance (LD) Permit from Clay County, and also develop and implement a Storm Water Pollution Protection Plan (SWPPP), as specified in this section.

- a. No land shall be graded except upon issuance of such a LD permit.
- b. Any development or grading which does not comply with the requirements set forth herein shall be deemed to be in violation of this section and shall be subject to enforcement measures and penalties set forth herein.

Land disturbance sites that disturb less than one (1) acre do not require a Land Disturbance (LD) permit, and the site owner is not required to submit a site-specific Storm Water Pollution Prevention Plan (SWPPP), but must comply with the guidelines in the document "Erosion and Sediment Control Standards for Building Construction that Disturbs Less Than One Acre for Unincorporated Area of Clay County".

**5. Performance Surety**

Performance under every LD permit shall be secured by a letter of credit, performance bond, cash escrow, or other method of not less than the value of all work to be done under the LD permit for installation of the erosion and sediment control measures as required by this section and the Design Manual, which will provide adequate assurances to the County that the construction of the erosion and sediment control measures are installed in a timely and workmanlike manner and maintained throughout the duration of the project.

- a. This may be a part of other bond/escrow funds, subject to the County’s discretion.
- b. In the event of a violation of this section, the performance surety proceeds shall be used by the County to complete the planned erosion and sediment control practices.
- c. The required surety amount may be increased by the Director by up to 50% from the standard amount depending upon specific nature and scope of project and anticipated disturbance. Upon request and supporting documentation from the owner, the Director may also reduce the standard surety amount if on-site conditions warrant a reduction.

For LD permits which do not include the construction of public improvements related to subdividing land under jurisdiction of the Land Development Code (“LDC”), or construction of permanent structures, under jurisdiction of the Building Codes (i.e. where only grading work is included, such as for a borrow pit) the only type of security which will be accepted will be a cash bond.

**B. Definitions**

For the purpose of this section, certain terms, phrases, words and their derivatives shall be defined as specified in this section. Where terms are not defined, they shall have their ordinary accepted meanings within the context with which they are used. Words in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine. The following terms shall have the following meanings in this section. In the event of a conflict between defined terms in Section 151-15 and the terms defined herein, this section shall control.

<b>Term</b>	<b>Definition</b>
Best Management Practices	Physical facilities, schedules of activities, prohibitions of practices, maintenance procedures, and other management practices which, when properly designed, installed and maintained, will be effective to prevent or reduce the discharge of water or air pollution associated with land disturbance activities.
Channel	A watercourse of perceptible extent which periodically or continuously contains moving water or which forms a connecting link between two (2) bodies of water.
Clearcutting	Cutting essentially all trees in a given area
Clearing	Any activity by which vegetative cover, structures or surface material are removed, including, but not limited to, surface layer, root or topsoil removal.
Common Plan	A plan undertaken by one (1) or more persons, to offer lots for sale or lease; where land is offered for sale by a person or group of persons acting in concert, and the land is contiguous or is known, designated or advertised as a common unit or by a common name or similar names, the land is presumed, without regard to the number of lots covered by each individual offering, as being offered for sale or lease as part of a common promotional plan.

<b>Term</b>	<b>Definition</b>
Debris or Sediment Basin	A barrier or dam built across a waterway or at other suitable locations to retain rock, sand, sediment, gravel, silt, or other materials.
Design Manual	Means all design, construction and maintenance standards in accordance with the most current standards as established in the following: the Kansas City Metropolitan Chapter of the American Public Works Association (KC-APWA) sections 5100 ( <i>Erosion and Sediment Control-Design Criteria</i> ), 2100 ( <i>Grading and Site Preparation</i> ), 2150 ( <i>Erosion and Sediment Control-Specifications</i> ), 2400 ( <i>Seeding and Sodding</i> ), the KC-APWA Division III Standard Drawings, and the MARC/APWA Manual of Best Management Practices for Stormwater Quality.
Director	Clay County Planning and Zoning Director or the Director's authorized representative.
Diversion	A channel with or without a supporting ridge on the lower side constructed across or at the bottom of a slope.
Drainage Way	Any channel that conveys surface runoff within, through and/or away from the site.
Erosion	The wearing away of land by the action of wind, water, gravity, ice, or artificial means, and/or land disturbance activities.
Erosion Control	Measures that prevent erosion.
Erosion and Sediment Control Plan	A plan for the control of sedimentation and erosion resulting from land disturbance activities, and may include, without being limited to, the drawings, specifications, construction documents, schedules, or other related documents upon which the Best Management Practices to be used on a site are set forth, including such information as necessary to review the basis for their design and to ensure their proper installation, maintenance, inspection and removal.
Excavation or Cut	The removal, stripping or disturbance of soil, earth, sand rock, gravel, or other substance from the surface of the earth.
Existing Grade	The vertical elevation of the existing ground surface prior to excavation or filling.
Fill or Filling	The placing of any soil, earth, sand, rock, gravel or other substance on the ground.
Finished Grade	The final grade or elevation of the ground surface conforming to the proposed design.
Grading	Excavation or fill of material, including the resulting conditions thereof.
Land Disturbance or Land Disturbing Activity	Any activity that changes the physical conditions of landform, vegetation and hydrology, creates bare soil, or otherwise may cause erosion or sedimentation. Such activities include, but are not limited to, Clearing, removal of vegetation, stripping, Grading, grubbing, excavating, filling, logging and storing of materials.
Land Disturbance (LD) Permit	A permit issued by Clay County for the construction or alteration of ground improvements and structures for the control of erosion, runoff and grading or other activity which results in the destruction of the root zone.
Open Channel	A constructed ditch or channel designed to remove water.

<b>Term</b>	<b>Definition</b>
Perennial Vegetation	Grass or other appropriate natural growing vegetation that provides substantial land cover, erosion protection and soil stability and that is capable of sustained and healthy growth over multiple years under the constraints of shade, temperature, and moisture that will be prevalent on the site.
Perimeter Control	A barrier that prevents sediment from leaving a site either by filtering sediment-laden runoff, or diverting it to a sediment trap or basin.
Phasing	Clearing a parcel of land in distinct phases, with the stabilization of each phase before the clearing of the next.
Qualified Erosion Control Specialist	A person qualified to perform inspections of Erosion and Sediment Control measures. Qualified personnel includes a Professional Engineer licensed in the state of Missouri or anyone who has obtained one of the following certifications: CCIS through Stormwater USA, LLC; CISEC through CISEC, Inc; or CESSWI through EnviroCert International, Inc. or equivalent qualifications approved in writing by the Director as part of an approved Stormwater Pollution Prevention Plan.
Sediment	Soils or other materials transported or deposited by the action of wind, water, gravity, ice, or artificial means in a location other than the point of origin.
Sediment Control	Measures that prevent eroded sediment from leaving the site.
Silt Traps or Filters	Staked bales of straw or silt fencing systems that function as a filter and a velocity check to trap fine-grained sediment while allowing satisfactory passage of storm water runoff.
Site	A parcel of land, or a contiguous combination thereof, where land disturbance work is performed as a single unified operation.
Site Development	Altering terrain and/or vegetation and constructing improvements.
Stabilization	The use of practices that prevent exposed soil from eroding.
Start of Construction	The first land disturbance 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.
Stream Bank, Top of Existing	The usual boundaries, not the flood boundaries, of a stream channel. The top of the natural incline bordering a stream.
Stop Work Order	An order issued which requires that some or all construction activity on the site be stopped.
Stormwater Pollution Prevention Plan (SWPPP)	A plan required by Clay County and the Missouri Department of Natural Resources (MoDNR) for which contents are specified by the Missouri State Operating Permit. The purpose of the Stormwater Pollution Prevention Plan (SWPPP) is to help identify the sources of pollution that affect the quality of storm water discharges from a site and to describe and ensure the implementation of practices to reduce pollutants in storm water discharges and includes an Erosion and Sediment Control Plan as well as plans to prevent pollution from other construction site sources such as, but not limited to, concrete washout, litter, and sanitary waste.

<b>Term</b>	<b>Definition</b>
Tree	Vegetative growth with a trunk six (6) inches in diameter and larger, measured three (3) feet above ground.
Vegetative Cover	Any grasses, shrubs, trees, and other vegetation that protects and stabilizes soils.
Watercourse	Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water which are delineated by Clay County.
Watershed	All that area drained by a waterway, drainage ditch, stream or other water course.
Waterway	A channel that directs surface runoff to a Watercourse, or to a storm drain.

### **C. Land Disturbance (“LD”) Permit Requirements and Exemptions**

1. Unless exempt, no person shall undertake any land disturbing activity without first obtaining a LD permit.
2. No person required to obtain a LD permit shall fail to make application for such permit, fail to pay required fees, and fail to comply with the County’s Design Manual, or violate any of the requirements of this section.
3. The following shall be exempt from obtaining a LD permit:
  - a. Any emergency activity which is immediately necessary for the protection of life, property or natural resources.
  - b. Mowing, brush hog clearing, tree cutting (excluding clearcutting) or similar activities which do not grade, dig, excavate or otherwise remove or kill surface growth and root system of the vegetative cover.
  - c. Agricultural land uses, however, nothing in this section shall relieve any person from complying with any applicable erosion and sediment standards of the United States Department of Agriculture Natural Resources Conservation Service (“NRCS”) or the requirements of the Missouri Department of Natural Resources (“MoDNR”) or other federal or state agency.
  - d. Land disturbing activities of less than one (1) acre. For the purposes of this section, land disturbing activities that are part of a larger, phased, staged, or common plan of development shall be considered a single Site for purposes of calculating the disturbed area.
  - e. Linear, strip or ribbon construction on maintenance operations meeting one of the following criteria provided that water quality criteria are not exceeded:
    - i. Grading of existing dirt or gravel roads which does not increase the runoff coefficient and the addition of an impermeable surface over an existing dirt or gravel road;
    - ii. Cleaning or routine maintenance of roadside ditches, sewers, waterlines, pipelines, utility lines or similar facilities;
    - iii. Trenches two (2) feet in width or less; or
    - iv. Emergency repair or replacement of existing facilities as long as best management practices are employed during emergency repairs.
  - f. Federal and State projects.
  - g. City or County improvement projects. However, such projects are required to follow the Design Manual guidelines.

#### D. Land Disturbance (“LD”) Permit and Application

1. The issuance of a LD permit is contingent upon compliance with this section, the Design Manual, all other County regulations, including the Land Development Code (“LDC”), fire code, building code and any other County requirements.
2. The Director may require additional requirements or waive specific requirements, based on the data deemed appropriate to ensure compliance with the intent, purpose and provisions of the County’s Erosion and Sediment Control Regulations.
3. Every LD permit application shall be submitted to the County, on the County’s forms, which shall include the following minimum requirements:
  - a. A site specific Storm Water Pollution Prevention Plan (“SWPPP”) that complies with this section, the Design Manual, and a Land Disturbance Permit from the MoDNR.
  - b. A site specific Erosion and Sediment Control Plan (ESC) and approved final Engineering/Construction Plans that complies with the Design Manual and any other applicable County regulations.
  - c. A site specific plan that complies with the Design Manual to provide for control of pollutants related to land disturbance activities that might cause an adverse impact to water quality, including but not limited to: discarded building materials, concrete truck washout, fuel hydraulic fuels, chemicals, litter, and sanitary wastes;
  - d. Contact information for the applicant, the site owner’s name, and the retained licensed by the State of Missouri Professional Engineer or Landscape Architect and a Qualified Erosion Control Specialist who will perform the routine inspections;
  - e. Description of area to be disturbed;
  - f. Proposed schedule of work and contemplated duration of land disturbing activities on the site;
  - g. Proposed method of providing performance surety as required by this section,
  - h. Any LD permit fee as authorized by the County;
  - i. A copy of the approved Land Disturbance Permit from MoDNR ;
  - j. Upon an applicant's request, the Director may modify these requirements to take into account any unusual circumstances or factors affecting the work to be performed.
4. The LD permit application, Storm Water Pollution Prevention Plan (SWPPP), Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans and all other technical requirements shall be prepared under the supervision of, and sealed by a licensed in the State of Missouri Professional Engineer or Landscape Architect.
5. It shall be the duty of the permit holder to ensure that land disturbing activities authorized by the LD permit be undertaken according to the approved plans and proposed schedule of work defined in the LD permit application. Modifications to the approved plan or proposed schedule of work that are not in compliance with the LD permit must be resubmitted for approval. Minor modifications of the approved plan or proposed schedule of work may be authorized by the Director without formal review provided those modifications are consistent with the Design Manual and standard industry practice.

Failure to adhere to the schedule or complete the work in accordance with the LD permit shall be: i) a violation of this section, ii) subject to additional fees to be paid by the LD permit holder, iii) may result in the revocation of the LD permit and the issuance of a Stop Work Order.

6. Every LD permit shall have an expiration date established by the Director which takes into consideration the nature, scope, and any necessary phasing of the work to be undertaken. Requests for LD permit extension must be made to the Director prior to the expiration of the LD permit and are subject to approval by the Director.
7. Prior to the expiration of the LD permit, the LD permit holder shall obtain a satisfactory final County inspection and approval of the work undertaken pursuant to the LD permit to determine whether the work complies with the Stormwater Pollution Prevention Plan (SWPPP), Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans. Upon satisfactory inspection and approval, the LD permit shall be deemed "closed" when conditions set forth in these sections are met.

#### **E. Maintenance and Inspections**

##### **1. Maintenance**

All erosion and sediment control measures set forth in the SWPPP, Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans shall be maintained in good order at all times during and after construction.

##### **2. Inspections**

It shall be the duty of the LD permit holder to provide routine inspections of the land disturbing activities and maintain effective erosion and sediment control measures throughout the duration of the LD permit. Inspections shall be performed by a licensed Professional Engineer or Landscape Architect in the State of Missouri or by a Qualified Erosion Control Specialist at least once each week and within twenty-four (24) hours following each rainfall event of one-half (1/2) an inch or more within any twenty-four (24) hour period. A log of all inspections shall be kept during land disturbing activities as a part of the SWPPP, Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans. Any deficiencies shall be noted in a report of the inspection and the LD permit holder shall correct such deficiencies within a reasonable time not to exceed three (3) days unless extended by the Director for good cause shown.

The LD permit holder shall keep a copy of the most current SWPPP at the site until the LD permit is closed.

The LD permit holder shall notify the Director for an inspection after installing perimeter erosion and sediment control devices, but before beginning other work on the site.

A LD permit shall not be closed until a final inspection and approval of the site stabilization and restoration is issued by the County. A site shall be considered stabilized and restored when perennial vegetation, pavement, buildings, or structures using permanent materials cover a minimum of seventy-percent (70%) of the area defined in the LD permit and as required by the Director. Restoration includes the removal of all non-permanent erosion and sediment control devices for the site. Final certification of the restoration and stabilization of the site shall be submitted for approval to the Director by the LD permit holder.

A LD permit conveys to the Director and the Director's designees, the right to enter upon property described in the LD permit as necessary to enforce provisions of this section.

#### **F. Land Disturbances Less than One (1) Acre**

Land disturbances less than one(1) acre do not require a Land Disturbance (LD) permit, and the site owner is not required to submit a site-specific Stormwater Pollution Prevention Plan (SWPPP), but must comply with the guidelines in the document "Erosion and Sediment Control Standards for Building Construction that Disturbs Less Than One Acre for Unincorporated Area of Clay County".

#### **G. Land Disturbances Less than One (1) Acre for Utility Work**

Franchised and public utility providers disturbing less than one (1) acre shall obtain a general, annual permit in lieu of obtaining a site-specific permit. The general land disturbance permits for utility providers can be renewed annually and shall include the effective erosion control standards and construction methods that are to be implemented on the utility's projects, conforming to the Design Manual. The fee and performance surety, if any, for a general permit will be as shown in the adopted fee schedule.

**H. Time Requirement**

Where land disturbing activities appear to have temporarily or permanently ceased on a portion of a site for fifteen (15) consecutive days, all disturbed area shall be protected from erosion by stabilizing the area with mulch or other similarly effective soil stabilizing best management practices. Where implementation of stabilization measures is precluded by weather, snow cover, or other reason beyond the LD permit holder’s control, the Director may allow the LD permit holder to delay the implementation of such stabilization measures for a reasonable period.

**I. Fees**

Prior to issuance of LD permit for projects that disturb one (1) acre or greater, and franchised and public utilities providers shall pay fees according to the County Commission adopted fee schedule. The Director may adjust the fee Schedule annually and shall make such Fee Schedule available to the public.

**J. Appeals**

Any person denied a Land Disturbance (LD) permit as herein stated shall have the right to appeal such denial to the Board of Zoning Adjustment in accordance with Section 151-3.14 within thirty (30) days of the date of such denial.

**K. Separability**

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

**L. Responsibility for Compliance**

The person responsible for compliance with this section shall include, jointly and severally:

1. The owner of the site upon which a land disturbance activity takes place. When a LD permit is issued to a person, such person shall remain responsible for land disturbance activities notwithstanding a transfer of the site unless the County approves, in writing, an assignment of the person’s obligations; AND,
2. If the owner is not the LD permit holder, the person to whom a LD permit is issued for a site upon which a land disturbance activity takes place is jointly and severally liable along with the owner of the site for compliance with this section; AND,
3. Any person who undertakes any land disturbance activity and fails to ensure that a LD permit has been issued by the County for such land disturbance activity.

**M. Compliance and Use**

The site described in a LD permit shall be maintained at all times in compliance with the provisions of the Stormwater Pollution Prevention Plan (SWPPP), Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans.

**N. Enforcement of Code Provisions**

The failure to comply with any requirement of this section shall result in a fine of not less than ten (10) dollars nor more than one thousand (1,000) dollars for each such violation as determined by the Director. Each day such violation continues shall constitute a separate violation and result in a separate fine.

1. In addition, any person who fails to provide and implement a Stormwater Pollution Prevention Plan (SWPPP), Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans as required by this section may be ordered by the Director to take remedial action on any site to prevent the occurrence or recurrence of a violation of this section. Remedial action shall include, but not limited to, conformance to the requirements of this section.

When failed or absent erosion and sediment control has resulted in mud, silt, gravel, dust or other debris entering into any street right-of-way, drainage easement, stream setback easement, or adjoining property, the remedial action required shall include the restoration and stabilization of the area defined as disturbed in the LD permit, to include perennial vegetation, pavement, buildings, or structures using permanent materials cover a minimum of seventy-percent (70%) of the area defined and the removal of any debris or other pollutants caused by a failure to comply with the Design Manual.

2. Whenever the Director finds a violation of this section, the Director may order the owner of the site and the LD permit holder to take action within a minimum of three (3) days after service of such order to comply with the provisions of this section. Notice may be given in person, by mail, including electronic mail, posting at the site, telephone, by facsimile, or by any other method reasonably calculated to provide notice.

#### **O. Stop Work Order Authorized**

In addition to the enforcement provisions of this section, the Director may issue a Stop Work Order if the Director determines that work authorized by a LD permit is in violation of this section or the Stormwater Pollution Prevention Plan (SWPPP), Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans or if any one or more of the following conditions exist:

1. Inspection by the Director reveals the site defined by the LD permit is not in substantial compliance with the SWPPP, Erosion and Sediment Control Plan (ESC) and Engineering/Construction Plans, as determined by the Director; OR,
2. Failure to comply with a written order from the Director to bring the site into compliance with the LD permit, correct a violation of this section, or restore a disturbed area within the time limits defined by the Director; OR,
3. Failure to pay any required fee; OR,
4. Failure to submit reports in accordance with the Design Manual.

If a Stop Work Order is issued by the Director, the Director shall order and direct the site owner, or site owner's agent, and any party in possession of the site, including the contractor performing work at the site, to immediately suspend work.

A Stop Work Order shall be in writing, shall state the conditions under which the work may be resumed, and may be served upon a person to whom it is directed by any reasonable method including by personal delivery, by posting at the site, or mailing a copy of the same to the address identified within the LD permit application for the LD permit holder, site owner, or any party in possession of the such property. If the Director issues a Stop Work Order, all persons shall cease all work on the site, except work necessary to remedy the cause of the Stop Work Order as expressly authorized by the Director.

It shall be a violation of this section for a person to undertake, allow, consent, or permit another to undertake work upon a site subject to a Stop Work Order.

If the cause of a Stop Work Order is not cured within a reasonable period of time, the LD permit may be revoked by the Director and thereafter no person shall continue any work described in the LD permit without first obtaining a new LD permit and paying a new LD permit fee as required by this section.

#### **P. Effective Date**

The provisions of this section shall be effective upon the date as accepted by Ordinance by the Clay County Commission (2010-ORD-08, March 8, 2010). A LD permit shall not be required for any land disturbance activity upon sites for which a valid County Building Permit has been issued prior to the effective date. Any final plat or final site plan approved prior to the effective date shall nonetheless be subject to this section.