

## **CHAPTER 407: LAND DISTURBANCE CODE**

### **SECTION 407.010: ADOPTION OF COUNTY CODE**

A. The Cole County, Missouri Land Disturbance Code as adopted by the County of Cole, Missouri is hereby adopted as the Land Disturbance Code of the Village of Wardsville, Missouri, which is set out herein in [Section 407.020](#).

B. All ordinances, parts of ordinances or provisions of the Municipal Code of the Village of Wardsville in conflict with any provisions of this Chapter are hereby repealed.

### **SECTION 407.020: LAND DISTURBANCE CODE OF COLE COUNTY**

#### *TITLE XI*

#### *PUBLIC WORKS AND BUILDING REGULATIONS*

#### *LAND DISTURBANCE CODE*

#### *CHAPTER 407*

#### *407.100 CHAPTER 1--ADMINISTRATION*

*407.101.1 Title:* These regulations shall be known as the "Land Disturbance Code" of Cole County, Missouri, hereinafter referred to as "this code".

*407.102 Introduction:* On construction or land disturbance sites, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Deposits of eroded soil also necessitate maintenance of sewers and ditches and the dredging of lakes. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat. Construction activities also utilize materials and generate wastes which, if not properly controlled, can pollute receiving waters.

*407.103 Purpose:* The purpose of this code is to safeguard persons, protect property, and prevent damage to the environment in Cole County. This code will also promote the public welfare by guiding, regulating and controlling the design, construction, use and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in Cole County.

*407.104 Scope:* This code provides for the safety, health and welfare of the public by regulating and controlling the design, construction, use and maintenance of any development or other activity that disturbs land surfaces or results in the movement of earth in the unincorporated part of Cole County, Missouri.

*407.105 Definitions:* For the purpose of this code, the following terms, phrases, words and their derivations shall have the meanings given herein. Where terms are not defined by this Section, such terms shall have ordinarily accepted meanings such as the context implies.

*Best Management Practices or BMP:* Practices, procedures or a schedule of activities to reduce the amount of sediment and other pollutants in storm water discharges associated with construction and land disturbance activities.

*Clearing:* Any activity that removes the vegetative surface cover.

*Code or this Code:* The "Land Disturbance Code" of Cole County, Missouri, as adopted by Cole County ordinance.

*County:* Cole County, Missouri.

*Construction Site or Land Disturbance Site:* A parcel or contiguous parcels where land disturbance activities are performed as part of a proposed development.

*Department of Highways and Traffic:* The County Department of Highways and Traffic acting through its Director or his/her duly authorized designee.

*Department of Planning:* The County Department of Planning acting through its Director or his/her duly authorized designee.

*Department of Public Works:* The County Department of Public Works acting through its Director or his/her duly authorized designee.

*Drainage Way:* Any channel that conveys surface runoff through a site.

*Erosion:* The wearing away of land surface through the action of wind or water.

*Erosion Control:* Any Best Management Practices (BMP) that prevents or minimizes erosion.

*Grading:* Reshaping the ground surface through excavation and/or fill of material.

*Land Disturbance Activities:* Clearing, grading or any related work which results in removal of the natural site vegetation and destruction of the root zone or otherwise results in leaving the ground surface exposed to soil erosion through the action of wind or water.

*Land Disturbance, Major:* Any land disturbance activity involving one (1) acre or more of land or a site involving less than one (1) acre that is part of a proposed development that will ultimately disturb one (1) acre or more.

*Land Disturbance, Ordinary:* Any land disturbance activity involving less than one (1) acre of land.

*Land Disturbance Permit:* A permit issued by the authority having jurisdiction authorizing a land disturbance activity at a specific site subject to conditions stated in the permit. A permit may be for either major or ordinary land disturbance activities.

*Perimeter Control:* A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

*Phasing:* Clearing a parcel of land in distinct stages with the stabilization of each phase substantially completed before the clearing of the next.

*Qualified Professional:* A Missouri licensed professional engineer or other person or firm knowledgeable in the principles and practices of erosion and sediment control, including the Best Management Practices described in this code.

*Runoff coefficient:* The fraction of total rainfall that exits at the outfalls from a site.

*Sediment Control:* Any Best Management Practices (BMP) that prevents eroded sediment from leaving a site.

*Stabilization:* The use of Best Management Practices (BMP) that prevent exposed soil from eroding from a land disturbance site.

*Start of Construction:* The first (1st) land disturbance activity associated with a development.

*Storm Water Pollution Prevention Plan (SWPPP):* A management plan, the purpose of which is to ensure the design, implementation, management and maintenance of Best Management Practices (BMP) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with land disturbance activities, comply with the standards of the County and ensure compliance with the terms and conditions of the applicable State permits, including adherence to the land disturbance program contained in Missouri MS4 NPDES permits.

*Water Course:* A natural or artificial channel or body of water, including, but not limited to, lakes, ponds, rivers, streams, ditches and other open conveyances that carry surface runoff water either continuously or intermittently.

*407.106 SERVICE TO MUNICIPALITIES*

*407.106.1 Contracting with Municipalities:* The Department of Public Works, with the approval of the County Executive, is hereby authorized to contract with municipalities within the County to provide appropriate services to enforce the requirements of this code and further to collect fees for applicable permits and inspections issued or made pursuant to such contracts. No contract for services under this code shall be entered into until the municipality desiring to contract with the County for enforcement of this code shall:

1. Contract with the County for enforcement of Building Code and Explosives Code enforcement services; and
2. Adopt a code identical in substance to this code; and
3. Perform the functions associated with the authority and responsibilities of the Department of Planning identified in Section 103.1 of this code or other mutually agreeable services; and
4. Perform the functions associated with the authority and responsibilities of the Department of Highways and Traffic identified in Section 103.3 of this code or other mutually agreeable services.

*407.106.2 Municipal Zoning Approval:* All plans for land disturbance activities within the corporate limits of any municipality that contracts with the County for code enforcement services shall be reviewed and approved by the contracting municipality for compliance with its zoning or other municipal regulatory ordinances or provisions prior to issuance of a County permit under this code.

#### APPLICABILITY

*407.200 Other Laws:* The provisions of this code shall not be deemed to nullify any provisions of County, State or Federal law.

#### ENFORCEMENT

*407.300 Department of Planning:* The Department of Planning shall have the authority and responsibility to perform the following functions related to the enforcement of this code as associated with major land disturbance permits:

1. Receive applications for major land disturbance permits;
2. Coordinate the review of permit applications and accompanying documents with the Department of Public Works, the State of Missouri and Cole County as applicable;
3. Clear issuance of major land disturbance permits with the State of Missouri and Cole County, as applicable, and issue such permits; and

4. Administer the determination, collection and release of site development escrows required by this code.

*407.301 Department of Public Works:* The Department of Public Works shall have the authority and responsibility to perform the following functions related to the enforcement of this code:

1. Inspection of major land disturbance activities;
2. Inspection of land disturbance activities within or abutting areas designated one hundred (100) year flood plain; and
3. Plan review, inspection and issuance of permits for ordinary land disturbance activities relating to Best Management Practices (BMP) to be utilized to control erosion and sedimentation from leaving the site during construction and other land disturbance activities.

*407.302 Department of Highways and Traffic:* The Department of Highways and Traffic shall have the authority and responsibility to perform the following functions related to the enforcement of this code:

1. Plan review of major land disturbance activities;
2. Plan review and inspection of land disturbance activities related to construction, repair, maintenance, or condition of roadways and roadway right-of-ways which are maintained by the County; and
3. Plan review of land disturbance activities within or abutting areas designated one hundred (100) year flood plain.

*407.303 Rule-making Authority:* County departments having enforcement authority and responsibilities described in Section 103 of this code shall have the authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code, in order to secure the intent thereof, and to designate requirements applicable because of local climatic or other conditions. Such rules and regulations shall not have the effect of waiving requirements specifically provided for in this code or of violating accepted engineering practices involving the purpose of this code.

#### VIOLATIONS

*407.400 Unlawful acts:* It shall be unlawful for any person, firm or corporation to perform any land disturbance activities or cause or allow same to be done in conflict with or in violation of any of the provisions of this code.

*407.401 Notices of Violations:* When the Department of Public Works, the Department of Planning or the Department of Highways and Traffic determines that a violation of this code exists, the respective Director shall notify the violator. The notification shall be in writing and shall be delivered to the violator or his/her legally authorized representative or mailed to his last known address via first class mail postage prepaid. Any person having been notified that a violation exists and who fails to abate the violation within ten (10) days after notification shall be subject to the penalties enumerated in Sections 104.4 and 104.4.1.

*407.402 Prosecution of Violation:* If the violator does not abate the violation promptly, the Department of Public Works, Department of Planning or the Department of Highways and Traffic shall request the County Counselor to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation.

*407.403 Violation, Penalties:* Any person, firm or corporation who shall violate any provision of this code, or who shall fail to comply with any of the requirements thereof, or who shall perform work in violation of the approved construction documents or the Storm Water Pollution Prevention Plan, or any directive of the Department of Public Works, Department of Planning or the Department of Highways and Traffic, or of a permit or certificate issued under the provisions of this code, or shall start any work requiring a permit without first obtaining a permit therefore, or who shall continue any work in or about a structure after having been served a stop work order, except for such work which that person, firm or corporation has been directed to perform to remove a violation or unsafe conditions, or any owner of a property or any other person who commits, takes part or assists in any violation of this code or who maintains any property on which such violation shall exist shall be guilty of a misdemeanor, punishable by a fine of not more than one thousand dollars (\$1,000.00) or by imprisonment not exceeding ninety (90) days, or both such fine and imprisonment. Each day that a violation continues shall be deemed a separate offense.

*407.404 No-Permit Penalty:* In addition to the penalties set out above, the following procedure shall be followed where a County department identified in Section 103 determines that work has been started prior to the acquisition of a permit required by this code:

1. The department shall issue a stop work order.
2. The department Director shall notify the violator of his/her assessment regarding the appropriate penalty amount to be assessed against the violator, which shall not exceed one thousand dollars (\$1,000.00) for each day that work occurs without a permit. In making the assessment, the department shall consider whether the violator has previously violated this code and whether the occupation or experience of the violator indicates that he/she knew or should have known that a permit was required. In no case will a no-permit penalty be assessed against a property owner unless he/she actually performed the work involved.

3. At the violator's option, he/she may deposit the assessed penalty amount in escrow (certified check or cash only) with the department, in which case the violator's right to a hearing will be preserved.

4. No-permit penalties are appealable to the Building Commission in the same manner as other decisions of the department. The department may revise its assessment upon notice to both the Building Commission and the violator at any time prior to the hearing. Likewise, at any time prior to the hearing, the violator may accept and pay the recommended penalty amount and the hearing will be canceled.

5. At the hearing before the Building Commission, said Commission shall afford both the department and the alleged violator an opportunity to present any evidence or make any statements they wish to have considered.

6. Following the hearing the Building Commission shall determine whether a permit was required:

a. If the Building Commission determines that a permit was required, an appropriate penalty amount shall be assessed, taking into account the same considerations as noted above. The stop work order shall remain in full force and effect until such time as the penalty amount is paid and the violator has complied with all other regulations pertaining to the issuance of permits.

b. If the Building Commission determines that no permit was required, the department shall immediately cancel the stop work order.

*407.405 Abatement of Violation:* The imposition of the penalties herein prescribed shall not preclude the County Counselor from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation or to prevent illegal use of a property or to stop an illegal act.

*407.406 Permit Suspension or Revocation:* When a land disturbance activity is conducted in violation of the requirements of this code or the terms of the permit in such a manner as to materially adversely affect the safety, health or welfare of persons or materially be detrimental or injurious to property or improvements, the Department of Public Works or the Department of Highways and Traffic may suspend or revoke such permit.

*407.407 Stop Work Order:* Upon notice from the Department of Public Works or the Department of Highways and Traffic that work on any property is being prosecuted contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved or to the owner's agent or to the person doing the work and shall state the conditions under which work will be permitted to resume.

*407.408 Unlawful Continuance:* Whenever the Department of Public Works or the Department of Highways and Traffic finds that any land disturbance activity is being

prosecuted contrary to the provisions of this code or in an unsafe and dangerous manner, the owner or the person performing such activity shall immediately stop such activity. The stop work order shall be in writing and shall be given to the owner of the property involved or to the owner's agent or to the person doing the work and shall state the conditions under which work will be permitted to resume. Any person who shall continue any work in or about the property after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as specified in Chapter 407.400 of this code.

## APPEALS

*407.500 Application for Appeal:* Any person shall have the right to appeal a decision of the Department of Planning, the Department of Public Works or the Department of Highways and Traffic to the Building Commission. An application for appeal shall be based on a claim that the intent of this code or the rules or regulations adopted thereunder have been incorrectly interpreted or the provisions of this code do not apply.

*407.501 Filing Procedure:* All appeals shall be filed in writing with the Department of Public Works. All appeals shall be filed within thirty (30) days after the decision to be appealed is rendered by the departments identified in this Section.

*407.502 Filing Fee:* All appeals must be accompanied by a fee as set by Cole County.

*407.503 Notice of Meeting:* The Commission shall meet upon notice from the Chairman within ten (10) days of the filing of an appeal or at stated periodic meetings.

*407.504 Open Hearing:* All hearings before the Commission shall be open to the public. The appellant, the appellant's representative, the County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code and any person whose interests are affected shall be given an opportunity to be heard.

*407.505 Procedure:* The Commission shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information be received.

*407.506 Commission Decision:* Decisions by the Commission to reverse or modify a decision by a department requires a minimum vote of three (3) members.

*407.507 Resolution:* The decision of the Commission shall be in writing. Copies shall be furnished to the appellant and to the County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code.

*407.508 Administration:* The applicable County department identified in Section 105.1 of this code shall take immediate action in accordance with the decision of the Commission.



*407.509 Court Review:* A party adversely affected by a decision of the Commission may appeal to an appropriate court from such decision. Application for review shall be made in the manner and time required by law following the filing of the decision.

**LAND DISTURBANCE PERMITS REQUIRED**

*407.600 County Permit Required:* Any person who intends to conduct any land disturbance activity must obtain a permit prior to beginning the activity. The type of permit shall be as required by Sections 407.601 or 407.602 in this code.

*Exception:* Activities that do not require permits under Section 106.3 of this code.

*407.601 Major Land Disturbance Permit:* No person shall perform any major land disturbance activity prior to receipt of a major land disturbance permit. Applications for major land disturbance permits shall be filed with the Department of Planning.

*Exception:* Activities that do not require permits under Section 407.605 of this code.

*407.602 Ordinary Land Disturbance Permit:* No person shall perform any ordinary land disturbance activity prior to receipt of an ordinary land disturbance permit. Applications for ordinary land disturbance permits shall be filed with the Department of Public Works.

*Exception:* Activities that do not require permits under Section 407.605 of this code.

*407.603 County Building Permit and Related Ordinary Land Disturbance Activities:* The Department of Public Works may include ordinary land disturbance activities associated with the construction of a building, structure or parking lot authorized by a permit issued under the Building Code as an integrated permit for the proposed construction.

*407.604 Limitation on Transfer of Land Disturbance Permits:* Any person who buys land from a person who has been issued a land disturbance permit under Sections 106.1.1 or 106.1.2 of this code must obtain a separate land disturbance permit from County.

*Exceptions:*

1. Major land disturbance permits may be transferred to a new land owner provided the original permit holder obtains the approval of the Department of Planning to retain responsibility for the land disturbance activities on such property.

2. Ordinary land disturbance permits may be transferred to a new land owner provided the original permit holder obtains the approval of the Department of Public Works to retain responsibility for the land disturbance activities on such property.

*407.605 Exceptions--Land Disturbance Permits Not Required:* Land disturbance permits are not required for the activities identified as items 1 and 8 in this Section, nor are such permits required for the activities identified in items 2, 3, 4, 5, 6 and 7, provided the

activity does not alter, or cause to be altered, the present surface of the ground: a) by any cut or fill at the property line; b) by any cut or fill that would permanently divert one drainage area to another drainage area; c) by any cut or fill which would deposit mud or harmful silt or create erosion or damage to adjoining properties; or d) by any cut or fill that would block or affect an existing swale or drainage path in a manner to cause damming and ponding.

1. Any emergency activity that is immediately necessary for the protection of life, property or natural resources.

2. Existing farming, nursery and agricultural operations conducted as a permitted or accessory use.

3. Excavation or fill of less than thirty (30) cubic yards provided the land disturbance activity is for the improvement of the property. Erosion and sediment control measures shall be provided, when necessary, until grass or other vegetation is established or other approved means of ground cover means are used.

4. Land disturbance activities associated with additions to and accessory structures for one- and two-family dwellings.

5. Land disturbance activities less than two thousand (2,000) square feet in area.

6. Removal of existing or dying grass or similar vegetation by disturbing not more than ten thousand (10,000) square feet and resodding or reseeded with new landscaping to include preparation of the seed bed; provided erosion and sediment control measures are provided until the grass or other vegetation is established. Any cut or fill in conjunction with the preparation of the seed bed shall not exceed thirty (30) cubic yards.

7. Gardening and similar activities on property occupied by one- or two-family dwellings.

8. Land disturbance activities by any public utility for the installation, inspection, repair or replacement of any of its equipment or for its collection or distribution lines or piping systems; provided erosion and sediment control measures are provided until grass or other vegetation is established or other approved ground cover means are used. This exception does not apply to any land disturbance activity associated with work that requires a building permit.

*407.606 State of Missouri Permits Required:* The permit applicant must obtain a land disturbance permit from the State of Missouri Department of Natural Resources for any site where one (1) acre or more of land will be disturbed, before beginning any site work authorized by a County permit. This requirement applies to sites of less than one (1) acre that are part of a proposed development that will ultimately disturb one (1) acre or more.

## LAND DISTURBANCE PERMIT APPLICATIONS

*407.700 Permit Applications:* Applications for land disturbance permits required by this code shall be in the form prescribed by and accompanied by the site plans and documents determined necessary by the County department responsible for issuing the permit. Such applications shall include proof that proposed land uses have received zoning approvals from the County or the municipality in which the land disturbance activities will occur.

*407.701 Storm Water Pollution Prevention Plan Required (SWPPP) for Major Land Disturbance Permits:* All applications for major land disturbance permits shall be accompanied by a Storm Water Pollution Prevention Plan prepared for the specific site by or under the direction of a qualified professional. The application shall contain a statement that any land clearing, construction or development involving the movement of earth shall be in accordance with the Storm Water Pollution Prevention Plan, and the applicant will assume and acknowledge responsibility for compliance with this code and the Storm Water Pollution Prevention Plan at the site of the permitted activity.

*407.702 Required Site Development Escrows for Major Land Disturbance Permits:* Applicants for major land disturbance permits shall file a site development escrow, in the form of a letter of credit or other improvement security in an amount deemed sufficient by the Department of Planning to cover all costs of improvements, landscaping and maintenance of improvements for such period as specified by the Department of Planning. The site development escrow shall include engineering and inspection costs sufficient to cover the cost of failure or repair of improvements installed on the site.

*407.703 Release of Escrows--Project Closure:* Any site development escrow will not be fully released to the property owner, site operator or permit holder until all of the following have been completed:

1. All temporary storm water control Best Management Practices (BMPs) have been removed and the site has been fully stabilized.
2. All permanent storm water control Best Management Practices (BMPs) have been completed.
3. All final inspections/certifications have been completed by each of the government jurisdictions involved in authorizing the project.

## FEES

*407.800 Issuance of Permits:* Land disturbance permits shall not be issued until the fees associated with the permit are paid to the individual County departments as specified in Sections 108.1.1 through 108.1.3 of this code.

*Exception:* Individual County departments may defer all or parts of fees to a later stage of site development.

*407.801 Department of Planning:* Fees for the activities of the Department of Planning related to land disturbance permits shall be in accordance with the fee rates set forth and promulgated by Cole County.

*407.802 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)*

*407.803 Content--Storm Water Pollution Prevention Plan (SWPPP):* The design requirements in Chapter 2 of this code shall be complied with when developing the Storm Water Pollution Prevention Plan and the plan shall include the following:

- 1) Name, address and telephone number of the site owner and the name, address and telephone number of the individual who will be in overall responsible charge of construction/development activities at the site.
- 2) Site address or location description and parcel identification number(s).
- 3) A site map showing the outlines of the total project area, the areas to be disturbed, existing land uses, locations and names of surface water bodies, locations of flood plains, locations of temporary and permanent Best Management Practices (BMP) and such other information as may be required by the County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code.
- 4) Existing contours of the site and adjoining strips of off-site property and proposed contours after completion of the proposed land disturbance and development, based on United States Geological Survey datum, with established elevations at buildings, walks, drives, street and roads; and information on necessary clearing and grubbing, removal of existing structures, excavating, filling, spreading and compacting.
- 5) A natural resources map identifying soils, forest cover and resources protected under other provisions of County ordinances.
- 6) An estimate of the runoff coefficient of the site prior to disturbance and the runoff coefficient after the construction addressed in the permit application is completed.
- 7) Estimated quantity of land to be disturbed.
- 8) Details of the site drainage pattern both before and after major land disturbance activities.
- 9) Access to construction site.
- 10) Description of Best Management Practices (BMP) to be utilized to control erosion and sedimentation during the period of land disturbance.
- 11) Description of Best Management Practices (BMP) to be utilized to prevent other potential pollutants such as construction wastes, toxic or hazardous substances,

petroleum products, pesticides, herbicides, site litter, sanitary wastes and other pollutants from entering the natural drainage ways during the period of construction and land disturbance.

12) Description of Best Management Practices (BMP) that will be installed during land disturbance to control pollutants in storm water discharges that will occur after land disturbance activity has been completed.

13) Location of temporary off-street parking and wash-down area for related vehicles.

14) Sources of off-site borrow material or spoil sites and all information relative to haul routes, trucks and equipment.

15) The anticipated sequence of construction and land disturbance activities, including installation of Best Management Practices (BMP), removal of temporary Best Management Practices (BMP), stripping and clearing; rough grading; construction utilities, infrastructure and buildings; and final grading and landscaping. Sequencing shall identify the expected date(s) on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.

16) All erosion and sediment control measures necessary to meet the objectives of this code throughout all phases of construction and after completion of site development. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.

17) Seeding mixtures and rates, types of sod, method of seed bed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.

18) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.

19) Plans for responding to any loss of contained sediment to include the immediate actions the permit holder will take in case of a containment failure. This plan must include documentation of actions and mandatory reporting to the Department of Public Works.

20) Schedules and procedures for routine inspections of any structures provided to prevent pollution of storm water or to remove pollutants from storm water and of the site in general to ensure all Best Management Practices (BMP) are continually implemented and are effective.

*407.804 Required Plan Amendments--Storm Water Pollution Prevention Plan (SWPPP):*  
The permit holder shall amend the Storm Water Pollution Prevention Plan whenever:

1. Design, operation or maintenance of Best Management Practices (BMP) is changed;
2. Design of the construction project is changed that could significantly affect the quality of the storm water discharges;
3. Site operator's inspections indicate deficiencies in the Storm Water Pollution Prevention Plan (SWPPP) or any Best Management Practices (BMP);
4. Inspections by County or by the Missouri Department of Natural resources indicate deficiencies in the Storm Water Pollution Prevention Plan (SWPPP) or any Best Management Practices (BMP);
5. The Storm Water Pollution Prevention Plan (SWPPP) is determined to be ineffective in significantly minimizing or controlling erosion or excessive sediment deposits in streams or lakes;
6. The Storm Water Pollution Prevention Plan (SWPPP) is determined to be ineffective in preventing pollution of waterways from construction wastes, chemicals, fueling facilities, concrete truck washouts, toxic or hazardous materials, site litter or other substances or wastes likely to have an adverse impact on water quality;
7. Total settleable solids from a storm water outfall exceeds 0.5 ml/L/hr if the discharge is within the prescribed proximity of a "valuable resource water" as defined by the Missouri Department of Natural Resources;
8. Total settleable solids from a storm water outfall exceeds 2.5 ml/L/hr for any other outfall; or
9. The County or the Missouri Department of Natural Resources determines violations of water quality standards may occur or have occurred.

*407.805 Permit Holder Responsibilities for Administration of Storm Water Pollution Prevention Plan (SWPPP):* The permit holder shall:

1. Notify all contractors and other entities (including utility crews, County employees or their agents) that will perform work at the site of the existence of the Storm Water Pollution Prevention Plan (SWPPP) and what actions or precautions shall be taken while on site to minimize the potential for erosion and the potential for damaging any Best Management Practices (BMP);
2. Determine the need for and establish training programs to ensure that all site workers have been trained, at a minimum, in erosion control, material handling and storage, and housekeeping;

3. Provide copies of the Storm Water Pollution Prevention Plan (SWPPP) to all parties who are responsible for installation, operation or maintenance of any Best Management Practices (BMP); and

4. Maintain a current copy of the Storm Water Pollution Prevention Plan (SWPPP) on the site at all times.

### DESIGN REQUIREMENTS

#### GENERAL

*407.900 Design:* The design of erosion and settlement controls required for land disturbance activities shall comply with the following minimum requirements:

1. Land disturbance, erosion and sediment control practices, and watercourse crossings shall be adequate to prevent transportation of sediment from the site.

2. Materials brought to any site or property under a permit issued under this code, where said material is intended to be utilized as fill material at the site for land disturbance, erosion or sediment control, shall consist of clean uncontaminated earth, soil, dirt, sand, rocks, gravel or masonry materials only.

3. Cut and fill slopes shall be no greater than 3:1 except as approved by the Department of Public Works or the Department of Highways and Traffic to meet other community or environmental objectives.

4. Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other County ordinances.

5. Clearing techniques that retain existing vegetation to the maximum extent practicable shall be used and the time period for disturbed areas to be without vegetative cover shall be minimized to the extent practical.

6. Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.

7. Phasing shall be required on all sites disturbing greater than thirty (30) acres of land. The size of each phase will be established by the Department of Planning at the time of plan review for the issuance of a major land disturbance permit.

*407.901 Erosion Control Design:* Erosion control requirements shall include the following:

1. Soil stabilization shall be completed within five (5) days of clearing or inactivity in construction.

2. If seeding or another vegetative erosion control method is used, it shall become established within two (2) weeks or the site shall be reseeded or a non-vegetative option employed.

3. Techniques shall be employed to ensure stabilization on steep slopes and in drainage ways.

4. Soil stockpiles must be stabilized or covered at the end of each workday or perimeter controls must be in place to prevent silt from the stockpile from leaving the site.

5. The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.

6. Techniques shall be employed to prevent the blowing of dust or sediment from the site.

7. Techniques shall be employed to divert upland runoff past disturbed slopes.

*407.902 Sediment Control Design:* Sediment control requirements shall include:

1. Settling basins, sediment traps or tanks and perimeter controls.

2. Settling basins shall be provided for each drainage area within ten (10) or more acres disturbed at one time and shall be sized to contain 0.5 inch of sediment from the drainage area and be able to contain a 2-year, 24-hour storm. If the provision of a basin of this size is impractical, other similarly effective Best Management Practices (BMP), as evaluated and specified in the Storm Water Pollution Prevention Plan (SWPPP), shall be provided.

3. Settling basins shall be designed in a manner that allows adaptation to provide long-term storm water management as required by the County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code.

4. Settling basins shall have stabilized spillways to minimize the potential for erosion of the spillway or basin embankment.

5. Protection for adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls.

*407.903 Watercourse Design:* Watercourse protection requirements shall include:

1. Encroachment into or crossings of active watercourses/riparian areas and wetlands shall be avoided to the maximum extent practicable. All County, State and



Federal permits and approvals shall be obtained by a permit holder prior to beginning work authorized by a County land disturbance permit.

2. Stabilization of any watercourse channels before, during and after any in-channel work.

3. If a defined watercourse is to be realigned or reconfigured, clearing and grubbing activities within fifty (50) feet of the watercourse shall not begin until all materials and equipment necessary to protect the watercourse and complete the work are on site. Once started, work shall be completed as soon as possible. Areas within fifty (50) feet of the watercourse shall be recontoured and revegetated, seeded or otherwise protected within five (5) working days after land disturbance activities have ceased.

4. All storm water conveyances shall be designed and approved by a licensed engineer upon plans bearing the seal of said engineer, and then approved by the Village Engineer.

5. Stabilization adequate to prevent erosion shall be provided at the outlets of all pipes and paved channels.

*407.904 Construction Site Access Design:* Construction site access requirements for major land disturbance activities shall include:

1. A temporary access road provided at all land disturbance sites including a wash-down area supporting all active sites.

2. The Department of Highways and Traffic may require other measures to ensure that construction vehicles do not track sediment onto public streets or be washed with wash effluent channeled directly into storm drains.

*407.905 Control of Construction Materials and Waste:* Control requirements for construction materials, construction wastes and other wastes generated on site at land disturbance sites shall include provisions satisfactory to the County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code for:

1. Spill prevention and control facilities for materials such as paint, solvents, petroleum products, chemicals, toxic or hazardous substances, substances regulated under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and any wastes generated from the use of such materials and substances, including their containers. Any containment systems employed to meet this requirement shall be constructed of materials compatible with the substances contained and shall be adequate to protect both surface and ground water.

2. Collection and disposal of discarded building materials and other construction site wastes, including those listed in Section 201.6.1 above.

3. Litter control.
4. Control of concrete truck washouts.
5. Assurance that on-site fueling facilities will adhere to applicable Federal and State regulations concerning storage and dispensers.
6. Provision of sufficient temporary toilet facilities to serve the number of workers on major land disturbance sites.

### INSPECTIONS

#### GENERAL

*407.1000 Department of Public Works--General:* The County department(s) having enforcement authority and responsibilities described in Section 103.0 of this code shall make inspections as herein required and shall either approve that portion of the work completed or shall notify the permit holder wherein the work fails to comply with the land disturbance, erosion and sediment control plan as approved. Plans for land disturbance, stripping, excavating and filling work bearing the stamp of approval of the County department issuing the permit shall be maintained at the site during the progress of the work. To obtain inspections, a permit holder shall notify the Department of Public Works at least two (2) working days before the following:

1. Start of construction.
2. Installation of sediment and erosion measures.
3. Completion of site clearing.
4. Completion of rough grading.
5. Completion of final grading.
6. Close of the construction season.
7. Completion of final landscaping.

*Exception:* Inspections conducted by the Department of Highways and Traffic related to construction and maintenance of County highways and roadways.

*407.1010 Extra Inspections:* In addition to the inspections otherwise required, the Department of Public Works is authorized to perform and charge fees for extra inspections or reinspections which in their judgment are reasonably necessary due to non-compliance with the requirements of this code or work not ready or accessible for inspection when requested.

*407.1020 Permit Holder Inspection and Report Responsibilities--Major Land Disturbances:* The holder of a major land disturbance permit or his/her agent shall cause regular inspections of land disturbance sites, including all erosion and sediment and other pollutant control measures, outfalls and off-site receiving waters in accordance with the inspection schedule outlined in the approved Storm Water Pollution Prevention Plan (SWPPP). Inspections must be scheduled at least once per week and no later than seventy-two (72) hours after heavy rain. The purpose of such inspections will be to ensure proper installation, operation and maintenance of Best Management Practices (BMP) and to determine the overall effectiveness of the Storm Water Pollution Prevention Plan (SWPPP) and the need for additional control measures. All inspections shall be documented in written form on weekly reports with copies submitted to the Department of Public Works at the time interval specified in the permit. Permit holder inspection reports must include the following minimum information:

1. Inspector's name and signature;
2. Date of inspection;
3. Observations relative to the effectiveness of the Best Management Practices (BMPs);
4. Actions taken or necessary to correct deficiencies; and
5. A listing of areas where land disturbance operations have permanently or temporarily stopped.

The permit holder shall notify the site contractor(s) responsible for any deficiencies identified so that deficiencies can be corrected within seven (7) calendar days of the weekly inspection report.

*407.1030 Verification of Permit Holder's Reports:* The Department of Public Works may make extra inspections as deemed necessary to ensure the validity of the reports filed under this code or to otherwise ensure proper installation, operation and maintenance of storm water Best Management Practices (BMP) and to determine the overall effectiveness of the Storm Water Pollution Prevention Plan (SWPPP) and the need for additional control measures.