

PART IV- LAND DISTURBANCE, ILLICIT DISCHARGE & EROSION CONTROL

Section 110 PURPOSE, GOALS AND OBJECTIVES

A. **PURPOSE:** The purpose of this section is to protect the health, safety and general welfare of the citizens of Nixa and protect the Waters of the City and Waters of the State through the regulation to the maximum extent practicable of non-storm water discharges to the storm drainage system as required by federal and state law. This section establishes uniform requirements for land disturbance activities in order to control the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

B. **GOALS AND OBJECTIVES:** The goal of the regulation is to effectively minimize erosion and discharge of sediment by application of Best Management Practices (BMP's).

This goal can be attained by meeting the following objectives:

1. Stabilize disturbed areas as soon as possible by re-establishing sod, other forms of landscaping, and completing proposed structures, pavements and storm drainage systems.
2. To regulate the contribution of pollutants to the MS4 by storm water discharges by any user.
3. To prohibit illicit connections and discharges to the MS4.
4. To establish legal authority to carry out all inspection, surveillance, monitoring, and enforcement procedures necessary to ensure compliance with this ordinance.

Section 111 DEFINITIONS

For the purposes of this section, the following words shall have the definitions hereinafter set forth:

“Accepted” or “Acceptance” means a determination by the Director or designee that the documents under review meets the minimum applicable standards.

Authorized Enforcement Agency: City of Nixa.

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act: The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity: Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating and demolition.

Director: Means the Director of Public Works of the City of Nixa, Missouri, or the Director’s authorized representative.

Discharge: means any substance disposed, deposited, spilled, poured, injected, seeped, leached, pumped, dumped, leaked, or placed by any means such that it can reasonably be expected to enter, intentionally or unintentionally, into the Waters of the City or Waters of the State, or on any area draining directly or indirectly into the MS4.

Erosion: The wearing away of land due to the action of gravity, wind, water or other mechanical forces.

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

Illegal Discharge: Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section 25-116 of this ordinance.

Illicit Connections: An illicit connection is defined as either of the following:

- Any drain or conveyance, whether on the surface or subsurface that allows an illegal discharge to enter the storm drain system including but not limited to any conveyances that allow any non-storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or,
- Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Land Disturbance Permit: The document issued by Public Works approving the SWPPP and sediment erosion control plan thus authorizing land disturbance activity in accordance with the SWPPP.

Land Disturbance: Any activity that exposes soil including clearing, grubbing, grading, excavating, filling and other related activities.

MS4: Municipal Separate Storm Sewer System.

Municipal Separate Storm Sewer System (MS4): The system of conveyances (including sidewalks, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, berms, stream beds, open fields, parking lots, impervious surfaces used for parking, man-made channels, or storm drains) owned and operated by the City of Nixa and designed or used for collecting or conveying storm water, and that is not used for collecting or conveying sewage.

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

Non-Storm Water Discharge: Any discharge to the storm drain system that is not composed entirely of storm water.

Person: Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

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

Premises: Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Responsible party: The property owner or person authorized to act on the property owner's behalf; or any person allowing, causing or contributing to a violation of the Code.

Sediment: Mineral or organic matter generated as a result of erosion.

Sediment & Erosion Control Plan: A written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

Storm Drainage System: Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

Storm Water (stormwater): Any surface or shallow subsurface flow, runoff, or drainage consisting entirely of water from rainstorm or frozen precipitation events.

Storm Water Pollution Prevention Plan (SWPPP): A plan developed by a qualified professional engineer or person certified in erosion and sediment control to establish controls to limit erosion and transport of sediment and other pollutants from the site. The plan shall include BMPs in accordance with the City's Technical Specifications, Land Development Code and City code of ordinances.

SWPPP: Storm Water Pollution Prevention Plan.

Wastewater: Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

Watercourse: Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water which are delineated by the City of Nixa.

Water Quality Standards: The standards, required under the Clean Water Act, which Missouri has adopted to control and remedy water pollution (10 CSR 20-7.031). Water quality standards have three parts: water used classifications, water quality criteria, and an anti-degradation policy.

Waters of the City: Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, sinkholes, springs, wetlands, wells and channels, and other bodies of surface or subsurface waters, natural or artificial, lying within the boundaries of the City of Nixa, Missouri.

Waters of the State: Any water, surface or underground, lying within the boundaries of the City of Nixa, Missouri over which the Missouri Department of Natural Resources has authority with respect to Clean Water Law.

Section 112 SCOPE AND AUTHORITY

This section shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless specifically exempted. The provisions in this section shall be administered and enforced by the Director. The Director shall have the authority to develop and implement procedures, forms, policies, design and construction standards and interpretations for administering the provisions of this section.

Section 113 COMPATIBILITY WITH OTHER REGULATIONS

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation, or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation, or other provision of law, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards of human health or environment shall control.

Section 114 EROSION AND SEDIMENT CONTROL

The Responsible Party shall control site erosion and the release of sediment and other pollutants resulting from land disturbance activities to the Maximum Extent Practicable (MEP) utilizing Best Management Practices (BMPs). The Responsible Party shall ensure that BMPs are designed, constructed and maintained during land disturbance activities.

Section 115 PERMIT REQUIRED

A. PERMIT REQUIRED: A Land Disturbance Permit is required for all land disturbance activity affecting one (1) acre or greater, cumulatively, throughout the duration of the development. The Responsible Party shall obtain a Land Disturbance Permit from the Public Works Director prior to commencing land disturbance activity. A Land Disturbance Permit is not generally required for land disturbance activity of less than one (1) acre, cumulatively, throughout the duration of the development. However, a Land Disturbance Permit may be required if the Director determines that there is significant potential for deposition of sediment that is in violation of this section or the land disturbance activity is within close proximity to valuable resource waters. Regardless of land disturbance size, a Land Disturbance Permit is required if the land disturbance is located twenty-five feet (25') or less from the boundary of a spring, rim of a sinkhole, cave entrance, wetland, watercourse, stream buffer or one hundred (100) year FEMA identified floodplain. The Director shall provide written notice of the need for a permit to the Responsible Party or person conducting the land disturbance activities. The Responsible Party shall obtain a Land Disturbance Permit from the Public Works Department prior to commencing or resuming land disturbance activity.

B. PERMIT PROCEDURES: The following items must be received prior to issuance of a Land Disturbance Permit:

1. An approved grading, SWPPP, and sediment and erosion control plan.
2. A performance bond or other security.
3. A copy of the General Operating Permit

The submittal and approval procedure is as follows: Subdivisions, Commercial and Other Sites; The sediment and erosion control plan shall be submitted for review along with the plans for the proposed improvements: and Land Disturbance permit for subdivisions will be issued by the Director after approval of the plans for the subdivision improvements.

In addition, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits may only be obtained by means of the Department of Natural Resources ePermitting system available online at www.dnr.mo.gov/env/wpp/wpermit/help.htm. See www.dnr.mo.gov/env/wpp/wtormwater/sw-land-disturb-permits.htm for more information.

C. PLAN REQUIREMENTS: Plans must be prepared by and bear the seal of an engineer registered to practice in the State of Missouri. Plan requirements are set forth in the Stormwater Planning and Design Section (page 123) and in this Section.

Plans will not be required in the following cases:

1. Grading associated solely with a single family residence and which is exempt from the permit requirement except as provided in Section 25-115
2. Grading or filling of less than 1 acre if located outside of allowable building areas and not located within 25 feet of a spring, sinkhole, wetland, or watercourse.

In these instances, a Land Disturbance permit can be issued following an inspection of the site by a representative of the Planning Department if it does not reveal any conditions which would warrant preparation of a detailed plan in the opinion of the Planning Department.

D. SECURITY REQUIREMENTS: Upon approval of the Land Disturbance Permit and prior to issuance of a Land Disturbance Permit, the Public Works Department shall require the developer to post a security in the form of a cash bond, cash or equivalent approved by the Director of Finance of not less than 150% of the value of all work to be done under the grading plan and SWPPP. For land disturbance permits which do not include the construction of public improvements related to subdividing land under the jurisdiction of the Subdivision Regulations, chapter 23 of the Nixa City code, or construction of permanent building or structures, under jurisdiction of the Land Development Code, chapter 23, (i.e. where only grading

work is included, such as a borrow pit or pond) the only type of security which will be accepted will be a cash bond. If the bond, letter or credit or other security document is placed in default, or the insurance is terminated or not maintained at a satisfactory level, then no further permits or approvals, including building permits, shall be issued for the developer's property located in the development for which the security was given, until the improvements are completed to the satisfaction of the City. Any portion of the deposit not expended or retained by the City hereunder shall be refunded when the land disturbance is completed and the soil and drainage conditions are stabilized to the satisfaction of the City.

Section 116 WORK EXEMPT FROM PERMIT

A Land Disturbance Permit shall not be required in the following instances, provided that no change in drainage patterns or sedimentation onto adjacent properties will occur:

1. Grading of land for farming;
2. Nurseries;
3. Gardening or similar agricultural or horticultural use; and
4. Grading activities in quarries and permitted sanitary landfills.

No Land Disturbance Permit is required for the following activities, provided they are less than one (1) acre of cumulative land disturbance, are not located within twenty-five feet (25') of the boundary of a spring, rim of a sinkhole, cave entrance, wetland, watercourse, stream buffer or one hundred (100) year FEMA identified floodplain and do not cause a violation of the Missouri Clean Water Law or Water Quality Standards:

1. Grading and repair of existing roads or driveways;
2. Cleaning and routine maintenance of roadside ditches or utilities;
3. Utility construction where the width of the disturbed area for trench excavation and backfill is twenty feet (20') or less;
4. Emergency construction required to repair or replace roads, utilities, or other items affecting the general safety and well being of the public; and

5. Land disturbance for single family residences not part of an overall subdivision plan.

For emergency construction activities which would otherwise be required to obtain a permit and for which remedial construction will take more than fourteen (14) calendar days, application for the Land Disturbance Permit must be made within three (3) calendar days from the start of construction.

Section 117 GENERAL DESIGN GUIDELINES.

The following items must be considered in preparing a sediment and erosion control plan.

A. TEMPORARY vs. PERMANENT CONTROLS: The greatest potential for soil erosion occurs during construction. Temporary controls are those which are provided for the purpose of controlling erosion and containing sediment until construction is completed. Temporary controls include straw or hay bale dikes, silt fences, erosion control blankets etc., which are not needed after the area is stabilized. Permanent controls consist of riprap, concrete trickle channels, detention basins, etc., which will remain in place through the life of the development. It is possible for the same facility to serve both a temporary and permanent purpose. The difference between temporary and permanent erosion control should be clearly recognized in preparing a sediment and erosion control plan.

B. SHEET FLOW vs. CONCENTRATED FLOW: In areas where runoff occurs primarily as sheet flow, containment of sediment is relatively simple. In these areas straw or hay bales, silt fences and vegetative filter areas can be very effective. Where concentrations of flow occur, containment of sediment becomes more difficult as the rate and volume of flow increases. In these areas more sophisticated controls such as sedimentation basins must be provided.

C. SLOPE: Control of erosion becomes progressively more difficult as the slope of the ground increases. Areas with steeply sloping topography, and cut and fill slopes must be given special consideration.

D. SOILS AND GEOLOGIC SETTING: Area soils and the geologic setting must be considered in preparing the plan and any special considerations deemed necessary for a particular site provided.

E. ENVIRONMENTALLY SENSITIVE AREAS: Where construction occurs within the vicinity of permanent streams, springs, sinkholes, lakes or wetland, special attention must be given to preventing discharge of sediment.

Section 118 DESIGN STANDARDS AND CRITERIA.

A. GRADING:

1. Maximum Grades: Cut or fill slopes shall not exceed 3:1; 4:1 slopes are preferred where possible.
2. Maximum Height: Cut or fill slopes shall not exceed 15 feet in vertical height unless a horizontal bench area at least 5 feet in width is provided for each 15 feet in vertical height.
3. Minimum Slope: Slope in grassed areas shall not be less than 1 percent.
4. Construction Specifications: Construction for streets must comply with specifications set forth by the City of Nixa Planning Department. For all other areas, construction specifications stating requirements for stripping, materials, subgrade compaction, placement of fills, moisture and density control, preparation and maintenance of subgrade must be included or referenced on the plans, or accompanying specifications submitted.
5. Spoil Areas: Broken concrete, asphalt and other spoil materials may not be buried in fills within proposed building or pavement areas. Outside of proposed building and pavement areas, broken concrete or stone may be buried in fills, provided it is covered by a minimum of 2 feet of earth. Burying of other materials in fills is prohibited.
6. Stockpile Access: Location of proposed stockpile areas shall be outlined on the plans, and specifications for proper drainage included.

7. Borrow Areas: The proposed limits of temporary borrow areas shall be outlined in the plans and a proposed operating plan described on the grading plan. Temporary slopes in borrow areas may exceed the maximums set forth above. At the time that borrows operations are completed, the area shall be graded in accordance with the criteria set forth above, and reseeded.

B. SEDIMENT CONTAINMENT:

1. Existing Vegetative Filter Area: Existing vegetative filter areas may be used where:

- * Unconcentrated sheet flow occurs;
- * An area of existing vegetation a minimum of 25 feet in width can be maintained between the area to be graded and a property line, watercourse, sinkhole, spring, wetland or classified lake;
- * Existing ground slope is no greater than 5:1 (20 percent);
- * The existing vegetative growth is of sufficient density and in sufficiently good condition to provide for filtration of sediment.

2. Containment areas constructed of hay or straw bales, or silt fence may be provided in areas where:

- * Unconcentrated sheet flow occurs;
- * An area of existing vegetation, a minimum of 25 feet in width cannot be maintained between the area to be graded and a property line, watercourse, sinkhole, spring, wetland or classified lake;
- * Existing ground slope is no greater than 5:1 (20 percent);
- * Concentration flow from an area no greater than 1 acre occurs and a minimum volume of 100 cubic feet per acre is contained behind the dike.

- * Either cereal grain straw or hay may be used for bale dikes.
- * Silt fence may be used in lieu of hay or straw bales.
- * Straw/hay bale dikes and silt fences are temporary practices.

3. Temporary Containment Berms: Temporary containment berms may be provided for areas where concentrated flow from areas greater than 1 acre and less than 5 acres occurs. Temporary containment berms must contain a volume of 1000 cubic feet per acre of drainage area. Temporary containment berms and accumulated sediment may be completely removed after the tributary area is stabilized, and must be removed prior to final acceptance and release of escrow.

4. Sedimentation Basin: Sediment basins shall be provided for all areas where concentrated flow occurs from an area of 5 or more acres. Sediment basins shall be designed to detain the runoff from 1 inch of rainfall, for a period of at least 24 hours. Runoff shall be calculated using the methods contained in Chapter 2 of TR-55 (Reference 11), using the recommended curve number for newly graded areas from Table 2-2a.

Note: For construction sites in Nixa, an average value of runoff volume from 1 inch of rainfall is approximately 1000 cubic feet per acre, using a curve number of 90, as indicative of a Type B & C soils. This value may be used in sizing sediment basins or the runoff volume determined using the values from Figure 2-1 of TR-55.

a. Sediment basins shall be provided with: an outflow structure consisting of:

- * A flow restriction device which provides for the required detention time,
- * An outfall pipe sized to carry the maximum estimated outflow rate,
- * Protective structures at the pipe outlet to prevent crushing or damage of the end of the pipe,

- * Protective structures to prevent blockage of the pipe with debris,
- * Erosion protection at the pipe outlet.

b. An overflow spillway capable of discharging the peak flow rate for the annual 4% annual probability (25-year) storm while maintaining a minimum freeboard of 1 foot. Overflow spillways may be sodded where the depth of flow at the crest is limited to no greater than 6" and outlet channel velocities do not exceed 5 feet per second for the minor (5- year) storm. Overflow spillways not meeting these restrictions must be constructed of riprap, concrete or other approved, non-erodible material.

C. EROSION PROTECTION:

1. Seeding and Mulching: (Also see "Seeding" in this Chapter)

a. Permanent Seeding: Permanent seeding fertilizer and mulch shall be applied at the rate set forth in Drawing G-1 or according to other specifications which are approved with the Grading Permit. Permanent seeding seasons are from March 1 to May 15, and August 15 to October 15.

b. Mulching: Where slopes are less than 4:1, cereal grain mulch is required at the rate of 100 pounds per 1000 square feet (4500 pounds per acre). Cereal grain mulch shall meet the requirements of Section 802 of the State Specifications (Reference 17) for Type 1 mulch. Where slopes are 4:1 or greater Type 3 mulch ("hydromulch") meeting the requirements of Section 802 of the State Specifications (Reference 17) shall be used.

c. Temporary Seeding: Whenever grading operations are suspended for more than 30 calendar days between permanent grass or seeding periods all disturbed areas must be reseeded with temporary cover according to Drawing G-1. Temporary seeding season runs from May 15 to November 15.

d. Overseeding: During the winter season (November 15 to March 1) temporary seed and mulch shall be placed on all completed areas or areas where grading is suspended for more than 30 days. During this period seed, mulch and soil amendments shall be applied at the following rates:

- * Lime: 100% of specified quantity.
- * Fertilizer: 75% of specified quantity.
- * Seed: 50% of specified quantity.
- * Mulch: 100% of specified quantity.
- * Per Drawing G-1

e. Maintenance: Seeded areas must be maintained for one year following seeding.

2. Cut and Fill Slopes: Cut and fill slopes shall be protected from erosion by construction of straw bale dikes, silt fences, diversion berms, or swales along the top of the slope. Where drainage must be carried down the slopes, pipe drains, concrete flumes, riprap chutes, or other impervious areas must be provided. Suitable erosion control measures such as riprap stilling basins, must be provided at the bottom of the slope. Diversions shall be maintained until permanent growth is firmly established on the slopes.

3. Channels and Swales: Permanent channels and swales shall be provided with a stabilized invert consisting of one of the following materials:

a. Sod: Where the average velocity of flow is 5 feet per second or less and there is no base flow, the channel shall be lined with sod. The remainder of the channel slopes shall be seeded and mulched as provided above.

b. Erosion Control Blanket: Commercial erosion control blankets may be used in lieu of sod provided that samples are submitted and approved by the City Planner. The guaranteed maintenance period shall be one year.

c. Non-erosive lining: In grass channels where base flow occurs, a non-erosive low- flow channel of riprap or concrete must be provided. Low flow channels shall have a minimum capacity of 5 cubic feet per second. Other suitable non-erosive materials may be specified with approval of the City Planner. For channels which have an average velocity of 5 feet per second or greater a non- erosive lining of riprap concrete or other approved material must be provided.

4. Storm Sewer and Culvert Outlets: Erosion protection shall be provided at storm sewer and culvert outlets. Minimum erosion protection shall consist of a concrete toe wall and non-erosive lining. Flared end sections and headwalls are not required, but may be provided at the discretion of the designer to meet grading or aesthetic requirements. The required length of non- erosive lining will not be decreased where flared end sections or headwalls are provided unless calculations and data to support the decrease in length are submitted and approved. Non-erosive lining shall consist of riprap, unless otherwise specified and approved. Field stone, gabions, or Riprap shall extend to the point at which average channel velocity for the peak flow rate from the minor (5-year) storm has decreased to 5 feet per second maximum The length of riprap to be provided shall be as follows:

Average outlet velocity less than 5 feet per second: $L = 3$ times the pipe diameter or culvert width.

Average outlet velocity less than 5-10 feet per second: $L = 5$ times the pipe diameter or culvert width.

Average outlet velocity greater than 10 feet per second: Use MHTD standard energy dissipater headwall (Reference 17) or approved equal.

5. Curb Openings: Where drainage flows from paved areas to grass areas through curb openings erosion protection shall be provided.

6. Ditch Checks and Drop Structures: In grass channels, grades and velocities may be controlled by use of ditch checks and drop structures. Riprap ditch checks may be required in natural channels where average velocity for the peak flow rate from the minor storm exceeds 5 feet per second for post-development conditions.

7. Spillways: Erosion protection must be provided at spillways and outlet structures for detention ponds. Erosion protection shall extend to the point where flow has stabilized and average velocity in the outlet channel is 5 feet per second or less.

D. TEMPORARY VEHICLE TRACKING PAD: A minimum of one temporary vehicle tracking pad is required at each site. Additional tracking pad's may be provided if approved. The location of each tracking pad shall be shown on the plan. Only tracking pads designated on the sediment and erosion control plan may be used. Barricades shall be maintained if necessary to prevent access at other points until construction is complete. Temporary Vehicle Tracking Pad's shall be constructed of crushed limestone meeting the following specifications.

- * Temporary vehicle tracking pad's shall be a minimum of 25 feet wide and 50 feet long.

- * Minimum thickness of crushed limestone surface shall be 2" to 4" inch diameter rock (rocks 6" and larger shall be avoided because they can become lodged between dual tires on trucks) is to be used, with a minimum thickness of 12 inches. Additional 2 inch lifts of crushed limestone shall be added at the discretion of the City if the surface of the initial drive deteriorates or becomes too muddy to be effective.

E. CLEANING STREETS: Streets both interior and adjacent to the site shall be completely cleaned of sediment at the end of construction and prior to release of security.

F. DUST CONTROL: The contractor will be required to use water trucks to water haul roads and construction areas to minimize dust leaving the site when conditions warrant.

G. SEQUENCING AND SCHEDULING: Costs of sediment and erosion control can be minimized if proper consideration is given to sequencing and scheduling construction. Any special sequencing and scheduling considerations should be noted in the grading plan. A detailed schedule must be received from the contractor at the Pre-Construction Conference.

Section 119: INSPECTION

A. By submitting a Land Disturbance permit the applicant consents to inspections of the proposed development site and all work in progress. The Director shall be allowed to enter the property of the responsible party as deemed necessary to make regular inspections.

B. A copy of the Land Disturbance permit and SWPPP must be available on site for inspection by the Director.

C. The Director shall make inspections as hereinafter required in Subsection D and shall either approve that portion of the work completed or shall notify the Responsible Party wherein the work fails to comply with the plan as approved.

D. In order to obtain required inspections, the responsible party shall notify the Director at least two (2) working days **before** the following required inspections:

1. Initial erosion and sediment control measures placement.
2. Site Clearing.
3. Rough Grading.
4. Removal or substantial modification of any erosion and sediment control measure or practice.
5. Final landscaping.

E. The Responsible Party shall provide a qualified inspector to conduct inspections on a weekly basis or within forty-eight (48) hours of a half inch (1/2") or greater rain event.

The log of such inspections shall be maintained on site and available for review by the City upon request. Prior to final acceptance of the project a copy of the inspection log must be provided to the Director for permanent record.

F. The purpose of inspections will be to determine the overall effectiveness of the SWPPP plan and shall be used to identify the need for additional control measures. The need for changes to the plan as identified by the inspections shall be provided to the Responsible Party in writing.

G. In the event work does not conform to the permit or conditions of approval or to the approved plan or to any instruction of the Director, notice to comply shall be given to the Responsible Party in writing. After a notice to comply is given, the Responsible Party shall be required to make the corrections within the time period determined by the Director. If an imminent hazard exists, the Director shall require that the corrective work begin immediately.

Section 120 ENFORCEMENT AND PENALTIES

A. Stop-Work Order; Revocation of Permit

1. In the event that the Responsible Party holding a Land Disturbance Permit pursuant to this ordinance violates the terms of the permit, or implements site development in such a manner as to materially adversely affect the health, safety, welfare, or safety of persons residing or working in the neighborhood or development site, the Director may suspend or revoke the Land Disturbance Permit and issue a stop-work order.

2. For the purpose of this ordinance, a stop work order is validly posted by posting a copy of the stop work order on the site of the land disturbance activity in reasonable proximity to a location where the land disturbance activity is taking place. A copy of the order, in the case of work for which there is a permit, shall be mailed to the address listed by the Responsible Party on the permit. In the case of work for which there is no permit, a copy of the order shall be mailed to the person listed as the owner of the property on the tax records of Christian County Missouri.

3. No person is permitted to continue or permit the continuance of work in an area covered by a stop work order, except work required to correct deficiencies with respect to an erosion or sediment control measure and as authorized by the Director.

4. Forty-eight (48) hours after posting a stop work order, the Director, if the conditions specified in the stop work order to resume work have not been satisfied, may issue a notice to the Responsible Party that the City of Nixa will perform work necessary to comply with this regulation. The City of Nixa may go on the land and commence work after forty-eight (48) hours from issuing the notice of intent. The costs incurred by the City of Nixa to perform this work shall be charged against the performance security.

B. Violation and Penalties

1. No Responsible Party, owner, or land user shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of the terms of this ordinance.
2. Any Responsible Party, owner or land user violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined not more than one thousand dollars (\$500.00) for each offense, and each day during which any violation of any of the provisions of this ordinance is committed, continued or permitted, shall constitute a separate offense.
3. Any waiver of a violation of this ordinance by the Director shall not be deemed or construed by the Responsible Party to constitute a waiver of any prior or succeeding violation of this ordinance.
4. The City Attorney may seek any appropriate remedy to cause the removal of such sediment including, but not limited to, an injunction, revocation proceedings or any and all permits, licenses, and termination of utility services.

Section 121 DISCHARGE PROHIBITIONS

A. Prohibition of Illegal Discharges: No person shall throw, drain, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the MS4 any pollutants or waters containing any pollutants, other than storm water. The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

1. The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl spaces pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water.
2. Discharges or flow from firefighting, and other discharges specified in writing by the City of Nixa as being necessary to protect public health and safety.
3. Discharges associated with dye testing, however this activity requires a verbal notification to the City of Nixa Public Works Director prior to the time of the test.
4. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the United States Environmental Protection Agency (EPA), provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

B. Prohibition of Illicit Connections:

1. The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.
2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.
4. Improper connections in violation of this ordinance must be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system upon approval of the City of Nixa.
5. Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that property upon receipt of written notice of violation from the City of Nixa Public Works Director requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the City of Nixa Public Works Director.