

**CHAPTER 31**

**STORMWATER/FLOODPLAIN MANAGEMENT<sup>1</sup>**

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## ARTICLE I. GENERAL

### Section 31-100 Intent and Purpose.

The purpose of these regulations is to safeguard persons, protect property, prevent damage to the environment and promote the public welfare by guiding, regulating, and controlling the design, construction, use and maintenance of all stormwater facilities and development.

### Section 31-110 Responsibility for Administration

The provisions of this chapter shall be administered and enforced by the Director. The Director shall prescribe forms for attainment of the purposes of this chapter and for the proper enforcement thereof. The Director may delegate the administration of this chapter, or any part thereof, subject to limitations of the ordinances of the city, to duly qualified employees, deputies or agents of the city.

### Section 31-120 Definitions.

Unless specifically defined below, words or phrases in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

Actuarial or risk premium rates. Those rates established by the administrator pursuant to individual community studies and investigations which are undertaken to provide flood insurance in accordance with Section 1307 of the Act and the accepted actuarial principles. "Risk premium rates" include provisions for operating costs and allowances.

Appeal. A request for a review of the floodplain administrator's interpretation of any provision of this article or a request for a variance.

Area of special flood hazard. The land in the floodplain within the City of Jefferson subject to one percent or greater chance of flooding in any given year.

Base flood. The flood having one percent chance of being equaled or exceeded in any given year (100 year flood).

Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater 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.

City. The City of Jefferson, Missouri.

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

Clearing. Any activity which removes the vegetative surface cover.

Council. The city council of the City of Jefferson, Missouri.

Design year storm. The selected or established frequency or return period of rainfall time-duration for which drainage facilities are to be designed.

Detention basin. Any man-made area which serves as a means of controlling and storing stormwater runoff.

Developer. A person directing or participating in the direction of improvements on and/or to land, including, but not limited to, the owner of the land, a general contractor or a commercial agent engaged for such activity.

Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations. May also include any change of land use.

Director. The Director of Community Development or a delegated representative.

Drainage Basin (Watersheds). The catchment area from which stormwater is carried off by a watercourse or storm drainage system. The area served by a drainage system receiving storm and other surface-borne water. The boundaries of a drainage basin are a product of natural topography and drainage system configuration.

Drainage facility. A man-made structure or natural watercourse for the conveyance of stormwater runoff. Examples are channels, pipes, ditches, swales, catch basins and street gutters.

Drainage Way. Any channel that conveys surface runoff.

Dwelling unit. One or more rooms in a dwelling occupied or intended to be occupied as separate living quarters by a single family as defined herein.

Erosion Control. Measures that prevent erosion.

Erosion and Sediment Control Plan. A set of plans prepared by or under the direction of a licensed professional engineer that indicates the specific measures and sequencing to be used controlling sediment and erosion on a development site both before, during and after construction.

Existing construction. For the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRM's effective before that date. "Existing construction" may also be referred to as "existing structures."

Family. One or more persons related by blood, marriage or adoption, occupying a dwelling unit as an individual housekeeping organization. A family may not include more than two (2) persons not related by blood, marriage or adoption.

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland waters.
2. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map (FIRM). An official map of a community on which the flood insurance study has delineated the flood hazard boundaries and the zones establishing insurance rates applicable to the community.

Flood insurance study. The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary/floodway map and the water surface elevation of the base flood.

Floodway or regulatory floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Floodway fringe. That area of the floodplain, outside of the floodway that has a one percent chance of flood occurrence in any one year.

Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, clogged bridge openings, and the hydrological effect or urbanization of the watershed.

Grading. Excavation or fill of material, including the resulting condition thereof.

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.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Illegal Discharge. Any direct or indirect non-storm water discharge to the storm drain system, except as exempted by this ordinance.

Illicit Connections. An illicit connection is defined as either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the 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 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Impervious surface. Surfaces on real property where infiltration of stormwater into the earth has been virtually eliminated by the works of man.

Improved land. Land having improvements that are impervious to, or alter the flow of, stormwater within the limits of a platted, or otherwise distinguished, parcel of land.

Improvement. A structure on or other alteration of land.

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

KC-APWA 5100. Kansas City Metro Chapter of the American Public Works Association (APWA), Division 5100, Erosion and Sediment Control, as amended from time to time by APWA and including all additions and exceptions kept on file by the City.

KC-APWA 5600. Kansas City Metro Chapter of the American Public Works Association, Division 5600, Storm Drainage Systems and Facilities, as amended from time to time by APWA and including all additions and

exceptions kept on file by the City.

Low-density residential. Individually platted lots containing two (2) or fewer dwelling unit.

Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles.

Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

Mean sea level. The average height of the sea for all stages of the tide.

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

Natural Stream. For the purposes of this chapter natural stream shall be defined as a water course containing an ordinary high water mark with a drainage area of fifty (50) acres or more.

Natural Stream Protection Buffer. An area of land containing a twenty-five (25) foot riparian zone and a thirty-five (35) foot minimum building setback. The purpose of the buffer is to protect water quality, minimize the effects of stream bank erosion and enhance flood protection.

New construction. Structures for which the "start of construction" or substantial improvement is commenced on or after the effective date of the FIRM.

Ordinary High Water Mark. A line on the bank established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Owner. Any person, firm, association, syndicate, partnership, corporation, trust, or any other entity having legal title to, or a sufficient proprietary interest to legally transfer, real property. Proprietary interest shall include, but not be limited to, estate administration, trusteeship, guardianship and actions under a valid power of attorney. Proprietary interest shall not include an agency or a bare employment relation.

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.

Person. A natural person, corporation, partnership or other entity.

Phasing. Clearing a parcel of land in distinct phases, with the stabilization of each phase before the clearing of the next.

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 coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a 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.

Regional Detention Master Plan: Plan showing existing and future regional detention facilities to be owned and operated by the City and as amended from time to time by the Director. The document shall be kept on file at the City.

Riparian Zone. A twenty-five (25) foot area of land adjacent to a natural stream, kept in its natural state for the purpose of protecting water quality, minimizing the effects of stream bank erosion and enhancing flood protection. The width of the riparian zone shall be measured from the ordinary high water mark of the natural stream. After the riparian zone is platted, the area designated on the plat as the riparian zone shall be substituted for this definition.

Sediment Control. Measures that prevent eroded sediment from leaving the site.

Site. A parcel of land, or a contiguous combination thereof, where grading work is performed as a single unified operation.

Stabilization The use of practices that prevent exposed soil from eroding.

Start of Construction. The first land-disturbing 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.

Structure. A walled and roofed building that is principally above ground, as well as a manufactured home, and a gas or liquid storage tank that is principally above ground.

Storm drain. An improved storm drain is a closed conduit or paved open ditch for conducting collected stormwater. An unimproved storm drain is an open ditch, natural or specifically constructed for conveying collected stormwater.

Storm drainage design manual. A city manual for use by land developers in the design of storm drainage systems such as storm drains, culverts, streets, gutter flow hydraulics, natural drainage swales and storm inlets. The Storm Drainage Design Manual may include drainage policy to be followed, standard design methods, computation forms and city standards.

Storm Water. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater drainage system. All drainage facilities used for collecting and conducting stormwater to, through and from drainage areas to the points of final outlets including, but not limited to, any and all of the following: Conduits and appurtenant features, canals, ditches, streams, gullies, flumes, culverts, streets, gutters and pump stations.

Stormwater management plan. All phases (1-4) of the city master plan describing the development of, and facilities required for, the stormwater drainage system and additional improvements and actions necessary to the management of stormwater drainage, entitled "City of Jefferson, Missouri Comprehensive Stormwater Master Plan Update," prepared by Burns and McDonnell, as approved by the council and from time to time amended.

Stormwater Pollution Prevention Plan: A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. (Ord. No. 11850, § 1, 1-26-93)

Substantial improvement. Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement.

Swale. A relatively wide, shallow ditch around or between structures used to carry stormwater runoff.

Unimproved land. Land in its natural state.

Variance. A grant or relief to a person from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

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

Watercourse. A stream, usually flowing in a particular direction (though it need not flow continuously in a definite channel), having a bed or banks and usually discharging into some other stream or body of water.

### **Section 31-130 Limitations on Liability.**

Floods from stormwater runoff may occur which exceed the capacity of stormwater drainage facilities constructed and maintained under this chapter. This chapter does not guarantee that property will always be free from stormwater flooding or flood damage. This chapter shall not create a liability on the part of, or cause of action against, the city or any officer or employee thereof for any flood damage. Neither does this chapter purport to reduce the need or the necessity for obtaining flood insurance.

### **Section 31-140 Conditions, Interpretations, Conflict, Separability.**

- A. Conditions. Regulation of stormwater drainage and the attachment of reasonable conditions thereto is an exercise of the valid police power delegated by the State of Missouri to the city. Property owners have the duty of compliance with reasonable policies, regulations, standards and conditions established by the city for design, construction, improvement and restrictive use of the land so as to conform to the physical and economical development of the city, and to promote the health, safety and general welfare of the community at large.
- B. Interpretation. The provisions of this chapter shall be the minimum requirements for the protection of the public health, safety and general welfare.
- C. Conflict. Conflict with public and private provisions:
  1. Public provisions. Where any provision of this chapter imposes restrictions different from those imposed by any other law or regulation, whichever is more restrictive or imposes a

higher standard shall control.

2. Private provisions. This chapter is not intended to abrogate any easement, covenant or any other private agreement or restriction; provided, that where the provisions of this chapter are more restrictive or impose higher standards or regulations than such easement, covenant, or other private agreement or restriction, the requirements of this chapter shall govern.

- D. 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.

#### **Section 31-150. Access to the facilities.**

The Department of Community Development shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the Department of Community Development.

Unreasonable delays in allowing the Department of Community Development access to a permitted facility is a violation of a storm water discharge permit and of this ordinance.

If the Department of Community Development has been refused access to any part of the premises from which stormwater is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the Department of Community Development may seek issuance of a search warrant from any court of competent jurisdiction.

#### **Section 31-160 Violations and Penalties.**

In addition to any specific penalties set forth in individual articles, any person found guilty of violating the provisions of this chapter, shall upon conviction be fined not more than five hundred dollars (\$500.00) and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Jefferson, Missouri, or other appropriate authority, from taking such other lawful action as is necessary to prevent or remedy any violation.

Where a violation is declared a nuisance, all policies and procedures set forth in Chapter 21 shall apply.

## ARTICLE II. STORMWATER MANAGEMENT

### Section 31-200 General Requirements.

#### A. Design Criteria

1. **Storm Drainage Systems and Facilities:** The design procedures stipulated in the KC-APWA 5600 shall be followed insofar as it is applicable. Written justification for all deviations must be prepared and submitted in accordance with the variance procedures set forth in this chapter.
  2. **Erosion and Sediment Control:** The design procedures stipulated in the latest edition of the KC-APWA 5100 shall be followed insofar as it is applicable. Written justification for all deviations must be prepared and submitted in accordance with the variance procedures set forth in this chapter.
- B. **Standard Drawings:** The City of Jefferson Standard Details, as amended from time to time, as well as the Kansas City Metro Chapter of the American Public Works Association, Division 5300, Standard Drawings (KC-APWA 5300) shall be referenced as necessary for design and construction. When the two documents conflict, the City of Jefferson Standard Details shall rule.
- C. **Plan Requirements:** Plans shall include all drawings, narratives and computations as outlined in KC-APWA 5100 and 5600.
- D. **Drainage onto sidewalks.** Tributary areas where sidewalks exist or are proposed, and which drain across a public sidewalk, must not exceed three thousand (3,000) square feet of impervious area, including roofs discharging upon paved areas, or nine thousand (9,000) square feet of sodded areas, or in proportional amounts for a combination of such areas. Paved, roofed or other impervious areas exceeding three thousand (3,000) square feet shall be provided with drains for discharge into storm conduits, channels, or street gutters.
- E. **Downspouts.** Downspouts shall not be discharged directly onto sidewalks or entrance ways. When downspouts are connected to the gutterline of the street or the public drainage system, they shall be connected by a method approved by the Director. Downspouts shall not discharge within the building setback unless there is a drainage swale established to carry the water to the front or rear of the property or closest natural drainage course. Downspouts may also discharge within the building setback if discharging into a rain garden, rain barrel or other stormwater management practice.
- F. **Flow toward streets.** Any concentration of surface flow in excess of two (2) cubic feet per second (cfs) for the ten-year frequency rain shall be intercepted before reaching the street right-of-way and shall be carried by an enclosed storm drain to connect with a drainage structure at the low point in the street right-of-way or to discharge to a watercourse.
- G. **Parking lots and garages.** Adequate provisions shall be made for the disposal of stormwater from parking lots and garages. Plans shall be submitted for approval to the Director to ensure measures are taken to limit the flow of water onto adjoining property or adjacent sidewalks or streets in a quantity that would be detrimental to or inconvenient to persons using the streets or sidewalks.

H. Natural Stream Protection On Developments Platted after April 1, 2007.

1. Natural streams containing an ordinary high water mark with a drainage area of 50 acres or greater shall be buffered by a natural stream protection buffer consisting of a twenty-five (25) foot riparian zone plus a thirty-five (35) foot building setback.
2. If a channel enclosure or relocation of such a drainageway is permitted by the City the riparian zone shall not be required and building setbacks will revert to those dictated by zoning.
3. Riparian zones shall remain undisturbed to the maximum extent practicable. This zone prohibits any land disturbance, clearing, grubbing, or any other construction activities except as necessary for utility construction, greenways and road access. Naturally occurring vegetation within the riparian zone shall not be removed, diminished, inhibited, mowed or substantially altered from its natural state or growth. Such construction shall minimize disturbance of the stream and riparian zone.
4. Adjustments in widths of the riparian zone or adjacent building setback may be made when approved by the Director when local conditions justify deviation from the standard widths.
5. Wherever the designated riparian zone must be disturbed, mitigation measures shall be taken to re-establish vegetative filtration and stream stabilization to the maximum extent practicable.

**Section 31-210 Permit Required.**

- A. No stormwater drainage facility shall be constructed, altered or reconstructed without first obtaining a permit. All such construction shall comply with the general requirements and design procedures, as set forth in this chapter, and the criteria of the KC-APWA 5600. Stormwater drainage facilities shall comport with the stormwater management plan. No clearing, grading, borrowing or filling of land shall be done without obtaining a permit from the Director.
- B. No clearing, grading, borrowing or filling of land shall be done without obtaining a permit from the Director. All such work shall comport with the stormwater management plan as well as an approved erosion and sediment control plan. No permit may be issued pursuant to this subsection for clearing, grading, borrowing or filling of land on tracts greater than one (1) acre except in conjunction with a building permit issued in accordance with the provisions of Chapter 8 of the Code of the City of Jefferson, Missouri, or in conjunction with an approved site development plan. Every permit issued under this subsection for clearing, grading, borrowing or filling of land not in conjunction with a building permit shall expire within one (1) year from the date of issuance. No grading permit is required for the following activities:
  1. Any emergency activity which is immediately necessary for the protection of life, property or natural resources.
  2. Existing nursery and agricultural operations conducted as a permitted main or accessory use.
  3. Minor construction that does not substantially alter the lay of the land or increase the impervious surface by more than 10%.

- C. The Director shall promulgate rules and regulations governing the issuance of the permits required by this section.
- D. Duties of property owners and developers; detailed plan required.
  - 1. Prior to the issuance by the city of a building permit for any low-density residential construction, the staff of the Department of Community Development shall visit the site and prepare the permit noting any special conditions to be met for storm drainage. This shall be accomplished within three (3) working days after receipt of the application.
  - 2. Prior to the issuance by the city of a building permit for any other type of construction, the property owner, the developer or their agent shall have a detailed drainage plan approved by the Director in accordance with this chapter. The property owner, developer or their agent shall, at his own expense, submit necessary plans, designs and specifications to the Director for review and approval.
  - 3. Provisions of this section for plan requirement shall be waived provided no land is disturbed and no trees, shrubs, grass or vegetation is destroyed or removed for construction, reconstruction, repair or alteration of any building provided the improvement does not alter or increase the flow of water.
- E. Review and approval
  - 1. The Community Development Department will review each application for a permit to determine its conformance with the provisions of the Code. Within thirty (30) days after receiving an application, the Community Development Department shall, in writing:
    - a. approve the permit application; or
    - b. approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
    - c. disapprove the permit application, indicating the deficiencies and the procedure for submitting a revised application and/or submission.
  - 2. Failure of the Community Development Department to act on original or revised applications within thirty (30) days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the Community Development Department. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the Community Development Department.
- F. Modifications to the plan
  - 1. Major amendments of any approved plan shall be submitted to the Community Development Department and shall be processed and approved, or disapproved, in the same manner as the original plans.
  - 2. Field modifications of a minor nature may be authorized by the Community Development Department by written authorization to the permittee.

**Sec. 31-220. Developments.**

- A. Conformance with stormwater management plan. Drainage plans submitted by developers must be developed in conformance with the stormwater management plan in effect at the time of the submission.
- B. Restriction of runoff. The city may require that storm drainage systems for tributary areas upstream of existing storm drainage facilities include on-site stormwater detention facilities limiting the peak discharge to that which would have occurred for the existing land use type prior to a zoning change or prior to development of the area. The city may waive such requirements for detention facilities when the developer makes satisfactory arrangements to improve or provide a downstream drainage system of adequate hydraulic capacity for peak rates of discharge to the system, including discharge from the developer's site, to a point downstream where the rate of total runoff from the site is ten (10) percent or less of the total runoff rate conveyed by the downstream system measured at the time of system peak rate. The City at its option may allow downstream system improvements, detention and/or fees in-lieu-of construction that provide the same level of control.
- C. Stormwater management plan facilities. Drainage plans and facilities constructed by developers for developments encompassing more than forty-three thousand five hundred sixty (43,560) square feet in total area, including areas not directly subject to improvements, must include any improvements not previously constructed, which are planned as part of the stormwater drainage system on the affected property pursuant to the stormwater management plan. For purposes of this paragraph, the stormwater management plan in effect at the time of submission of the drainage plan shall govern. Also for purposes of this paragraph, the affected property shall include any adjacent property under common ownership with, and within one hundred (100) feet of the limits of, the parcel of property being developed. Where the cost of such stormwater-related improvements exceeds ten (10) percent of the total cost of the development, excluding the cost of land, the developer may petition for city participation in financing and/or contribution to the funding of the improvements.
- D. Alternative improvements. In reviewing petitions for variances from the requirements of this section, the city will consider alternative improvements or types of improvements proposed by developers which the city deems to be equivalent for the purpose of stormwater management.

**Section 31-230. Construction requirements.**

- A. Location of structures. In addition to any other requirements set forth by ordinance for construction in designated flood hazard areas, the following restrictions for construction adjacent to all watercourses and other drainage facilities shall apply:
  - 1. No house or building and no other structure shall be constructed within thirty (30) feet of the ordinary high water mark of a watercourse or other drainage facility nor shall any such structure be constructed with openings at an elevation below four (4) feet above the highest bank of a watercourse or top of other drainage facilities which traverse or are adjacent to the parcel being developed.
  - 2. The Director may vary the above requirements upon visiting the building site for low-density residential construction or reviewing plans for any other construction should such revisions not diminish the overall intent of this chapter.

- B. Existing storm drains. No cuts shall be made nor fill deposited over existing storm drains nor shall existing storm drains be altered without the approval of the Director.

**Section 31-240 Easements and maintenance.**

- A. Easements. Whenever improvements to land are made, easements for the stormwater drainage system including structural facilities, engineered channels and overflow paths, shall be provided across private property. Easements through existing developments may be obtained as deemed necessary by the Director. Drainage easements shall include access from a convenient public street or parking lot. The minimum width of easements for stormwater drainage shall be fifteen (15) feet. Where a storm drain consists of a closed conduit, the width shall be the greater of fifteen (15) feet or the sum of the conduit diameter and twice the cover depth over the conduit. Where the drainage system consists of an engineered channel, easements shall be as wide as the top of bank width plus ten (10) feet each side.
- B. Maintenance.
1. Public Stormwater Improvements. Maintenance of stormwater sewers, lined drainage channels, detention facilities and related facilities located within public drainage easements shall be the responsibility of the city.
  2. Natural Channels. The city may undertake all maintenance activities, deemed necessary by the Director, of natural watercourses and other unlined drainage channels located within public drainage easements; however, assumption of such maintenance activities does not relieve the property owner of the responsibility for normal maintenance including debris removal, cutting of vegetation, repair of erosion and removal of silt.
  3. Private Stormwater Improvements. Maintenance of stormwater facilities located on private property and not within any public drainage easements shall be the responsibility of the property owners and shall include debris removal and cleaning, cutting of vegetation, repair of erosion, removal of silt and maintenance of structural facilities.
  4. Private Detention Facilities.
    - a. Responsibilities. Owners of land containing private detention facilities shall maintain the facility as it was designed in order to continue the mitigation of the stormwater impacts. This maintenance shall include removal of overgrown vegetation, repair of erosion, repairs to any inlet/outlet structures, and removal of excess silt or any other maintenance deemed necessary to provide the design storage capacity.
    - b. Nuisance declared. Failure to provide necessary maintenance shall be deemed a nuisance.
    - c. Stormwater Pollution Prevention. Any owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit

authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

**Section 31-250 Interference and damage.**

No person shall damage or discharge or place any substance into the drainage system which will or may cause obstruction to flow or other interference with the operation of the stormwater drainage system. Any person violating this section or damaging the stormwater drainage system shall be liable to the city for all expense, loss or damage incurred by the city due to such violation or damage, in addition to any other penalties set forth herein.

**Section 31-260 Inspection.**

The Director or his designated representative may periodically inspect development sites. Through such periodic inspections the Director shall ensure that the drainage plan is properly implemented. The improvements shall be maintained by the developer or owner until such time, if any, maintenance is taken over by the city.

**Section 31-270 Remedial work.**

If it is determined that development is not proceeding in accordance with the approved drainage plan, the Director shall issue a written stop-work order to the developer detailing the nature and location of the noncompliance and specifying what remedial work is necessary to bring the project into compliance. The developer shall immediately stop work on all aspects of the development except the required remedial action, which shall begin. The developer shall complete the remedial work within a reasonable time after receipt of said order. Upon satisfactory completion of the remedial work, the Director shall issue a notice of compliance and the development may proceed.

## ARTICLE III. FLOODPLAIN MANAGEMENT

### Sec. 31-300. General provisions.

- A. Methods of reducing flood losses. In order to accomplish its purposes, this article includes methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion or to flood heights or velocities.
  2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
  3. Controlling the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
  4. Controlling filling, grading, dredging and other development which may increase erosion or flood damage.
  5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodway waters or which may increase flood hazards in other areas.
- B. Lands to which this article applies. This article shall apply to all areas of special flood hazards within the jurisdiction of City of Jefferson, Missouri.
- C. Basis for establishing the areas of special flood hazard:
1. The areas of special flood hazard which are identified by the Federal Emergency Management Agency through a scientific and engineering report entitled The Flood Insurance Study for Cole County and Incorporated Areas dated December 2, 2005, with accompanying flood insurance rate maps with any revisions thereto are hereby adopted by reference and declared to be a part of this article. The flood insurance study is on file in the office of the city clerk.
  2. All areas of special flood hazard which are within the City limits and located in Callaway County, Missouri, identified in The Flood Insurance Study of Callaway County, Missouri, dated February 18, 2005 and accompanying flood insurance rate maps (and floodway maps) with any revisions thereto are hereby adopted by reference and declared to be a part of this article. (Ord. No. 13848, §1, 3-7-2005)
- D. Penalties for noncompliance. No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this article and other applicable regulations.

Violation of the provisions of this article or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or special exception) shall constitute an ordinance violation. Any person who violates this article or fails to comply with any of its requirements shall upon conviction thereof be fined not less than ten dollars (\$10.00) and not more than one hundred dollars (\$100.00) and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate

offense.

Nothing herein contained shall prevent the City of Jefferson, Missouri, or other appropriate authority from taking such other lawful action as is necessary to prevent or remedy any violation.

- E. Abrogation and greater restriction. This article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- F. Interpretation. In the interpretation and application of this article, all provisions shall be considered as minimum requirements; shall be liberally construed in favor of the governing body; and shall be deemed neither to limit nor repeal any other powers granted under state statutes.
- G. Warning and disclaimer of liability. The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This article does not imply that land outside the area of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the City of Jefferson, Missouri, or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Ord. No. 10796, § 2, 3-16-87; Ord. No. 13972, §1, 11-21-2005)

**Sec. 31-310. Administration.**

- A. Establishment of a development permit. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 31-300. No person, firm, or corporation or unit of government shall initiate any development or substantial improvement or cause the same to be done without first obtaining a separate permit for each development as defined in Section 31-300. Application for a development permit shall be made on forms furnished by the Director of Community Development and may include, but not limited to: Plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of material, drainage facilities and the location of the foregoing. Specifically, the following information is required:
  - 1. Elevation in relation to mean sea level of the lowest floor (including basement) of all structures.
  - 2. Elevation in relation to mean sea level to which any nonresidential structure is to be floodproofed.
  - 3. Certification from a registered professional engineer or architect that the nonresidential floodproofed structure will meet the floodproofing criteria in Section 31-320.
  - 4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
  - 5. Elevations required for the application shall be provided by a registered professional engineer, architect or land surveyor.

- B. Designation of the local administrator. The Director of Community Development, or his/her designee, hereinafter referred to as the floodplain administrator is hereby appointed to administer and implement the provisions of this article by granting or denying development permit applications in accordance with the provisions of this article.
- C. Duties and responsibilities of the floodplain administrator. Duties of the floodplain administrator or his designee shall include, but not be limited to:
1. Review all development permit applications to assure that sites are reasonably safe from flooding and that the permit requirements of this article have been satisfied.
  2. Review all development permit applications for proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required. This shall include, but not be limited to, obtaining the permits required by Chapter 31, Stormwater Management.
  3. When base flood elevation data has not been provided in accordance with Section 31-300, then the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation or floodway data available from a federal, state or other source, in order to administer the provisions of Section 31-320.
  4. Verify, record and maintain record of the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures.
  5. Verify, record and maintain record of the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed.
  6. When floodproofing is utilized for a particular structure the floodplain administrator shall obtain certification from a registered professional engineer or architect.
  7. Notify adjacent communities and the Missouri Department of Natural Resources prior to any alteration or relocation of a watercourse, and shall submit evidence of such notification to the Federal Emergency Management Agency.
  8. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
  9. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the floodplain administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
  10. All records pertaining to the provisions of this article shall be maintained in the office of the floodplain administrator and shall be open for public inspection.
  11. The floodplain administrator shall be authorized to promulgate rules consistent with this article to carry out the purpose and intent of this article.
- D. Variance procedures

1. The Board of Adjustment, as established by the City shall hear and decide appeals and requests for variances from the requirements of this article.
2. The Board of Adjustment shall hear and decide appeals when it is alleged that there is an error in any requirement, decision or determination made by the floodplain administrator in the enforcement or administration of this article.
3. Any person aggrieved by the decision of the Board of Adjustment or any taxpayer may appeal such decision to the circuit court as provided in Chapter 89 RSMo., 1986.
4. In passing upon such applications, the Board of Adjustment shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and:
  - a. The danger that materials may be swept onto other lands to the injury of others;
  - b. The danger of life and property due to flooding or erosion damage;
  - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - d. The importance of the services provided by the proposed facility to the community;
  - e. The necessity to the facility to a waterfront location, where applicable;
  - f. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
  - g. The compatibility of the proposed use with existing and anticipated development;
  - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
  - I. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - j. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
  - k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

E. Conditions for variances:

1. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section.
2. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
4. Variances shall only be issued upon a showing of good and sufficient cause; a determination that failure to grant the variance would result in exceptional hardship to the applicant; and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
5. Any applicant to whom a variance is granted shall be given a written notice that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
6. The Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.
7. The floodplain administrator shall maintain the records of all appeal actions and report any variances to the federal emergency management agency upon request.

**Sec. 31-320. Provisions for flood hazard reduction.**

- A. General standards. In all areas of special flood hazards (Zones A, AH, AO, AE and A1-30) the following provisions are required:
  1. All new construction, including the placement or replacement of manufactured homes, and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
  2. All new construction and substantial improvements shall be constructed with materials resistant to flood damage.
  3. All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.
  4. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
  5. All new and replacement electrical, heating, ventilation, and air conditioning equipment and shall be designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding unless deemed a minor repair by the floodplain administrator.
  6. In the event an excavation is made on land adjacent to special flood hazard areas which places the lowest floor, including basement elevation at or below the 100 year flood elevation plus one foot, the structure shall, for the purpose of these regulations, be considered as being in a special flood hazard area.

7. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
8. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
9. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
10. The storage or processing of materials that are in time of flooding buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited.
11. The storage or processing of materials that are in time of flooding buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited, unless such materials are stored in:
  - (a) A structure conforming to the specific standards as set forth in Section 31-320.C.2; or
  - (b) A structure that does not conform to the specific standards as set forth in Section 31-320.C.2, but only if such materials are stored in a closed area. (Ord. 12120, § 1, 7-5-94)
12. That until a flood way has been designated, no development, including landfill, may be permitted within Zones A1-30 and AE on the city's FIRM unless the applicant of the land use has demonstrated that the proposed use, when combined with all other existing and reasonably anticipated uses, will not increase the water surface elevation of the 100-year flood more than one foot on the average cross-section of the reach in which the development or landfill is located as shown on the flood insurance rate study incorporated by reference in Section 31-300 of this article.

B. Standards for subdivision proposals:

1. All subdivision proposals and other proposed new developments, including manufactured home parks or subdivisions, shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
4. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions), which is greater than either fifty (50) lots or five (5) acres.

C. Specific standards. In all areas of special flood hazard, where base flood elevation data has been provided as set forth in Section 31-300 or Section 31-310 (Zones A1-30 or AE), the following provisions are required:

1. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above the base flood elevation plus one foot. As a minimum, two elevation certifications shall be required with one being required prior to the issuance of a Flood Plain Development Permit and a second being required after completion of construction. Elevation certifications shall be provided by a registered professional engineer, architect or land surveyor. On existing structures where no change is made to the existing floor elevation the floodplain administrator may waive the requirement for the second elevation certification.
2. Nonresidential Construction: New construction or substantial improvement of any commercial, industrial or other nonresidential structure shall have:
  - a. The lowest floor, including basement, elevated to the level of the base flood elevation plus one foot; or,
  - b. Together with attendant utility and sanitary facilities, be floodproofed so that below such a level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. The floodproofed structure shall not move, float, leak, collapse, nor be substantially damaged by water pressure, erosion, water current or debris loading. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Section 31-310. As a minimum one certification shall be required prior to the issuance of a Flood Plain Development Permit and a second certification shall be required after construction is complete; or,
  - c. If the area will be used solely for parking, building access, or limited storage; and designed to allow for the automatic entry and exit of flood waters through the use of engineered openings; and constructed of flood resistant materials; and with any necessary attendant utility and sanitary facilities floodproofed in accordance with Section 31-320.C.2.b; the area may be considered wet floodproofed. Certifications from a registered professional engineer or architect shall certify that the structure will resist hydrostatic, hydrodynamic and debris impact forces and that the utility and sanitary facilities have been floodproofed in accordance with Section 31-320.C.2.b. At a minimum, one certification shall be required prior to the issuance of a Flood Plain Development Permit and a second certification shall be required after construction is complete. Additionally, the owner shall provide a written statement prior to issuance of a Flood Plain Development Permit stating that the area will only be used for parking, building access, or limited storage and that, when a flood warning is issued, as much of the contents as possible will be evacuated.
3. Pressurized and flammable liquid tanks.
  - a. Pressurized and flammable liquid tanks are nonresidential structures. The installation of such tanks shall comply with the Nonresidential Construction Standards (Sec. 31-320.C.2) and the more restrictive standards of this subsection.
  - b. Standards for pressurized and flammable liquid tanks.

A tank located in a flood hazard area shall be installed so the tank, when full, partially full, or empty, will not float, move, leak or collapse during a rise in water level up to the 100 Year Flood Elevation plus one foot. Tank vents or other openings which are not liquid-tight shall be extended above the 100 Year Flood Elevation plus one foot. Tank piers, footings, vent stacks and any other support, anchorage or mechanical attachments shall be installed with sufficient mass and to a depth sufficient to prevent movement or destruction by erosion, current or debris loading. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Sec. 31-310 and Sec. 31-320.C.2.

4. Requirement for All New Construction and Substantial Improvements: That fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.
5. Manufactured Homes:
  - a. All manufactured homes shall be anchored to resist flotation, collapse or lateral movement. Manufactured homes must be anchored in accordance with state and local building codes and FEMA guidelines to minimize potential flood damage. In the event that over-the-top frame ties to ground anchors are used, the following specific requirements (or their equivalent) shall be met:
    - (1) Over-the-top ties shall be provided at each of the four (4) corners of the manufactured home, with two (2) additional ties per side at intermediate locations, and manufactured homes less than fifty (50) feet long requiring only one additional tie per side;
    - (2) Frame ties shall be provided at each corner of the home with five (5) additional ties per side at intermediate points and manufactured homes less than fifty (50) feet long requiring only four (4) additional ties per side;
    - (3) All components of the anchoring system shall be capable of carrying a force of four thousand eight hundred (4,800) pounds; and
    - (4) Any additions to the manufactured home shall be similarly anchored
  - b. Require that all manufactured homes to be placed, replaced or substantially improved within Zones A1-30 or AE on the community's FIRM, be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevations plus one foot; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection (a) of this section.

6. **Accessory Structure:** An accessory structure is a structure whose use is incidental, customary and subordinate to the principal building on a lot and whose size and cost is small when compared to the principal building.
    - a. A residential accessory structure shall fully comply with the specific standards for residential construction as found in Section 31-320.C.1.
    - b. A nonresidential accessory structure shall fully comply with the specific standards for nonresidential construction as found in Section 31-320.C.2.
  7. **Subterranean parking prohibited.** A parking facility having a floor which is more than 6 feet below grade is a subterranean parking facility and is prohibited in special flood hazard areas.
  8. **Recreational Vehicles.** Recreational vehicles placed on sites within any designated flood hazard area shall either be:
    - a. On the site for fewer than 180 consecutive days and be fully licensed and ready for highway use (defined highway ready if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions); or
    - b. Meet the permitting, elevating, and anchoring requirements for manufactured homes listed in this ordinance.
- D. **Flood ways.** Located within areas of special flood hazard established in Section 31-300 are areas designated as flood ways. Since the flood way is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:
1. Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.
  2. If subsection (d)(1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 31-330.
  3. In Zone A unnumbered, obtain review and reasonably utilize any floodway data available through federal, state or other sources or subsection (b)(4) of this section in meeting the standards of this section.
- E. **Shallow flooding.**
1. In any AO Zone shown on the FIRM, all new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM plus one foot (at least three feet if no depth number is specified).
  2. In any AO Zone shown on the FIRM, all new construction and substantial improvements of non-residential structures shall (i) have the lowest floor (including basement) elevated

above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM plus one foot (at least three feet if no depth number is specified), or (ii) together with attendant utility and sanitary facilities be completely floodproofed to that level to meet the floodproofing standard specified in Section 31-320.C.2.

3. All structures located in Zone AH or Zone AO as shown on the FIRM, shall have adequate drainage paths around the structure on slopes, to guide floodwaters around and away from the proposed structure.

(Ord. No. 10796, § 2, 3-16-87)

**Sec. 31-330. Nonconforming use.**

- A. A structure or the use of a structure or premises which was lawful before the passage or amendment of the original Flood Hazard Ordinance, but which is not in conformity with the provisions of this article, may be continued subject to the following conditions:
  1. If such use is discontinued for twelve (12) consecutive months, any future use of the building premises shall conform to this article.
  2. Uses or adjuncts thereof which are or become nuisances shall not be entitled to continue as nonconforming uses.
- B. If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than fifty (50) percent of the market value of the structure before the damage occurred, except that if it is reconstructed in conformity with the provisions of this article. This limitation does not include the cost of any alteration to comply with existing state or local health, sanitary, building, or safety codes or regulations or the cost of any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

(Ord. No. 10796, § 2, 3-16-87)

**Sec. 31-340. Amendments.**

- A. The regulations, restrictions and/or boundaries set forth in this article may from time to time be amended, supplemented, changed or repealed to reflect any and all changes in the National Flood Disaster Protection Act of 1973; provided, however, that no such action may be taken until after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in a newspaper of general circulation in the City of Jefferson, Missouri.
- B. At least twenty (20) days shall elapse between the date of this publication and the public hearing. A copy of such amendments will be provided to the Federal Emergency Management Agency.

(Ord. No. 10796, § 2, 3-16-87)

**Sec. 31-350. Authority.**

These regulations are in accordance with those sections of the Revised Statutes of the State of Missouri which permit cities to adopt codes and ordinances designed to promote the public health, safety and general welfare of its citizenry. The regulations of this article are in compliance with the National Flood Insurance Program Regulations as published in Title 44 of the Code of Federal Regulations.

(Ord. No. 10796, § 2, 3-16-87)

**Sec. 31-360. Validity.**

If any section, subsection, sentence, clause or phrase of this article is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this article. The council of the City of Jefferson hereby declares that it would have passed this article and each section, subsection, sentence, clause and phrase hereof irrespective of the fact that any one or more other sections, subsections, sentences, clauses and phrases be declared unconstitutional.

(Ord. No. 10796, § 2, 3-16-87; Ord. No. 11980, § 1, 10-4-93)

**ARTICLE IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION**

**Section 31-400 General.**

- A. Purpose. The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Jefferson through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling 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. The objectives of this ordinance are:
  - (1) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user
  - (2) To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system
  - (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance
- B. Applicability. This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted.
- C. Ultimate Responsibility. The standards set forth in this article and promulgated pursuant to this article are minimum standards. Compliance with this article does not insure that there will be no contamination, pollution or unauthorized discharge of pollutants into the waters of the United States. This article shall not create liability on the part of the City or any agent or employee of the City for any damages that result from any discharges, reliance on this article or any administrative decision made under this article.

**Section 31-410 Prohibitions.**

- A. Illegal Discharges. Except as provided in subsection (b), it shall be unlawful for any person to discharge or cause to be discharged into the municipal separate storm sewer system or into any water course any material other than stormwater.

The following discharges are exempt from the discharge prohibitions established by this article:

- 1. Waterline flushing or other potable water sources;
- 2. Landscape irrigation or lawn watering;
- 3. Diverted stream flows;
- 4. Rising groundwater;
- 5. Groundwater infiltration;
- 6. Uncontaminated pumped groundwater;

7. Foundation or footing drains excluding active groundwater de-watering systems;
8. Crawlspace pumps, air conditioning condensation;
9. Springs;
10. Non-commercial washing of vehicles;
11. Natural riparian habitat or wetland flows;
12. Swimming pools if de-chlorinated to less than 1 ppm chlorine;
13. Fire fighting activities;
14. Other water not containing pollutants;
15. Discharges specified by the Director as necessary to protect public health and safety;
16. Dye testing if notification is given to the Director before the test; and
17. 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 Environmental Protection Agency, 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 municipal separate storm sewer system.

B. Illicit connections.

1. It shall be unlawful for any person to construct, use, maintain or have an illicit connection.
2. This section expressly applies to illicit connections made in the past even if the connection was permissible under law or practices applicable or prevailing at the time of connection.

C. Waste disposal prohibitions.

It shall be unlawful for any person to place, deposit or dump or to cause or allow the placing, depositing or dumping any refuse, rubbish, yard waste, paper litter or other discarded or abandoned objects, articles and accumulations containing pollutants into the municipal separate storm sewer system or into any waterway.

D. Connection of sanitary sewer prohibited.

It shall be unlawful for any person to connect a line conveying sewage to the municipal separate storm sewer system or to allow such a connection to continue.

E. Industrial or construction activity discharges.

It shall be unlawful for any person subject to an industrial activity or construction NPDES storm water discharge permit to fail to comply with all provisions of such permit.

F. Continuing violation.

Each day that a violation of this article continues shall be deemed a separate offense.

**Section 31-420 Notification of Spills.**

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the City in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Department of Community Development within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

**Section 31-430 Regulations and Monitoring.**

- A. The City Council may, by ordinance, adopt standards identifying best management practices (BMP) for any activity, operation or facility which may cause or contribute to pollution of storm water, the storm drain system, waters of the state or waters of the United States. These standards shall be on file in the office of the Director. It shall be unlawful for any person undertaking any activity or owning or operating any facility subject to such standards to fail to comply with the standards.
- B. The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal separate storm sewer system or water courses through the use of structural and non-structural BMPs. Any person responsible for property which is or may be the source of an illicit discharge may be required to implement additional structural and non-structural BMPs to prevent further discharge. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity to the extent practicable shall be deemed in compliance with provisions of this section. These BMPs shall be a part of the storm water pollution prevention plan as necessary for compliance with the requirements of the NPDES permit.

**Section 31-440 Nuisance declared.**

- A. Any discharge in violation of this article is a nuisance.
- B. Any illicit connection is a nuisance.

## ARTICLE V. EROSION AND SEDIMENT CONTROL

### Section 31-500 General.

Grading, erosion control practices, sediment control practices, and waterway crossings shall be adequate to prevent transportation of sediment from the site to the satisfaction of the Community Development Department.

### Section 31-510 Clearing and Grading.

- A. Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other chapters of this Code.
- B. Clearing techniques that retain natural vegetation and retain natural drainage patterns shall be used.
- C. Phasing shall be required on all sites disturbing greater than *thirty* acres, with the size of each phase to be established at plan review.
- D. Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- E. Cut and fill slopes shall be *no greater than 2:1*, except as approved by the Community Development Department to meet other community or environmental objectives.

### Section 31-520 Erosion Control.

- A. Soil must be stabilized within 120 days of clearing or inactivity in construction, unless otherwise authorized.
- B. If vegetative erosion control methods, such as seeding, have not become established, the Community Development Department may require that the site be reseeded, or that a non-vegetative option be employed where possible.
- C. On steep slopes or in drainage ways, special techniques that meet the design criteria outlined in KC - APWA Division 5100 shall be used to ensure stabilization.
- D. Soil stockpiles must be stabilized or covered at the end of each work day unless otherwise protected from allowing sediment to leave the site.
- E. Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- F. Techniques that divert upland runoff past disturbed slopes shall be employed.

### Section 31-530 Sediment Controls.

- A. Sediment controls shall be provided in the form of settling basins or sediment traps or tanks, and perimeter controls.

- B. Where possible, settling basins shall be designed in a manner that allows adaptation to provide long term stormwater management.
- C. Adjacent properties shall be protected by the use of a vegetated buffer strip, in combination with perimeter controls.

**Section 31-540 Waterways and Watercourses.**

- A. When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided, and an approval obtained from the U.S. Army Corps of Engineers.
- B. When in-channel work is conducted, the channel shall be stabilized before, during and after work.
- C. All on-site stormwater conveyance channels shall be designed according to the criteria outlined in KC - APWA Division 5600 .
- D. Stabilization adequate to prevent erosion must be provided at the outlets of all pipes and paved channels.

**Section 31-550. Construction Site Access.**

- A. A temporary access road or driveway shall be provided at all sites where a land disturbance permit is required.
- B. Other measures may be required at the discretion of the Community Development Department in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains.
- C. Regardless of the amount of land disturbance at a particular site, it shall be the responsibility of the permit holder and/or property owner to ensure streets open to the public surrounding a permitted site are kept free of excessive debris and sediment throughout the term of the permit. Upon notification from the Director that a problem exists, the permit holder and/or property owner shall immediately remedy the issue. If the permit holder and/or property owner fails to remedy such issue, the Director may temporarily suspend the permit until the problem has been resolved. If a permit holder and/or property owner does not address the issue after requested, the Director may choose to remedy the situation and bill the permit holder and/or property owner for any reasonable associated costs. The permit will remain suspended until said bill is paid. Alternatively, the permit holder and/or property owner may request a hearing with the Director to contest the abatement costs.

**Section 31-560 Inspection.**

- A. General: The Director may periodically inspect development sites. Through such periodic inspections, the Director shall ensure that the Stormwater Pollution Prevention Plan (SWPPP) is properly implemented and any necessary amendments thereto made in order to protect the environment and the public's health, safety and welfare. The erosion and sediment control measures for the site must be maintained by the developer until the site is stabilized.
- B. The permittee shall notify the Department of Community Development at least two (2) working days

before the following:

1. Start of Construction
  2. Site Clearing has been completed
  3. Rough Grading has been completed
  4. Final Grading has been completed
- C. The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved erosion and sediment control plan(s) or in the Stormwater Pollution Prevention Plan (SWPPP). The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures and/or maintenance of existing measures. All inspections shall be documented in written form and kept readily available.

**Section 31-570 Violations and Penalties.**

- A. The Director may suspend or revoke any permit associated with the site or any permit associated with the person(s) holding the permit(s) for the site for non-compliance with this article.
- B. Procedure
1. Upon discovery of a violation of this article, the contractor will be notified and given up to seven (7) days to remedy the violation. The owner may request a hearing before the Director to review any violation notice within the given time frame. If such a request is made, the Director shall promptly set a hearing on the matter. The hearing shall be conducted by the Director. Any person aggrieved by a decision of the Director may appeal his decision to the Circuit Court of Cole County.
  2. If the violation has not been remedied within the time frame set forth in the notice, the permit(s) will be suspended. Once the violation has been remedied, the suspension will be lifted.
  3. If the violation for which the permit(s) was suspended is not corrected within 30 days, the permit(s) shall be revoked and the violation deemed a nuisance.
  4. After three (3) suspensions of a permit for the same site for similar violations, the permit(s) will be revoked. All applicable procedures from other chapters will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.

## ARTICLE VI. VARIANCES

### Section 31-600 General.

Where undue hardships or practical difficulties may result from strict compliance with this chapter, except where said hardships or practical difficulties relate to Article III: Floodplain Management, the developer may petition for a variance. The Director may recommend, and the council may approve, variances so that substantial justice may be done and the public interest secured; provided, that any such variance shall not have the effect of nullifying the intent and purpose of this chapter; and further provided, that the council shall not grant variances unless they find and determine that:

1. The granting of the variance will not be detrimental to the public safety, health or welfare, or injurious to other property or improvements.
2. The conditions upon which the request for a variance is based are unique to the property for which the variance is sought, are not applicable generally to other property, and are not self-imposed.
3. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a \*mere inconvenience, if this chapter was strictly interpreted and carried out.

\*Editor's note: *Word "more" changed to "mere" administratively to correct grammatical error.*

### Section 31-610 Conditions.

In recommending variances and exceptions, the Director may recommend and the council may require such conditions as will, in the judgment of each, secure substantially the objectives of the standards or requirements of this chapter.

### Section 31-620 Procedures.

A petition for a variance shall be submitted at the time of filing for a preliminary plat or for application for a building permit. The petition shall state fully the grounds for the request and all facts relied upon by the practitioner.

(Ord. No. 10557, § 2, 1-6-86; Ord. 13301, 11-5-2001; Ord. 14154, §2, 2-5-2007)

## NOTES

<sup>1</sup>. **Cross references** - Buildings and building regulations, Ch. 8; health and sanitation, Ch. 15; sewers and sewage disposal generally, Ch. 29; discharge of stormwater to public sewer prohibited, § 31-89(b); streets and sidewalks, Ch. 32.