Chapter 50 - FLOODS[1]

Footnotes:

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Cross reference— Buildings and building regulations, ch. 18; environment, ch. 42; planning, ch. 82; zoning, ch. 126.

ARTICLE I. - IN GENERAL

Secs. 50-1—50-30. - Reserved.

ARTICLE II. - FLOOD DAMAGE PREVENTION[2]

Footnotes:

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Editor's note—Ord. No. 2011-10-7871, §§ 1, 2, adopted October 25, 2011, repealed the former Art. II, §§ 50-31—50-41, 50-61, 50-81—50-85, 50-101, 50-102, 50-121—50-124, and enacted a new Art. II as set out herein. The former Art. II pertained to similar subject matter. See Code Comparative Table for history.

Note—The FIRMs for the City of Paducah shall be located in the Engineering-Public Works Office. The FIS for McCracken County, City of Paducah shall be located in the Engineering-Public Works Office. The city adopts the Summary of Map Actions that document previous Letter of Map Changes (LOMCs) actions previously approved by FEMA that will be superseded with the adoption of Ord. No. 2011-10-7871 as listed on Appendix "A" attached to Ord. No. 2011-10-7871.

DIVISION 1. - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

Sec. 50-31. - Statutory authorization.

The Legislature of the Commonwealth of Kentucky has in Kentucky Revised Statutes Chapter 100 delegated to local government units the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of Commissioners of the City of Paducah, Kentucky, hereby adopts the following floodplain management ordinance, as follows.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-32. - Findings of fact.

(1) The flood hazard areas of the City of Paducah are subject to periodic inundation, which result in loss of life and property, health and safety hazards, disruption of commerce and governmental services,

- extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increased flood height and velocity, and by the location in flood hazard areas of uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise protected from flood damage.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-33. - Statement of purpose.

It is the purpose of this article to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding by provisions designed to:

- (1) Restrict or prohibit uses which are dangerous to health, safety, and property due to water erosion hazards, or which result in damaging increases in erosion or in flood height or velocity;
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which accommodate or channel flood waters;
- (4) Control filling, grading, dredging, and other development which may increase erosion or flood damage, and;
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other areas.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-34. - Objectives.

The objectives of this article are to:

- (1) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines; streets and bridges located in areas of special flood hazard;
- (6) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard or other flood-prone areas in such a manner as to minimize future flood blighted areas caused by flooding;
- (7) Ensure that potential homebuyers are on notice that property is in a Special Flood Hazard Area; and
- (8) Ensure that those who occupy a Special Flood Hazard Area assume responsibility for their actions.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Secs. 50-35—50-40. - Reserved.

DIVISION 2. - DEFINITIONS

Sec. 50-41. - Definitions.

Unless specifically defined below, words or phrases used in this article shall be interpreted to give them the meaning they have in common usage and to give this article it's most reasonable application.

A zone. Portions of the special flood hazard area (SFHA) in which the principle source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, floodwaters may move slowly or rapidly, but waves are usually not a significant threat to structures. Areas of 100-year flood, base flood elevations and flood hazard factors are not determined.

Accessory structure (appurtenant structure). A structure located on the same parcel of property as the principle structure, the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and should be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Accessory use. A use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

Addition (to an existing structure). Any walled and roofed expansion to the perimeter of a structure in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

A1-30 and AE zones. Special flood hazard areas inundated by the one percent annual chance flood (100-year flood. Base flood elevations (BFEs) are determined.

AH zone. An area of 100-year shallow flooding where depths are between one and three feet (usually shallow ponding). Base flood elevations are shown.

AO zone. An area of 100-year shallow flooding where water depth is between one and three feet (usually sheet flow on sloping terrain) Flood depths are shown.

Appeal. A request for a review of the Floodplain Administrator's interpretation of any provision of this article or from the Floodplain Administrator's ruling on a request for a variance.

AR/A1—A30, AR/AE, AR/AH, AR/AO, and AR/A zones. Special flood hazard areas (SFHAs) that result from the de-certification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection. After restoration is complete these areas will still experience residual flooding from other flooding sources.

A99 zone. That part of the SFHA inundated by the 100-year flood which is to be protected from the 100-year flood by a federal flood protection system under construction. No base flood elevations are determined.

Area of shallow flooding. A designated AO or AH zone on a community's flood insurance rate map (FIRM) where the base flood depths range from one to three feet, there is no clearly defined channel, the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

B and *X* zones (shaded). Areas of the 0.2% annual chance (500-year) flood, areas subject to the 100-year flood with average depths of less than one foot or with contributing drainage area less than one square mile, and areas protected by levees from the base flood.

Base flood. A flood which has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood"). Base flood is the term used throughout this article.

Base flood elevation (BFE). The elevation shown on the flood insurance rate map (FIRM) for zones AE, AH, A1-30, AR, AR/A, AR/AE, AR/A1—A30, AR/AH, and AR/AO that indicates the water surface elevation resulting from a flood that has a one percent or greater chance of being equaled or exceeded in any given year.

Basement. That portion of a structure having its floor subgrade (below ground level) on all four sides.

Building. A walled and roofed structure that is principally aboveground; including a manufactured home, gas or liquid storage tank, or other man-made facility or infrastructure. See definition for structure.

C and X (unshaded) zones. Areas determined to be outside the 500-year floodplain.

Community. A political entity having the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

Community rating system (CRS). A program developed by the Federal Insurance Administration to provide incentives to those communities in the regular program to go beyond the minimum floodplain management requirements to develop extra measures for protection from flooding.

Community flood hazard area (CFHA). An area that has been determined by the Floodplain Administrator (or other delegated, designated, or qualified community official) from available technical studies, historical information, and other available and reliable sources, which may be subject to periodic inundation by floodwaters that can adversely affect the public health, safety and general welfare. Included are areas downstream from dams.

Critical facility. Any property that, if flooded, would result in severe consequences to public health and safety or a facility which, if unusable or unreachable because of flooding, would seriously and adversely affect the health and safety of the public. Critical facilities include, but are not limited to: Housing likely to contain occupants not sufficiently mobile to avoid injury or death unaided during a flood; schools, nursing homes, hospitals, police, fire and emergency response installations, vehicle and equipment storage facilities, emergency operations centers likely to be called upon before, during and after a flood, public and private utility facilities important to maintaining or restoring normal services before, during and after a flood, and those facilities or installations which produce, use or store volatile, flammable, explosive, toxic and/or water-reactive materials, hazardous materials or hazardous waste.

D zone. An area in which the flood hazard is undetermined.

Development. Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of equipment or materials.

Elevated structure. A non-basement structure built to have the lowest floor elevated above ground level by means of fill, solid foundation perimeter walls, piling, columns (post and piers), shear walls, or breakaway walls. (See freeboard requirements for residential and nonresidential structures.)

Elevation certificate. A statement certified by a registered professional engineer or surveyor on the FEMA-approved form in effect at the time of certification that verifies a structure's elevation and other related information to verify compliance with this article.

Emergency program. The initial phase under which a community participates in the NFIP, intended to provide a first layer amount of insurance at subsidized rates on all insurable structures in that community before the effective date of the initial FIRM.

Enclosure. That portion of a structure below the base flood elevation (BFE) used solely for parking of vehicles, limited storage, or access to the structure.

Encroachment. The physical advance or infringement of uses, plant growth, fill, excavation, structures, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing construction. Any structure for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures".

Existing manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the first floodplain management ordinance adopted by the City of Paducah based on specific technical base flood elevation data which established the area of special flood hazards.

Expansion to an existing manufactured home park or subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Five-hundred year flood. The flood that has a 0.2 percent chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding.

Flood, flooding, or flood water:

- (1) A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e. mudflows). See Mudslides.
- (2) The condition resulting from flood-related erosion. See "flood-related erosion".

Flood boundary and floodway map (FBFM). A map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and the regulatory floodway.

Flood hazard boundary map (FHBM). A map on which the boundaries of the flood, mudslide (i.e. mudflow), and flood-related erosion areas having special hazards have been designated as zones A, M, and/or E by the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA).

Flood insurance rate map (FIRM). A map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated special flood hazard areas and risk premium zones.

Flood insurance study. The report provided by the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) containing flood profiles, the flood insurance rate map (FIRM), and/or the flood boundary floodway map (FBFM), and the water surface elevation of the base flood.

Floodplain or flood-prone area. Any land area susceptible to being inundated by flood waters from any source.

Floodplain administrator. The individual appointed by a NFIP participating community to administer and enforce the floodplain management ordinances.

Floodplain management. The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management ordinances, and open space plans.

Floodplain management regulations. This article and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control), and other applications of police power, which control development in flood-prone areas. This term describes federal, state and/or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood-proofing. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

Floodproofing certificate. A certification by a registered professional engineer or architect, on a FEMA-approved form in effect at the time of certification stating that a nonresidential structure, together with attendant utilities and sanitary facilities is watertight to a specified design elevation with walls that are substantially impermeable to the passage of water and all structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy and anticipated debris impact forces.

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. Also referred to as the "regulatory floodway".

Floodway fringe. That area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.

Freeboard. A factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood. Freeboard must be applied not just to the elevation of the lowest floor or floodproofing level, but also to the level of protection provided to all components of the structure, such as building utilities, HVAC components, etc. in accordance with all applicable codes, requirements and specifications.

Fraud and victimization. As related in division 7, appeals and variance procedures, of this article, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City of Paducah will consider the fact that every newly constructed structure adds to government responsibilities and remains a part of the community for 50 to 100 years. Structures that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages may incur. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

Functionally dependent use facility. A facility, structure, or other development, which cannot be used for its intended purpose unless it is located or carried out in close proximity to water. The term includes only a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Governing body. The City of Paducah being empowered to adopt and implement ordinances to provide for the public health, safety and general welfare of its citizenry.

Hazard potential. The possible adverse incremental consequences that result from the release of water or stored contents due to failure of a dam or misoperation of a dam or appurtenances. The hazard potential classification of a dam does not reflect in any way the current condition of a dam and its appurtenant structures (e.g., safety, structural integrity, flood routing capacity).

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

Historic structure. Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.

- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior, or
 - b. Directly by the Secretary of the Interior in states without approved programs.

Increased cost of compliance (ICC). Increased cost of compliance coverage provides for the payment of a claim for the cost to comply with state or community floodplain management laws or ordinances after a direct physical loss by flood. When a building covered by a standard flood insurance policy under the NFIP sustains a loss and the state or community declares the building to be substantially or repetitively damaged, ICC will help pay up to \$30,000.00 for the cost to elevate, flood-proof, demolish, or remove the building.

ICC coverage is available on residential and nonresidential buildings (this category includes public or government buildings, such as schools, libraries, and municipal buildings) insured under the NFIP.

Kentucky Revised Statute 151.250—Plans for dams, levees, etc to be approved and permit issued by cabinet - (Environmental and Public Protection Cabinet).

- (1) Notwithstanding any other provision of law, no person and no city, county or other political subdivision of the state, including levee districts, drainage districts, flood control districts or systems, or similar bodies, shall commence the construction, reconstruction, relocation or improvement of any dam, embankment, levee, dike, bridge, fill or other obstruction (except those constructed by the department of highways) across or along any stream, or in the floodway of any stream, unless the plans and specifications for such work have been submitted by the person or political subdivision responsible for the construction, reconstruction or improvement and such plans and specifications have been approved in writing by the cabinet and a permit issued. However, the cabinet by regulation may exempt those dams, embankments or other obstructions which are not of such size or type as to require approval by the cabinet in the interest of safety or retention of water supply.
- (2) No person, city, county, or other political subdivision of the state shall commence the filing of any area with earth, debris, or any other material, or raise the level of any area in any manner, or place a building, barrier or obstruction of any sort on any area located adjacent to a river or stream or in the floodway of the stream so that such filling, raising, or obstruction will in any way affect the flow of water in the channel or in the floodway of the stream unless plans and specifications for such work have been submitted to and approved by the cabinet and a permit issued as required in subsection (1) above.
- (3) Nothing in this section is intended to give the cabinet any jurisdiction or control over the construction, reconstruction, improvement, enlargement, maintenance or operation of any drainage district, ditch or system established for agricultural purposes, or to require approval of the same except where such obstruction of the stream or floodway is determined by the cabinet to be a detriment or hindrance to the beneficial use of water resources in the area, and the person or political subdivision in control thereof so notified. The Department for Natural Resources through KRS ch. 350 shall have exclusive jurisdiction over KRS ch. 151 concerning the regulation of dams, levees, embankments, dikes, bridges, fills, or other obstructions across or along any stream or in the floodway of any stream which structures are permitted under KRS ch. 350 for surface coal mining operations.

Letter of map change (LOMC). Is an official FEMA determination, by letter, to amend or revise effective flood insurance rate maps, flood boundary and floodway maps, and flood insurance studies. LOMC's include the following categories:

(1) Letter of map amendment (LOMA). A revision based on technical data showing that a property was incorrectly included in a designated SFHA. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.

- (2) Letter of map revision (LOMR). A revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features.
- (3) Letter of map revision—Fill (LOMR-F) A determination that a structure or parcel has been elevated by properly placed engineered fill above the BFE and is, therefore, excluded from the SHFA.

Levee. A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee system A flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

For a levee system to be recognized, the following criteria must be met:

- (1) All closure devices or mechanical systems for internal drainage, whether manual or automatic, must be operated in accordance with an officially adopted operation manual (a copy of which must be provided to FEMA by the operator when levee or drainage system recognition is being sought or revised).
- (2) All operations must be under the jurisdiction of a federal or state agency, an agency created by federal or state law, or an agency of a community participating in the NFIP.

Limited storage. An area used for storage and intended to be limited to incidental items which can withstand exposure to the elements and have low flood damage potential. Such an area must be of flood resistant material, void of utilities except for essential lighting, and cannot be temperature controlled.

Lowest adjacent grade. The elevation of the sidewalk, patio, deck support, or basement entryway immediately next to the structure and after the completion of construction. It does not include earth that is emplaced for aesthetic or landscape reasons around a foundation wall. It does include natural ground or properly compacted fill that comprises a component of a structure's foundation system.

Lowest floor The lowest floor of the lowest enclosed area including basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, structure access, or storage in an area other than a basement area is not considered a structure's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this article. See "freeboard".

Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected or attached to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property. The term "manufactured home" does not include a "recreational vehicle" (see "recreational vehicle").

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

Map. The flood hazard boundary map (FHBM) or the flood insurance rate map (FIRM) for a community issued by the Federal Emergency Management Agency (FEMA).

Map panel number. The four-digit number on a flood map, followed by a letter suffix, assigned by FEMA. The first four digits represent the map panel. The letter suffix represents the number of times the map panel has been revised. (The letter "A" is not used by FEMA, the letter "B" is the first revision.)

Market value. The structure value, excluding the land (as agreed between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of structure (actual cash value) or adjusted assessed values.

Mean sea level (MSL). The average height of the sea for all stages of the tide. For the purposes of the National Flood Insurance Program, the MSL is used as a reference for establishing various elevations within the floodplain as shown on a community's FIRM. For purposes of this article, the term is synonymous with either National Geodetic Vertical Datum (NGVD) 1929 or North American Vertical Datum (NAVD) 1988.

Mitigation. Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: To protect people and structures, and to minimize the costs of disaster response and recovery.

Mudslide (i.e. mudflow). Describes a condition where there is a river, flow, or inundation of liquid mud down a hillside, usually as a result of a dual condition of loss of brush cover and the subsequent accumulation of water on the ground, preceded by a period of unusually heavy or sustained rain. A mudslide (i.e. mudflow) may occur as a distinct phenomenon while a landslide is in progress, and will be recognized as such by the floodplain administrator only if the mudflow, and not the landslide, is the proximate cause of damage that occurs.

Mudslide (i.e. mudflow) area management. The operation of and overall program of corrective and preventative measures for reducing mudslide (i.e. mudflow) damage, including but not limited to emergency preparedness plans, mudslide control works, and floodplain management regulations.

Mudslide (i.e. mudflow) prone area. An area with land surfaces and slopes of unconsolidated material where the history, geology, and climate indicate a potential for mudflow.

National Flood Insurance Program (NFIP). The federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the federal government and the private insurance industry.

National Geodetic Vertical Datum (NGVD). As corrected in 1929, a vertical control used as a reference for establishing varying elevations within the floodplain. (Generally used as the vertical datum on the older FIRM's. Refer to FIRM legend panel for correct datum.)

New construction. Structures for which the start of construction commenced on or after the effective date of this adopted floodplain management ordinance and includes any subsequent improvements to such structures.

New manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this adopted floodplain management ordinance.

Nonresidential. Structures that are not designed for human habitation, including but is not limited to: Small business concerns, churches, schools, farm structures (including grain bins and silos), pool houses, clubhouses, recreational structures, mercantile structures, agricultural and industrial structures, warehouses, and hotels or motels with normal room rentals for less than six months duration.

North American Vertical Datum (NAVD). As corrected in 1988, a vertical control used as a reference for establishing varying elevations within the floodplain. (Generally used on the newer FIRM's and Digitally Referenced FIRM's (DFIRM's). (Refer to FIRM or DFIRM legend panel for correct datum.)

Obstruction. Includes but is not limited to any dam, wall, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, structure, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One-hundred year flood (100-year flood) (see base flood). The flood that has a one percent or greater chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the 100-year flood. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood with the SFHA.

Participating community. A community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

Pre-FIRM construction. Construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

Post-FIRM construction. Construction or substantial improvement that started on or after the effective date of the initial FIRM of the community or after December 31, 1974, whichever is later.

Probation. A means of formally notifying participating NFIP communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations. During periods of probation, each insurance policy is subject to a \$50.00 surcharge.

Program deficiency. A defect in a community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management standards or of the standards of 44 CFR 60.3, 60.4, 60.5, and/or 60.6.

Public safety and nuisance. Anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle. A vehicle that is:

- (1) Built on a single chassis;
- Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable to a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regular program. The phase of a community's participation in the NFIP where more comprehensive floodplain management requirements are imposed and higher amounts of insurance are available based upon risk zones and elevations determined in a FIS.

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. See "base flood".

Remedy a violation. The process by which a community brings a structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impact of noncompliance. Reduced impact may include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing state or federal financing exposure with regard to the structure or other development.

Repair. The reconstruction or renewal of any part of an existing structure.

Repetitive loss. Flood-related damages sustained by a structure on two or more separate occasions during a ten-year period where the value of damages equals or exceeds an average of 50 percent of the current value of the structure, beginning on the date when the damage first occurred, or, four or more flood losses of \$1,000.00 or more over the life of the structure, or, three or more flood losses over the life of the structure that are equal to or greater than the current value of the structure.

Riverine. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Section 1316. That section of the National Flood Insurance Act of 1968, as amended, which states that no new or renewal flood insurance coverage shall be provided for any property that the administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

Sheet flow area. See "area of shallow flooding".

Special flood hazard area (SFHA). That portion of the floodplain subject to inundation by the base flood and/or flood-related erosion hazards as shown on a FHBM or FIRM as zone A, AE, A1—A30, AH, AO, or AR.

Start of construction (includes substantial improvement and other proposed new development). The date a building permit is issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement is within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; the installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the structure.

Structure. A walled and roofed building that is principally above ground; including manufactured homes, gas or liquid storage tanks, or other man-made facilities or infrastructures. See "building".

Subdivision. Any division, for the purposes of sale, lease, or development, either on the installment plan or upon any and all other plans, terms and conditions, of any tract or parcel of land into two or more lots or parcels.

Subrogation. An action brought by FEMA to recover insurance money paid out where all or part of the damage can be attributed to acts or omissions by a community or other third party.

Substantial damage. Means damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement. Means any reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during a one-year period in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (2) Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as a "historic structure." Or:

Substantially improved existing manufactured home parks or subdivisions. Repair, reconstruction, rehabilitation, or improvement of the streets, utilities, and pads equaling or exceeding 50 percent of the value of the streets, utilities, and pads before the repair, reconstruction, or improvement commenced.

Suspension. Removal of a participating community from the NFIP for failure to enact and/or enforce floodplain management regulations required for participation in the NFIP. New or renewal flood insurance policies are no longer available in suspended communities.

Utilities. Includes electrical, heating, ventilation, plumbing, and air conditioning equipment.

Variance. Relief from some or all of the requirements of this article.

Violation. Failure of a structure or other development to fully comply with this article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this article is presumed to be in violation until such time as that documentation is provided.

Watercourse. A lake, river, creek, stream, wash, channel or other topographic feature on or over which water flows at least periodically.

Water surface elevation. The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Watershed. All the area within a geographic boundary from which water, sediments, dissolved materials, and other transportable materials drain or are carried by water to a common outlet, such as a point on a larger stream, lake, or underlying aquifer.

X zone. The area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs (B zones on older FIRMs) designate areas subject to inundation by the flood with a 0.2-percent probability of being equaled or exceeded (the 500-year flood) in any year. Unshaded X zones (C zones on older FIRMS) designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

Zone. A geographical area shown on a flood hazard boundary map or a flood insurance rate map that reflects the severity or type of flooding in the area.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Secs. 50-42-50-50. - Reserved.

DIVISION 3. - GENERAL PROVISIONS

Sec. 50-51. - Lands to which this article applies.

This article shall apply to all special flood hazard areas (SFHA), areas applicable to KRS 151.250 and, as determined by the Floodplain Administrator or other delegated, designated, or qualified community official as determined by the Board of Commissioners of the City of Paducah from available technical studies, historical information, and other available and reliable sources, areas within the foresaid jurisdiction which may be subject to periodic inundation by floodwaters that can adversely affect the public health, safety, and general welfare of the citizens of the City of Paducah.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-52. - Basis for establishing the special flood hazard areas.

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the flood insurance study (FIS) for the City of Paducah in McCracken County, with an Effective Date of November 2, 2011, with the accompanying flood insurance rate maps (FIRMS), other supporting data and any subsequent amendments thereto, are hereby adopted by reference and declared to be a part of these regulations by the City of Paducah, and for those land areas acquired by the City of Paducah through annexation. This FIS and attendant mapping is the minimum area of applicability of this article and may be supplemented by studies for other areas which allow implementation of this article and which are recommended to the Board of Commissioners by the Floodplain Administrator and are enacted by the City of Paducah pursuant to statutes governing land use management regulations. The FIS and/or FIRM are permanent records of the City of Paducah and are on file and available for review by the public during regular business hours at the office of the City Engineer-Public Works Director.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-53. - Establishment of development permit.

A development permit shall be required in conformance with the provision of this article prior to the commencement of any development activities in the special flood hazard areas (SFHA). See division 5 for instructions and explanation.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-54. - Compliance.

No structure or land shall hereafter be constructed, located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable state regulations. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the City of Paducah from taking such lawful action as is necessary to prevent or remedy any violation.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-55. - Abrogation and greater restrictions.

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-56. - Interpretation.

In the interpretation and application of this article, all provisions shall be:

- (1) Considered minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-57. - 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 areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damage. This article shall not create liability on the part of the City of Paducah, any officer or employee, the Commonwealth of Kentucky, the Federal Insurance Administration, or the Federal Emergency Management Agency, thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made hereunder.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-58. - Enforcement, violation notice and penalties.

- (1) Civil offense: If, at any time, development occurs which is not in accordance with the provisions of this article including obtaining or complying with the terms and conditions of a floodplain construction permit and any approved modifications, such development shall constitute a civil offense.
- (2) Notice of violation: If, at any time, a duly authorized employee or agent of the Floodplain Administrator has reasonable cause to believe that a person has caused development to occur which is not in accordance with the provisions of this article including obtaining or complying with the terms and conditions of a floodplain construction permit and any approved modifications thereof, a duly authorized employee of the Floodplain Administrator shall issue a notice to the person responsible for the violation and/or the property owner, stating the facts of the offense or violation, the section of this article and/or of the permit violated, when it occurred, how the violation is to be remedied to bring the development into conformity with this article or with the approved permit, and within what period of time the remedy is to occur, which period of time shall be reasonable and shall be determined by the nature of the violation and whether or not it creates a nuisance or hazard. The remedy may include an order to stop work on the development. The notice shall also state that a citation may be forthcoming in the event that the requested remedies and corrective actions are not taken, which citation will request a civil monetary fine and shall state the maximum fine which could be imposed in accordance with provisions of this article.
- (3) Notice of citation: If, at any time, a duly authorized employee or agent of the Floodplain Administrator has reasonable cause to believe that a person has caused development to occur which is not in accordance with the provisions of this article including obtaining or complying with the terms and conditions of a floodplain construction permit and any approved modifications thereof, a duly authorized employee of the Floodplain Administrator may issue a citation to the offender stating the violation, prior notices of violation issued, how the violation is to be remedied to bring the development into conformity with this article or with the approved permit, and within what period of time the remedy is to occur, and what penalty or penalties are recommended. When a citation is issued, the person to whom the citation is issued shall respond to the citation within seven days of the date the citation is issued by either carrying out the remedies and corrections set forth in the citation, paying the civil fine set forth in the citation or requesting a hearing before the governing body. If the person to whom the citation is issued does not respond to the citation within seven days, that person shall be deemed to have waived the right to a hearing and the determination that a violation occurred shall be considered final.
- (4) Penalties: Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with granting of a variance or special exceptions, shall constitute a misdemeanor civil offense. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined no less than \$500.00 per day or imprisoned for not more than 90 days, or both; 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 Floodplain Administrator from taking such other lawful action as is necessary to prevent or remedy any violation.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Secs. 50-59—50-70. - Reserved.

DIVISION 4. - ADMINISTRATION

Sec. 50-71. - Designation of local administrator.

The City Engineer-Public Works Director is hereby appointed as the Floodplain Administrator to administer, implement, and enforce the provisions of this article by granting or denying development

permits in accordance with its provisions, and are herein collectively referred throughout this article as the Floodplain Administrator.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-72. - Duties and responsibilities of the local administrators.

The City Engineer-Public Works Director, as Floodplain Administrator, and/or authorized staff members is hereby appointed, authorized and directed to administer, implement and enforce the provisions of this article. The Floodplain Administrator is further authorized to render interpretations of this article, which are consistent with its spirit and purpose by granting or denying development permits in accordance with its provisions.

The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to the following:

- (1) Permit review. Review all development permits to ensure that:
 - a. Permit requirements of this article have been satisfied;
 - b. All other required state and federal permits have been obtained: Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334.;
 - c. Flood damages will be reduced in the best possible manner;
 - d. The proposed development does not adversely affect the carrying capacity of affected watercourses. For purposes of this article, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will increase the water surface elevation of the base flood more than one foot at any point.
- (2) Review and use of any other base flood data. When base flood elevation data has not been provided in accordance with division 3, section 50-52, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or other source, in order to administer this article.
- (3) Notification of other agencies.
 - a. Notify the Kentucky Division of Water, and any other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of the watercourse, and
 - b. Submit evidence of such notification to the Federal Insurance Administration, Federal Emergency Management Agency (FEMA); and
 - Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.
- (4) Documentation of floodplain development. Obtain and maintain for public inspection and make available as needed the following:
 - a. Certification required for residential construction, division 6, section 50-92(1), (lowest floor elevations) as shown on a completed and certified Elevation Certificate. Verify and record the actual elevation (in relation to Mean Sea Level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with division 6, section 50-91(2);
 - Certification required for elevation or flood-proofing of non-residential construction by division 6, section 50-92(2) as shown on a completed and certified flood-proofing certificate. Verify and record the actual elevation (in relation to mean sea level) to which

- the new or substantially improved structures have been flood-proofed, in accordance with division 5, section 50-81(2):
- c. Certification required for elevated structures by division 6, section 50-92(3),
- d. Certification of elevation required by subdivision standards by division 6, section 50-95(1).
- e. Certification required by floodway encroachments, division 6, section 50-92(5).
- f. Assure that maintenance is provided within the altered or relocated portion of a Watercourse so that the flood-carrying capacity is not diminished.
- g. Review certified plans and specifications for compliance;
- Remedial action. Take action to remedy violations of this article as specified in division 3, section 50-58.
- (5) Documentation of floodway development. The City Engineer-Public Works Director shall obtain and maintain for public inspection and make available as needed the following:
- (6) Map determinations. Make interpretations where needed, as to the exact location of the boundaries of the special flood hazard areas, for example, where there appears to be a conflict between a mapped boundary and actual field conditions.
 - a. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (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 division 7, section 50-111(3)b.
 - b. When base flood elevation data or floodway data has not been provided in accordance with division 3, section 50-52, then the Floodplain Administrator shall obtain, review, and reasonable utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of this article.
 - c. When flood-proofing is utilized for a particular structure, the Floodplain Administrator shall obtain certification from a registered professional engineer or architect, in accordance with division 6, section 50-92(2) a flood-proofing certificate;
 - d. 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.

(6) Right of entry.

- a. Whenever necessary to make an inspection to enforce any of the provisions of this article, or whenever the administrator has reasonable cause to believe that there exists in any structure or upon any premises any condition or ordinance violation which makes such building, structure or premises unsafe, dangerous or hazardous, the administrator may enter such building, structure or premises at all reasonable times to inspect the same or perform any duty imposed upon the administrator by this article.
- b. If such structure or premises are occupied, he/she shall first present proper credentials and request entry. If such building, structure, or premises are unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of such request entry.
- If entry is refused, the administrator shall have recourse to every remedy provided by law to secure entry.
- d. When the administrator shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after

proper request is made as herein provided, to promptly permit entry therein by the administrator for the purpose of inspection and examination pursuant to this article.

(7) Stop work orders.

a. Upon notice from the administrator, work on any building, structure or premises that is being done contrary to the provisions of this article shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed.

(8) Revocation of permits.

- a. The administrator may revoke a permit or approval, issued under the provisions of this article, in case there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
- b. The administrator may revoke a permit upon determination by the administrator that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this article.

(9) Liability.

a. Any officer, employee, or member of the Floodplain Administrator's staff, charged with the enforcement of this article, acting for the applicable governing authority in the discharge of the required duties, shall not thereby be rendered personally liable, and is hereby relieved from all personal liability, for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of his duties. Any suit brought against any officer, employee, or member because of such act performed as required in the enforcement of any provision of this article shall be defended by the department of law until the final termination of the proceedings.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Secs. 50-73—50-80. - Reserved.

DIVISION 5. - DEVELOPMENT PERMITS

Sec. 50-81. - Establishment of development permit.

A Special Flood Hazard Development Permit (SFHA Development Permit) shall be obtained before any construction or other development begins within any special flood hazard area established in division 3, Section 50-52. A Special Flood Hazard Area Development Permit Application to obtain a SFHA Development Permit shall be made on forms furnished by the Floodplain Administrator prior to any development activities, and may include, but not be limited to, the following: 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 materials, drainage facilities; and the location of the foregoing. Endorsement of the local administrator is required before a state floodplain construction permit can be processed. Specifically, the following information is required.

(1) Application stage.

- a. Proposed elevation in relation to Mean Sea Level (MSL) of the proposed lowest floor (including basement) of all structures in Zone A and elevation of highest adjacent grade:
- b. Proposed elevation in relation to Mean Sea Level to which any non-residential structure will be flood-proofed. All appropriate certifications from a registered professional engineer or

- architect that the nonresidential flood-proofed structure will meet the flood-proofing criteria in division 6, section 50-92(2) and section 50-94(2);
- Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- A Special Flood Hazard Area Development Permit Application fee of \$100.00 shall be submitted with the Application.
- (2) Construction Stage. Upon placement of the lowest floor, and before construction continues, or flood proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Floodplain Administrator and to the State a certification of the elevation of the lowest floor or flood-proofed elevation, as built, in relation to Mean Sea Level. In AE, A1-30, AH, and A zones where the Community has adopted a regulatory Base Flood Elevation, said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood-proofing is utilized for a particular structure, said certification shall be prepared by or under the direct supervision of a certified professional engineer or architect.

Any continued work undertaken prior to the submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the lowest floor and flood proofing elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

(3) Expiration of Floodplain Construction Permit. The Special Flood Hazard Area/Development Permit, and all provisions contained therein, shall expire one year from the date of issuance by the Floodplain Administrator.

(Ord. No. 2011-10-7871, § 2, 10-25-11; Ord. No. 2012-3-7908, § 1, 3-20-12)

Secs. 50-82—50-90. - Reserved.

DIVISION 6. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 50-91. - General construction standards.

In all special flood hazard areas the following provisions are required:

- (1) All new construction and substantial improvements shall be adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or fame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- (3) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical, heating, ventilation, plumbing, air condition equipment, and other service facilities shall be designed and/or located in accordance with all applicable codes, requirements and

specifications so as to prevent water from entering or accumulating within the components during conditions of flooding; and if within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (7) 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;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and
- (9) Any alteration, repair, reconstruction, or improvements to a structure, which is not in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article:
- (10) Any alteration, repair, reconstruction, or improvements to a structure, which is not in compliance with the provisions of this article, shall be undertaken only if said nonconformity is not furthered, extended, or replaced.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-92. - Specific standards.

In all special flood hazard areas where base flood elevation data have been provided, as set forth in division 3, section 50-52, the following provisions are required:

- (1) Residential construction. New construction or substantial improvement of any residential structure or manufactured home shall have the lowest floor, including basement, mechanical equipment, and ductwork elevated no lower than one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of division 6, section 50-92(3).
 - a. In an AO zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade if no depth number is specified. See division 6, section 50-94(1).
 - In an A zone, where no technical data has been produced by the Federal Emergency Management Agency, elevated 1 foot above the base flood elevation, as determined by this community. The Floodplain Administrator will determine the method by which base flood elevations are determined. Methods include but are not limited to detailed hydrologic and hydraulic analyses, use of existing data available from other sources, use of historical data, best supportable and reasonable judgment in the event no data can be produced. Title 401 KAR (Kentucky Administrative Regulations) Chapter 4, Regulation 060, Section 5(5)a, states as a part of the technical requirements for a State Floodplain Permit: The applicant shall provide cross sections for determining floodway boundaries(and thereby base flood elevations) at any proposed construction site where FEMA maps are not available. All cross sections shall be referenced to mean sea level and shall have vertical error tolerances of no more than + five-tenths (0.5) foot. Cross sections elevations shall be taken at those points which represent significant breaks in slope and at points where hydraulic characteristics of the base floodplain change. Each cross section shall extend across the entire base floodplain and shall be in the number and at the locations specified by the cabinet. If necessary to ensure that significant flood damage will not occur, the cabinet may require additional cross sections or specific site elevations which extend beyond those needed for making routine regulatory floodway boundary calculations.

- c. In all other flood hazard zones, elevated one foot above the base flood elevation.
- d. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community building inspection department to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.
- (2) Nonresidential construction. New construction or substantial improvement of any commercial, industrial, or nonresidential structure (including manufactured homes used for nonresidential purposes) shall be elevated to conform with division 6, section 50-92(1) or together with attendant utility and sanitary facilities:
 - a. Be flood-proofed below an elevation one foot above the level of the base flood elevation so that the structure is watertight with walls substantially impermeable to the passage of water;
 - Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - Have the lowest floor, including basement, mechanical equipment, and ductwork, elevated no lower than one foot above the level of the base flood elevation; or
 - d. 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 division 6, section 50-92(1)d.
 - e. Manufactured homes shall meet the standards in division 6, section 50-92(4).
 - f. For areas of shallow flooding (AO zones), see division 6, section 50-94(2).
 - g. All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be constructed of flood resistant materials below an elevation one foot above the base flood elevation, and, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Opening sizes (FEMA Technical Bulletin 1-93) for meeting this requirement must meet or exceed the following minimum criteria:
 - (i) Be certified by a registered professional engineer or architect; or
 - (ii) Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. 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 floodwater.
- (3) Elevated structures. New construction or substantial improvements of elevated structures on columns, posts, or pilings (e.g.) that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - Opening sizes for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - (i) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) The bottom of all openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade); and,
 - (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

- Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and,
- The interior portion of such enclosed areas shall not be partitioned or finished into separate rooms.
- d. Electrical, plumbing and other utility connections are prohibited below the base flood elevation. Electrical, heating, ventilation, plumbing, air condition equipment, and other service facilities shall be designed and/or located in accordance with all applicable codes, requirements and specifications.
- (4) Standards for manufactured homes and recreational vehicles.
 - a. All new or substantially improved manufactured homes placed on sites located within A, A1—30, AO, AH, and AE on the community's flood insurance rate map (FIRM) must meet all the requirements for new construction, including elevation and anchoring. Locations include:
 - (i) On individual lots or parcels;
 - (ii) In expansions to existing manufactured home parks or subdivisions;
 - (iii) In new manufactured home parks or subdivisions; or
 - (iv) In substantially improved manufactured home parks or subdivisions; or
 - (v) Outside of a manufactured home park or subdivision;
 - (vi) In an existing manufactured home park or subdivision on a site upon which a manufactured home has incurred "substantial damage" as the result of a flood;

All manufactured homes must be:

- (i) Elevated on a permanent foundation; and
- (ii) Have its lowest floor elevated no lower than one feet above the level of the base flood elevation; and
- (iii) Be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- b. Except manufactured homes that have incurred substantial damage as a result of a flood, all manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
 - (i) The manufactured home is securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement, so that either the:
 - The lowest floor of the manufactured home is elevated no lower than one foot above the level of the base flood elevation; or
 - The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the highest adjacent grade.
- c. All recreational vehicles placed on sites located within A, A1—30, AO, AH, and AE on the community's flood insurance rate map (FIRM) must either:
 - (i) Be on the site for fewer than 180 consecutive days;
 - (ii) Be fully licensed and ready for highway use; or

(iii) Meet the permit requirements for new construction of this article, including anchoring and elevation requirements for "manufactured homes".

A recreational vehicle is ready for highway use if it is licensed and insured in accordance with the State of Kentucky motor vehicle regulations, 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.

- (5) Floodways. Located within areas of special flood hazard established in division 3, section 50-52, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and has erosion potential, the following provisions shall apply:
 - a. Prohibit encroachments, including fill, new construction, substantial improvements, and other developments unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in the base flood elevation levels during occurrence of base flood discharge.
 - If division 6, section 50-92(5)a. is satisfied, all new construction and substantial improvements and other proposed new development shall comply with all applicable flood hazard reduction provisions of Article 6.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-93. - Standards for streams without established base flood elevation (unnumbered A zones) and/or floodways.

Located within the special flood hazard areas established in division 3, section 50-52, where streams exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:

- (1) No encroachments, including fill material or structures shall be located within special flood hazard areas, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.
- (2) New construction or substantial improvements of structures shall be elevated or flood proofed to elevations established in accordance with division 3, section 50-52.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-94. - Standards for shallow flooding zones (AO zones).

Located within the special flood hazard areas established in division 3, section 50-52, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the water path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures shall:
 - a. Have the lowest floor, including basement, elevated to or above either the base flood elevation or in zone AO the flood depth specified on the flood insurance rate map above the highest adjacent grade. In zone AO, if no flood depth is specified, the lowest floor,

including basement, shall be elevated no less than two feet above the highest adjacent grade.

- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor, including basement, elevated to or above either the base flood elevation or in zone AO the flood depth specified on the flood insurance rate map, above the highest adjacent grade. In zone AO, if no flood depth is specified, the lowest floor, including basement, shall be elevated no less than two feet above the highest adjacent grade.
 - b. Together with attendant utility and sanitary facilities be completely flood-proofed either to the base flood elevation or above or, in zone AO, to or above the specified flood depth plus a minimum of one foot so that any space below that level 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. Certification is required as stated in division 6, section 50-92(2).

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-95. - Standards for subdivision proposals.

- (1) All subdivision proposals shall identify the flood hazard area and the elevation of the base flood and 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: and
- (4) In areas where base flood elevation and floodway data is not available (zone A or unmapped streams), base flood elevation and floodway data for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall be provided.
- (5) All subdivision plans will include the elevation of proposed structure(s) and lowest adjacent grade. If the site is filled above the base flood elevation, the lowest floor and lowest adjacent grade elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-96. - Standards for accessory structures in all zones beginning with the letter "A".

For all accessory structures in special flood hazard areas designated "A" the following provisions shall apply:

- (1) Structure must be non-habitable;
- (2) Must be anchored to resist floatation forces;
- (3) Will require flood openings/vents no more than one foot above grade, total openings are to be one square inch per one square foot of floor area, at least two openings required on opposite walls;
- (4) Built of flood resistant materials below a level one foot above the base flood elevation:
- (5) Must elevate utilities above the base flood elevation;

- (6) Can only be used for storage or parking;
- (7) Cannot be modified for a different use after permitting.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-97. - Critical facilities.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the SFHA (100-year floodplain). Construction of new critical facilities shall not be permissible within the floodway; however, they may be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated one foot or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Sec. 50-98-50-110. - Reserved.

DIVISION 7. - APPEALS AND VARIANCE PROCEDURES

Sec. 50-111. - Appeals and variance procedures.

(1) Nature of variances. The variance criteria set forth in this section of the ordinance are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this article would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City of Paducah to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level is so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this article are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

- (2) Designation of variance and appeals board. The City of Paducah Board of Commissioners, shall hear and decide appeals and requests for variances from the requirements of this article.
- (3) Duties of variance and appeals board.
 - (a) The Board of Commissioners shall hear and decide appeals when it is alleged that there is an error in any requirement, decision, or determination made by the city in the enforcement or administration of this article.
 - (b) Any person aggrieved by the decision of the Board of Commissioners or any taxpayer may appeal such decision to the McCracken County Circuit Court, as provided in Kentucky Revised Statutes.

- (4) Appeals/variance procedures. In passing upon such applications, the Board of Commissioners shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and the:
 - (a) Danger that materials may be swept onto other lands to the injury of others;
 - (b) Danger to life and property due to flooding or erosion damage;
 - (c) Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the existing individual owner and future owners of the property;
 - (d) Importance to the community of the services provided by the proposed facility;
 - (e) Necessity that the facility be located on a waterfront, in the case of functionally dependent facility;
 - (f) Availability of alternative locations which are not subject to flooding or erosion damage;
 - (g) Compatibility of the proposed use with existing and anticipated development;
 - (h) Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (i) Safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) 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) Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, streets, and bridges.
- (5) Conditions for variances. Upon consideration of the factors listed above and the purposes of this article, the Board of Commissioners may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.
 - (a) Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.
 - (b) Variances shall only be issued upon a determination that the variance is the "minimum necessary" to afford relief considering the flood hazard. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this article. For example, in the case of variances to an elevation requirement, this means the City of Paducah need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the City of Paducah believes will both provide relief and preserve the integrity of the local ordinance.
 - (c) Variances shall only be issued upon a determination that the variance is the "minimum necessary" to afford relief considering the flood hazard. In the instance of an historical structure, a determination shall be made that the variance is the minimum necessary to afford relief and not destroy the historic character and design of the structure.
 - (d) Variances shall only be issued upon:
 - (i) A showing of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship to the applicant (as defined in this article); and
 - (iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, cause extraordinary public expense, create nuisance (as defined in the definition section under "public safety and nuisance"), cause fraud or victimization of the public (as defined in the definition section) or conflict with existing local laws or ordinances.

- (e) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built, and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (f) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) and the Federal Insurance Administration (FIA) upon request.
- (g) Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of division 7, section 50-111(4)(a)—(k) are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.
- (6) Variance notification. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
 - (a) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage, and;
 - (b) Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the Floodplain Administrator in the McCracken County Court Clerk's Office and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.
 - (c) The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance, and report such variances issued in the community's biennial report submission to the Federal Emergency Management Agency.
- (7) Historic structures. Variances may be issued for the repair or rehabilitation of "historic structures" (see definition) upon determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (8) No impact certification within the floodway. Variances shall not be issued within any mapped or designated floodway if any increase in flood levels during the base flood discharge would result.

(Ord. No. 2011-10-7871, § 2, 10-25-11)

Secs. 50-112—50-150. - Reserved.

ARTICLE III. - STORMWATER CONVEYANCE AND MANAGEMENT

Sec. 50-151. - Purpose and scope of article.

Stormwater management is vital in promoting the health, safety and general welfare of the public. It is the intent of this article, in an effort to minimize the dangers of flooding to life and property and to protect local water quality and maintain the integrity of stream channels, that certain runoff control devices be provided as land areas are developed or redeveloped. The design criteria for stormwater conveyance structures are outlined in this article.

(Code 1968, § 27½-1(a); Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.01; Ord. No. 2005-12-7064, § 1, 12-20-05)

Sec. 50-152. - Definitions.

For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

City plan review staff. The City Engineer and/or other designated officials.

Controlled release structure. A facility constructed to regulate the volume of stormwater runoff that is conveyed during a specific length of time.

Conveyance structures. Water-carrying devices or improvements such as channels, ditches, storm sewers, culverts, inlets, and the like.

Detention or retention. Restraining the rate of stormwater runoff with some natural or manmade devices.

Developed. Conditions after construction or other manmade change to improved or unimproved land, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

Excess stormwater. The calculated runoff produced under a natural or pre-developed condition versus the calculated runoff produced under an altered or post-developed condition, or that portion of stormwater runoff which exceeds the capacity of the storm sewers or natural drainage channels serving a specific watershed.

Impervious surface. Asphalt, concrete or any other surface which does not allow measurable infiltration.

Larger common plan of development or sale means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of 51/4-acre lots.

Natural drainage. Water which flows by gravity in channels formed by the surface topography of the earth prior to changes made by the efforts of humans.

Off-site. External to the boundary of a development.

On-site. Internal to the boundary of a development.

Point discharge. Release of stormwater at a specific location.

Runoff. Rainfall excess after natural losses from infiltration, evaporation, transportation or incidental poundage.

Stormwater runoff release rate. The rate at which stormwater runoff is released from dominant to servient land.

Stormwater storage area. An area designed to temporarily accumulate excess stormwater.

Swale. Surface-type conveyance for stormwater, usually designated to carry incidental, localized runoff.

(Code 1968, § 27½-2; Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.02; Ord. No. 2005-12-7064, § 1, 12-20-05)

Cross reference— Definitions generally, § 1-2.

Sec. 50-153. - Stormwater conveyance and management facilities required.

The requirements in this article shall apply to:

- (1) All land-disturbing activities and all development or redevelopment activities that disturb an area greater than or equal to one acre.
- (2) Sites that are smaller than one acre may also be covered by these regulations if they are a part of a larger common plan of development or sale.
- (3) Any nonresidential development for which the area paved and under roof is equal to or greater than 10,000 square feet.

These regulations shall apply to land-disturbing activities in the area designated by the Kentucky Division of Water for coverage under the KPDES SMS4 permit.

Unless included in exemptions listed in section 50-155 or a waiver granted, all development occurring within the city and subject to this article shall provide for properly sized stormwater conveyance facilities and shall contain on-site, or provide off-site, stormwater management facilities capable of controlling increased runoff equal to but not greater than its predeveloped condition.

The use of other methods of controlling peak discharge rates and pollutant removal, such as bio-retention swales, infiltration ditches, hydrodynamic separators, and created wetlands may be required by the city, in its sole discretion, for some large developments. Additionally, the city will promote conservation measures such as buffer strips and greenways as acceptable techniques toward the protection and improvement of local waterways.

(Code 1968, § 27½-1(b); Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.03; Ord. No. 2005-12-7064, § 1, 12-20-05)

Sec. 50-154. - Stormwater conveyance facilities design criteria.

The following criteria shall control when designing stormwater conveyance facilities:

- (1) Open channels and roadside ditches. The design storm for the design of open channels and roadside ditches shall be a storm with a recurrence frequency of ten years. The time of concentration for open channel and roadside ditch design should be assumed to be 20 minutes.
- (2) Storm sewers and inlets. The design storm for the design of storm sewers and inlets shall be the five-year storm. Storm sewers and inlets shall be checked under ten-year storm loading conditions for ponding limits. The ponding limit for streets with curb and gutter shall be an eightfoot spread measured from gutter to driving lane. Spread calculations shall be based upon an intensity of four inches per hour. Pipes should be sized based upon the actual time of concentration. The minimum time of concentration should be assumed to be eight minutes.
- (3) Entrance pipes and cross drains. The design storm for the design of entrance pipes and cross drains shall be the ten-year storm. The duration of the design storm shall be assumed to be equal to the calculated time of concentration. The minimum time of concentration shall be assumed to be eight minutes. Entrance pipes and cross drains shall be checked under 25-year storm conditions to ensure against overtopping of roadways and flood damage to affected areas. Situations requiring pipes larger than 36 inches shall be designed using the culvert criteria in subsection (4) below.
- (4) Culverts. The design storm for the calculation of runoff for culvert design shall be the 25-year storm. The duration of the design storm shall be assumed to be equal to the calculated time of concentration. The recommended check storm is the 100-year storm. The maximum headwater under 100-year storm conditions should not be allowed to overtop roads or increase the flooding potential in the affected areas.
- (5) *Erosion control.* Plans for stormwater conveyance systems shall include the applicable provisions identified under Article IV, Erosion Prevention and Sediment Control, of this chapter.

(6) Design certification. Design of all stormwater conveyance facilities shall be prepared and stamped by a licensed professional engineer (Kentucky registration required). Design methods shall be in accordance with the Kentucky Department of Highways' Manual of Instructions for Drainage Design, latest edition.

(Code 1968, § 27½-3; Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.04; Ord. No. 2005-12-7064, § 1, 12-20-05)

Sec. 50-155. - Stormwater management facilities design criteria.

As a minimum, the following criteria shall be followed when designing a stormwater management facility:

- (1) Design storm. Stormwater management facilities shall be designed to retain the difference in the pre-development and post-development ten-year, 24-hour storm event.
- (2) *Emergency spillways*. Emergency spillways shall be designed to pass the 100-year storm. The effect of the 100-year storm must be considered and documented in the design of all stormwater management facilities.
- (3) Design calculations. Design calculations submitted must include, but are not limited to, the following:
 - Contributing drainage area, in acres. Indicate if pre-development and post-development areas differ.
 - b. A breakdown of surface type for pre-development and post-development conditions (such as grassed, paved, roofed, and the like).
 - c. Stage-storage curve for the proposed stormwater management facility.
 - d. Stage-discharge curve for the outlet structure of the proposed stormwater management facility.
 - e. Inflow and outflow hydrographs for pre-development and post-development conditions.
 - f. Emergency spillway design calculations.
 - g. Embankment design criteria as it relates to slope stability and compaction requirements during construction.
- (4) *Gradiant.* All detention basins having a vegetative cover shall be designed, constructed, and maintained equal to or greater than one percent throughout to the point of discharge.
- (5) Stormwater management plan. The final stormwater management plan for the entire development shall include, but not be limited to, the following:
 - All calculations, assumptions and criteria used in the design of the stormwater management facility.
 - b. All plans and profiles of proposed storm sewers and open channels including horizontal and vertical controls, elevations, sizes, slopes and materials.
 - c. Location, dimensions and design details required for the construction of all facilities.
 - d. A description of the operation and maintenance needs for the stormwater management facilities.
 - e. All information relative to the design and operation of emergency spillways.
 - f. Project specifications relative to erosion and sedimentation control.
 - g. All deed restrictions, easements and rights-of-way.

- h. The ownership and maintenance responsibilities for all stormwater management control structures during and after development. The identity of the responsible individual, corporation, association or other specific entity and the specific maintenance must be outlined on the plan.
- (6) Exemptions. Exemptions from the stormwater management requirements contained herein shall be granted to the following:
 - a. Land-disturbing activities on property used for agricultural, horticultural or botanical production of plants and animals useful to man, including but not limited to: forages and sod crops, grains and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of these animals; bees; fur animals and aquaculture, except that the construction of a structure used for agricultural purposes of one or more acres, such as broiler houses, machine sheds, repair shops and other major buildings and which require the issuance of a building permit shall require the submittal and approval of a stormwater management plan prior to the start of the land-disturbing activity.
 - Land-disturbing activities undertaken on forestland for the production and harvesting of timber and timber products.
 - c. Minor land-disturbing activities such as residential gardens, individual residential or commercial landscaping, minor home repairs, or maintenance work, and construction or maintenance of individual underground utility connections.
 - d. Activities undertaken by local governments or special purpose or public service districts relating to the emergency repair and maintenance of existing facilities and structures. These activities will be carried out using appropriate best management practices to minimize the impact on the environment and surrounding properties.
 - e. Any nonresidential development for which the area paved and under roof is less than 10,000 square feet.
 - f. Waivers may also be granted if, in other cases, the developer can provide sufficient documentation that the proposed development will not result in an adverse impact either upstream or downstream of the proposed site. Waivers shall be granted solely at the discretion of the City Engineer, based upon interpretation of the documentation presented by the developer in conjunction with his or her knowledge of the relationship of the proposed development to the adjacent property.
- (7) Design certification. Design of all stormwater management and conveyance facilities shall be prepared and stamped by a licensed professional engineer (Kentucky registration required).
- (8) Construction certification. Prior to final approval of the development, the licensed professional engineer must submit certification that the stormwater management and conveyance facilities were constructed in accordance with the approved plan. Final approval shall also provide evidence of the recording of all stormwater conveyance and management facilities deed restrictions, easements and rights-of-way. Any request for deviation from the approved plan during construction shall be submitted to the City Engineer in writing for approval.
- (9) Ownership, operation and maintenance of stormwater control facilities. For all developments requiring stormwater control facilities, ownership and maintenance responsibilities remain with the property owner/developer.

(Code 1968, § 27½-4; Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.05; Ord. No. 2005-12-7064, § 1, 12-20-05)

Sec. 50-156. - Issuance of certificate of occupancy.

No certificate of occupancy shall be issued for any development which is subject to the regulations of this article unless and until all requirements and criteria of this article are fully complied with.

(Code 1968, § 27½-5(a); Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.06)

Sec. 50-157. - Penalty.

Any person, firm, corporation or agency acting as principal, agent, employee or otherwise, who fails to comply with the provisions of this article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not less than \$100.00 per day and not more than \$500.00 per day, or by imprisonment for not more than 90 days, or both, for each separate offense. Each day there is a violation of any part of this article shall constitute a separate offense.

(Code 1968, § 27½-5(b); Ord. No. 91-2-4574, 2-26-91; Code 1996, § 52.99; Ord. No. 2005-12-7064, § 1, 12-20-05)

Secs. 50-158—50-170. - Reserved.

ARTICLE IV. - EROSION PREVENTION AND SEDIMENT CONTROL

Sec. 50-171. - Authority.

This article is adopted pursuant to the powers granted and limitations imposed by Kentucky laws, including the statutory authority granted to Kentucky cities and counties in KRS chs. 67 and 100.

This article is adopted pursuant to the powers granted and limitations by the Federal Clean Water Act, and in particular those parts that authorize local governments to require any state or federal department or agency to comply with all local water pollution control requirements.

(Ord. No. 2005-12-7065, § 1, 12-20-05)

Sec. 50-172. - Purpose and scope.

The regulations set forth in this article are intended to protect the general health, safety, and welfare of the citizens of Paducah, and more specifically;

- (1) To control soil erosion and sedimentation resulting from land-disturbing activities within the city;
- (2) To establish guidelines, conservation practices and planning activities which minimize soil erosion and sedimentation;
- (3) To comply with all applicable provisions as set forth by the Kentucky Pollutant Discharge Elimination System (KPDES) stormwater general permit for SMS4 Phase II communities.

This article controls land disturbances, soil storage, and erosion and sedimentation resulting from such activities and establishes procedures for issuance, approval, administration, and enforcement of an Erosion Prevention and Sediment Control (EPSC) Permit.

(Ord. No. 2005-12-7065, § 1, 12-20-05)

Sec. 50-173. - Definitions.

For the purposes of this article, the following terms, phrases, words, and their derivatives shall have the meaning stated below:

Applicant is the person and/or landowner who submits an application to city for an EPSC permit pursuant to this article. The applicant must be a person who has financial or operational control over the land-disturbing activity.

Bench is a relatively level step excavated into earth material on which fill is to be placed.

Best management practice (BMP) is a technique or series of techniques, which are proven to be effective in controlling runoff, erosion, and sedimentation.

Borrow is earth material acquired from an off-site location for use in grading on a site.

Clearing and grubbing is the cutting and removal of trees, shrubs, bushes, windfalls and other vegetation including removal of stumps, roots, and other remains in the designated areas.

Contractor is a person who contracts with the permittee, landowner, developer, or another contractor (i.e. subcontractor) to undertake any or all the land disturbance activities covered by this article.

Detention facility is a temporary natural or manmade structure that provides for the temporary storage of stormwater runoff.

Developer is any person, firm, corporation, organization, sole proprietorship, partnership, state agency, legal identity or political subdivision thereof engaged in a land disturbance activity.

Engineer is a professional engineer licensed in the Commonwealth of Kentucky to practice in the field of civil engineering.

Erosion is the wearing away of the ground surface as a result of the movement of wind, water, ice, and/or vehicles and equipment associated with land disturbance activities.

EPSC (erosion prevention and sediment control) is the prevention of soil erosion and control of solid material during land-disturbing activity to prevent its transport out of the disturbed area by means of air, water, gravity, or ice.

EPSC permit is a permit required by this article for land disturbance activities.

EPSC plan is a detailed plan which includes a set of best management practices or equivalent measures designed to control surface runoff and erosion and to retain sediment on a specific development site or parcel of land during the period in which pre-construction and construction related land disturbances, fills, and soil storage occur, and before final improvements are completed, all in accordance with this article.

Erosion Control Inspector is a person designated by the Issuing Authority who is properly trained to inspect EPSC measures.

Existing grade is the grade prior to land-disturbing activities.

Finish grade is the final grade of the site which conforms to the approved plan.

Floodplain is the 100-year floodplain which is that area adjoining a watercourse which could be inundated by a flood that has a one percent chance of being equaled or exceeded in any given year and is delineated on the Federal Emergency Management Agency Floodway Maps.

General permit refers to the KPDES stormwater general permit for stormwater discharges related to construction activities that disturb one acre or more. Coverage under this general stormwater permit is obtained by filing a notice of intent (NOI) with the Kentucky Division of Water.

Grade is the vertical location of the ground surface.

Issuing Authority is the Paducah City Engineer's Office and their duly authorized designee.

Land disturbance activity is any clearing, grubbing, grading, excavating, filling, or other alteration of the earth's surface where natural or manmade ground cover is destroyed. Land disturbance activity does not include the following:

- (1) Minor land disturbance activities including, but not limited to, activities specific to underground utility repairs, replacement of existing utilities, home gardens, minor repairs, and maintenance work.
- (2) Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- (3) Emergency work to protect life, limb, or property and emergency repairs. If the land-disturbing activity would have required an approved EPSC plan except for the emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of this article.

Larger common plan of development or sale means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of 51/4-acre lots.

Outfall is the point of discharge to any watercourse from a public or private stormwater drainage system.

Permittee is the applicant in whose name a valid EPSC permit is duly issued pursuant to this article and his/her agents, employees, and others acting under his/her direction.

Retention facility is a permanent natural or manmade structure that provides for the storage of stormwater runoff by means of a permanent pool of water.

Rough grade is the stage at which the grade approximately conforms to the approved plan.

Runoff is rainfall, snowmelt, or irrigation water flowing over the ground surface.

Sediment is soils or other surficial materials transported by surface water or mechanical means as a product of erosion.

Sedimentation is the process or action of deposition sediment that is determined to have been caused by erosion.

Site is the entire area of land on which the land disturbance activity is proposed in the land disturbance permit application.

Site plan is a plan or set of plans showing the details of any land disturbance activity of a site including but not limited to the construction of: structures, open and enclosed drainage facilities, stormwater management facilities, parking lots, driveways, curbs, pavements, sidewalks, bike paths, recreational facilities, ground covers, plantings, and landscaping.

Slope is the incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

Stripping is any activity which removes or significantly disturbs the vegetative surface cover including clearing, grubbing of stumps and root mat, and topsoil removal.

Structure is anything manufactured, constructed or erected which is normally attached to or positioned on land, including buildings, portable structures, earthen structures, roads, parking lots, and paved storage areas.

Topsoil is the upper layer of soil.

Utility is the owner/operator of any underground facility including an underground line, facility, system, and its appurtenances used to produce, store, convey, transmit, or distribute communications, data, electricity, power, heat, gas, oil, petroleum products, potable water, stormwater, stream, sewage and other similar substances.

Watercourse is any natural or improved stream, river, creek, ditch, channel, canal, conduit, gutter, culvert, drain, gully, swale, or wash in which waters flow either continuously or intermittently.

Wetlands is a lowland area such as a marsh, that is saturated with moisture, as defined by the United States Army Corps of Engineers.

Sec. 50-174. - Permits.

- (a) Applicability. An EPSC permit from the city will be required and the activity subject to the provisions of this article in the following circumstances:
 - (1) All land-disturbing activities including development and redevelopment activities that disturb an area greater than or equal to one acre. Sites that are smaller than one acre are also covered by this article if they are part of a larger common plan of development or sale as defined by this article.
 - (2) Land-disturbing activities of less than one acre that have the potential to negatively impact local water quality, sensitive areas, or result in a nuisance to the public. This determination will be made at the sole discretion of the City Engineer or his designee.
- (b) Exemptions. The following activities are exempt from obtaining an EPSC permit and from the procedures of this article:
 - (1) Cemetery graves.
 - (2) Emergencies posing an immediate danger to life or property, substantial flood or fire hazards.
 - (3) Land disturbance activity on lots less than one acre which are not located in or near a sensitive area.
 - (4) Land disturbance activity less than one acre that is not associated with a common plan of development, and is not located in or near a sensitive area.
 - (5) Agricultural operations required to adopt and implement an individual agriculture water quality plan pursuant to the requirements set forth in the Kentucky Agriculture Water Quality Act (KRS 224).
 - (6) Usual and customary site investigations, such as geotechnical explorations, monitoring wells and archaeological explorations, which are undertaken prior to submittal of an application for preliminary subdivision plat.
 - (7) The Issuing Authority may, on a project-by-project basis, exempt other land disturbance activities not specifically identified in this subsection (b).
- (c) EPSC permit application. Upon approval of the preliminary plat, or other applicable approvals from the local planning and zoning authorities, the person responsible for the land-disturbing activities subject to this article must submit a completed EPSC permit application form along with an EPSC plan to the City Engineer for review and approval. A licensed engineer shall prepare the EPSC plan. The Issuing Authority may waive the preparation or approval and signature by the licensed engineer when it is self-evident that the work is simple, clearly shown, and entails no hazard or nuisance potential to adjacent property or watercourse, and does not include the placement of fill upon which a structure may be erected.
- (d) Fiscal surety.
 - (1) The permittee shall be responsible for the installation, good repair, day to day maintenance and ultimate removal of all temporary and permanent EPSC measures.
 - (2) The Issuing Authority may require the permittee to post a fiscal surety in the form of, cash, blanket bond, certified check, irrevocable letter of credit, or other instrument approved by the Issuing Authority. Fiscal surety for single-family developments may be exempt as determined by the Issuing Authority. When a fiscal surety is required, the surety shall be posted prior to the issuance of an EPSC permit.
 - (3) The fiscal surety shall be in the amount equal to 125 percent of the estimated cost of the EPSC measures, as approved by the Issuing Authority. Whenever feasible, fiscal surety for the EPSC

- measures may be combined with and posted with other appropriate security instruments, such as those required for final plat approval or other building approvals.
- (4) If the Issuing Authority finds the required temporary or permanent improvements or control measures have not been installed or maintained properly or are not in good repair or functioning properly, then the Issuing Authority may declare the permittee to be in default and enforcement actions initiated.
- (5) Request for release of surety may be made after the Issuing Authority makes an inspection of the property and determines that site construction is finished; final stabilization has been established; the required improvements and controls are properly installed and temporary controls have been removed.
- (e) General permit. Complying with the provisions of this article and issued EPSC permit does not exempt the permittee from obtaining coverage from the Kentucky Division of Water under the KPDES stormwater general permit for storm discharges related to construction activities that disturb one acre of more. The permittee shall provide a copy of the notice of intent filed with the Kentucky Division of Water to the Issuing Authority prior to the issuance of an EPSC permit by the Issuing Authority.
- (f) Relation to other laws. Neither this article nor any administrative decision made under it exempts the permittee or any other person from procuring other required local, state, or federal permits or complying with the requirements and conditions of such other permit(s), or limits the right of any person to maintain, at any time, any appropriate action, at law or in equity, for relief or damages against the permittee or any other person arising from the activity regulated by this article.

Sec. 50-175. - Review and approval.

The Issuing Authority will review each application for an EPSC permit to determine its conformance with the provisions of this article. After receiving a complete application and EPSC plan, the Issuing Authority shall, in writing:

- (1) Approve the application and EPSC plan and issue the EPSC permit;
- (2) Approve the application and EPSC plan subject to such reasonable conditions as may be necessary to secure substantially the objectives of this article, and issue the EPSC permit subject to these conditions; or
- (3) Disapprove the permit application and EPSC plan, indicating the reason(s) and procedure for submitting a revised application and/or submission.

(Ord. No. 2005-12-7065, § 1, 12-20-05)

Sec. 50-176. - Erosion prevention and sediment control plan.

- (a) Land disturbance activities, which involve the disturbance of soil as defined herein and described in subsection 50-174(a) above, require an EPSC plan approved by the Issuing Authority. These plans shall be prepared by a licensed professional engineer, drawn to an appropriate scale and shall include sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed grading on water resources, and show measures proposed to minimize soil erosion and off-site sedimentation. The permittee shall assure that all clearing, grading, drainage, construction, and development are performed in strict accordance with the approved plan and this article. The EPSC plan shall include the following:
 - (1) A project narrative.

- (2) The location of the site in relationship to the surrounding area's watercourses, water bodies, sinkholes, roads, structures, and other significant geographic features vulnerable to erosion from the disturbed site.
- An indication of the scale used.
- (4) The name, address, and telephone number of the owner and/or developer of the property where the land-disturbing activity is proposed.
- (5) Ground contours, minimum two feet intervals, for the existing and proposed topography.
- (6) The proposed grading or land disturbance activity including: the surface area involved, excess spoil material, use of borrow material, and specific limits of disturbance.
- (7) A clear and definite delineation of any areas of vegetation or trees to be saved.
- (8) A clear and definite delineation of any wetlands, sinkholes, natural or artificial water storage detention areas, and drainage ditches on the site.
- (9) A clear and definite delineation of any 100-year floodplain on or near the site.
- (10) Existing and proposed storm drainage systems.
- (11) Standard details for stormwater facilities and EPSC measures.
- (12) Erosion and sediment control provisions to minimize on-site erosion and prevent off-site sedimentation, including provisions to preserve topsoil and limit disturbance.
- (13) Design details for both temporary and permanent erosion control structures.
- (14) Details of temporary and permanent stabilization measures.
- (15) A signed statement on the permit by the permittee that any clearing, grading, construction, or development, or all of these, will be done pursuant to the approved EPSC plan and this article.
- (b) The applicant may propose the use of any erosion protection and sediment control techniques in a final EPSC plan, provided such techniques are proven to be as or more effective than the equivalent best management practices as contained in the Kentucky Erosion Prevention and Sediment Control Field Guide.

Sec. 50-177. - Design requirements.

- (a) The design, testing, installation, and maintenance of erosion protection and sediment control operations and facilities shall adhere to the criteria, standards and specifications as set forth in the most recent version of the Kentucky Erosion Prevention and Sediment Control Field Guide.
- (b) At a minimum, the following requirements shall be met:
 - (1) Cut and fill slopes stabilized with standard vegetation shall be no greater than 3H:1V, unless approved by the Issuing Authority.
 - (2) Clearing and grading, except that necessary to establish sediment control devices, shall not commence until sediment control devices have been installed.
 - (3) Erosion control methods shall include the following:
 - a. Phasing of clearing and grading operations for all sites greater than 30 acres;
 - Soil stabilization by seeding/mulching within 15 days of mass grading operations for borrow (excavation) and fill areas;
 - c. Stabilizing soil stockpiles at the end of each workday;

- Installing diversion ditches or other techniques where upland runoff occurs past disturbed areas.
- (4) Sediment control methods shall include installing detention/retention facilities, sedimentation basins and traps, other similar facilities at the most downstream runoff location within the site.
- (5) Waterway (creeks, ditches, etc.) protection shall include the installation of a temporary stream crossing; on-site stormwater drainage system and stabilized outlets at all pipes.
- (6) Prevention of mud and debris onto public roadways by construction equipment and vehicles shall include the installation of crushed stone construction entrances.
- (7) Maintenance schedule during and after construction of graded surfaces, EPSC facilities, and drainage structures.

Sec. 50-178. - Inspection.

- (a) The Issuing Authority or its duly authorized representatives shall, as deemed necessary by the Issuing Authority, make inspections of land-disturbing activities subject to this article.
- (b) To ensure compliance with the approved EPSC plan and to examine field practices to determine if control measures are adequate, authorized inspectors of the Issuing Authority shall have the power to inspect any land-disturbing activity and to review the records of all inspections, repairs and modifications made by the permittee.
- (c) The permittee shall notify the Issuing Authority 24 hours in advance of conducting initial land-disturbing activities.
- (d) Consistent with the requirements of the Kentucky Division of Water the permittee shall conduct weekly inspections of the EPSC and document the results of such inspections. These reports shall be kept on site if possible but otherwise made available to the Issuing Authority, if requested. At a minimum the inspection report shall include the date, time of day, name of the person conducting the inspection, company represented, scope of the inspection, major observations relating to the EPSC plan and BMPs installed, and subsequent changes. The Issuing Authority has the right to make regular inspections to ensure the validity of the inspection reports.
- (e) The permittee shall be self-policing and shall correct or remedy any EPSC measures that are not effective or functioning properly at all times during the various phases of construction. Failure of the permittee under this provision subjects the permittee and/or landowner to penalties under the enforcement provisions of this article.

(Ord. No. 2005-12-7065, § 1, 12-20-05)

Sec. 50-179. - Enforcement.

- (a) The Issuing Authority shall be responsible for the enforcement of this article. A stop-work order may be posted for the entire project or any specified part thereof if any of the following conditions exist:
 - (1) Any land disturbance activity regulated under this article is being undertaken without a permit.
 - (2) The erosion and sediment control plan is not being fully implemented.
 - (3) Any of the conditions of the EPSC permit are not being met.
- (b) For the purposes of this section, a stop-work order is validly posted by posting a copy of the stopwork order on the site of the land-disturbing activity in reasonable proximity to a location where the land-disturbing activity is taking place. Additionally, a copy of the order, in the case of work for which

- there is an EPSC permit, shall be mailed by first class mail, postage pre-paid, to the address listed by the permittee on the permit.
- (c) Once a stop work order has been issued, the permittee may not conduct land-disturbing activities until such time that the permittee has demonstrated full compliance with the approved EPSC plan, and received written approval by the Issuing Authority.
- (d) For land disturbance activities being conducted without a permit, the responsible parties shall immediately cease such activity upon being notified by the Issuing Authority. If the responsible party does not cease the land disturbance activity immediately, the Issuing Authority may request the city attorney to obtain injunctive relief.
- (e) Ten calendar days after posting a stop-work order, the Issuing Authority may issue a notice of intent to the permittee, landowner, or land user of the Issuing Authority's intent to perform work necessary to comply with article. The Issuing Authority may go on the land and commence work after three calendar days from issuing the notice of intent. The costs incurred by the Issuing Authority to perform this work shall be paid by the landowner or permittee out of the fiscal security referred to in this article, to the extent that the amount is covered thereby, with the remainder being directly due and owed by the landowner or permittee. In the event no EPSC permit was issued or no bond was posted, the cost, plus interest at the rate authorized by the Issuing Authority, plus a reasonable administrative and attorneys fee shall be billed to the owner.
- (f) Compliance with the provisions of this article may also be enforced by injunction.
- (g) The Issuing Authority is authorized to require immediate abatement of any violation of this article that constitutes an immediate threat to the health, safety or well-being of the public. If any such violation is not abated immediately, the Issuing Authority is authorized to enter onto private or public property and to take any and all measures required to remediate the violation. Any expense related to such remediation undertaken by the Issuing Authority shall be fully reimbursed by the property owner and/or responsible party. If any expenses related to remediation are not reimbursed by the property owner and/or responsible party within ten days of notification by the Issuing Authority to these individuals, then the expenses shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. The Issuing Authority shall be entitled to recover from the property owner and/or responsible party all reasonable attorney fees and other costs of collection required in order to enforce the lien, if any, which secures the liability of the property owner and/or responsible party related to these remediation expenses.
- (h) Any person, firm, corporation or agency acting as principal, agent, employee or otherwise, who fails to comply with the provisions of this article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not less than \$100.00 per day and not more than \$500.00 per day, or by imprisonment for not more than 90 days, or both, for each separate offense. Each day there is a violation of any part of this article shall constitute a separate offense.
- (i) Should the Issuing Authority or city take legal action to enforce the provisions of this article, the Issuing Authority or city shall be entitled to collect any and all costs in instituting and taking such legal action, including but limited to its court costs and attorney's fees.