

Article amendments approved unless noted:	OMPC	Owensboro	Daviess Co.	Whitesville
Flood plain regulations established	08-Nov-1980	05-Dec-1980	13-Jan-1981	not applic.
Flood plain regulations amended	14-May-1987	16-Jun-1987	24-Jun-1987	not applic.
Flood plain regulations amended	21-Apr-1994	07-Jun-1994	01-Jun-1994	not applic.
Limited expansion of existing use in floodway {18-6(b)(2)(h)}	18-Apr-1996	21-May-1996	22-May-1996	not applic.
2003 Review Committee: Format changes only	11-Dec-2003	02-Mar-2004	05-Feb-2004	not applic.
Flood plain regulations amended in conjunction with 2009 maps	12-Mar-2009	5-May-2009	7-May-2009	not applic.

18-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

18-1(a) Statutory Authorization. The legislature of the State of Kentucky has in KRS Chapter 100 delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Commission of the City of Owensboro and the Fiscal Court of Daviess County, Kentucky hereby adopt the following floodplain management ordinance, as follows:

18-1(b) Findings of Fact.

(1) Flood Losses Resulting From Periodic Inundation. The flood hazard areas of Daviess County are subject to periodic inundation which results 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 of which adversely affect the public health, safety and general welfare.

(2) General Causes of These Flood Losses. These flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities, and by the locations 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 damages.

18-1(c) 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 losses due to flood conditions in specific areas by provisions designed to:

(1) restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

(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 flood plains, 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 flood waters or which may increase flood hazards to other areas

18-1(d) Objectives. The objectives of this article are:

(1) to protect human life and health;

(2) to minimize expenditure of public money for costly flood control projects;

(3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) to minimize prolonged business interruptions;

(5) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;

(6) to help maintain a stable tax base by providing for the sound use and development of special hazard or other flood-prone areas in such a manner as to minimize future flood blighted areas caused by flooding; and,

(7) to insure that potential home buyers are put on notice that property is in a Special Flood Hazard Area.

18-2 DEFINITIONS. Unless specifically defined below or elsewhere in this zoning ordinance, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application. If a word or phrase defined below is defined differently in another article of this zoning ordinance, the definition below shall apply to provisions of this article.

“A Zone” means 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)” means a structure located on the same parcel of property as the principle structure, the use of which is incidental to the principal 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” means 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)” means 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 fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

“A1-30 and AE Zones” means Special Flood Hazard Areas inundated by the one percent (1%) annual chance flood (100 –year flood). Base flood elevations are determined.

“AH Zone” means an area of 100-year shallow flooding where depths are between one (1) and three (3) feet (usually shallow ponding). Base flood elevations are shown.

“AO Zone” means an area of 100-year shallow flooding where water depth is between one (1) and three (3) feet (usually sheet flow on sloping terrain). Flood depths are shown.

“Appeal” means an appeal to the Board of Adjustment resulting from an official action, order, requirement, interpretation, grant, refusal, decision, or request for a review of the Floodplain Administrator’s interpretation of any provision of this ordinance or from the Floodplain Administrator’s ruling on a request for a variance or an appeal to the Circuit Court of Daviess County resulting from any final action of the Board of Adjustment. Procedures for appeals are described in Section 18-4 of this Article.

“AR/A1 – A30, AR/AE, AR/AH, AR/AO, and AR/A Zones” means Special Flood Hazard Areas (SFHAs) that result from 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” means 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” means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

“Area of Special Flood Hazard” is the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

“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 (1) foot or with contributing drainage area less than 1 square mile, and areas protected by levees from the base flood.

“Base Flood” means the flood having a one percent chance of being equaled or exceeded in any given year, (also called the 100-year flood). Base flood in the term used throughout this ordinance.

"Base Flood Elevation (BFE)" is the elevation shown on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1-30, AR, AR/A, AR/A1-30, AR/AH and AR/AO that indicates the water surface elevation resulting from a flood that has a one (1) percent or greater chance of being equaled or exceeded in any given year.

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

"Building" (for the purposes of this article) means a walled and/or roofed structure that is principally above ground, including a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures. The term "building" herein is synonymous with the term "structure."

"C and X (unshaded) Zones" means areas determined to be outside the 500-year floodplain.

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

"Community Rating System" is 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.

"Critical Facility" is any property that, if flooded, would result in severe consequences to public health and safety of 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.

"Cut and Fill Permit" means any excavation, cut or fill of earth or debris.

"D Zone" is an area in which the flood hazard is undetermined.

"Development" means any man-made 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 materials or equipment.

"Elevated Building or Structure" means a non-basement structure built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, posts or piers, shear walls, or breakaway walls. (See freeboard requirements for residential and non-residential structures.)

"Elevation Certificate" is a statement certified by a licensed professional engineer, surveyor or architect 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 ordinance.

"Emergency Program" is 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" is 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" means 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" means any structure for which the "start of construction" commenced before the effective date of the FIRM. "Existing Construction" may also be referred to as "Existing Structures."

"Existing Manufactured Housing Park Complex or Subdivision" means a manufactured housing park complex 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) was completed before August 1, 1980, if located within the City of Owensboro, or before September 3, 1980, if located outside the City of Owensboro.

"Expansion to an Existing Manufactured Housing Park Complex or Subdivision" means 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” is the flood that has a 0.2 percent chance of being equaled or exceeded in any year. Areas subject to the 500-year have a moderate to low risk of flooding.

“Flood”, “Flooding” or “Flood Water”:

(1) A general and temporary condition or 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.

“Flood Boundary and Floodway Map (FBFM)” is 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)” is 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)” means a map, on which the Federal Emergency Management Agency (FEMA) or the Federal Insurance Administration (FIA) has delineated both the areas of special flood hazard and the risk premium zones

“Flood Insurance Study” is the official report provided by the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) containing 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” means any land susceptible to being inundated by flood waters from any source.

“Floodplain Administrator” is the individual appointed by a NFIP participating community to administer and enforce the floodplain management ordinances.

“Floodplain Construction Permit” is the permit issued by the Kentucky Division of Water to construct in a floodplain along or across a stream.

“Floodplain Management” means 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” means this ordinance 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.

“Floodproofing” means any combination of structural and non-structural 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” is a certification by a licensed professional engineer on a FEMA-approved form in effect at the time of certification stating that a non-residential 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” means 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” means that area of the floodplain on either side of the regulatory floodway where encroachment may be permitted in compliance with Chapter 8 of the

Owensboro Metropolitan Public Improvement Specifications.

"Floor" means the top surface of an enclosed area in a building (including basement), that is, top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

"Freeboard" is 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 electrical and HVAC components.

"Fraud and Victimization" as related to Article 18-4(d) Administrative Appeals and Article 18-4(e) Variances, of this ordinance means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the Daviess County Fiscal Court and the Owensboro City Commission will consider the fact that every newly constructed structure adds to government responsibilities and remains a part of the community for fifty to one hundred 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" means 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, ship building, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

"Governing Body" is the local governing unit empowered to adopt and implement ordinances to provide for the public health, safety and general welfare of its citizenry.

"Hazard Potential" means 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" means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

"Historic Structure" means any structure that is:

(a) 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;

(b) 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;

(c) 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

(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

(1) By an approved state program as determined by the Secretary of the Interior, or

(2) Directly by the Secretary of the Interior in states without approved programs.

"Increased Cost of Compliance (ICC)" means that the 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 repetively damaged, ICC will help pay up to \$30,000 for the cost to elevate, flood proof, demolish, or remove the building. ICC coverage is available on residential and non-residential buildings (this

category includes public or government buildings, such as schools, libraries, and municipal buildings) insures under the NFIP.

“Kentucky Revised Statute 151.250 – Plans for dams, levees, etc to be approved and permits issued by cabinet – (Environment 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 specification 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 obstruction, 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 filling 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 jurisdictional 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 Chapter 350 shall have exclusive jurisdiction over KRS Chapter 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 Chapter 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)** is 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)** is a revision based on technical data that, usually due to man-made changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features.
- (3) **Letter of Map Revision (LOMR F)** is a determination that a structure or parcel has been elevated by properly placed engineered fill above the BFE and is, therefore, excluded from the SFHA.

“Levee” is 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” is 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 NFIF.

“Limited Storage” means 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” means 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” means 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 Subsection 18-5(b).

“Manufactured Home” (for the purposes of this article) means a structure transportable in one or more sections, which is built on a permanent chassis and 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 one hundred eighty (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” is a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“Map” is 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” is 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” is 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” means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the flood plain, as shown on a community's FIRM. For purposes of this article, the term is synonymous with North American Vertical Datum (NAVD) 1988.

“Mitigation” means 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)” means 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” means 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” is 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)” means 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.

"New Construction" means structures for which the "start of construction" commenced on or after the effective date of Owensboro-Daviess County's flood plain management regulations and includes any subsequent improvements to such structures.

"New Manufactured Housing Park Complex or Subdivision" means a manufactured housing park complex 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) was or is completed on or after August 1, 1980, if located within the City of Owensboro, or on or after September 3, 1980, if located outside the City of Owensboro.

"Non-Residential" means structures that are not designed for human habitation, including but 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 6 months duration

"North American Vertical Datum (NAVD)" as corrected in 1988, is a vertical control used as a reference for establishing varying elevations within the floodplain. (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)" means the flood that has a one (1) 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. See Base Flood.

"Participating Community" is 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" means 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" means 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" means 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 surcharge as determined by FEMA.

"Program Deficiency" means 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" means 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" means a vehicle which is:

- (a) built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) designed to be self-propelled or permanently towable by a light duty truck; and
- (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Regular Program" means 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" is 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” means 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 non-compliance. 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” means the reconstruction or renewal of any part of an existing structure.

“Repetitive Loss” means flood-related damages sustained by a structure on two or more separate occasions during a 10-year period where the value of damages equals or exceeds an average of 50% of the current value of the structure, beginning on the date when the damage first occurred, or, four or more flood losses of the value determined by FEMA 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” means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

“Section 1316” is 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” means **“Area of Shallow Flooding”**.

“Special Flood Hazard Area (SFHA)” is 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, A 1 A30, AH, AO, or AR.

“Start of Construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, 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; nor does it include the installation on the property of accessory buildings, 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 building.

“Structure” (for the purposes of this article) means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures. The term “structure” herein is synonymous with the term “building.”

“Subdivision” means 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 (2) or more lots or parcels.

“Subrogation” means 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 its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. This term includes structures that are categorized as repetitive loss.

For the purposes of this definition, “repair” is considered to occur when the first repair or reconstruction of any wall, ceiling, floor, or other structural part of the building commences. The term does not apply to:

Any project for improvement of a building required to comply with existing health, sanitary, or safety.

1) code specifications which have been identified by the Building Inspector and which are solely 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”.

“Substantial Improvement” means any combination of repairs, reconstruction, alteration, or improvements to a

structure, taking place during a five (5) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure. For the purposes of this definition, an improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building.

The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. For the purposes of this definition, "substantial improvements" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

(1) any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by code enforcement official(s) and which are solely 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

(3) any building that has been damaged from any source or is categorized as repetitive loss.

"Substantially Improved Existing Manufactured Housing Park Complex or Subdivision" is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities, and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

"Suspension" means the 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" is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this article where specific

enforcement would result in unnecessary hardship. Procedures and conditions for variances are described in Subsection 18-4(e) of this article.

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

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

"Water Surface Elevation" means the height, in relation to the North American Vertical Datum of 1988 (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplain of coastal or riverine areas.

"Watershed" means 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" is 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" is 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.

18-3 GENERAL PROVISIONS.

18-3(a) Lands to Which This Ordinance 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 County of Daviess, KY and the City of Owensboro, KY from available technical studies, historical information, and other available and reliable sources, areas within the jurisdiction of the City of Owensboro and the County of Daviess, Kentucky.

18-3(b) Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Emergency Management Agency through a scientific and engineering report entitled "The Flood Insurance Study for the City of Owensboro," dated August 1st, 1980, and "The Flood Insurance Study for Daviess County, Kentucky," dated September 3rd, 1980, with accompanying maps and other supporting data, and any revision thereto or newly adopted editions thereof which will, upon publication, automatically become a part of this article and replace the current edition (the latest edition being that of April 16, 2009, for both the City of Owensboro and Daviess County). . . This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the Daviess County Fiscal Court and the City of Owensboro by the Floodplain Administrator and are enacted by each legislative body pursuant to statutes governing land use management regulations. The FIS and/or FIRM are permanent records of and are on file and available for review by the public during regular business hours at the Owensboro Metropolitan Planning Office, 200 E 3rd Street, Owensboro, KY.

18-3(c) Establishment of Development Permit. A development or construction permit, as appropriate, shall be required in conformance with the provisions of this article prior to commencement of any development activities, in the Special Flood Hazard Areas (SFHA)

18-3(d) 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 and local regulations, including the Owensboro Metropolitan Public Improvement Specifications. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the Daviess County Fiscal Court or the City of Owensboro from taking such lawful action as is necessary to prevent or remedy any violation.

18-3(e) 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.

18-3(f) Interpretation. In the interpretation and application of this article, all provisions shall be: (1) considered as 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.

18-3(g) Warning and Disclaimer of Liability. The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the City of Owensboro, Kentucky, or the County of Daviess, Kentucky, or any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

18-3(h) Penalties for Violations. Penalties for violation of the regulations of this article shall be as established in Article 5 of this Zoning Ordinance.

18-4 ADMINISTRATION.

18-4(a) Designation of Building Inspector as local administrator. The Building Inspector is hereby appointed as the Floodplain Administrator to administer and implement the provisions of this article.

18-4(b) Permit Procedures. Application for a development or construction permit for any development within any area of special flood hazard or along any watercourse shall be made to the Floodplain Administrator on forms furnished by him or her 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. 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 all Zone As and elevation of highest adjacent grade; or.

(b) Proposed elevation in relation to mean sea level to which any nonresidential structure will be flood-proofed.

(c) All appropriate certifications from a licensed professional engineer, surveyor or architect that the nonresidential flood-proofed structure will meet the flood-proofing criteria in Subsection 18-5(b) (2).

(d) Description of the extent to which any watercourse and/or its associated flood plain will be altered (filled or excavated) or relocated as a result of the proposed development.

(e) The Floodplain Administrator may require the applicant to secure a permit from the Kentucky Division of Water (under KRS 151.250), prior to issuance of a local development permit or building permit. Subdivision plats, development plans, or site plans that have received local approval prior to issuance of a permit by the Division of Water may require local reapproval if substantial changes to those plans are required by the Division of Water.

(2) Construction Stage.

(a) 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, licensed professional engineer, or architect and certified by same.

(b) When flood proofing is utilized for a particular structure, said certification shall be prepared by or under the direct supervision of a licensed professional engineer, surveyor or architect.

(c) 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. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed.

(d) 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) Conditional Uses Permitted in the FW District. Conditional uses permitted in the FW District (floodway) by Subsection 18-6(b)(2) shall require the issuance of a conditional use permit by the Owensboro Metropolitan Board of Adjustment prior to the issuance of any development or construction permits, and shall be subject to the following requirements:

(a) **Required Findings.** The Board of Adjustment in its review of a proposed conditional use must find that all flood hazard reduction provisions of Subsection 18-5(b) (4) can be met.

(b) **Storage of Material or Equipment.** The storage or processing of material is prohibited if, in time of flooding, it is buoyant, flammable, explosive, or could otherwise be injurious to human, animal, or plant life. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

(c) **Other Required Permits.** All other permits as may be required by the Army Corps of Engineers or the Kentucky Division of Water must be obtained prior to the Board of Adjustment's issuance of a conditional use permit.

18-4(c) Duties and Responsibilities of the Floodplain Administrator. The Floodplain Administrator and/or staff is hereby appointed, authorized and directed to administer, implement and enforce the provisions of this ordinance. The Floodplain Administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose by granting or denying development permits in accordance with its provisions.

Duties of the Floodplain Administrator shall include, but not be limited to:

(1) Review all development permits to assure that the permit requirements of this article have been satisfied.

(2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

(3) Notify adjacent communities and the Kentucky Division of Water prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency and the Federal Insurance Administration.

(4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

(5) 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 Subsection 18-4(b)(2).

(6) 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 Subsection 18-4(b)(2).

(7) When flood-proofing is utilized for a particular structure, the Floodplain Administrator shall obtain certification from a licensed professional engineer, surveyor or architect, in accordance with Subsection 18-5(b)(2).

(8) Where interpretation is needed as to the exact location of the 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 this article.

(9) When base flood elevation data have not been provided in accordance with Subsection 18-3(b), then the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Section 18-5.

(10) All records pertaining to the provisions of this Article shall be maintained in the office of the

Floodplain Administrator and shall be open for public inspection.

(11) Right of Entry

a) Whenever necessary to make an inspection to enforce any of the provisions of this ordinance, or whenever the Floodplain 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 Floodplain Administrator may enter such building, structure or premises at all reasonable times to inspect the same or perform any duty imposed upon the Floodplain Administrator by this ordinance.

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.

c) If entry is refused, the Floodplain Administrator shall have recourse to every remedy provided by law to secure entry.

d) When the Floodplain 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 ordinance.

12) Stop Work Orders

a) Upon notice from the Floodplain Administrator, work on any building, structure or premises that is being done contrary to the provisions of this ordinance 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.

13) Revocation of Permits

a) The Floodplain Administrator may revoke a permit or approval, issued under the provisions of this ordinance, 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 Floodplain 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 ordinance.

14) Liability

a) Any officer, employee, or member of the floodplain administrator's staff, charged with the enforcement of this ordinance, acting for the applicable governing authority in the discharge of his duties, shall not thereby render himself 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 by him or her in the enforcement of any provision of this ordinance shall be defended by the department of law until the final termination of the proceedings.

15) Expiration of Floodplain Construction Permit,

a) A floodplain construction permit, and all provisions contained therein, shall expire if the holder of a floodplain construction permit has not commenced construction within three hundred sixty five days (365) calendar days from the date of its issuance by the Kentucky Division of Water.

18-4(d) Administrative Appeals. Appeals to the Board of Adjustment may be taken by any person or entity claiming to be injuriously affected or aggrieved by an official action, order, requirement, interpretation, grant, refusal, or decision of the Floodplain Administrator. Such administrative appeal shall be taken within thirty (30) days after the appellant or his agent receives notice of the action of the Floodplain Administrator, by filing with the Floodplain Administrator and with the Board of Adjustment a notice of appeal specifying the grounds thereof, and giving notice of such appeal to any and all parties of record. The Floodplain Administrator shall

forthwith transmit to the Board of Adjustment all papers constituting the record upon which the action appealed from was taken and shall be treated as and be the respondent in such further proceedings. At the public hearing on the appeal held by the Board of Adjustment, any interested person may appear and enter his/her appearance, and all shall be given an opportunity to be heard.

18-4(e) Variance Procedures. The Board of Adjustment as established by the local governmental bodies shall hear and decide requests for variances from the requirements of this article.

(1) 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 a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(2) In passing upon such applications, the Board of Adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:

(a) the danger that materials may be swept onto other lands to the injury of others;

(b) the danger to life and property due to flooding or erosion damage;

(c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(d) the importance of the services provided by the proposed facility to the community;

(e) the necessity to the facility of a waterfront location, in the case of a functionally dependent facility;

(f) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(g) the compatibility of the proposed use with existing and anticipated development;

(h) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;

(i) the safety of access to the property in times of flood for ordinary and emergency vehicles;

(j) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site; and,

(k) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(3) Upon consideration of the factors listed above and the purposes of this article, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

(4) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(5) Conditions for Variances.

(a) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazards, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.

(b) 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; and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(c) 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.

(d) The Owensboro Metropolitan Planning Commission shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

18-4(f) Appeals from Final Action of the Board of Adjustment. Any person or entity claiming to be injured or aggrieved by any final action of the Board of Adjustment shall appeal from the action to the Circuit Court of Daviess County. Such appeal shall be taken within thirty (30) days after the final action of the Board of Adjustment. All final actions which have not been appealed within thirty (30) days shall not be subject to judicial review. The Board of Adjustment shall be a party in any such appeal filed in the circuit court.

18-5 PROVISIONS FOR FLOOD HAZARD REDUCTION.

18-5(a) General Standards. In all areas of special flood hazard, 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 frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces, other acceptable installation standards and acceptable similarity appearance standards.

(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 conditioning equipment, and other service facilities shall be designed and/or located 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.

(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, and shall be undertaken only if said nonconformity is not furthered, extended, or replaced.

18-5(b) Specific Standards. In all areas of special flood hazard where base flood elevation data have been provided as set forth in Subsection 18-3(b) or Subsection 18-4(c)(9), 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, and mechanical equipment elevated no lower than one (1) foot or greater above the base flood elevation. Ductwork shall be installed above the ceiling unless the finish floor elevation is a minimum of two (2) feet above the base flood elevation and a minimum of two (2) feet above the finish grade. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 18-5(b)(3).

a) In an AO zone, new construction or substantial improvement shall be 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.

b) In an A zone, where no technical data has been produced by the Federal Emergency Management Agency, new construction or substantial improvement shall be elevated one (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, 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 Zones, new construction or substantial improvement shall be elevated one (1) foot above the base flood elevation. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a licensed 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 other nonresidential structure (or manufactured home used for non residential purposes) shall have the lowest floor, including basement, mechanical and electrical equipment, elevated no lower than one (1) foot or greater above the base flood elevation. Ductwork shall be installed above the ceiling unless the finish floor elevation is a minimum of two (2) feet above the base

flood elevation and a minimum of two (2) feet above the finish grade. If lowest floor is constructed lower than one (1) foot above the base flood elevation the following provisions shall apply:

- a). The structure must be flood-proofed below an elevation one foot above the level of the base flood elevation, provided that all areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water:
- b), The structure must have all structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- c). A licensed professional engineer, surveyor or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Subsection 18-4(c)(7).

(3) Elevated Buildings. New construction or substantial improvements of elevated structures on columns, posts, or pilings 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 entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

(a) Designs 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 flood waters in both directions.

(b) 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

(c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(4) Floodways. Located within areas of special flood hazard established in Subsection 18-3(b) 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 licensed professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.

(b) If Subsection 18-5(b)(4)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(5) 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)** outside of a manufactured housing park complex or subdivision,
- (ii)** in a new manufactured housing park complex or subdivision,
- (iii)** in an expansion to an existing manufactured housing park complex or subdivision,
- (iv)** in an existing manufactured housing park complex or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, must meet all the requirements for new construction, including elevation and anchoring ,**(v)** in substantially improved manufactured home

park or subdivisions, or (vii) on individual lots or parcels.

(b) All manufactured homes placed or substantially improved in an existing manufactured housing park complex or subdivision must be elevated on a permanent foundation so that:

(i) the lowest floor of the manufactured home is elevated no lower than one foot above the level of the base flood elevation, or

(ii) 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 grade.

(iii) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

(iv) In an existing manufactured housing park complex or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of Subsection 18-5(b)(5)(b)(i) and (iii) above.

(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 ordinance, 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.

18-5(c) Standards for Areas of Shallow Flooding (AO Zones). Located within the areas of special flood hazard established in Section 18-3(b) are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1'-3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

(1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade, at least as high as the depth number specified on the applicable Flood Insurance Rate Map. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) 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 above the highest adjacent grade at least as high as the depth number specified on the applicable Flood Insurance Rate Map. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade, or

(b) together with attendant utility and sanitary facilities be completely flood-proofed to or above that level 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.

18-5(d) Standards for All Subdivision Proposals and Development Plans.

(1) All subdivision proposals and development plans 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 and development plans 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 and development plans shall have adequate drainage provided to reduce exposure to flood hazards.

(4) Base flood elevation data shall be provided for all subdivision proposals, development plans, and other proposed development (including manufactured housing park complexes and subdivisions). When a subdivision proposal, development plan, or other proposed development involves streams where no base flood data has been provided or where base flood data has been provided without floodways, the plat or plan drawings shall be accompanied by a certification and supporting data, as specified in Subsection 18-5(e) below.

(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 licensed professional engineer, surveyor or architect and provided to the Floodplain Administrator.

18-5(e) Standards for Streams without Established Base Flood Elevations and/or Floodways. Located within the areas of special flood hazard established in Subsection 18-3(b), 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 areas of special flood hazard, unless certification by a licensed professional engineer is provided demonstrating that the cumulative effects 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 (1) 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 buildings shall be elevated or flood-proofed to elevations established in accordance with Subsection 18-4(c)(9).

18-5(f) Standards for Accessory Structures in all Zones Beginning with the Letter A. For all accessory structures in a 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) If built below base flood elevation 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 above the base flood elevation;

5) Must elevate electrical and mechanical equipment above the base flood elevation;

6) Can only be used for storage or parking;

7) Cannot be modified for a different use after permitting; and,

8) If structure is equipped with a heating system, it must meet the requirements for residential or non-residential construction as per Articles 18-5(b)(1) and 18-5(b)(2)

18-6 ESTABLISHMENT OF ZONING DISTRICTS.

The mapped areas of special flood hazard within the jurisdiction of this article are hereby designated as the General Flood Plain Overlay District (GFP District). The GFP District shall be divided into two subdistricts: The portions of the GFP District located outside floodways are hereby designated as the Floodfringe District (FF District); and the portions of the GFP District located within floodways are hereby designated as the Floodway District (FW District). The flood district boundaries as delineated on the currently applicable Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM) (or as described by any revisions thereto or interpretations thereof that are authorized by the Federal Emergency Management Agency or by provisions of this article), shall serve as the Official Zoning Map of the flood plain overlay districts established by this subsection. All uses not permitted as principal, accessory or conditional uses within each district shall be prohibited.

18-6(a) Floodfringe District (FF District).

(1) **Permitted Uses.** Permitted uses in the FF District shall be the same principal, accessory and conditional uses as are permitted in the applicable base zone, subject to the requirements or limitations in the following subsections.

(2) **Development and/or Structures.** Any development, or new construction or substantial

improvement of any structure (see definitions) shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(3) Storage of Material or Equipment. The storage or processing of material is prohibited if, in time of flooding, it is buoyant, flammable, explosive, or could otherwise be injurious to human, animal, or plant life. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

18-6(b) Floodway District (FW District).

(1) Principal and Accessory Uses Permitted. Principal and accessory permitted uses in the FW District shall have a low flood-damage potential, shall not obstruct flood flows, shall not be prohibited by other ordinances or the base zone, shall not be a use which requires a conditional use permit under Subsection 18-6(b)(2) below, shall not adversely affect the capacity of the channels or floodways of any tributary to the main stream, drainage ditch, or any other drainage facility, and shall not require structures, fill, or storage of materials or equipment unless explicitly permitted below. The following are principal and accessory permitted uses to the extent that they conform to the aforementioned criteria. The base zone in which particular uses are located may require conditional use permits.

(a) Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, viticulture, truck farming, forestry, sod farming, horticulture, and wildcrop harvesting.

(b) Industrial/commercial accessory uses such as loading areas, parking areas, and airport landing strips.

(c) Private and public recreation uses such as golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat-launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding traces.

(d) Residential accessory uses such as lawns, gardens, parking areas, and play areas.

(e) Streets, railroads, bridges, utility transmission lines, and pipe lines. Such uses are explicitly permitted to require structures or fill, or the temporary storage of materials or equipment. All characteristics of such uses, including their effects on areas of special flood hazard, shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(2) Conditional Uses Permitted. Conditional permitted uses in the FW District shall not be prohibited by other ordinances or the base zone; may involve encroachments such as temporary or permanent structures, fill, or storage of equipment or materials, subject to compliance with the requirements of Subsection 18-5(b)(4); and shall comply with the permit procedures in Subsection 18-4(b)(3). The following are permitted conditional uses to the extent that they conform to the aforementioned criteria.

(a) Uses or structures accessory to open space or other permitted conditional uses.

(b) Single-family residential structures, including manufactured homes, if located on existing lots of record created within the City of Owensboro before August 1, 1980, or if located on existing lots of record created outside the City of Owensboro before September 3, 1980.

(c) Circuses, carnivals, and similar transient amusement enterprises.

(d) Drive-in theaters, new and used car lots, and roadside stands.

(e) Extraction of sand and gravel.

(f) Marinas, boat rentals, docks, piers, wharves, and other functionally dependent facilities as defined in this article.

(g) Other uses similar in nature to those described above which may include temporary or permanent structures, fill, or storage of equipment or materials.

(h) Limited expansion of an existing use that was established before the date it was mapped within a Floodway District. This provision is not intended to allow major expansions of existing uses within floodways. Major expansions would not be able to comply with the requirements of Subsection 18-5(b)(4).