(Published 8-6-15)

# ORDINANCE NO. <u>0-41-15</u>

AN ORDINANCE

amending the existing floodplain management ordinances to reflect the new effective date of September 2, 2015 on all of the FIRM panels; amending Chapter 27, Article VIII, Sections 27-548 to 27-555 of the 2008 Code of Ordinances and Resolutions of the Unified Government of Wyandotte County/Kansas City, Kansas.

# BE IT ORDAINED BY THE UNIFIED GOVERNMENT COMMISSION OF WYANDOTTE/COUNTY/KANSAS CITY, KANSAS:

Section 1. That Chapter 27, Planning and Development, Article VIII, Sections 27-548 to 27-555 of the 2008 Code of Ordinances and Resolutions of the Unified Government of Wyandotte County/Kansas City, Kansas, is hereby amended to read as follows:

Subdivision III. - Floodplain District

FOOTNOTE(S): --- (10) ---

Editor's note— Ord. No. O-7-14, §§ 1—3, adopted Feb. 6, 2014, amended the Code by repealing former Subd. III, §§ 27-548—27-557, and enacted a new Subd. III. Former Subd. III pertained to similar subject matter and derived from Ord. No. O-39-11, adopted August 25, 2011 that Implemented the modified flood hazard determinations (FHDs) affecting the Flood Insurance Rate Maps (FIRM) panels. The new panels will be effective as of September 2, 2015.

State Law reference— Floodplain zoning, K.S.A. 12-766. (Back)

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**Note**— A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.

Sec. 27-548. - Definitions.

Unless specifically defined below, words or phrases used in this floodplain district subdivision shall be interpreted so as to give them the same meaning they have in common usage and to give this subdivision its most reasonable application.

100-year flood see "base flood."

Accessory structure means the same as "appurtenant structure."

Actuarial rates see "risk premium rates."

Administrator means the Federal Insurance Administrator.

Agency means the Federal Emergency Management Agency (FEMA).

Agriculture accessory structure for the purpose of this article, agriculture accessory structure is defined as farm storage structure(s) used exclusively for the storage of farm machinery and equipment (e.g., pole and pre-fabricated metal frame structures with open or closed sides). Grain bins and corn cribs. General purpose barns for the temporary feeding of livestock, provided they remain open on at least one side.

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

Appurtenant structure means a structure that is on the same parcel of property as the principle structure to be insured and the use of which is incidental to the use of the principal structure.

Area of shallow flooding means a designated AO or AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable 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 floodplain within a community subject to a one percent or greater chance of flooding in any given year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year.

Base flood elevation (BFE) The elevation of surface water resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year. The BFE is shown on the flood insurance rate Map (FIRM) for zones AE, AH, A1—A30, AR, AR/A, AR/AE, AR/A1— A30, AR/AH, AR/AO, V1—V30, and VE.

Basement means any area of the structure having its floor subgrade (below ground level) on all sides.

Building see "structure."

Chief engineer means the chief engineer of the division of water resources, Kansas Department of Agriculture.

Chief executive officer or chief elected official means the official of the community who is charged with the authority to implement and administer laws, ordinances, and regulations for that community.

Community means any state or area or political subdivision thereof, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

Community rating system (CRS) A program developed by FEMA to provide incentives for those communities in the regular program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, levees, levee systems, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials. Development does not include: a.) maintenance of existing buildings or facilities, such as re-roofing, re-siding, or resurfacing of roads when there is no increase in the building footprint ground or road surface elevation; b.) gardening, tilling, plowing or similar agricultural practices that do not involve filling, grading, terracing of land, or construction of levees.

Elevated building means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

Eligible community or participating community means a community for which the administrator has authorized the sale of flood insurance under the National Flood Insurance Program (NFIP).

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

Existing manufactured home park or subdivision means 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 floodplain management regulations adopted by a community.

Expansion to an existing manufactured home park 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).

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of inland waters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood, or by some similarly unusual and unforeseeable event which results in flooding as defined above in item (1).

Flood boundary and floodway map (FBFM) means an official map of a community on which the administrator has delineated both special flood hazard areas and the designated regulatory floodway.

Flood elevation determination means a determination by the administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year.

Flood elevation study means an examination, evaluation and determination of flood hazards and if appropriate, corresponding water surface elevations.

Flood fringe means the area outside the floodway encroachment lines, but still subject to inundation by the regulatory flood.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the administrator, where the boundaries of the flood areas having special flood hazards have been designated as (unnumbered or numbered) A zones.

Flood hazard map means the document adopted by the governing body showing the limits of: (1) the floodplain; (2) the floodway; (3) streets; (4) stream channel; and (5) other geographic features.

Flood insurance rate map (FIRM) means an official map of a community, on which the administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

Flood insurance study (FIS) means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source (see "flooding").

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain and grading ordinances) and other applications of police power. The term describes such state or local regulations, in any combination thereof, that provide standards for the purpose of flood damage prevention and reduction.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, or structures and their contents.

Floodway or regulatory 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.

Floodway encroachment lines means the lines marking the limits of floodways on federal, state and local floodplain maps.

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

Functionally dependent use means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities and facilities that are necessary for the loading and unloading of cargo or passengers, but does not include long-term storage or related manufacturing facilities.

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.

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, building access, or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable floodproofing design requirements of this article.

Manufactured home means a structure, transportable in one or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

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

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

Market value or fair market value means an estimate of what is fair, economic, just and equitable value under normal local market conditions.

*Mean sea level* means, for purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood insurance rate map (FIRM) are referenced.

New construction means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of the floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lot 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 floodplain management regulations adopted by the community.

(NFIP) means the National Flood Insurance Program.

Participating community also known as an "eligible community", means a community in which the administrator has authorized the sale of flood insurance.

Permit means a signed document from a designated community official authorizing development in a floodplain, including all necessary supporting documentation such as: (1) the site plan; (2) an elevation certificate; and (3) any other necessary or applicable approvals or authorizations from local, state or federal authorities.

*Person* includes any individual or group of individuals, corporation, partnership, association, or any other entity, including federal, state, and local governments and agencies.

*Pre-FIRM building* a building for which construction or substantial improvement occurred on or before December 31, 1974, or before the effective date of an initial flood insurance rate map (FIRM).

Post-FIRM building a building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of an initial flood insurance rate map (FIRM), whichever is later.

Principally above ground means that at least 51 percent of the actual cash value of the structure, less land value, is above ground.

Reasonably safe from flooding means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

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 projections; (c) designed to be self-propelled or permanently able to be towed 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.

Remedy a violation means to bring the structure or other development into compliance with federal, state, or local floodplain management regulations; or, if this is not possible, to reduce the impacts of its noncompliance.

Risk premium rates means those rates established by the administrator pursuant to individual community studies and investigations, which are undertaken to provide flood insurance in accordance with section 1307 of the National Flood Disaster Protection Act of 1973 and the accepted actuarial principles. "Risk premium rates" include provisions for operating costs and allowances.

Special flood hazard area see "area of special flood hazard."

Special hazard area means an area having special flood hazards and shown on an FHBM, FIRM or FBFM as zones (unnumbered or numbered) A, AO, AE, or AH.

Start of construction includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvements were within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, 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, the installation of streets and/or walkways, excavation for a basement, footings, piers, foundations, the erection of temporary forms, nor 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 building.

State coordinating agency means the Division of Water Resources, Kansas Department of Agriculture, or other office designated by the governor of the state or by state statute at the request of the administrator to assist in the implementation of the national flood insurance program (NFIP) in that state.

Structure means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. "Structure" for insurance purposes, means a walled and roofed building, other than a gas or liquid storage tank that is principally above ground and affixed to a permanent site, as well as a manufactured home on a permanent foundation, or a travel trailer, without wheels on a permanent foundation. For the latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises. For the purpose of this article, the term building or structure does not include open pavilions, bleachers, carports, and similar structures that do not have all least two rigid walls and a roof.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to pre-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, the cost of which equals or exceeds 50 percent of the market value of the structure before "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 that 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."

Variance means a grant of relief by the community from the terms of a floodplain management regulation. Flood insurance requirements remain in place for any varied use or structure and cannot be varied by the community.

- e. Delineation of floodway fringe, i.e., that area outside the floodway encroachment lines, but still subject to inundation by the base flood.
- (c) Statement of purpose. It is the purpose of this subdivision to promote the public health, safety, and general welfare; to minimize those losses described in subsection 27-549 b(1); to establish or maintain the city's eligibility for participation in the National Flood Insurance Program (NFIP) as defined in 44 Code of Federal Regulations (CFR) 59.22(a)(3); and to meet the requirements of 44 CFR 60.3(d) and K.A.R. 5-44-4 by applying the provisions of this subdivision to:
  - (1) Restrict or prohibit uses that are dangerous to health, safety, or property in times of flooding or cause undue increases in flood heights or velocities;
  - (2) Require uses vulnerable to floods, including public facilities that serve such uses, be provided with flood protection at the time of initial construction; and
  - (3) Protect individuals from buying lands that are unsuited for the intended development purposes due to the flood hazard.

(Ord. No. O-7-14, § 2, 2-6-2014).

#### Sec. 27-550. - General provisions.

- (a) Lands to which this subdivision applies. This subdivision shall apply to all lands within the jurisdiction of the city identified as numbered and unnumbered A zones, AE, AO, and AH zones, on the index map dated February 5, 2014 September 2, 2015 of the flood insurance rate map (FIRM) as amended and any future revisions thereto. In all areas covered by this subdivision, no development shall be permitted except through the issuance of a floodplain development permit, granted by the unified government board of commissioners or its duly designated representative under such safeguards and restrictions as unified government board of commissioners or the designated representative may reasonably impose for the promotion and maintenance of the general welfare, health of the inhabitants of the community, and as specifically noted in this subdivision.
- (b) Compliance. No development located within the special flood hazard areas of this community shall be located, extended, converted, or structurally altered without full compliance with the terms of this subdivision and other applicable regulations.
- (c) Abrogation and greater restrictions. It is not intended by this subdivision to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this subdivision imposes greater restrictions, the provisions of this subdivision shall prevail. All other ordinances inconsistent with this subdivision are hereby repealed to the extent of the inconsistency only.
- (d) Interpretation. In their interpretation and application, the provisions of this subdivision shall be held to be minimum requirements, shall be liberally construed in favor of the governing body, and shall not be deemed a limitation or repeal of any other powers granted by Kansas statutes.
- (e) Warning: Disclaimer of liability. The degree of flood protection required by this subdivision is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions or the flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This subdivision does not imply that areas outside the floodway and flood fringe or land uses permitted within such areas will be free from flooding or flood damage. This subdivision shall not create a liability on the part of the unified government, any officer or employee thereof, for any flood damages that may result from reliance on this subdivision or any administrative decision lawfully made there under.
- (f) Severability. If any section; clause, provision; or portion of this subdivision is adjudged unconstitutional or invalid by a court of appropriate jurisdiction, the remainder of this subdivision shall not be affected thereby.

(Ord No. O-7-14, § 2, 2-6-2014)

Sec. 27-551. - Administration.

*Violation* means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required by this article is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means 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 floodplain riverine areas.

(Ord. No. O-7-14, § 2. 2-6-2014)

Sec. 27-549. - Statutory authorization, findings of fact, and purposes.

## (a) Statutory authorization.

- 1(1) Approval of draft ordinance by the state chief engineer prior to adoption. The following floodplain management regulations, as written, were approved in draft form by the chief engineer of the Division of Water Resources of the Kansas Department of Agriculture, December 30, 2013.
- (2) Kansas statutory authorization. The legislature of the State of Kansas in K.S.A. 12-741 et seq., and specifically in K.S.A. 12-766, delegated the responsibility to local governmental units to adopt floodplain management regulations designed to protect the health, safety, and general welfare.

## (b) Findings of fact.

- (1) Flood losses resulting from periodic inundation. The special flood hazard areas in the city are subject to 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 the flood losses. These flood losses are caused by (1) the cumulative effect of development in any delineated floodplain causing increases in flood heights and velocities; and (2) the occupancy of flood hazard areas by uses vulnerable to floods, hazardous to others, inadequately elevated, or otherwise unprotected from flood damages.
- (3) Methods used to analyze flood hazards. The flood insurance study (FIS) that is the basis of this subdivision uses a standard engineering method of analyzing flood hazards, which consist of a series of interrelated steps.
  - a. Selection of a base flood that is based upon engineering calculations, which permit a consideration of such flood factors as its expected frequency of occurrence, the area inundated, and the depth of inundation. The base flood selected for this subdivision is representative of large floods, which are characteristic of what can be expected to occur on the particular streams subject to this subdivision. The base flood is the flood that is estimated to have a one percent chance of being equaled or exceeded in any one year as delineated on the federal insurance administrator's FIS, and illustrative materials dated February 5, 2014. September 2, 2015 as amended, and any future revisions thereto.
  - Calculation of water surface profiles that are based on a standard hydraulic engineering analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood.
  - c. Computation of a floodway required to convey this flood without increasing flood heights more than one foot at any point.
  - d. Delineation of floodway encroachment lines within which no development is permitted that would cause any increase in flood height.

(a) Floodplain development permit. A floodplain development permit shall be required for all proposed construction or other development, including the placement of manufactured homes, in the areas described in 27-550, subsection (a). No person, firm, corporation, or unit of government shall initiate any development or substantial improvement or cause the same to be done without first obtaining a separate floodplain development permit for each structure or other development. This permit may be incorporated into the regular building permit provided there is a check box indicating floodplain review is necessary and that proper documentation of review is kept in the approval file and verified during post construction inspection by staff or a third party engineer or surveyor.

An application for a floodplain development permit shall be required for all development activities located wholly within, partially within, or in contact with an indentified special flood hazard area (SFHA) or future conditions flood hazards area.

- (b) Designation of floodplain administrator. The director of planning or his or her designate is hereby appointed to administer and implement the provisions of this subdivision.
- (c) Duties and responsibilities of floodplain administrator. Duties of the floodplain administrator shall include, but not be limited to:
  - (1) Review of all applications for floodplain development permits and when necessary coordinate with the county engineer to assure that sites are reasonably safe from flooding and that the floodplain development permit requirements of this subdivision have been satisfied;
  - (2) Review of all applications for floodplain development permits for proposed development to assure that all necessary permits have been obtained from federal, state, or local governmental agencies from which prior approval is required by federal, state, or local law;
  - (3) Review all subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding;
  - (4) Issue floodplain development permits for all approved applications;
  - (5) Notify adjacent communities and the Division of Water Resources, Kansas Department of Agriculture, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA);
  - (6) Assure that the flood-carrying capacity is not diminished and shall be maintained within the altered or relocated portion of any watercourse; and
  - (7) Verify and maintain a record of the actual elevation (in relation to mean sea level) of the lowest floor, including basement, of all new or substantially improved structures;
  - (8) Verify and maintain a record of the actual elevation (in relation to mean sea level) that the new or substantially improved non-residential structures have been floodproofed;
  - (9) When floodproofing techniques are utilized for a particular non-residential structure, the floodplain administrator shall require certification from a registered professional engineer or architect.
- (d) Application for floodplain development permit. To obtain a floodplain development permit, the applicant shall first file an application in writing on a form furnished for that purpose. Every floodplain development permit application shall:
  - (1) Describe the land on which the proposed work is to be done by lot, block and tract, house and street address, or similar description that will readily identify and specifically locate the proposed structure or work;
  - (2) Identify and describe the work to be covered by the floodplain development permit:
  - (3) Indicate the use or occupancy for which the proposed work is intended;
  - (4) Indicate the assessed value of the structure and the fair market value of the improvement;

- (5) Specify whether development is located in designated flood fringe or floodway;
- (6) Identify the existing base flood elevation and the elevation of the proposed development;
- (7) Give such other information as reasonably may be required by the floodplain administrator;
- (8) Be accompanied by plans and specifications for proposed construction; and
- (9) Be signed by the permittee or his authorized agent who may be required to submit evidence to indicate such authority.

(Ord. No. O-7-14, § 2, 2-6-2014)

Sec. 27-552. - Provisions for flood hazard reduction.

#### (a) General standards.

- (1) No permit for floodplain development shall be granted for new construction, substantial improvements, and other improvements, including the placement of manufactured homes, within any numbered or unnumbered A zones, AE, AO, and AH zones, unless the conditions of this section are satisfied.
- (2) All areas identified as unnumbered A zones on the FIRM are subject to inundation of the 100-year flood; however, the base flood elevation is not provided. Development within unnumbered A zones is subject to all provisions of this subdivision. If flood insurance study data is not available, the community shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from federal, state, or other sources.
- (3) Until a floodway is designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within any unnumbered or numbered A zones, or AE zones on the FIRM, unless it is demonstrated 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.
- (4) All new construction, subdivision proposals, substantial improvements, prefabricated structures, placement of manufactured homes, and other developments shall require:
  - Design or adequate anchorage to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
  - b. Construction with materials resistant to flood damage;
  - c. Utilization of methods and practices that minimize flood damages;
  - All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
  - e. New or replacement water supply systems and/or sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems be located so as to avoid impairment or contamination from them during flooding; and
  - f. Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, located within special flood hazard areas are required to assure that:
    - All such proposals are consistent with the need to minimize flood damage;
    - 2. All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
    - 3. Adequate drainage is provided so as to reduce exposure to flood hazards; and

- 4. All proposals for development, including proposals for manufactured home parks and subdivisions, of five acres or 50 lots, whichever is lesser, include within such proposals base flood elevation data.
- Storage, material, and equipment.
  - a. The storage or processing of materials within the special flood hazard area that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal, or plant life is prohibited.
  - b. Storage of other material or equipment may be allowed if not subject to major damage by floods, if firmly anchored to prevent flotation, or if readily removable from the area within the time available after a flood warning.
- (6) Nonconforming uses. A structure, or the use of a structure or premises that was lawful before the passage or amendment of this subdivision, but which is not in conformity with the provisions of this subdivision, may be continued subject to the following conditions:
  - a. If such structure, use, or utility service is discontinued for 18 consecutive months, any future use of the building shall conform to this subdivision.
  - b. If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than 50 percent of the pre-damaged market value of the structure. This limitation does not include the cost of any alteration to comply with existing state or local health, sanitary, building, safety codes, regulations or the cost of any alteration of a structure listed on the National Register of Historic Places, the State Inventory of Historic Places, or local inventory of historic places upon determination.

## (b) Specific standards.

- (1) In all areas identified as numbered and unnumbered A zones, AE, and AH zones, where base flood elevation data have been provided, as set forth in subsection 27-552(a)(2), the following provisions are required:
  - a. Residential construction. New construction, substantial improvement, or substantial damage of any residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of 18 inches above base flood elevation. The elevation of the lowest floor shall be certified by a licensed land surveyor or professional engineer. Substantial improvement or substantial damage is applied when the combined total of improvements or repairs made to the structure in the calendar year exceeds 50 percent of the structure's market value.

All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities be designed to be elevated to a minimum of 18 inches above the base flood elevation and in accordance with section 27-552.

When fill is used, the top layer shall be above the BFE and in accordance with adopted building code standards. Fill shall not adversely affect the flow or surface drainage from or onto neighboring properties.

Retrofitting a pre-firm single family residence that fully enclosed areas below lowest floor used solely for parking of vehicles, building access, or storage in an area other than a basement and that are subject to flooding may be retrofitted to meet the design standards for insurance ratings as specified in FEMA flood insurance manual, lowest floor guide. Owners may voluntarily choose to wet floodproof. Any mechanical, electrical, or other utility equipment must be located 18 inches above the base flood elevation. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and meet or exceed the following minimum criteria National Flood Insurance Program (NFIP) opening requirements. If wet floodproofing techniques are utilized, a certificate of wet floodproofing shall be provided by a registered professional engineer or architect.

Pre-firm accessory structure in a single family residential zoned district, that are subject to flooding may be retrofitted to meet the design criteria for automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Owners may voluntarily choose to wet floodproof an accessory structure to reduce potential flood damage. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and meet or exceed the following minimum criteria National Flood Insurance Program (NFIP) opening requirements.

b. Non-residential construction. New construction, substantial improvement or substantial damage of any commercial, industrial, or other non-residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of 18 inches above the base flood elevation or, together with attendant utility and sanitary facilities in accordance with section 27-552, be dry floodproofed to a minimum of 18 inches above the base flood elevation. A registered professional engineer and/or architect shall certify that the standards of this subsection are satisfied. The elevation of the lowest floor shall be certified by a licensed land surveyor or professional engineer. Such certification shall be provided to the floodplain administrator as set forth in subsection 27-551(c)(7)—(9). Substantial improvement or substantial damage is applied when the combined total of improvements or repairs made to the structure in the calendar year exceeds 50 percent of the structure's market value.

When fill is used, the top layer shall be above the BFE and in accordance with adopted building code standards. Fill shall not adversely affect the flow or surface drainage from or onto neighboring properties.

- c. Require, for all new construction and substantial improvements, that fully enclosed areas below lowest floor used solely for parking of vehicles, building access, or storage in an area other than a basement and that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
  - 1. The structure must provide one square inch of venting for every square foot of enclosed area;
  - 2. The structure must provide at least two vents located on different sides of the structure, with one being located on the upstream side of the structure, if possible;
  - 3. The bottom of required vents must be no higher than one foot above grade;
  - 4. The required vents must be freely open with no human interventions required and be equipped with screens, louvers, valves, or other coverings or devices provided that they permit automatic entry and exit of floodwaters;
  - The area below the base flood elevation must be unfinished and constructed of floodresistant materials as the same are defined by FEMA. Sheetrock or drywall used for fire protection is permitted in unfinished areas;
  - All ductwork, heating, ventilation and air conditioning systems, electrical and hot water heaters included as part of the structure must be elevated a minimum of 18 inches above the base flood elevation;
  - 7. All of the above required features must be shown on the plan submitted for the floodplain development permit;
  - 8. An elevation certificate must document the venting features included in a structure and be filed with the floodplain administrator before the structure is occupied.
- (c) Manufactured homes.

- (1) All manufactured homes to be placed within all unnumbered and numbered A zones, AE, and AH zones, on the community's FIRM shall be required to be installed using methods and practices that minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist 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 requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- (2) Require manufactured homes that are placed or substantially improved within unnumbered or numbered A zones, AE, and AH zones, on the community's FIRM on sites:
  - a. Outside of a manufactured home park or subdivision;
  - b. In a new manufactured home park or subdivision;
  - c. In an expansion to and existing manufactured home park or subdivision; or
  - d. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated a minimum of 18 inches above the base flood elevation and be securely attached to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. The elevation of the lowest floor shall be certified by a licensed land surveyor or professional engineer.
- (3) Require that manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within all unnumbered and numbered A zones, AE and AH zones, on the community's FIRM, that are not subject to the provisions of subsection 27-551(c)(2) of this subdivision, be elevated so that either:
  - The lowest floor of the manufactured home is a minimum of 18 inches above the base flood level; or
  - Reserved.
  - c. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely attached to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. The elevation of the lowest floor shall be certified by a licensed land surveyor or professional engineer.
- (d) Appurtenant structure/accessory structure. Agriculture structure, or accessory structure with two or less outside rigid walls and a fully secured roof, or an accessory structure used solely for parking and limited storage purposes, not attached to any other structure on the site, and of limited investment value may be constructed at-grade and wet-floodproofed (flood vents and flood openings) provided there is no human habitation or occupancy of the structure; that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Accessory structure shall be in conformance with section 27, article VIII, zoning and accessory uses. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and meet or exceed the following minimum criteria National Flood Insurance Program (NFIP) opening requirements.

In order to minimize flood damages during the 100-year flood and the threat to public health and safety, the following conditions shall be included for agricultural structures and accessory structures that are constructed at grade and wet-floodproofed.

(1) Use of the accessory structures must be solely for parking and limited storage purposes in zones A, AE, AO, and AH only as identified on the community's flood insurance rate map (FIRM).

- (2) For any new or substantially damaged accessory structures, the exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the base flood elevation, must be built with flood resistant materials. If floodproofing techniques are utilized, a certificate of floodproofing shall be provided by a registered professional engineer or architect.
- (3) The accessory structures must be adequately anchored to prevent flotation, collapse, or lateral movement of the structures. All of the building's structural components must be capable of resisting specific flood related forces including hydrostatic, buoyancy, and hydrodynamic and debris impact forces.
- (4) Any mechanical, electrical, or other utility equipment must be located 18 inches above the base flood elevation.
- (5) The accessory structures must meet all National Flood Insurance Program (NFIP) opening requirements. The NFIP requires that enclosure or foundation walls, subject to the 100-year flood, contain openings that will permit the automatic entry and exit of floodwaters. If wet floodproofing techniques are utilized, a certificate of floodproofing shall be provided by a registered professional engineer or architect.
- (6) Reserved.
- (7) Equipment, machinery, or other contents must be protected from any flood damage and in accordance with subsections 27-522(5)(a) and (b). Equipment such as scales, may be floodproofed so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions. If floodproofing techniques are utilized, a certificate of floodproofing shall be provided by a registered professional engineer or architect.
- (8) Reserved.
- (9) All of the above required features must be shown on the plan submitted for the floodplain development permit.
- (10) An elevation certificate must document the features included in a structure and be filed with the floodplain administrator before the structure is occupied.
- (e) Areas of shallow flooding (AO and AH zones). Located within the areas of special flood hazard as described in subsection 27-550(a) are areas designated as AO zones. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. The following provisions apply:
  - (1) AO zones.
    - a. All new construction and substantial improvements of residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).
    - b. All new construction and substantial improvements of any commercial, industrial, or other non-residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community FIRM (at least two feet if no depth number is specified) or together with attendant utilities and sanitary facilities be completely floodproofed to that level so that the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
    - Adequate drainage paths shall be required around structures on slopes, in order to guide floodwaters around and away from proposed structures.

- (2) AH zones.
  - a. The specific standards for all areas of special flood hazard where base flood elevation has been provided shall be required as set forth in subsection 27-552(b).
  - b. Adequate drainage paths shall be required around structures on slopes, in order to guide floodwaters around and away from proposed structures.
- (f) Floodway. Located within areas of special flood hazard established in subsection 27-550(a) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris and potential projectiles, the following provisions shall apply:
  - (1) The unified government shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood without increasing the water surface elevation of that flood more than one foot at any point.
  - (2) The unified government shall prohibit any encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the city during the occurrence of the base flood discharge.
  - (3) If subsection 27-552(e)(2), is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of section 27-552
  - (4) In unnumbered A zones, the unified government shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from federal, state, or other sources as set forth in subsection 27-552(a)(2).
- (g) Recreational vehicles. Require that recreational vehicles placed on sites within all unnumbered and numbered A zones, AE, AH, and AO zones on the city's FIRM either:
  - (1) Be on the site for fewer than 180 consecutive days, or
  - (2) Be fully licensed and ready for highway use [11]; or
  - (3) Meet the permitting, elevation, and anchoring requirements for manufactured homes of this subdivision.

(Ord. No. O-7-14, 8 2, 2-6-2014).

Sec. 27-553. - Floodplain management variance procedures.

- (a) Establishment of appeal board. The city's board of zoning appeals, as established by article III of the unified government planning and development ordinances shall hear and decide appeals and requests for variances from the floodplain management requirements of this subdivision.
- (b) Responsibility of appeal board. Where an application for a floodplain development permit is denied by the floodplain administrator, the applicant may apply for such floodplain development permit directly to the appeal board, as defined in subsection 27-553(a).

The appeal board shall hear and decide appeals when it is alleged that there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this subdivision.

- (c) Appeals. Any person aggrieved by the decision of the appeal board or any taxpayer may appeal such decision to the district court as provided in K.S.A. 12-759 and 12-760.
- (d) Floodplain management variance criteria. In passing upon such applications for variances, the appeal board shall consider all technical data and evaluations, all relevant factors, standards specified in other sections of this subdivision, and the following criteria:
  - (1) Danger to life and property due to flood damage;

- (2) Danger that materials may be swept onto other lands to the injury of others;
- (3) Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) Importance of the services provided by the proposed facility to the community;
- (5) Necessity to the facility of a waterfront location, where applicable;
- (6) Availability of alternative locations, not subject to flood damage, for the proposed use;
- (7) Compatibility of the proposed use with existing and anticipated development;
- (8) Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) Safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) Expected heights, velocity, duration, rate of rise and sediment transport of the flood waters, if applicable, expected at the site; and,
- (11) 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; streets; and bridges.
- (e) Conditions for approving floodplain management variances.
  - (1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, providing items two through six below have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
  - (2) Variances may be issued for the reconstruction, repair, rehabilitation, or restoration of structures listed on the National Register of Historic Places, the State Inventory of Historic Places, or local inventory of historic places upon determination, provide the proposed activity will not preclude the structure's continued historic designation and the variance is the minimum necessary to preserve the historic character and design of the structure.
  - (3) Variances shall not be issued within any designated floodway if any significant increase in flood discharge would result.
  - (4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - (5) Variances shall only be issued upon: (a) showing of good and sufficient cause, (b) determination that failure to grant the variance would result in exceptional hardship to the applicant, and (c) 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.
  - (6) A community shall notify the applicant in writing over the signature of a community official that:

    (a) the issuance of a variance to construct a structure below base flood level 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. Such notification shall be maintained with the record of all variance actions as required by this subdivision.

(Ord. No. O-7-14, § 2, 2-6-2014)

Sec. 27-554. - Penalties for violation.

(a) Violation of the provisions of this subdivision or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with granting of

variances) shall constitute a misdemeanor. Any person who violates this subdivision or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500.00, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues, shall be considered a separate offense. Nothing herein contained shall prevent the unified government or other appropriate authority from taking such other lawful action as is necessary to prevent or remedy any violation. Each day such violation continues shall be considered a separate offense.

(b) Nothing contained in this section shall prevent the unified government or other appropriate authority from taking such other lawful action as is necessary to prevent or remedy any violation.

(Ord. No. O-7-14, § 2, 2-6-2014)

Sec. 27-555. - Amendments.

The regulations, restrictions, and boundaries set forth in this subdivision may from time to time be amended, supplemented, changed, or appealed to reflect any and all changes in the National Flood Disaster Protection Act of 1973, provided, however, that no such action may be taken until after a public hearing in relation thereto, at which parties of interest and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in the official newspaper of the city. At least 20 days shall elapse between the date of this publication and the public hearing. A copy of such amendments will be provided to the FEMA Region VII office. The regulations of this subdivision are in compliance with the NFIP regulations.

(Ord. No. O-7-14, § 2, 2-6-2014).

Secs. 27-556-27-572. - Reserved.

PASSED BY THE COMMISSION OF THE UNIFIED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS,

THIS 30 DAY OF JULY

Mark Holland, Mayor/CEO

Attest:

Unified Government Cle

Approved as to form:

Patrick Waters Legal Department