

January 26, 2010

CHAPTER 27.06. FLOODPLAIN MANAGEMENT

Sec. 27.06.010. Statement of purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare; to minimize those losses described in Article 1, Section B(1); to establish or maintain the community'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. 544-4 by applying the provisions of this chapter 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 unsuitable for the intended development purposes due to the flood hazard.

(Ord. No. 47-346, § 1, 2-13-07)

Sec. 27.06.020. Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the same meaning they have in common usage and to give this chapter 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).

"Appeal" means a request for review of the Floodplain Administrator's interpretation of any provision of this chapter 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 (1) to three (3) 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.

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

"Best Available Data" means data obtained from a Federal, State or other source that reasonably reflects flooding conditions expected during the base flood, is gathered or developed using Federal Emergency Management Agency standards, and is not known to be scientifically or technically incorrect.

"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.

January 26, 2010

"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.

"Compensatory storage" means an excavated hydrologically and hydraulically equivalent volume of flood storage that is created to offset the loss of existing flood storage.

"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.

"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 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.

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

"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 Administrator" means the Superintendent of the Office of Central Inspection of the City of Wichita, Kansas.

"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.

January 26, 2010

"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 ordinance.

"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

January 26, 2010

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 (NFIP).

"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.

"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 improvements, 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. 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.

January 26, 2010

"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 fifty (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.

"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 chapter 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.

(Ord. No. 47-346, § 2, 2-13-07)

Sec. 27.06.030. Applicability.

This chapter shall apply to all lands within the City of Wichita identified as unnumbered A Zones, AE, AO, and AH Zones, on the Index Map dated February 2, 2007 of the Flood Insurance Rate Map (FIRM) as amended, and any future revisions thereto except where noted in this chapter. In all lands within the City of Wichita identified as unnumbered A Zones, AE, AO, and AH Zones, on the Index Map dated February 2, 2007 of the Flood Insurance Rate Map (FIRM) as amended, and any future revisions thereto~~areas covered by this ordinance,~~ no development shall be permitted except through the issuance of a floodplain development permit, granted by the City Council or its duly designated representative under such safeguards and restrictions as the City Council 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 Article 4.

(Ord. No. 47-346, § 3, 2-13-07)

Sec. 27.06.040. 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 chapter and other applicable regulations.

(Ord. No. 47-346, § 4, 2-13-07)

Sec. 27.06.050. Abrogation and greater restrictions.

It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail. All other ordinances inconsistent with this chapter are hereby repealed to the extent of the inconsistency only.

(Ord. No. 47-346, § 5, 2-13-07)

January 26, 2010

Sec. 27.06.060. Interpretation.

In their interpretation and application, the provisions of this ordinance 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.

(Ord. No. 47-346, § 6, 2-13-07)

Sec. 27.06.070. Warning and disclaimer of liability.

The degree of flood protection required by this chapter 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 man-made or natural causes, such as ice jams and bridge openings restricted by debris. This chapter 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 chapter shall not create a liability on the part of the City of Wichita, any officer or employee thereof, for any flood damages that may result from reliance on this chapter or any administrative decision lawfully made there under.

(Ord. No. 47-346, § 7, 2-13-07)

Sec. 27.06.080. Designation of floodplain administrator; duties and responsibilities.

(a) The Superintendent of the Office of Central Inspection is hereby appointed to administer and implement the provisions of this ordinance as the Floodplain Administrator.

(b) The Floodplain Administrator shall have the authority to administer and implement the provisions of this ordinance in accordance with the effective Flood Insurance Rate Maps and any future revisions thereto, or with best available data, when accessible.

(b)(c) Duties of the Floodplain Administrator shall include, but not be limited to:

- (1) Review of all applications for floodplain development permits to assure that sites are reasonably safe from flooding and that the floodplain development permit requirements of this ordinance 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;
- (10) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a

January 26, 2010

mapped boundary and actual field conditions), the city engineer shall make the necessary interpretation.

(Ord. No. 47-346, § 8, 2-13-07)

Sec. 27.06.090. 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 section 27.06.030. No person, firm, corporation, or unit of government shall initiate any development or substantial improvements or cause the same to be done without first obtaining a separate floodplain development permit for each structure or other development.

(Ord. No. 47-346, § 9, 2-13-07)

Sec. 27.06.100. 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. 47-346, § 10, 2-13-07)

Sec. 27.06.110. Recording of minimum pad elevation information.

For every development permit issued hereunder, the floodplain administrator shall cause an affidavit to be filed and recorded with the register of deeds of Sedgwick County, Kansas, which affidavit shall contain the following information:

1. The legal description of the subject land;
2. Elevation in relation to mean sea level of the lowest floor (including basement) of all structures;
3. Elevation in relation to mean sea level to which any nonresidential structure is to be floodproofed; and
4. The name or names of the record owners of the subject land.

The cost of recording of such affidavit shall be at the expense of the applicant for the development permit.

(Ord. No. 47-346, § 11, 2-13-07)

January 26, 2010

Sec. 27.06.120. General standards.

(a) No permit for floodplain development shall be granted for new construction, substantial improvement, and other improvements, including the placement of manufactured homes, within any unnumbered A zones, AE, AO, and AH zones, unless the conditions of this section are satisfied.

(b) 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 ordinance. 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.

(c) Until a floodway is designated, no new construction, substantial improvement, or other development, including fill, shall be permitted within any unnumbered 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. For unnumbered A zones without established base flood elevations or regulatory floodways, hydrologic and hydraulic studies shall be prepared to define proposed base flood elevations and a proposed regulatory floodway under existing conditions. For AE zones with established base flood elevations but without regulatory floodways, hydraulic studies shall be prepared to define a proposed floodway under existing conditions. In either case, an application for a Letter of Map Revision (LOMR) based on the study shall be submitted to FEMA for approval. FEMA approval of the LOMR must be obtained prior to start of construction in the floodplain. In the event that the proposed project will increase the 1% annual chance flood elevations by more than one foot above the base flood elevation established in the LOMR, a Conditional Letter of Map Revision (CLOMR) must be obtained after the LOMR is approved and prior to the start of construction. Whenever any project is being constructed under an approved CLOMR, a post-construction LOMR must be obtained to ensure that the project was constructed in accordance with the CLOMR.

(d) All new construction, subdivision proposals, substantial improvement, prefabricated structures, placement of manufactured homes, and other developments shall require:

(i) Design or adequate anchorage to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

(ii) Construction with materials resistant to flood damage;

(iii) Utilization of methods and practices that minimize flood damages;

(iv) 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;

(v) 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; and

(vi) Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, located within special flood hazard areas are required to assure that:

(aa) All such proposals are consistent with the need to minimize flood damage;

(bb) All public utilities and facilities, such as sewer, gas electrical, and water systems are located and constructed to minimize or eliminate flood damage;

(cc) Adequate drainage is provided so as to reduce exposure to flood hazards; and

(dd) All proposals for development, including proposals for manufactured home parks and subdivisions, of five (5) acres or fifty (50) lots, whichever is lesser, include within such proposals base flood elevation data.

(Ord. No. 47-346, § 12, 2-13-07)

January 26, 2010

Sec. 27.06.130. Storage of material and equipment.

- (a) The storage or processing of materials within the special flood hazard area that are buoyant, flammable, explosive, chemicals or pollutants, or could otherwise be injurious to human, animal or plant life is prohibited, unless elevated a minimum of two (2) feet above the base flood elevation. 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.
- (b) No storage or processing of materials of any kind is allowed in the floodway.

Sec. 27.06.140. Nonconforming uses.

A structure, or the use of a structure or premises that was lawful before the passage or amendment of the ordinance, but which is not in conformity with the provisions of this chapter, may be continued subject to the following conditions:

- 1. If such structure, use, or utility service is discontinued for twenty-four (24) consecutive months, any future use of the building shall conform to this ordinance.
- 2. If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than fifty (50) percent of the 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.
- 3. Uses or adjuncts thereof which are or become nuisances shall not be entitled to continue as nonconforming uses."

(Ord. No. 47-346, § 14, 2-13-07)

Sec. 27.06.150. Specific standards.

In all areas identified as unnumbered A zones, AE, and AH zones, where base flood elevation data have been provided, as set forth in Article 4, Section A(2), the following provisions are required:

- (a) New construction or substantial improvements of any residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of two (2) feet above base flood elevation. The elevation of the lowest floor shall be certified by a licensed land surveyor.
- (b) New construction or substantial improvements of any commercial, industrial, or other non-residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of two (2) feet above the base flood elevation or, together with attendant utility and sanitary facilities, be floodproofed so that below the base flood elevation 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. A registered professional engineer 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. Such certification shall be provided to the floodplain administrator as set forth in section 27.06.080(b)(7),(8), and (9).
- (c) For all new construction and substantial improvement of fully enclosed areas below lowest floor which are 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) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided; and

January 26, 2010

(2) The bottom of all opening shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.”

(Ord. No. 47-346, § 15, 2-13-07)

- (d) Roadways shall be placed a minimum of one (1) foot above the base flood elevation.
- (e) The following provisions shall apply to areas designated as the flood fringe:
 - 1. Parking lots shall have a minimum elevation that is no lower than six (6) inches below the base flood elevation. Parking lots or areas of parking lots having an elevation below the base flood elevation shall be clearly marked as being in a flood hazard area.
 - 2. New construction or substantial improvements of any commercial, industrial, or other non-residential structures, and residential structures, including manufactured homes, shall not cause in an increase in erosive velocities, as described in the Storm Water Manual, downstream for the 2-year, 5-year, 10-year, 25-year, 100-year and 500-year return frequency, 24-hour duration storm events.
- (f) New construction or substantial improvements of any non-habitable structures shall be elevated a minimum of two (2) feet above the base flood elevation or be designed for protection against physical damage due to flooding. Floodproofing measures shall be operational without human intervention. If electricity is required for protection against flood damage, then a secondary power source must be provided that will activate without human intervention in the event that the primary power source becomes inoperable. Floodproofing measures shall be certified by a professional engineer registered in the State of Kansas.
- (g) No filling, grading, dredging, or excavating which changes the base flood elevation, base flood flow rate, or floodway boundary shall occur until a Conditional Letter of Map Revision is issued by FEMA.
- (h) Any fill required to elevate a structure in accordance with this chapter must extend at least ten (10) feet beyond the foundation before the grade slopes below the base flood elevation.
- (i) Channel design requirements. The following geometric design provisions shall apply to the construction of new channels, or to approved modifications of existing channels in A, AE, AO and AH Zones on any current Flood Insurance Rate Map (FIRM). Specifically, the new channels or modifications to existing channels shall be designed so as to:
 - 1. not increase downstream erosive velocities, as defined in the Storm Water Manual, (refer to some standard in the manual) downstream for the 2-year, 5-year, 10-year, 25-year, 100-year and 500-year return frequency, 24-hour duration storm events, and;
 - 2. have self-cleaning velocities for the 1-year and 2-year return frequency, 24-hour duration storm events, and;

Sec. 27.06.151. Special standards for flood~~have a top-of-bank constructed a minimum of one (1) foot above the design flood-prone areas.~~

In all areas identified as A zones and/or other flood prone areas that are adjacent to stream channels that are not shown or included in the the Index Map dated February 2, 2007 of the Flood Insurance Rate Map (FIRM) as amended, and any future revisions thereto, the following provisions are required:

- (a) Base flood elevations and the boundary of the base flood that exists prior to the new development or redevelopment shall be determined in accordance with FEMA standards and procedures.
- (b) Encroachments into the limits of the base flood shall be prohibited unless it has been demonstrated that the proposed encroachment would not result in an increase in the existing base flood elevations within the community greater than one (1) foot.

January 26, 2010

- (c) All base flood calculations and results shall be provided to the Director in the drainage plan, in a format that can be accepted by FEMA.
- (d) All base flood calculations shall be performed by a registered professional engineer in the State of Kansas using hydrologic and hydraulic analyses that are performed in accordance with standard engineering practices that are accepted by FEMA.
- (e) Channel design requirements. The following geometric design provisions shall further apply to the construction of new channels, or to approved modifications of existing channels located within the city that are not identified as A Zones, AE, AO and AH Zones on any current Flood Insurance Rate Map (FIRM). Specifically, the new channels or modifications to existing channels shall be designed so as to:

 - 1. not increase erosive velocities downstream, as defined in the Storm Water Manual, downstream for the 2-year, 5-year, 10-year, 25-year, 100-year and 500-year return frequency, 24-hour duration storm events;
 - 2. have self-cleaning velocities, as defined in the Storm Water Manual, for the 1-year and 2-year return frequency, 24-hour duration storm events; and,
 - 3. should result in either a no rise or reduction in flood elevations for the 2-year, 5-year, 10-year, 25-year, 100-year and 500-year return frequency, 24-hour duration storm events.
- (f) Fill in Flood Prone Areas. The City reserves the right to require compensatory storage in the following critical areas where fill placed in of the floodplain fringe or flood-prone areas has the high potential to cause damage to nearby structures:

 - 1. Cadillac Lake;
 - 2. Known flood ponding areas that are located upstream of the Wichita Valley Flood Control Project;
 - 3. Other flood ponding areas that are caused by hydraulic restrictions located downstream.
- (g) Elevation of Habitable Structures. All habitable structures shall be designed such that the lowest opening in the structure is elevated two (2) feet above the maximum elevation of localized flooding that would be caused by the 100-year return frequency, 24-hour duration storm event, as defined in the Storm Water Manual.

Sec. 27.06.160. Manufactured homes.

- (a) All manufactured homes to be placed within all unnumbered 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
- (b) All manufactured homes that are placed or substantially improved within unnumbered A zones, AE, and AH zones, on the community's FIRM on sites (1) outside of a manufactured home park or subdivision; (2) in a new manufactured home park or subdivision; (3) in an expansion to and existing manufactured home park or subdivision; or (4) in an existing manufactured home park or subdivision in which a manufactured home has incurred substantial damage as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated a minimum of two (2) feet 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.
- (c) All manufactured homes that are placed or substantially improved on sites in an existing manufactured home park or subdivision within all unnumbered A zones, AE and AH zones, on the community's FIRM that are not subject to the provisions of subparagraph (b) herein shall be elevated so that either:

 - (1) The lowest floor of the manufactured home is a minimum of two (2) feet above the base flood level; or

January 26, 2010

- (2) The chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and that are 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.

(Ord. No. 47-346, § 16, 2-13-07)

Sec. 27.06.170. Areas of shallow flooding (AO and AH zones).

Located within the areas of special flood hazard as described herein are areas designated as AO zones and AH zones. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. The following provisions apply:

(a) *In AO Zones.*

- (1) 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 two (2) feet above the depth number specified in feet on the community's FIRM (at least three (3) feet if no depth number is specified).

- (2) 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 two (2) feet above the depth number specified in feet on the community FIRM (at least three (3) feet if no depth number is specified) or together with attendant utilities and sanitary facilities be completely floodproofed to that 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.

- (3) Adequate drainage paths shall be required around structures on slopes, in order to guide floodwaters around and away from proposed structures.

(b) *In AH Zones.*

- (1) The specific standards for all areas of special flood hazard where base flood elevation has been provided shall be required as set forth in section 27.06.150.

- (2) Adequate drainage paths shall be required around structures on slopes, in order to guide floodwaters around and away from proposed structures."

(Ord. No. 47-346, § 17, 2-13-07)

Sec. 27.06.180. Floodway.

Located within areas of special flood hazard as defined herein 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:

- (a) The community shall select and adopt a regulatory floodway based on the principle that the areas 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 (1) foot at any point.

- (b) The community shall prohibit any encroachments into the floodway, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated by a professional engineer registered in the State of Kansas 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 ("no rise") on the existing base flood elevations and floodway elevations within the community during the occurrence of the base flood discharge.

January 26, 2010

- (c) Pursuant to subsection (b) above, encroachments for bridges, culverts, roadways, sidewalks, railways, at or below-grade trails, re-grading within regulatory floodway (without fill) to create positive slope toward stream, floodproofing activities to protect existing structures, storm water facilities, utilities, outfalls, erosion control structures, habitat structures and recreational boating facilities are permitted in the regulatory floodway.
- (d) A Conditional Letter of Map Revision will be required to be submitted to FEMA for all filling, grading, dredging, excavating, or other structural improvements including bridges and culverts located in the regulatory floodway or that does not meet the criteria in subsection (b) or Zone A.
- (e) If a Letter of Map Revision is required by FEMA or the community, no building construction shall take place until the Conditional Letter of Map Revision is received. The Letter of Map Revision shall be submitted to FEMA no later than ~~ninety (90) days~~ ninety (90) days following the completion of construction activity.
- (f) All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions contained herein.
- (g) In unnumbered A zones, the community shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from Federal, State, or other sources as set forth herein".

(Ord. No. 47-346, § 18, 2-13-07)

Sec. 27.06.190. Recreational vehicles.

- (a) Recreational vehicles placed on sites within all flood hazard A Zones and AE Zones on the FIRM shall either:
 - (1) Be on the site for fewer than 30 consecutive days; or
 - (2) Be fully licensed and quickly operational for highway use.
 - (3) Meet the permitting, elevation, and anchoring requirements for manufactured homes as set forth herein.
- (b) Recreational vehicles placed on sites within all unnumbered and A Zones, AE, AH, and AO Zones on the FIRM shall either:
 - (1) Be on the site for fewer than 180 consecutive days, or
 - (2) Be fully licensed and ready for highway use; or
 - (3) Meet the permitting, elevation, and anchoring requirements for manufactured homes as set forth herein.
- (c) 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.

(Ord. No. 47-346, § 19, 2-13-07)

Sec. 27.06.200. Variance procedures.

- (a) The Floodplain Administrator shall hear and decide appeals and requests for variances from the floodplain management requirements of this ordinance. Applications for variance shall be in writing and on forms provided by the Floodplain Administrator. A nonrefundable processing fee of one hundred dollars shall be paid to the Floodplain Administrator at the time of the filing of a request for variance.
- (b) The subdivision committee of the Metropolitan Area Planning Commission, the first Appeal Board shall hear appeals from any decision or determination made by the Floodplain Administrator in the enforcement or administration of this chapter. Such appeals shall be in writing and shall specify the grounds for appeal. Such appeals shall be filed with the secretary of the Metropolitan Area Planning Commission within thirty days of the decision or determination appealed from. The secretary of the

January 26, 2010

Metropolitan Area Planning Commission shall fix a reasonable time for the hearing of appeals, giving notice to the appealing party or parties at least fifteen days prior to such hearing. Appeals shall be decided within a reasonable time. At appeal hearings, any party may appear in person, by agent or by attorney. The subdivision committee may reverse or affirm, in whole or in part or modify the decision or determination appealed from and may make such order, requirement, decision or determination as may be appropriate under the circumstances.

(c) Any person aggrieved by the decision or determination of the subdivision committee may appeal such decision or determination to the Metropolitan Area Planning Commission, the second Appeal Board. The procedure for such appeals shall be as set forth above in subsection (a) for appeals from decisions by the Floodplain Administrator.

(d) Any person aggrieved by the decision or determination of the Metropolitan Area Planning Commission may appeal such decision or determination to the city council, the third Appeal Board. The city council will review such decision or determination in the manner provided above for appeals from decisions by the Floodplain Administrator, except that such appeals shall be filed with the city clerk and the notice to the appealing party or parties shall be provided at least five days prior to such hearing.

(e) In passing upon such applications for variances, the Floodplain Administrator and Appeal Boards shall consider all technical data and evaluations, all relevant factors, standards specified in other sections of this ordinance, and the following criteria:

- (1) Danger to life and property due to flood damage and erosion 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 of 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 water, 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;

(f) Variances may be issued for new construction and substantial improvement 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 level, providing items two (2) through six (6) below have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

Variances may be issued for the reconstruction, 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.

Variances shall not be issued within any designated floodway if any significant increase in flood discharge would result.

Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

Variances shall only be issued upon: (1) showing of good and sufficient cause, (2) determination that failure to grant the variance would result in exceptional hardship to the applicant, and (3) determination that the granting of

January 26, 2010

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.

(Ord. No. 47-346, § 20, 2-13-07)

Sec. 27.06.210. Penalties.

Violation of the provisions of this chapter 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 chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500.00 for each such violation. Each day any such violation continues, shall be considered a separate offense. Nothing herein contained shall prevent the City of Wichita or other appropriate authority from taking such other lawful action as is necessary to prevent or remedy any violation of this chapter.

(Ord. No. 47-346, § 21, 2-13-07)