(g) Any certificate issued under the terms of this article shall expire of its own limitation twelve (12) months from the date of issuance if the work authorized thereby is not commenced by the end of such twelve-month period.

(Ord. No. H-523, § 10,1-2-79)

Sec. 19-52. Same-Appeals.

Any applicant for a certificate of appropriateness aggrieved by the determination of the commission may, within thirty (30) days after the making of such decision, appeal to the chancery court of the county.

(Ord. No. H-523, § 12, 1-2-79)

Sec. 19-53. Terms of office; vacancies.

The appointment of members to the commission shall be so arranged that the term of at least one member will expire each year, and their successors shall be appointed in a like manner for terms of three (3) years. Vacancies shall be filled in a like manner for the unexpired term.

(Ord. No. H-522, § 3, 12-21-78)

Secs. 19-54-19-65. Reserved.

ARTICLE IV. FLOODPLAIN ORDINANCE*

DIVISION 1. GENERAL PROVISIONS

Sec. 19-66. Statutory authorization.

The Legislature of the State of Arkansas has in Arkansas' Statutes (State Statutes 9-901, 21-1801., 21-1902) delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Board of Directors of Texarkana, Arkansas, does ordain the following provisions of this article.

(Ord. No. K-226, § 2(Art. 1, § A), 2-16-87)

*Editor's note-Ord. No. K-226, § 1, adopted Feb.16, 1987, repealed the provisions of former Art. IV, §§ 19-66-19-75, relative to the floodplain area, which d~ from Code 1961, §§ 9A-1-9A-6, 9A-8-9A-10; Ord. No.11-384, §§ 2-11, adopted July 1 ~§976) Ord. No. H-406, §§ 1-8, adopted Dec.20, 1976; Ord. No.11-407 §§ 1, 2, enacted Jan.14, 1977; and Ord. No. 11-418, §§ 3-7, adopted May 2, 1987. Section 2 of said Ord. No. K-226 enacted new flood damage prevention provisions which have been codified at the discretion of the editor within the substantive sections of Art. W, Divs. 1-3.

Cross references-Permit for mobile home park, § 14-22; subdivision in floodplain, §24-78; floodplain area under zoning ordinance, § 28-79.

State law references-Municipal flood control, Ark. Stats. § 21-1902; Interstate Watershed Cooperation Act, § 21-1801 et seq.; soil conservation, Ark. Stats. § 9-901 et seq.; drainage districts, Ark. Stats. Title 21, Ch. 5.

Sec. 19-67. findings of **fact.**

(a) The flood hazard areas of Texarkana, Arkansas are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(I)) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.
(Ord. No. K-226, § 2(Art. 1, § B), 2-16-87)

Sec. 19-68. Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health,

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

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

(4) Minimize prolonged business interruptions;

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

(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and

(7) Insure that potential buyers are notified that property is in a flood area. (Ord. No. K-226, § 2(Art. 1, § C), 2-16-87)

Sec. 19-69. Methods of reducing flood losses.

In order to accomplish its purposes, this article uses the following methods:

(1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;

(4) Control filling, grading, dredging and other development which may increase flood damage;

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

(Ord. No. K-226, § 2(Art. 1, § D), 2-16-87)

Sec. 19-70. Definitions.

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

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

Area of shallow flooding means a designated AO, AH, or VO zone on a community's flood insurance rate map (FIRM) with a one (1) per cent 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 (1) per cent or greater chance of flooding in any given year. The area may be designated as Zone A on the flood hazard boundary map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

Base flood means the flood having a one (1) percent chance of being equalled or exceeded in any given year.

Board of adjustment: The board created in section 28-43.

Building official: The official of the City of Texarkana, Arkansas empowered by the board of directors to inspect buildings and structures under the building and other codes adopted by the city, and to enforce the provisions of the building and other codes pertaining to building and construction adopted by the city.

City engineer: The official of the City of Texarkana, Arkansas, given the responsibility by the board of directors to provide engineering expertise for the planning, designing and execution of the professional and constructional services performed by or for the city.

Commission: The planning commission of the City of Texarkana, Arkansas.

Critical feature means an integral and read~y identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Designated floodplain area: The area of the city described in the flood insurance study as being subject to inundation by floodwaters.

Development means any manmade change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Elevated building means a nonbasement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, D, ttelevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In the case of Zones V1-30, VE, or V, t'elevated building", also includes a building otherwise meeting the definition of ~~elevated building", even though the lower area is enclosed by means of breakaway walls if the breakaway walls meet the standards of Section 60.3(eX5) of the National Flood Insurance Program regulations.

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 FIRM's effective before that date. ~~Existing construction" may also be referred to as existing structures."

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 or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

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

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

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

Flood protection system means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a ~~special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Floodway (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 a designated height.

Floodway fringe: That area of the floodplain lying between the floodway and the boundary of the one in one hundred-year flood which could be completely obstructed by fill, strucSupp. No.8

tures and buildings without increasing the water surface elevation of the one in one hundred-year flood more than one foot at any point.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, 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.

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

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

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 nonelevation design reqliirement of Section 60.3 of the National Flood Insurance Program regulations.

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

Mean sea level means, for purposes of the National Flood Insurance Program, 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 are referenced.

New construction means, for floodplain management purposes, structures for which the ~~start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community.

One in one hundred-year flood: The average flood, statistically determined by the United States Army Corps of Engineers, which is expected to occur one in every one hundred (100) years, but which may occur at more or less frequent intervals.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, Supp. No.8

repair, reconstruction, placement, or other improvement was within one hundred eighty (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 slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets andlor walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of

accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

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

Substantial improvement means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) per cent of the market value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purpose of this definition ~~substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or (2) any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

Variance is a grant of relief to a person from the requirements of this article when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. (For full requirements see Section 60.0 of the National Flood Insurance Program regulations). Appeal shall be made to the board of adjustment.

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 with-out the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(bX5), (cX4), (cXlO), (dX3), (eX2), (eX4), or (eX5) [of the National Flood Insurance Program regulations] 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 floodplains of coastal or riverine areas.

Zoning ordinance: The zoning ordinance of the City of Texarkana, Arkansas, also known and referred to as Ordinance No. B-i 186, as amended.

(Ord. No. K-226, Art. 2, 2-16-87)

Cross reference-Zoning, Ch. 28.

Sec. 19-71. Jurisdiction.

The area of jurisdiction under this article shall include all areas within the city subject to inundation by floodwaters as delineated by the flood insurance study for the city, issued in July, 1976, as prepared by the United States Army Corps of Engineers for the United States Department of Housing and Urban Development and the Federal Emergency Management Agency.

(Ord. No. K-226, § 2(Art. 3, § A), 2-16-87)

Sec. 19-72. Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, ~tThe Flood Insurance Study for City of Texarkana, Miller County, Arkansas," dated July, 1976, with accompanying flood insurance rate maps and flood boundary-floodway maps (FIRM and FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this article.
(Ord. No. K-226, § 2(Art. 3, § B), 2-16-87)

Sec. 19-73. Establishment of conditional use permit.

A conditional use permit shall be required to ensure conformance with the provisions of the article.
(Ord. No. K-226, § 2(Art. 3, § C), 2-16-87)

Sec. 19-74. Enforcement.

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this article and other applicable regulations. Any person who uses land or structures or who builds structures in violation of the regulations in this article or any architect, engineer, builder, contractor, agent or other person employed in connection with or assisting in such violation is guilty of a misdemeanor and subject to a fine of not less than ten dollars ($10.00) and not more than one hundred dollars ($100.00). Each day's violation shall constitute a separate offense. The building official shall institute proceedings to enjoin or stop such persons as hereinabove listed from continuing such violation through the usual means at his disposal.
(Ord. No. K-226, § 2(Art. 3, § D), 2-16-87)

Sec. 19-75. **Abrogation and greater restrictions.**

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail. These regulations are not intended to abrogate or annul easements, covenants, or private agreements.
(Ord. No. K-226, § 2(Art. 3, § E), 2-16-87)

Sec. 19-76. Interpretation.

In the interpretation and application of this article, all provisions shall be: (1) Considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under state statutes.
(Ord. No. K-226, § 2(Art. 3, § F), 2-16-87)

Sec. 19-77. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This article shall not creat~ liability on the part of the

community or any official or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder. A waiver of liability shall be executed by an applicant prior to planning commission approval to build in the floodplain. Said waiver shall be in favor of the City of Texarkana, Arkansas water and sewer system, as well as the city.

(Ord. No. K-226, § 2(Art. 3, § G), 2-16-87)

Secs. 19-78-19-80. Reserved.

DIVISION 2. ADMINISTRATION

Sec. 19-81. Designation of the floodplain administrator.

The city engineer is hereby appointed the floodplain administrator to administer and implement the provisions of this article and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

(Ord. No. K-226, § 2(Art. 4, § A), 2-16-87)

Sec. 19-82. Duties and responsibilities of the floodplain administrator.

Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:

(1) Maintain and hold open for public inspection all records pertaining to the provisions of this article.

(2) Review permit application to determine whether proposed building site will be reasonably safe from flooding.

(3) Review, approve or deny all applications for development permits required by adoption of this article.

(4) Review permits for proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies (including

Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.

(5) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for exam~e, where there appears to be a conflict between a mapped boundary and actual field conditions) the floodplain administrator shall make the necessary interpretation.

(6) Notify, in riverside situations, adjacent communities and the state coordinating agency which is the Arkansas Soil and Water Conservation Commission prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(8) When base flood elevation data has not been provided in accordance with section 19-72, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of sections 19-91 through 19-99 of this article.

(9) When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's 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.

(Ord. No. K-226, § 2(Art. 4, § B), 2-16-87)

Sec. 19-83. Administration of article; permits.

(a) *Limitations on land and structures.* No land shall be used, altered, raised in elevation or occupied, and no new structure shall be erected, used or occupied in any area within the designated floodplain area of the city without the approval of the planning commission, except as specifically provided in this article. Buildings and structures in existence at the date of passage of this article are not affected by the regulations set forth herein, provided that substantial improvements may not be made to said buildings and structures except under the provisions of this article.

(b) Annexed areas. In newly annexed areas containing any stream which is a part of the overall drainage system of the city and its environs, the planning commission may recommend that the United States Army Corps of Engineers perform a study of the area to determine if said annexed area lies within or contains a floodplain area. If the study determines that the newly annexed area contains or lies within a floodplain area, and the board of directors adopts said study as a part of this article, all uses of the land shall be in conformance with this article, except as herein provided.

(c) *Applications.* Any individual considering development of land, alteration of land, uses of land not excepted as provided in this article or construction of buildings and structures within the designated floodplain area shall file application for a conditional use permit with the floodplain administrator for review by the planning commission. Said application shall be filed no later than the deadline date as set forth in the official planning commission policy regarding application procedures.

(d) *Required information~* The information required in this subsection to be shown on maps may be combined and shown on a single map. Applications for use of the land or construction within the floodplain shall consist of the following:

(1) Legal description of the property involved;

(2) Zoning district(s) contained within the property;

(3) Map showing elevations of the property at a contour interval of not less than two (2) feet at a scale not less than one inch equals fifty (50) feet, or greater or lesser scales on the approval of the city engineer;

(4) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

(5) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;

(6) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 19-92(2);

(7) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed developments;

(8) Maintain a record of all such information in accordance with section 19-82(1);

(9) Waiver of liability as required in section 19-77.

(e) *Action of planning commission.*

(1) The planning commission shall approve, disapprove or table for additional information an application for use and/or construction upon land in the designated floodplain area. The planning commission shall make its decision to approve or disapprove an application based upon the objectives contained in section 19-68. The planning commission shall place conditions upon the building permit in order to safeguard the adjacent properties and utility systems from damage from effects of flooding caused by the applicant's proposal. A denial of the application for use of and/or construction upon land in the designated floodplain area by the planning commission means that an application for the same lot may not be resubmitted to the planning commission within twelve (12) months of the date of the action of the planning commission, unless the commission determines that a substantial change of conditions has occurred.

(2) The planning commission shall review all proposed developments to assure that all necessary permits have been received from those governmental agencies from which

approval is required by federal or state law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.

(3) Within parts of the designated floodplain area where base flood elevations are not provided (Zone A on the flood insurance rate map for Texarkana, Arkansas), the planning commission shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source until such other data has been provided by the Federal Emergency Management Administration as criteria for determining that:

a. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated to one foot above the base flood level.
b. All new construction and substantial improvements of nonresidential structures have the lowest floor (including basement) elevated or floodproofed to one foot above the base flood level.

(f) Relevant factors considered by planning commission~ In passing upon applications for the use of and/or construction upon land in the designated floodplain area, the planning commission shall consider all relevant factors specified in other sections of this article and:

(1) The danger to life and property due to increased flood heights and velocities caused by encroachments;

(2) The danger that materials may be swept onto other lands or downstream to the injury of others;

(3) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions;

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

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

(6) The availability of alternative locations not subject to flooding for the proposed use;

(7) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(10) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters expected at the site.

(11) Such other factors as are relevant to the purposes of this article.

(g) *Discretionary conditions attached to permits.* Upon consideration of the factors listed above and the purposes of this article, the commission may attach conditions to the granting Supp. No.8

of permits necessary to further the purposes of this article. Among such conditions, without limitation because of specific enumeration, may be included:

(1) Modification of waste disposal and water supply facilities.

(2) Limitations on periods of use and operation.

(3) Imposition of operational controls, sureties and deed restrictions.

(4) Requirements for construction of channel modifications, dikes, levees and other protective measures.

(5) Floodproofing measures. Floodproofing measures such as the following shall be designed consistent with the flood protection elevation for the particular area, flood velocities, durations, rate of rise, hydrostatic and hydrodynamic forces and other factors associated with the regulatory flood. The planning commission shall require that the application submit a plan or document certified by a registered professional engineer that the floodproofing measures are consistent with the regulatory flood protection elevation and associated flood factors for the particular area. The following floodproofing measures may be required without limitation because of specific enumeration:

a. Installation of watertight doors, bulkheads and shutters, or similar methods of construction.
b. Reinforcement of walls to resist water pressures.

c. Use of paints, membranes or mortars to reduce seepage of water through walls.
d. Addition of mass or weight to structures to resist flotation.
e. Installation of pumps to lower water levels in structures.
f. Pumping facilities or comparable practices for subsurface drainage systems for buildings to relieve external foundation wall and basement flood pressures.
g. Construction to resist rupture or collapse caused by water pressure or floating debris.
h. Installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent backup of sewage and storm waters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.
1. Location of all electrical equipment, circuits and installed electrical appliances i~ a ma~ner which will assure that they are not subject to flooding and to provide protection from inundation by the one in one hundred-year flood.
j. Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety and welfare in a manner which will assure that the facilities are situated at elevations above the height associated with the one in one hundred-year flood protection elevation or are adequately floodproofed to prevent flotation of storage containers, or damage to storage containers which could result in the escape of toxic materials into the floodwaters.

(h) *Mandatory conditions attached to permits.* The commission shall attach the following conditions to the granting of the permits to further the purposes of this article:

(1) Anchorage to resist flotation and lateral movement.

(2) Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters into the systems and the discharge of those systems into the floodwaters.

(i) *Re-hearings by planning commission.* An individual may request of the planning commission a rehearing of a request previously denied by the commission within the twelve-month period stipulated in this section based upon evidence that a substantial change in conditions has occurred. Should the planning commission, at a regularly scheduled meeting, determine that such a change has occurred, it shall then rehear the original request, based upon the new information within a period of sixty (60) days. Should the decision of the commission be to deny the request for rehearing or disapprove the building permit as a result of the rehearing, the property owner or applicant may appeal to the board of directors under the provisions of section 19-87.

(]) *Requirements of other ordinances.* Uses of and/or construction upon land within the desiguated floodplain area may be additionally governed by the zoning ordinance, subdivision regulations and mobile home ordinance of the city. In this event, the review by the planning commission shall be considered in combination with the provisions of the floodplain ordinance.

(k) *Subdivision plats: mobile home parks.* Approval of subdivision plats and mobile home parks shall not abrogate the requirements of this article pertaining to construction on individual lots in the floodplain.

(l) *Building permit&* Upon approval by the planning commission of a request for construction within the designated floodplain area, the building official shall issue a building permit for said construction, provided that said construction shall conform to other applicable ordinances and the building codes, upon which shall be listed any and all conditions attached to the permit by the planning commission.

(m) *Certificate of occupancy and statement of floodplain compliance.* Upon completion, the structure shall not be used or occupied until a statement of floodplain compliance has been issued by the building official. Said statement shall state that the structure as completed is in compliance with the provisions of this article, and shall be issued upon receipt of the following information:

(1) Certification by a registered engineer that the elevations of the finished grade of the site and finished floor of the structure or structures conform to the elevations shown on the submitted site plan.

(2) Certification by the contractor that adequate waterproofing has been applied to the structure or structures according to the approved manufacturer's specifications, in the case of basements in nonresidential buildings.

The building official shall then issue a certificate of occupancy.
(Ord. No. K-226, § 2(Art. 4, § C), 2-16-87)
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***Sec.* 19-84. Variance procedures.**

Variances may be issued by the board of adjustment for the new construction or substantial improvement of existing structures or other activities pertaining to the use of land in the designated floodplain area, exclusive of the floodway. Procedures for the granting of variances by the board of adjustment are as follows:

(a) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (½) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the procedures of paragraphs (1)) through (d) of this section 19-84.

(1)) Variances shall only be issued by the board of adjustment upon:

(1) A showing of good and sufficient cause.
(2) A determination that failure to grant the variance would result in exceptional hardship to the applicant.
(3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety or extraordinary public expenses; create nuisances; cause fraud on or victimization of the public; or conflict with existing city laws or ordinances.

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

(d) The board of adjustment shall notify the applicant in writing over the signature of the building official that:

(1) The issuance of a variance to construct a structure below the required one foot above base flood elevation will result in increased premium rates for flood insurance up to amounts as high as twenty-five dollars ($25.00) for one hundred dollars ($100.00) of insurance coverage.
(2) Such construction below the required elevation increases risks to life and property. (Ord. No. K-226, § 2(Art. 4, § D), 2-16-87)

Sec. 19-85. Records.

In order to aid in the determination of applicable flood insurance risk premium rates in Zone A on the city's flood insurance rate map as well as providing general record keeping of all activities affected by this article, the records of the building official shall reflect the following information:

(1) The elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures and whether or not such structures contain a basement.

(2) The elevation (in relation to mean sea level), if the structure had been floodproofed, to which the structure was floodproofed.

(3) Certificates of occupancy and floodproofing for all new construction and substantially improved structures.

(Ord. No. K-226, § 2(Art. 4, § D), 2-16-87)

Sec. 19~86. Interpretation of boundaries.

Should the boundary of the designated floodplain area, where shown on the designated floodplain area map adopted as a part of this article, be insufficiently described or there is a lack of cultural or topographical information presented to accurately describe such boundary, the city engineer shall establish the boundary. Where a dispute arises concerning the. decision of the city engineer, the board of adjustment shall establish the boundary.

(Ord. No. K-226, § 2(Art. 6), 2-16-87)

Sec. 19~7. Appeal to board of directors.

Should a request for a permit for the use of or construction on land within the designated floodplain area be denied by the planning commission, the property owner or applicant shall have thirty (30) days within which to appeal the commission's decision to the board of directors. Upon hearing the applicant's appeal, the board of directors may, by motion, grant approval of the permit or affirm the decision of the planning commission. The decision of the board of directors in respect to the above matters shall be subject to appeal only to a court of competent jurisdiction. (Ord. No. K-226, § 2(Art. 7), 2-16-87)

Secs. 19~8-19-90. Reserved.

DIVISION 3. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 19-91. Conformance to zoning ordinance.

Consideration by the planning commission of applications for the use of and/or construction upon land within the designated floodplain area shall be only those uses and/or structures permitted in Chapter 28, district regulations, of the zoning ordinance for the zoning district in which the subject property is located.

(Ord. No. K-226, § 2(Art. 5, § A), 2-16-87)

Sec. 19-92. General standards.

In all areas of special flood hazards the, following provisions are required for all new construction and substantial improvements;

(1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

(2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

(3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;

(4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and

(7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(Ord. No. K-226, § 2(Art. 5, § B), 2-16-87)

Sec. 19-93. Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) section 19-72, (ii) section 19-82(8), or (iii) section 19-94(c) and unnumbered A zones the following provisions are required:

(1) *Residential construction* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to one or more feet above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection as proposed in section 19-83(d)(l) is satisfied.

(2) *Nonresidential construction.* New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to one or more feet above the base flood level or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection.

A record of such certification which includes the specific elevations (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.

(3) *Enclosure &* New construction and substantial improvements, with fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and

exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

a. A minimum of two (2) openings have a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
b. The bottom of all openings shall be no higher than one foot above grade.
c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(4) Manufactured homes.

a. Require that all manufactured homes to be placed within Zone A shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring shall include, but are not limited to:
   1. Over-the-top ties be provided at each of the four (4) corners of the mobile home, with two (2) additional ties per side at intermediate locations and mobile homes less than fifty (50) feet long requiring one additional tie per side.
   2. Frame ties be provided at each corner of the home with five (5) additional ties per side at intermediate points and mobile homes less than fifty (50) feet long requiring four (4) additional ties per side.
   3. All components of the anchoring system be capable of carrying a force of forty-eight hundred (4,800) pounds.
   4. Any addition to the mobile home be similarly anchored.
b. All manufactured homes shall be in compliance with section 19-92(1).
c. Require that all manufactured homes to be placed or substantially improved within Zones A1-30, AH and AE on the community's FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provision of section 19-93(4) of this article.
d. Require that the base flood elevation be established through an engineering study and then use this data for requiring the lowest floor elevation to one foot above the base flood elevation.

(Ord. No. K-226, § 2(Art. 5, § C), 2-16-87)

Sec. 1~94. Standards for subdivision proposals.

(a) All subdivision proposals including manufactured home parks and subdivisions shall be consistent with sections 19-67, 19-68, and 19-69 of this article.

~) All proposals for the development of subdivisions including manufactured home parks and subdivisions shall meet conditional use permit requirements of section 19-73; section 19-83; and the provisions of sections 19-91 through 19-99 of this article.

(c) Base flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks and subdivisions which is greater than fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to section 19-72 or section 19-82(8) of this article.

(d) All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

(e) All subdivision proposals including manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(Ord. No. K-226, § 2(Art. 5, § D), 2-16-87)

Sec. 19-95. Standards for areas of shallow flooding (AO/AH Zones).

Located within the areas of special flood hazard established in section 19-72 are areas designated as shallow flooding. These areas have special flood hazard 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 where velocity flow may be evident. Such flooding is characterized by ponding of sheet flow; therefore, the following provisions apply:

(1) All new construction and substantial improvements of residential structures 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 (2) feet if no depth number is specified).

(2) All new construction and substantial improvements of nonresidential structures:

a. 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 (2) feet if no depth number is specified); or
b. Together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads or effects of buoyancy.

(3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this section, as proposed in section 19-83(mXl) are satisfied.

(4) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

(Ord. No. K-226, § 2(Art. 5, § E), 2-16-87)

Sec. 19-96. Floodways.

Within the floodway, no construction of buildings, structures or other permanent improvements shall be permitted. Uses which utilize open space in their principal activities may be allowed in the floodway and approval by the planning commission is not required, except

that those rules shall be conducted on land properly zoned for the purpose. A partial listing of uses which utilize open space is provided here below, but uses which may be made of land in the floodway are not necessarily confined to that list: Campgrounds; parking lots; parks and playgrounds; field, row and tree crops; golf courses; nature, hiking, bicycle and similar trails; nurseries *(field);* pasture and grazing.
(Ord. No. K-226, § 2(Art. 5, § F), 2-16-87)

Sec. 19-97. Fill.

If fill is used to raise the finished surface of the floor one foot above the elevation of the one in one hundred-year flood, the content and design of the fill shall be approved by the floodplain administrator. No sanitary landfill or material therefrom shall be permitted. The fill shall be used only to the extent that it does not adversely affect adjacent properties.
(Ord. No. K-226, § 2(Art. 5, § G), 2-16-87)

Sec. 19-98. Placement of buildings and structures.

All buildings and structures shall be constructed and placed on the lot so as to offer the minimum obstruction to the flow of water across the property and shall be designed to have a minimum effect upon the flow and height of the floodwaters.
(Ord. No. K-226, § 2(Art. 5, § H), 2-16-87)

Sec. 19-99. Alteration or relocation of watercourses.

Prior to the commencement of any work to be performed by private individuals or by the city for the purpose of altering or relocating any watercourse which lies within the city's designated floodplain area, the city shall notify in writing the adjacent communities and state coordinating office. Copies of such notification shall be submitted to the district office of the Federal Emergency Management Administration. The city shall assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.
(Ord. No. K-226, § 2(Art. 5, § I), 2-16-87)

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