

**RESOLUTION \_\_\_\_\_**

**A RESOLUTION RESCINDING AND REPLACING RESOLUTION #47-87, PROVIDING REGULATIONS FOR FLOOD HAZARD PREVENTION ACCORDING TO 44 CFR PERTAINING TO FLOODPLAIN MANAGEMENT**

WHEREAS, The Board of County Commissioners of Oklahoma County, Oklahoma, did on March 28, 1983, adopt Resolution #73-83 assuring the Federal Insurance Administration of Oklahoma County's intent regarding National Flood Insurance, and Resolution #74-83 establishing eligibility requirements for National Flood Insurance and Resolution #18-84 on January 30, 1984 providing regulations for flood hazard prevention; and

WHEREAS, these regulations must be updated from time to time; and

WHEREAS, the adoption of these Regulations is a prerequisite for continued eligibility in the National Flood Insurance Program;

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners of Oklahoma County hereby adopt Regulations for Flood Hazard Prevention, as provided in Title 82, Oklahoma Statutes, Sections 1601 to 1619, as follows:

**FLOOD DAMAGE PREVENTION REGULATIONS**

**ARTICLE 1**

**STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS**

**SECTION A.                    STATUTORY AUTHORIZATION**

The Legislature of the State of Oklahoma has in Title 82, Oklahoma Statutes, Sections 1601 to 1619 delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Board of County Commissioners of Oklahoma County, Oklahoma, does ordain as follows:

**SECTION B.                    FINDINGS OF FACT**

- (1) The flood hazard areas of the unincorporated areas of Oklahoma County 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.
- (2) 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 hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

**SECTION C.                    METHODS OF REDUCING FLOOD LOSSES**

- (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.
- (8) Allow procurement of insurance through the National Flood Insurance Program.

**SECTION D.                    STATEMENT OF PURPOSE**

It is the purpose of these regulations 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) Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

- (2) Require uses vulnerable to flood, 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 erosion or flood damages;
- (5) Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;
- (6) Qualify and maintain the participation in the National Flood Insurance Program.

## **ARTICLE 2**

### **DEFINITIONS**

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

**A-ZONE** – A-Zones are areas which would be flooded by the Base Flood, and is the same as a Special Flood Hazard Area (SFHA) or a 100-year floodplain. These areas may be numbered as A1 to A30, or as A99, or they may be unnumbered as A, AE, AH or AO Zones. Numbered A-Zones indicate an area’s risk to flooding.

**ACT** – the Oklahoma Floodplain Management Act, Title 82 O.S. 1981 §§1601 to 1619.

**APPEAL** – a request for a review of the Floodplain Board’s interpretation of any provision of these regulations or a request for a variance.

**BASE FLOOD** – the flood having a one percent chance of being equaled or exceeded in any given year, also known as the 100-year flood.

**BASE FLOOD ELEVATION** – the elevation for which there is a one-percent chance in any given year that flood levels will equal or exceed it.

**CRITICAL FEATURE** – an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

**DESIGNATED FLOODWAY** – the channel of a stream and that portion of the adjoining floodplain designated by a regulatory agency to be kept free of further development to provide for unobstructed passage of flood flows.

**DEVELOPMENT** – means any platting of land or man-made construction or change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, filling, grading, paving, fencing, excavation or drilling operations.

**DEVELOPMENT PERMIT** – specific written authorization from the Floodplain Board allowing development within a floodplain in accordance with the applicable regulations governing development within floodplains.

**ENCROACHMENT** – any physical object placed in a floodplain that hinders the passage of water or otherwise affects flood flows, such as landfills or buildings.

**ELEVATED BUILDING** – placement of structure at least 12 inches above the Base Flood Elevation by means of fill, solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters, posts and piers or pilings, and adequately anchored so as not to impair the structural integrity of the building during a flooding event.

**EXISTING CONSTRUCTION** – 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, 1985, for FIRMS effective before that date. “Existing construction” may also be referred to as “existing structures.”

**FILL** – material such as earth, clay, or crushed stone that is dumped in an area and compacted to increase ground elevation.

**FLOOD OR FLOODING** – (a) 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. (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of the definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas. (b)The collapse or subsidence of land along the shore of a lake or other body 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 or similarly unusual and unforeseeable event.

**FLOOD HAZARD BOUNDARY MAP (FHBM)** – official community map which the Federal Emergency Management Agency has delineated the boundaries of the flood, mudslide, (i.e., mudflow) and related erosion areas having special hazards have been designated as Zones A, M, and/or E.

**FLOOD INSURANCE RATE MAP (FIRM)** – official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zoned applicable to the community.

**FLOODPLAIN** – floodplain or flood-prone means any land area susceptible to being inundated by water from any source.

**FLOODPLAIN BOARD** – the administrative board for floodplain management of a county, or the planning commission of a county, if so designated by the governing body of the county.

**FLOODPROOFING** – any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.

**FREEBOARD** – an additional amount of height above the Base Flood Elevation used as a factor of safety (e.g. 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed to be in accordance with state or community floodplain management regulations.

**GRANDFATHERING (nonconforming use)** – an exemption based upon circumstances previously existing. Under NFIP, buildings located in Emergency Program communities and Pre-Flood Insurance Rate Map buildings in the Regular Program are eligible for subsidized flood insurance rates. Post-Flood Insurance Rate Map buildings in the Regular Program built in compliance with the floodplain management regulations in effect at the start of construction will continue to have favorable rate treatment even though higher base flood elevations or more restrictive, greater risk zone designations result from Flood Insurance Rate map revisions.

**IMPROVEMENTS** – fixtures, alterations, installations, or additions comprising a part of the insured building.

**INCREASED COST OF COMPLIANCE** – coverage for expenses that a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of state or local floodplain management regulations or laws. Acceptable mitigation measures are elevation, floodproofing, relocation, demolition, or any combination thereof.

**LETTER OF MAP AMENDMENT (LOMA)** – amendment to the currently effective FEMA map which establishes that a property is not located in a Special Flood Hazard Area. A LOMA is issued only by FEMA.

**LETTER OF MAP REVISION (LOMR)** – an official amendment to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

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

**LOWEST ADJACENT GRADE** – the lowest point of the ground level next to the building.

**LOWEST FLOOR** – the lowest floor of the lowest enclosed area (including the 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 requirements. (Formerly called "reference level" or "reference level floor.")

**LOWEST FLOOR ELEVATION (LFE)** – the measured distance of a building's lowest floor above the National Geodetic Vertical Datum (NGVD) or other datum specified on the FIRM for that location.

**MANUFACTURED (MOBILE) HOME** – a structure built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation. “Manufactured (mobile) home” does not include recreational vehicles.

**NATIONAL FLOOD INSURANCE PROGRAM (NFIP)** – the program of flood insurance coverage and floodplain management administered under the Act and applicable Federal regulations promulgated in Title 44 of the Code of Federal Regulations, Subchapter B.

**NEW CONSTRUCTION** – buildings 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, including any subsequent improvements.

**POST-FIRM BUILDING** – a building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of an initial Flood Insurance Rate Map (FIRM), whichever is later.

**PRE-FIRM BUILDING** – a building for which construction or substantial improvement occurred on or before December 31, 1974, or before the effective date of an initial Flood Insurance Rate Map (FIRM)

**PROPER OPENINGS** – all enclosures below the lowest elevated floor must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings, with positioning on at least two walls, having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding must be provided. The bottom of all openings must be no higher than 1 foot above grade.

**SPECIAL FLOOD HAZARD AREA (SFHA)** – an area having special flood, mudflow, or flood-related erosion hazards, as shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map as Zone A, AO A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-SFHAs.

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

**SUBSTANTIAL DAMAGE** – damage of any origin sustained by a building whereby the cost of restoring the building to its before-damaged condition would be equal or exceed 50 percent of the market value of the building before the damage occurred.

**SUBSTANTIAL IMPROVEMENT** - any reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which equals or exceeds 50 percent of the market value of the building before the “start of construction” of the improvement. Substantial improvement includes buildings that have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either any project for improvement of a building to correct existing state or local code violations or any alteration to a “historic building,” provided that the alteration will not preclude the building’s continued designation as an “historic building.”

**VARIANCE** – a grant of relief by a participating community from the terms of its floodplain management regulations.

**VIOLATION** – the failure of a structure or other development to be in full compliance with the community’s floodplain management regulations.

**WATER SURFACE ELEVATION** – the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

### **ARTICLE 3**

#### **GENERAL PROVISIONS**

##### **SECTION A. LANDS TO WHICH THESE REGULATIONS APPLY**

These regulations shall apply to all areas of special flood hazard within the jurisdiction of the unincorporated areas of Oklahoma County.

##### **SECTION B. 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 on its Flood Boundary and Floodway Map, Community No. 400466, dated February 15, 1984, and any revisions thereto are hereby adopted by reference and declared to be a part of these regulations.

**SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT**

A Development Permit shall be required to ensure conformance with the provisions of these regulations.

**SECTION D. COMPLIANCE**

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of these regulations and other applicable regulations.

**SECTION E. ABROGATION AND GREATER RESTRICTIONS**

These regulations are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these regulations conflict or overlap with another, whichever imposes the more stringent restrictions shall prevail.

**SECTION F. INTERPRETATION**

In the interpretation and application of these regulations, 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.

**SECTION G. WARNING AND DISCLAIMER OF LIABILITY**

The degree of flood protection required by these regulations 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 man-made or natural causes. These regulations do 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. These regulations shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder.

**ARTICLE 4**

**ADMINISTRATION**

**SECTION A. DESIGNATION OF THE FLOODPLAIN BOARD**

The Floodplain Board shall appoint a County Floodplain manager who shall administer and implement these regulations and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management. The manager shall maintain records, regular office hours, and assist the public in determining floodplain locations, and filing development permit applications. The floodplain manager will assist the Floodplain Board in all matters concerning the consideration of applications for development permits. The manager will to the extent possible obtain all material necessary for the Board to make sound decisions concerning development within the floodplain.

**SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN BOARD**

- (1) Adopt, administer, and enforce floodplain management regulations which:
  - (a) Delineate floodplains and floodways, and delineate one hundred year flood elevations within all of the unincorporated areas of the County. These delineations shall be submitted to the Oklahoma Water Resources Board;
  - (b) Preserve the capacity of the floodplain to carry and discharge regional floods;
  - (c) Minimize flood hazards; and
  - (d) Regulate the use of land in the floodplain.
- (2) Maintain and hold open for public inspection all records pertaining to the provisions of these regulations.
- (3) Review permit application to determine whether proposed building site will be reasonably safe from flooding.
- (4) Review, approve or deny all applications for development permits required by adoption of these regulations.
- (5) Review permits for proposed development to assure that all necessary permits have been obtained from federal, state or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334) from which prior approval is required.
- (6) 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

mapped boundary and actual field conditions) the Floodplain Board shall make the necessary interpretation.

- (7) Notify, in riverine situations, adjacent communities and the state coordinating agency, which is the Oklahoma Water Resources board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (8) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (9) When base flood elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Board shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal or state agency or other source, in order to administer the provisions of Article 5. All floodplain definitions and one hundred year flood elevations must be submitted to the Oklahoma Water Resources Board.
- (10) When a regulatory floodway has not been designated, the Floodplain Board 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.
- (11) Within one-hundred eighty (180) days after the completion of construction of any flood control protective works, the Floodplain Board in its area of jurisdiction shall redefine the floodplain as altered by the works. The new floodplain definition and one hundred year flood elevation shall then be submitted to the Oklahoma Water Resources Board and the Federal Insurance Administrator.

#### **SECTION C. PERMIT PROCEDURES**

- (1) To prevent unregulated construction or development from occurring in the floodplain, a notice of intent to build within the unincorporated area of the county must be filed with the Floodplain Manager. The Floodplain Manager can then determine whether the proposed construction or development is within a designated floodplain area. If it is within the floodplain, an application for a Development Permit must be filed with the Floodplain Board.
- (2) Application for a Development Permit shall be presented to the Floodplain Board on forms furnished by the Floodplain Manager (accompanied by a filing fee). The application may include, but is not limited to, plan in duplicate drawn to scale showing the location, dimensions, and elevation of the proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:
  - a. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
  - b. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
  - c. A certificate from a registered professional engineer or architect licensed to practice in the State of Oklahoma that the nonresidential floodproofed structure shall meet the floodproofing criteria of Article 5, Section B(2) of these regulations;
  - d. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
  - e. Maintain a record of all such information in accordance with Article 4, Section B(1) of these regulations.
- (3) Approval or denial of a Development Permit by the Floodplain Board shall be based upon all of the provisions of these regulations and the following relevant factors:
  - a. The danger to life and property due to flooding or erosion damage;
  - b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - c. The danger that materials may be swept onto other lands to the injury of others;
  - d. The compatibility of the proposed use with existing and anticipated development;
  - e. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - f. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
  - g. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
  - h. The necessity to the facility of a waterfront location, where applicable;

- i. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- j. The relationship of the proposed use to the comprehensive plan for that area.

**SECTION D. VARIANCE PROCEDURE**

- (1) The Floodplain Board shall hear and render judgment concerning requests for variances from the requirements of these regulations.
- (2) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of these regulations.
- (3) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C(2) of this Article have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- (4) Upon consideration of the factors noted above and the intent of these regulations, the Floodplain Board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of these regulations (Article 1, Section C).
- (5) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (6) Prerequisites for granting variances:
  - a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief and meets the following criteria:
    - i) Showing good and sufficient cause;
    - ii) A determination that failure to grant the variance would result in exceptional hardship to the applicant, and;
    - iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
  - b. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (7) Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that:
  - a. The criteria outlined in Article 4, Section D(1)-(9) are met, and;
  - b. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- (8) The Floodplain Board may grant variances for uses which do not satisfy the requirements of this act upon presentation of adequate proof that compliance with the local floodplain regulations adopted pursuant to this act will result in an arbitrary and unreasonable taking of property without sufficient benefit or advantage to the people. However, no variance shall be granted where the effect of the variance will be to permit the continuance of a condition which unreasonably creates flooding hazards, and any variance so granted shall not be construed as to relieve any person who receives it from any liability imposed by this act or by other laws of the state.
- (9) Any person seeking a variance shall file a petition with the Floodplain Board, accompanied by the required filing fee.
- (10) The Floodplain Board shall exercise wide discretion in weighing the equities involved and the advantages and disadvantages to the applicant and to the public at large when determining whether the variance shall be granted. The Floodplain Board shall conduct a hearing that complies with all requirements of the Floodplain Management Act, Title 82 O.S. 1981, §1610 (B), for public notice. In no case shall variances be effective for a period longer than twenty (20) years. A copy of any variance issued shall be sent to the Oklahoma Water Resources Board within fifteen (15) days of issuance.
- (11) The Floodplain Board shall maintain a record of all actions involving a variance and shall report variances to the Federal Emergency Management Agency upon request.

## **SECTION E. APPEALS PROCEDURE**

Appeals of the decision of a county or municipal Board shall be taken to the Board of Adjustment for the area of jurisdiction involved in the appeal or to the governing body of the county or municipality where no Board of Adjustment exists. Appeals may be taken by any person aggrieved or by a public officer, department, board or bureau affected by any decision of the Floodplain Board in administering the Floodplain Board's rules and regulations. The appeal shall be taken within a period of not more than ten (10) days, by filing written notice with the appellant body and the Floodplain Board, stating the grounds thereof. An appeal shall stay all proceedings concerning the action being appealed unless the Floodplain Board certifies that by reason of facts stated in the certificate a stay would cause imminent peril to life or property. The appellant body shall have the following powers and duties:

- (1) Hear and decide appeals where it is alleged that there is error of law in any order, requirement, decision or determination made by the Floodplain Board in the enforcement of the Floodplain Board's rules and regulations.
- (2) May reverse or affirm wholly or partly, or may modify the order, requirement, decision or determination as ought to be made, and to that end shall have all the powers of the Floodplain Board from which the appeal is taken.
- (3) Act upon any appeal, by applying the principles, standards, and objectives set forth and contained in all applicable regulations and plans adopted.

## **ARTICLE 5**

### **PROVISIONS FOR FLOOD HAZARD REDUCTION**

#### **SECTION A. 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) all 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.

#### **SECTION B. SPECIFIC STANDARDS**

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Article 3, Section B, Article 4, Section B(8) or Article 5 Section C(4), 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 at least one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Board that the standard of this subsection as proposed in Article 4, Section C(1)a., is satisfied.
- (2) **Nonresidential Construction** – new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to at least one foot 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 or practice as outlined in this subsection. A record of such certification that includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Board.

(3) **Manufactured Homes –**

- a. All manufactured homes to be placed within Zone A on a community’s FHBM or FIRM 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 floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- b. All manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community’s FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated at least one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- c. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community’s FIRM that are not subject to the provisions of paragraph (3) of this section be elevated so that either:
  - (i) the lowest floor of the manufactured home is at or above the base flood elevation, or
  - (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(4) **Enclosures –** new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which 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. Minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding 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.

(5) **Recreational Vehicles –** All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community’s FIRM either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of Article 4, Section C(1), and the elevation and anchoring requirements for “manufactured homes” in paragraph (3) of this section. 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.

**SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS**

- (1) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article 1, Sections B, C, and D of these regulations.
- (2) All proposals for the development of subdivisions including manufactured home parks and subdivisions shall meet Development Permit requirements of Article 3, Section C; Article 4 Section C; and the provisions of Article 5 of these regulations.
- (3) Base flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks and subdivisions which are greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Article 3, Section B or Article 4, Section B(8) of these regulations.

- (4) All subdivision proposals, including manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.
- (5) 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.

**SECTION D. STANDARDS FOR AREAS OF SHALLOW FLOODING**

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 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 or 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 one foot higher than the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).
- (2) All new construction and substantial improvements of non-residential structures;
  - (i) have the lowest floor (including basement) elevated above the highest adjacent grade at least one foot higher than the depth number specified in feet on the Community's FIRM (at least two feet if no depth number is specified), or;
  - (ii) 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 Board that the standards of this Section, as proposed in Article 4, Section C (1)a, are satisfied.
- (4) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

**SECTION E. FLOODWAYS**

Floodways – located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

- (1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- (2) If Article 5, Section E(1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5
- (3) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revision through FEMA.

**SECTION F. EXCEPTIONS**

These regulations shall not apply to the use of the usual farm buildings for agricultural purposes, the planting of agricultural crops or the construction of farm ponds (Title 82 O.S. 1981, §1608(3)).

**SECTION G. EXISTING USES**

Any use that exists prior to the adoption of these regulations that does not meet the minimum standards set forth herein may continue. However, unless brought into compliance with the minimum standards set forth in the regulations adopted, such uses may not be substantially altered, enlarged or added to.

**SECTION H. VIOLATIONS**

No new structure, fill, excavation or other floodplain use that is unreasonably hazardous to the public or that unduly restricts the capacity of the floodway to carry and discharge the base flood shall be permitted without securing written authorization from the Floodplain Board. Any person, firm or corporation violating any provision of these regulations or performing any unlawful act as defined herein, or failing to perform any act required herein, shall be guilty of a misdemeanor and upon conviction thereof, may be fined in a sum not to exceed one-hundred dollars (\$100.00) including costs, and each day such violation shall continue shall constitute a new offense for which a like fine may be imposed.

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2002.

FLOODPLAIN MANAGEMENT BOARD  
OKLAHOMA COUNTY, OKLAHOMA

\_\_\_\_\_  
Will K. Jones, Chairman

ATTEST:

\_\_\_\_\_  
Tyler Gammon, Jr., Secretary

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2002.

BOARD OF COUNTY COMMISSIONERS  
OKLAHOMA COUNTY, OKLAHOMA

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Member

\_\_\_\_\_  
Member

ATTEST:

\_\_\_\_\_  
Carolyn Caudill, County Clerk

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 2002.

\_\_\_\_\_  
Assistant District Attorney