ARTICLE IV. FLOOD PLAIN REGULATIONS*

DIVISION 1. GENERALLY

Sec. 8-81. Definitions.

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

Addition to an existing building means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common loadbearing wall other than a firewall. Any walled and roofed addition which is connected by a firewall or is separated by independent perimeter loadbearing walls is new construction.

Appeal means a request for a review of the county engineer's and planning commission's interpretation of any provision of this article or a request for a variance.

Area of shallow flooding means a designated AO or VO zone on a community's flood insurance rate map (FIRM) with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

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

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

Basement means that portion of a building between floor and ceiling, which may be partly below and partly above grade.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral leading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building means any structure built for support, shelter, or enclosure for any occupancy or storage.

***Editor's note -** This article is a compilation made by the county of Ord. No. 83 - 05 (June 23, 1983), Ord. No. 88-01 (February 11, 1988, Ord. No. 89-04 (April 5, 1989, and Ord. No. 90-02 (February 22, 1990) History notes in parenthesis in this article are based on amendment notes provided by the county.

County engineer means the person so appointed by the board of commissioners and his employees designated to enforce and interpret this article.

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

Elevated building means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid perimeter walls, pilings, columns, (posts and piers), shear walls, or breakaway walls.

Existing Construction means any structure for which the "start of construction" commenced before June 23, 1983.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before June 23, 1983.

Expansion to an existing manufactured home park of manufactured home subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets). Any expansion is considered "new construction."

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow in inland or tidal waters;

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

Flood control works is any manmade construction, such as dam, levee, groin or jetty designed to alter the flood potential of the body of water on or adjacent to which it is built.

Flood fringe area is that area of the flood plain lying outside the flood way but still lying within the area of special flood hazard, i.e., within the one hundred-year flood plain.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as zone A.

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 hazard 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, as well as the flood boundary-floodway map and the water surface elevation of the base flood.

Flood Plain is any normally dry land area that is susceptible to being inundated by waters of the one (1) percent annual chance flood, i.e., the one-hundred year flood.

Floodproofing is structural additions, changes, or adjustments to structures subject to flooding which will reduce or eliminate flood damages to water and sewer facilities, structures, and contents of buildings.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

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

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, ship building, ship repair, or seafood processing facilities. The term does not include long term storage, manufacture, sales or service facilities.

Habitable floor is any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor."

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminary determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

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

a. By an approved state program as determined by the Secretary of the Interior, or
b. Directly by the Secretary of the Interior in states without approved programs.

Jurisdictional Wetlands are an area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers. ***(Amended 10/25/01)***

Jurisdictional Wetlands Determination is a delineation of jurisdictional wetland boundaries by the U.S. Army Corps of Engineers, as required by Section 404 of the Clean Water Act, 33 U.S.C. 1344, as amended. ***(Amended 10/25/01)***

Manufactured home means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers. The term also includes park trailers, travel trailers, and similar transportable structures placed on site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the flood plain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD)

National Geodetic Vertical Datum (NGVD) as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the flood plain.

New construction means structures for which the "start of construction" commenced on or after June 23, 1983. The term also includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed on or after June 23, 1983.

Planning commission is the duly appointed board whose primary responsibility is to enforce the subdivision regulations and zoning ordinance of Fayette County.

Recreational vehicle means a vehicle which is:

(1) Built on a single chassis;

(2) Not larger than 8.5 feet in width and forty-five (45) feet in length;

(3) Designed to be self-propelled or permanently towable by a light duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory flood means a flood event having a one (1) percent chance of occurring in any given year, although the flood may occur in any year, i.e., the one-hundred year flood.

Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building that is principally above ground, manufactured home, a gas or liquid storage tank, or other manmade facilities or infrastructures.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of repairs, reconstruction, alteration, or improvements to a building, taking place during the life of a building, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the building. The market value of the building should be:

(1) The appraised value of the building prior to the start of the initial repair or improvement, or

(2) In the case of damage, the value of the building prior to the damage occurring. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. For the purposes of this definition, "substantial 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 building. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the county marshal and which are solely necessary to assure safe living conditions.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the street, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance means a grant of relief to a person from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.
(Ord. No. 88-01, 2-11-88; Ord. No. 90-02, 2-22-90)

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation. ***(Amended 10/25/01)***

Cross-reference - Definitions and rules of construction generally, § 1 - 2.

Sec. 8-82. Lands to which this article applies.

This article shall apply to all areas of special flood hazard within the jurisdiction of the county. Notwithstanding the uses permitted for the district applying to the property, no building or structure or land shall be used or occupied as herein provided and no building or structure or part thereof shall be erected, constructed, reconstructed, moved or altered except in conformity with the requirement of this article when such lands fall within the flood hazard areas as herein defined.

Sec. 8-83. Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study, and Flood Insurance Rate Map dated January 5, 1983, with accompanying maps and other supporting data, and any revision thereto are adopted by reference and declared to be a part of this article. (Ord. No. 2000-07)

Sec. 8-84. Establishment of development permit.

A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.

Sec. 8-85. Compliance.

No structure or land shall be located, extended, converted, or structurally altered without full compliance with the terms of this article and other applicable regulations.

Sec. 8-86. 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 other ordinance provisions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Sec. 8-87. 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 board of commissioners; and

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

Sec. 8-88. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the county or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

Sec. 8-89. Penalties for violations.

Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than five hundred dollars ($500.00) or imprisoned for not more than thirty (30) days, or both, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the county from taking such other lawful action as is necessary to prevent or remedy any violation.

Sec. 8-90. Wetlands Protection and Coordination with Army Corps of Engineers

Any development project which, in the determination of the County Engineer, will disturb a wetland area indicated on the U.S. Fish and Wildlife National Wetlands Inventory (NWI) maps must be submitted to the U.S. Army Corps of Engineers for a jurisdictional wetlands determination and permit if necessary. The NWI maps are on display in the Fayette County Engineering Department. Before a land disturbance permit will be issued for the project, the location for the proposed project site will be compared to the NWI maps. If the official determination by the U.S. Army Corps of Engineers indicates that jurisdictional wetlands will be affected/altered by the proposed activity, the applicant for the land disturbance permit must first obtain a permit from the U.S. Army Corps of Engineers for the project prior to Fayette County issuing its Land Disturbance permit. The NWI map does not represent all of the boundaries of jurisdictional wetlands within Fayette County and cannot serve as a substitute for a

delineation of wetland boundaries by the U.S. Army Corps of Engineers, as required by Section 404 of the Clean Water Act, as amended. No local government action under this ordinance relieves the land owner from federal or state permitting requirements.(Ord. No. 89-04, 4-5-89; Ord. No. 2000-12)***(Amended 12/5/01)***

Secs. 8-91 – 8-110. Reserved.

DIVISION 2. STATUTORY AUTHORIZATION; FINDINGS OF FACT; PURPOSE OBJECTIVES

Sec. 8-111. Statutory authorization.

The legislature of the state has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Sec. 8-112. Findings of fact.

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

(b) These flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

Sec. 8-113. Statement of purpose.

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

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

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

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

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

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

Sec. 8-114. Objectives.

The objectives of this article are:

(1) To protect human life and health;

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

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

(4) To minimize prolonged business interruptions;

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

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

(7) To ensure that potential homebuyers are notified that property is in a flood area.

Secs. 8 - 115 – 8 - 130. Reserved.

DIVISION 3. ADMINISTRATION

Sec. 8 - 131. Designation of planning commission and county engineer.

The planning commission and the county engineer are hereby appointed to administer and implement the provisions of this article.

Sec. 8 - 132. Permit procedures.

Application for a development permit shall be made to the county building and zoning departments on forms furnished by such departments prior to any development activities, and may include, but not be limited to, the following: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials; drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;

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

(3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in section 8-152(2);

(4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and

(5) The provisions of a flood elevation or floodproofing certification after the lowest floor is completed or after placement of the horizontal structural members of the lowest floor. Upon establishment of the lowest floor elevation, or floodproofing by whatever construction means, whichever is applicable, it shall be the duty of the permit holder to submit to the county building and zoning departments a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. Such certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building, such certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The county building and zoning departments and the county engineer shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make such corrections required hereby shall be cause to issue a stop-work order for the project.

Sec. 8-133. Duties and responsibilities of zoning administrator and county engineer.

The duties of the county zoning administrator and the county engineer shall include, but not be limited to:

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

(2) Advise the permitee that additional federal or state permits may be required, and if specific federal or state permits are known, require that copies of such permits be provided and maintained on file with the development permit. (See section 8-90.)

(3) Notify adjacent communities and the state department of natural resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

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

(5) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with section 8 - 132(5). Certification of as-built elevations will be required to be furnished by either a registered surveyor or professional engineer for any development or structures allowed by the county building and zoning departments in the areas of compensating cut and fill, which may be approved for irregularly shaped areas of the one-hundred year flood plain.

(6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed, in accordance with section 8 - 132(5).

(7) When floodproofing is utilized for a particular structure, the county building and zoning departments and the county engineer shall obtain certification from a registered professional engineer or architect. Expenses shall be born by the builder, owner, or developer of the structure.

(8) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the county engineer shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this division.

(9) When base flood elevation data has not been provided in accordance with section 8 - 83, then the county engineer shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of division 4.

(10) All records pertaining to the provisions of this article shall be maintained in the office of the county building and zoning departments and the county engineer and shall be open for public inspection.

Sec. 8-134. Variance procedures.

(a) *Planning commission generally.* The planning commission as established by the county shall hear and decide appeals and requests for variances from the requirements of this article.

(b) *Allegation.* The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the county in the enforcement or administration of this article.

(c) *Who may appeal.* Any person aggrieved by the decision of the county planning commission or any taxpayer may appeal such decision to the board of commissioners.

(d) *Historic structures.* Variances may be issued for the repair or rehabilitation of historic structures (see definition) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(e) *Factors considered.* In passing upon such applications, the county planning commission shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article; and:

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

(2) The danger to life and property due to flooding or erosion damage;

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

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

(5) The necessity to the facility of a waterfront location, where applicable;

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

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

(8) The relationship of the proposed use to the comprehensive plan and flood plain management program for that 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 flood waters and the effects of wave action, if applicable, expected at the site; and

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

(f) *Conditions may be attached.* Upon consideration of the factors listed above and the purposes of this article, the county planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

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

(h) *Conditions for variances.*

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

(2) Variances shall only be issued upon:

a. A showing of good and sufficient cause;
b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
c. A determination that the granting of a variance will not result in increased flood heights, additional threats to the public safety, or extraordinary public expense, nor create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(4) The county planning commission shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

(Ord. No. 90 - 02, 2-22-90)

Sec. 8-135 – 8-150. Reserved.

DIVISION 4. FLOOD HAZARD REDUCTION

Sec. 8-151. General standards.

In all areas of special flood hazard the following provisions are required:

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

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

(4) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.

(5) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.

(6) Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(7) Any alteration, repair, reconstruction, or improvements to a structure which is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article.

(8) Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities, shall be designed and/or located so as to prevent water from entering or accumulation within the components during conditions of flooding.

(9) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.

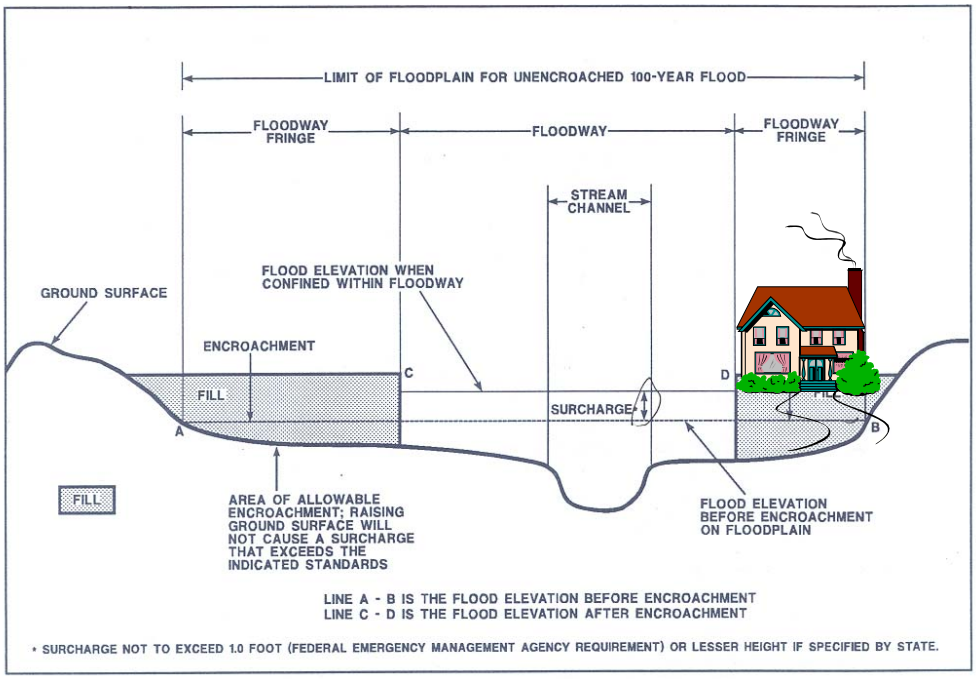
(10) Any alteration, repair, reconstruction or improvement to a building which is not in compliance with the provisions of this article shall be undertaken only if the nonconformity is not furthered, extended, or replaced.

(Ord. No. 88-01, 2-11-88; Ord. No. 90-02, 2-22-90)

Sec. 8-152. Specific standards.

In all areas of special flood hazard where base flood elevation data has been provided, as set forth in section 8 - 83, or section 8 - 133 (11), the following provisions are required:

(1) *Residential construction.* New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated no lower than three (3) feet above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwater shall be provided in accordance with standards of paragraph (5). (Ord. No. 2000-07)



In order to clarify the above standards please refer to the picture above.

a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

   1. Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

   2. The bottom of all openings shall be no higher than one (1) foot above grade; and:

   3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

b. Electrical, plumbing, and other utility connections are prohibited below the base flood elevation;

c. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance

equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

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

(2) *Nonresidential construction.* New construction or substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated no lower than three (3) feet above the level of the base flood elevation or, together with attendant utility sanitary facilities, be floodproofed so that below the base flood level the structure is watertight and with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in section 8 – 132 (3). (Ord. No. 2000-07)

(3) *Standards for manufactured homes and recreational vehicles.*

a. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or
subdivisions, must meet all the requirements for new construction, including elevation and anchoring.

b. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

1. The lowest floor of the manufactured home is elevated no lower than three (3) feet above the level of the base flood elevation. (Ord. No. 2000-07)
2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than thirty-six (36) inches in height above grade.
3. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
4. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, any manufactured home placed or substantially improved must meet the standards of paragraph (3)(b)(1) and (3) above.

c. All recreational vehicles placed on sites must either:

1. Be fully licensed and ready for highway use; or

2. The recreational vehicle must meet all requirements for new construction, including anchoring and elevation requirements of paragraph (3)(a) or (b), above. A recreational vehicle is ready for highway use of 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 structures.

(4) *Floodways.* Located within areas of special flood hazard established in section 8 - 83 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and have erosion potential, the following provisions shall apply:

a. Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.

b. If paragraph (4)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this division.

c. Prohibit the placement of manufactured homes, except in an existing manufactured homes park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of section 8 - 151(9), and the elevation standards of section 8 - 152(1) and the encroachment standards of section 8 - 152(4)(a) are met.

(5) *Elevated buildings.* New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.
(Ord. No. 88-01, 2-11-88; Ord. No. 90-02, 2-22-90)

Sec. 8 - 153. Standards for streams without established base elevations and/or floodways.

Located within the areas of special flood hazard established in section 8 - 83, where small streams exist but where no base flood data has been provided or where no floodways have been provided, the following provisions apply:

(1) The person(s) wanting to develop in these special flood hazard areas must use the methods outlined in the latest edition of Managing Floodplain Development in Approximate Zone A Areas to calculate where the 100-year flood is on their property. The person(s) will then also be required to complete elevation certificates for new construction and substantial improvement of structures. The structure must be elevated at least 3 feet above the calculated 100-year elevation. (Ord. No. 2000-07)

(2) New construction or substantial improvements of structures shall be elevated or floodproofed in accordance with elevations established in accordance with section 8 - 133.

Sec. 8 - 154. Standards for subdivision proposals.

(a) *Flood damage generally.* All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) *Utilities.* All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) *Drainage.* All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(d) *Base flood elevation data.* Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty (50) lots or five (5) acres.

(e) *Development adjacent to flood fringe areas.* In all zoning districts, a minimum of 1.0 acre or fifty (50) percent of the lot area as established by the applicable zoning district, whichever is greater, shall be above the 100-year flood elevation.

(Ord. No. 90-02, 2-22-90; Ord. No. 93-12, § 1, 12-9-93)

Sec. 8 - 155. Standards for areas of shallow flooding (AO zones).

Located within the areas of special flood hazard established in section 8 - 83 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

(1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade.

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

a. Have the lowest floor, including basement, elevated to the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest

floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade; or

b. Together with attendant utility and sanitary facilities be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.