

ARTICLE VII. - FLOOD DAMAGE PREVENTION^[2]

DIVISION 1. - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

Sec. 5-70. - Statutory authorization.

The Legislature of the State of Alabama has in Title 11, Chapter 19, Sections 1—24, Chapter 45, Sections 1-1-1, Chapter 52, Sections 1—84, and Title 41, Chapter 9, Section 166 of the Code of Alabama, 1975, authorized local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the city council of Citronelle Alabama, does ordain as follows.

(Ord. No. 1237, art. 1, § A, 6-11-09)

Sec. 5-71. - Findings of fact.

- (1) The flood hazard areas of Citronelle, Alabama, are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- (2) These flood losses are caused by the occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

(Ord. No. 1237, art. 1, § B, 6-11-09)

Sec. 5-72. - 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) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (2) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- (3) Control filling, grading, dredging and other development which may increase flood damage or erosion;
- (4) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and
- (5) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters.

(Ord. No. 1237, art. 1, § C, 6-11-09)

Sec. 5-73. - Objectives.

The objectives of this article are:

- (1) To protect human life and health;

- (2) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines and bridges located in floodplains;
- (3) 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 flood blight areas;
- (4) To minimize expenditure of public money for costly flood control projects;
- (5) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (6) To minimize prolonged business interruptions; and
- (7) To insure that potential home buyers are notified that property is in a flood area.

(Ord. No. 1237, art. 1, § D, 6-11-09)

DIVISION 2. - GENERAL PROVISIONS

Sec. 5-74. - Lands to which this article applies.

This article shall apply to all areas of special flood hazard within the jurisdiction of Citronelle, Alabama.

(Ord. No. 1237, art. 2, § A, 6-11-09)

Sec. 5-75. - Basis for area of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS), dated April 13, 2009, with accompanying maps and other supporting data and any revision thereto, are adopted by reference and declared a part of this article. For those land areas acquired by a municipality through annexation, the current effective FIS and data for (*unincorporated county*) are hereby adopted by reference. Areas of special flood hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in a FIS. (*Identify specific areas here*.)

(Ord. No. 1237, art. 2, § B, 6-11-09)

Sec. 5-76. - 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.

(Ord. No. 1237, art. 2, § C, 6-11-09)

Sec. 5-77. - Compliance.

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

(Ord. No. 1237, art. 2, § D, 6-11-09)

Sec. 5-78. - Abrogation and greater restrictions.

This article is not intended to repeal, abrogate, or impair any existing ordinance, easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Ord. No. 1237, art. 2, § E, 6-11-09)

Sec. 5-79. - 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. 1237, art. 2, § F, 6-11-09)

Sec. 5-80. - 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; 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 City of Citronelle 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.

(Ord. No. 1237, art. 2, § G, 6-11-09)

Sec. 5-81. - Penalties for violation.

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 City of Citronelle from taking such other lawful actions as is necessary to prevent or remedy any violation.

(Ord. No. 1237, art. 2, § H, 6-11-09)

Sec. 5-82. - Savings clause.

If any section, subsection, sentence, clause, phrase, or word of this article is for any reason held to be noncompliant with 44 Code of Federal Regulations 59-78, such decisions shall not affect the validity of the remaining portions of this article.

(Ord. No. 1237, art. 2, § I, 6-11-09)

Sec. 5-83. - Variance procedures.

- (a) The zoning board of adjustments as established by Citronelle shall hear and decide requests for appeals or

- variance from the requirements of this article.
- (b) The zoning board of adjustments shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the building inspector in the enforcement or administration of this article.
 - (c) Any person aggrieved by the decision of the zoning board of adjustments may appeal such decision to the circuit court as provided by law.
 - (d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the variance is the minimum to preserve the historic character and design of the structure.
 - (e) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this section are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.
 - (f) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
 - (g) In reviewing such requests, the zoning board of adjustments shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this article.
 - (h) Conditions for variances:
 - (1) A variance shall be issued only when there is:
 - (i) A finding of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship; 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 nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - (2) The provisions of this article are minimum standards for flood loss reduction, therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and, in the instance of a historic structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - (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 of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
 - (4) The building inspector shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency and the Alabama Department of Economic and Community Affairs/Office of Water Resources upon request.
 - (i) Upon consideration of the factors listed above and the purposes of this article, the zoning board of adjustments may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

(Ord. No. 1237, art. 5, 6-11-09)

Sec. 5-84. - 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 it's 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 load-bearing wall other than a firewall. Any walled and roofed addition which is connected by a firewall or is separated by an independent perimeter load-bearing wall shall be considered new construction.

Appeal means a request for a review of the building inspector's interpretation of any provision of this article.

Area of shallow flooding means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) feet, and/or 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 floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, areas of special flood hazard shall be those designated by the local community and referenced in section 5-75.

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

Basement means that portion of a building having its floor subgrade (below ground level) on all sides.

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

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, drilling operations, and storage of equipment or materials.

Elevated building means a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, pilings, posts, columns, piers, or shear walls.

Existing construction means any structure for which the "start of construction" commenced before June 11, 2009 (i.e., the effective date of the first floodplain management code or ordinance adopted by the community as a basis for that community's participation in the National Flood Insurance Program (NFIP)).

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 final site grading or the pouring of concrete pads) is completed before June 11, 2009 (i.e., the effective date of the first floodplain management regulations adopted by a community).

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

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

- a. The overflow of inland or tidal waters; or
- b. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Hazard Boundary Map (FHBM) means an official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been designated as zone A.

Flood Insurance Rate Map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated the areas of special flood hazard and/or risk premium zones applicable to the community.

Flood insurance study/flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide and/or flood-related erosion hazards.

Floodplain means any land area susceptible to being inundated by water from any source.

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.

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. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding, and ship repair facilities. The term does not include long-term storage or related manufacturing facilities.

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

Historic structure means any structure that is:

- a. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
 1. By an approved state program as determined by the Secretary of the Interior; or
 2. Directly by the Secretary of the Interior in states without approved programs.

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, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of this Code.

Manufactured home means a building, transportable in one (1) or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

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 floodplain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929 or other datum.

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

New construction means any structure (see definition) for which the start of construction commenced after June 11, 2009, and includes any subsequent improvements to the structure (i.e., the effective date of the first floodplain management ordinance adopted by the community as a basis for community participation in the (NFIP)) and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after June 11, 2009 (i.e., the effective date of the first floodplain management regulations adopted by a community).

Recreational vehicle means a vehicle which is:

- a. Built on a single chassis;
- b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
- c. Designed to be self-propelled or permanently towable by a light duty truck; and
- d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Remedy a violation means to bring the structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

Repetitive loss means flood-related damages sustained by a structure on two (2) separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five (25) percent of the market value of the structure before the damages occurred.

Section 1316. No new flood insurance shall be provided for any property which the administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body, to be in violation of state or local laws, regulations or ordinances which are intended to discourage or otherwise restrict land development or occupancy in floodprone areas.

Start of construction means the date the development 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 the structure such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation, and includes the placement of a manufactured home on a foundation. Permanent construction does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main structure. (NOTE: Accessory structures are not exempt from any ordinance requirements.) 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, a manufactured home, a gas or liquid storage tank.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. Substantial damage also means flood-related damages sustained by a structure on two (2) separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five (25) percent of the market value of the structure before the damages occurred. (Optional)

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred repetitive loss or substantial damage, regardless of the actual repair work performed. The market value of the building should be:

- (a) The appraised value of the structure prior to the start of the initial repair or improvement; or
- (b) In the case of damage, the value of the structure prior to the damage occurring.

This term includes structures which have incurred substantial damage, regardless of the actual amount of 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 either:

- (a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (b) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, 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 is a grant of relief from the requirements of this article which permits construction in a manner otherwise prohibited by this article.

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in the Code of Federal Regulations (CFR) 44, § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) and corresponding parts of this article is presumed to be in violation until such time as that documentation is provided.

(Ord. No. 1237, art. 6, 6-11-09)

DIVISION 3. - ADMINISTRATION

Sec. 5-85. - Designation of article administrator.

The building inspector is hereby appointed to administer and implement the provisions of this article.

(Ord. No. 1237, art. 3, § A, 6-11-09)

Sec. 5-86. - Permit procedures.

Application for a development permit shall be made to the building inspector on forms furnished by the community prior to any development activities, and may include, but not be limited to, the following: Plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, fill placement, storage of materials or equipment, and drainage facilities.

Specifically, the following information is required:

- (1) *Application stage.*
 - (a) Elevation in relation to mean sea level (or highest adjacent grade) of the regulatory lowest floor level, including basement, of all proposed structures;
 - (b) Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;
 - (c) Design certification from a registered professional engineer or architect that any proposed nonresidential floodproofed structure will meet the floodproofing criteria of subsections 5-89(2) and 5-92(2);
 - (d) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development.
- (2) *Construction stage.* For all new construction and substantial improvements, the permit holder shall provide to the building inspector an as-built certification of the regulatory floor elevation or floodproofing level using appropriate FEMA elevation or floodproofing certificate immediately after the lowest floor or floodproofing is completed. When floodproofing is utilized for nonresidential structures, said 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 these certifications shall be at the permit holder's risk. The building inspector shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

(Ord. No. 1237, art. 3, § B, 6-11-09)

Sec. 5-87. - Duties and responsibilities of the administrator.

Duties of the building inspector shall include, but shall not be limited to:

- (1) Review all development permits to assure that the permit requirements of this article have been satisfied; and assure that sites are reasonably safe from flooding.
- (2) Review proposed development to assure that all necessary permits have been received from 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. Require that copies of such permits be provided and maintained on file.
- (3) When base flood elevation data or floodway data have not been provided in accordance with section 5-75, then the building inspector shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other sources in order to administer the provisions of division 4.
- (4) Verify and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the regulatory floor level, including basement, of all new construction or substantially improved structures in accordance with subsection 5-86(2).
- (5) Verify and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been floodproofed, in accordance with subsections 5-89(2) and 5-92(2).
- (6) When floodproofing is utilized for a structure, the building inspector shall obtain certification of design criteria from a registered professional engineer or architect in accordance with subsections 5-86(1)(c) and 5-89(2) or 5-92(2).
- (7) Notify adjacent communities and the Alabama 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 (FEMA), and the Alabama Department of Economic and Community Affairs/Office of Water Resources/NFIP State Coordinator's Office.
- (8) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to the FEMA and state to ensure accuracy of community flood maps through the letter of map revision process. Assure flood-carrying capacity of any altered or relocated watercourse is maintained.
- (9) Where interpretation is needed as to the exact location of 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 building inspector shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (10) All records pertaining to the provisions of this article shall be maintained in the office of the building inspector and shall be open for public inspection.

(Ord. No. 1237, art. 3, § C, 6-11-09)

DIVISION 4. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 5-88. - General standards.

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

- (1) New construction and substantial improvements of existing structures shall be anchored to prevent flotation and lateral movement of the structure;
- (2) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- (3) New construction and substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
- (4) Elevated buildings. All new construction and substantial improvements of existing structures that include any fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood-resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters.
 - (a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - (i) 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;
 - (ii) The bottom of all openings shall be no higher than one (1) foot above grade; and
 - (iii) Openings may be equipped with screens, louvers, valves and other coverings and devices provided they permit the automatic flow of floodwater in both directions.
 - (b) So as not to violate the "lowest floor" criteria of this article, the unfinished or flood-resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and
 - (c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
- (5) All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) Manufactured homes shall be anchored to prevent flotation, collapse, and 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.
- (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (8) 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 floodwaters.
- (9) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (10) Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this article, shall be undertaken only if the nonconformity is not furthered, extended or replaced.

(Ord. No. 1237, art. 4, § A, 6-11-09)

Sec. 5-89. - Specific standards.

In all areas of special flood hazard designated as A1-30, AE, AH, A (with estimated BFE), the following provisions are required:

- (1) *New construction and substantial improvements.* Where base flood elevation data are available, new construction and substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than one (1) foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 5-88(4), elevated buildings.
- (2) *Nonresidential construction.* New construction and substantial improvement of any nonresidential structure located in A1-30, AE, or AH zones, may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one (1) foot above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in subsection 5-87(6).
- (3) *Standards for manufactured homes and recreational vehicles.* Where base flood elevation data are available:
 - (a) All manufactured homes placed and substantially improved on:
 - (i) Individual lots or parcels;
 - (ii) In new or substantially improved manufactured home parks or subdivisions;
 - (iii) In expansions to existing manufactured home parks or subdivisions; or
 - (iv) On a site in an existing manufactured home park or subdivision where a manufactured home has incurred substantial damage as the result of a flood, must have the lowest floor including basement elevated no lower than one (1) foot above the base flood elevation.
 - (b) Manufactured homes placed and substantially improved in an existing manufactured home park or subdivision may be elevated so that either:
 - (i) The lowest floor of the manufactured home is elevated no lower than one (1) foot above the level of the base flood elevation; or
 - (ii) Where no base flood elevation exists, the manufactured home chassis and supporting equipment is supported by reinforced piers or other foundation elements of at least equivalent strength and is elevated to a maximum of sixty (60) inches (five (5) feet) above grade.
 - (c) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (Refer: section 5-88.)
 - (d) All recreational vehicles placed on sites must either:
 - (i) Be on the site for fewer than one hundred eighty (180) consecutive days, fully licensed and ready for highway use if it is licensed, on it's wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached

structures or additions; or

- (ii) The recreational vehicle must meet all the requirements for new construction, including the anchoring and elevation requirements of subsections (3)(a), and (c), above.

(4) *Standards for subdivisions.*

- (a) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (b) 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) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- (d) Base flood elevation data shall be provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty (50) lots or five (5) acres, whichever is the lesser.

(Ord. No. 1237, art. 4, § B, 6-11-09)

Sec. 5-90. - Floodways.

- (1) *Floodway.* Located within areas of special flood hazard established in section 5-75, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:
- (a) The community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one (1) foot at any point;
- (b) Encroachments are prohibited, including fill, new construction, substantial improvements or other development within the adopted regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in any increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.
- (c) 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, fulfills the requirements for such revisions as established under the provisions of Section 65.12 [of the National Flood Insurance Program regulations], and receives the approval of the administrator.
- (d) Require, until a regulatory floodway is designated, 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 (1) foot at any point within the community.
- (e) Only if subsection (b), (c) or (d), above are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of division 4.

(Ord. No. 1237, art. 4, § C, 6-11-09)

Sec. 5-91. - Building standards for streams without established base flood elevations (approximate A zones).

Located within the areas of special flood hazard established in section 5-75, where streams exist but no base flood data has been provided (approximate A zones), the following provisions apply:

- (1) When base flood elevation data or floodway data have not been provided in accordance with section 5-75, then the building inspector shall obtain, review, and reasonably utilize any scientific or historic base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of division 4. Only if data are not available from these sources, then the following provisions of subsections (2) and (4) shall apply:
- (2) No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty-five (25) feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge. (Optional.)
- (3) All development in zone A must meet the requirements of section 5-88, and subsections 5-89(1) through (4).
- (4) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. Also, in the absence of a base flood elevation, a manufactured home must also meet the elevation requirements of subsection 5-89(3)(b)(ii) in that the structure must be elevated to a maximum of sixty (60) inches (five (5) feet). (Optional) Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 5-88(4), elevated buildings. The building inspector shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(Ord. No. 1237, art. 4, § D, 6-11-09)

Sec. 5-92. - Standards for areas of shallow flooding (AO zones).

Areas of special flood hazard established in section 5-75, may include designated "AO" shallow flooding areas. These areas have base flood depths of one (1) to three (3) feet above ground, with no clearly defined channel. The following provisions apply:

- (1) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map (FIRM) above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 5-88(4), elevated buildings. The building inspector shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (2) New construction and the substantial improvement of a nonresidential structure may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to the specified FIRM flood level or two (2) feet (if no map elevation is listed), above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components

having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in subsection 5-86(1)(c) and (2).

- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(Ord. No. 1237, art. 4, § E, 6-11-09)

Secs. 5-93, 5-94. - Reserved.