ARTICLE II. - FLOOD PREVENTION 2

Footnotes:

Editor's note— Ord. No. 2009-01, adopted Jan. 5, 2009, amended Art. II in its entirety to read as set out herein. Former Art. II, §§ 5-20—5-31, 5-40—5-44, and 5-50—5-55, pertained to similar subject matter and derived from Ord. No. 1993-12, arts. 1—5, adopted June 21, 1993; Ord. No. 1998-02, arts. 1—6, adopted Jan. 21, 1998; and Ord. No. 2007-29, adopted July 2, 2007.

DIVISION 1. - GENERALLY

Sec. 5-20. - Statutory authorization.

The legislature of the State of Alabama has in Title 11, Chapter 19, Sections 1—24, 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 Counsel of Daphne, Alabama, does ordain as follows:

(Ord. No. 2009-01, art. 1, § A, 1-5-09)

Sec. 5-21. - Findings of fact.

- (a) The flood hazard areas of Daphne, 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.
- (b) 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. 2009-01, art. 1, § B, 1-5-09)

Sec. 5-22. - 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 condition in specific areas by provisions designed to:

- 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. 2009-01, art. 1, § C, 1-5-09)

Sec. 5-23. - 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, streets 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. 2009-01, art. 1, § D, 1-5-09)

Sec. 5-24. - Lands to which this article applies.

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

(Ord. No. 2009-01, art. 2, § A, 1-5-09)

Sec. 5-25. - Basis for area of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in its DFIRM and Flood Insurance Study (FIS), dated July 17, 2007, with accompanying maps and other supporting data and 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 ("Baldwin 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.

(Ord. No. 2009-01, art. 2, § B, 1-5-09)

Sec. 5-26. - 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. 2009-01, art. 2, § C, 1-5-09)

Sec. 5-27. - 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. 2009-01, art. 2, § D, 1-5-09)

Sec. 5-28. - 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.

Sec. 5-29. - 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.

Sec. 5-30. - 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 consideration. 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 Daphne or by any officer or employee thereof for any flood damage that result from reliance on this article or any administrative decision lawfully made there under.

Sec. 5-31. - 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 one hundred dollars (\$100.00) or imprisoned for not more than one (1) day, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such a violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Daphne from taking such other lawful actions as is necessary to prevent or remedy any violation.

Sec. 5-32. - Saving 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 Regulation 59-78, such decision shall not affect the validity of the remaining portions of this article.

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 fire wall. Any walled and roofed addition which is connected by a fire wall 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 official'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 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 5-25.

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

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

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 loading 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. (See Structure)

Coastal high hazard area means the area subject to high velocity waters caused by, but not limited to, hurricane wave wash. The area is designated on a FIRM as Zone V1-30, VE or V.

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 material.

Elevated building means a non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground by means of solid foundation perimeter walls, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.

Existing construction means any structure for which the start of construction commenced before February 21, 1975 [(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 home 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 February 21, 1975 [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 partial or complete inundation of normally dry land areas from:

The overflow of inland or tidal waters; or

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

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

Flood insurance rate map (FIRM) means an official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

Flood insurance study means the official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.

Floodplain means any land area susceptible to flooding.

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 can not 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, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

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

Historic structure means any structure that is:

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;

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

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

Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:

By an approved state program as determined by the Secretary of the Interior, or

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 diverts 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 areas 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 provision of this Code.

Manufactured home means a building, transportable in one 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 includes park trailer, 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.

Mean sea level means the average height of the sea for all stages of the tides. 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 February 21, 1975, 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 February 21, 1975 [i.e., the effective date of the first floodplain management regulations adopted by a community].

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.

Recreational vehicle means a vehicle which is:

Built on a single chassis;

Four hundred (400) square feet or less when measured at the largest horizontal projection;

Designed to be self-propelled or permanently towable by a light duty truck;

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

Sand dunes means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

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 date. The actual start means the first placement of permanent construction of the structure such as the pouring of slabs or footing, 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, footing, piers or foundation 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 its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. Substantial damage 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.

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 (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) 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: (1) 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; (2) 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 flood plain management regulation. A structure or other development without the elevation certificate, other certification, or other evidence of compliance required in the Code of Federal Regulations (CFR, 44, Sec 60.3(b)(5), (c)(4), (c)(10), (d)(3), (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. 2009-01, art. 6, 1-5-09)

Secs. 5-34—5-45. - Reserved.

DIVISION 2. - ADMINISTRATION

Sec. 5-46. - Designation of article administrator.

Building official is hereby appointed to administer and implement the provisions of this article.

(Ord. No. 2009-01, art. 3, § A, 1-5-09)

Sec. 5-47. - Permit procedures.

Applications for a development permit shall be made to the building official 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;
 - Design certification from a registered professional engineer or architect that any proposed nonresidential floodproofed structure will meet the floodproofing criteria of subsections 5-52(2) and 5-54(2);
 - d. Design certification from a registered professional engineer or architect that any new construction or substantial improvement placed in a coastal high hazard area will meet the criteria of subsection 5-55(5); and
 - e. 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 administrator 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. Where a structure is subject to the provisions applicable to coastal high hazard areas and after placement of the lowest horizontal structural members. Any regulatory floor certification made relative to mean sea level 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 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 official shall review the above referenced certification data submitted. Deficiencies detected by such a 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. 2009-01, art. 3, § B, 1-5-09)

Sec. 5-48. - Duties and responsibilities of the administrator.

Duties of the building official 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 that the site is reasonable 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 USC 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 5-25, then the building official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from the federal, state or other sources in order to administer the provisions of this division.

- (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 5-47(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 5-52(2) and 5-54(2).
- (6) When floodproofing is utilized for a structure, the building official shall obtain certification of design criteria from a registered professional engineer or architect in accordance with subsection 5-47(1)c. and subsections 5-52(2) or 5-54(2).
- (7) Obtain design certification from a registered professional engineer or architect that any new construction or substantial improvement placed in a coastal high hazard area will meet the criteria of subsection 5-55(5).
- (8) 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 of Affairs (ADECA) and the Office of Water Resources (OWR).
- (9) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA and ADECA/OWR 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.
- (10) 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 official 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.
- (11) All records pertaining to the provision of this article shall be maintained in the office of the building official and shall be open for public inspection.

(Ord. No. 2009-01, art. 3, § C, 1-5-09)

Secs. 5-49, 5-50. - Reserved.

DIVISION 3. - PROVISION FOR FLOOD HAZARD REDUCTION

Sec. 5-51. - 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, collapse 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 or 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 floodwater. (Not applicable in coastal high hazard areas)

- Designs 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 not higher than one (1) foot above grade; and
 - iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that 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 vehicle, 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, 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.
- (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.
- (8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharges from the systems into floodwater.
- (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. 2009-01, art. 4, § A, 1-5-09)

Sec. 5-52. - 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 or substantial improvement of any structure or manufactured home shall have the lowest floor, including the basement, elevated not lower than one (1) foot above the base flood elevation. Should the 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 5-51(4), "elevated building".
- (2) Nonresidential construction. New construction or the 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 standard of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in subsection 5-48(6).

- (3) Standards for manufactured homes and recreational vehicles. Where base flood elevation data are available:
 - a. All manufactured homes placed or 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.
 - (iv) On a site in an existing manufactured home park or subdivision where a manufactured home has incurred substantial damages 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 or 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.
 - (ii) The manufactured home chassis is elevated and 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.
 - c. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (Refer to section 5-51 above)
 - d. All recreational vehicles places on sites must either:
 - (i) Be on the site for fewer than one hundred eighty (180) consecutive days, fully licensed, on its 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 subsection (3)a. and c., above.
- (4) Floodway. Located within areas of special flood hazard established in section 5-25 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. Encroachments are prohibited, including fill, new construction, substantial improvements or other development within the 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.
 - b. 44 CFR60.3 "Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than [one] foot at any point within the City."

c. Only if subsection (4)a. above is satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of division 3.

(Ord. No. 2009-01, art. 4, § B, 1-5-09)

Sec. 5-53. - Building standard for streams without established base flood elevation and/or floodway (A-Zones).

Located within the areas of special flood hazard established in section 5-25, where streams exist but no base flood data have been provided (A-Zones), or where base flood data have been provided but a floodway has not been delineated, the following provisions apply:

- (1) When base flood elevation data or floodway data have not been provided in accordance with section 5-25, then the building official shall obtain, review and reasonable utilize any scientific or historic base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provision of division 3. Only if data are not available from these sources, then the following provisions (2) and (3) 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.
- (3) 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 areas (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 5-51(4), "Elevated buildings".

Building official shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(Ord. No. 2009-01, art. 4, § C, 1-5-09)

Sec. 5-54. - Standards for areas of shallow flooding (A-O Zones).

Areas of special flood hazard established in section 5-52, 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 the basement, shall be elevated at least three feet (3) above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 5-51(4), "Elevated buildings".
 - Building official shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (2) New construction or 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 plus two (2) feet,

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 subsections 5-47(1)c. and (2).

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

(Ord. No. 2009-01, art. 4, § D, 1-5-09)

Sec. 5-55. - Coastal high hazard areas (V-Zones).

Located within the areas of special flood hazard established in section 5-25, are areas designated as coastal high hazard areas (V-Zones). These areas have special flood hazards associated with wave action and storm surge; therefore, the following provisions shall apply:

- (1) All new construction and substantial improvements of existing structures shall be located landward of the reach of the mean high tide;
- (2) All new construction and substantial improvements of existing structures shall be elevated on piles, columns, or shear walls parallel to the flow of water so that the bottom of the lowest supporting horizontal structural bottom of the lowest supporting horizontal structural member (excluding pilings or columns) is located no lower than one (1) foot above the base flood elevation level. All space below the lowest supporting member shall remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with subsection (6) below;
- (3) All new construction and substantial improvements of existing structures shall be securely anchored on pilings, columns, or shear walls; and
- (4) All pile and column foundations and the structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the combined effects of wind and water loads acting simultaneously on all building components, both (non-structural and structural). Water loading values shall equal or exceed those of the base flood. Wind loading values shall be in accordance with the most current edition of the International Building Codes.
- (5) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in full compliance with the provisions contained in subsections (2), (3), and (4) herein.
- (6) All space below the lowest horizontal supporting member must remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action without causing structural damage to the supporting foundation or elevated portion of the structure. The following design specifications are allowed:
 - a. No solid walls shall be allowed.
 - b. Material shall consist of lattice or mesh screening only.
 - c. If aesthetic lattice work or screening is utilized, any enclosed space shall not be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
- (7) Prior to construction, plans for any structure using lattice or decorative screening must be submitted to the building official for approval;

- (8) Any alteration, repair, reconstruction or improvement to any structure shall not enclose the space below the lowest floor except with lattice work or decorative screening, as provided in this section.
- (9) There shall be no fill material used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The building official shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
 - Particle composition of fill material does not have a tendency for excessive natural compaction;
 - b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
 - c. Slope of fill will not cause wave run-up or ramping.
- (10) There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage;
- (11) Prohibit the placement of manufactured homes (mobile 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 and elevation standards of this section are met.

(Ord. No. 2009-01, art. 4, § E, 1-5-09)

Sec. 5-56. - 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 subdivisions 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 less.

(Ord. No. 2009-01, art. 4, § F, 1-5-09)

Sec. 5-57. - Reserved.

DIVISION 4. - VARIANCE PROCEDURES

Sec. 5-58. - Variance procedures.

- (a) The board of adjustments as established by the city council shall hear and decide requests for appeals or variance from the requirements of this article.
- (b) The board of adjustments shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the city council in the enforcement or administration of this article.

- (c) Any person aggrieved by the decision of the building official may appeal such decision to the circuit court, as provided by the Code of Alabama 1975.
- (d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not prelude 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) Variance may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of the article 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 request, the board of adjustments shall consider all technical evaluation, relevant factors, and all standards specified in this and other sections of this article.
- (h) Condition for variances:
 - (1) A variance shall be issued only when there is:
 - (2) a. A finding of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship; and
 - c. 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.
 - (3) The provisions of this article are minimum standards for flood loss reductions, therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon 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.
 - (4) 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.
 - (5) The building official shall maintain the records of all appeal actions and report any variances to the federal and state emergency management agencies upon request.
- (i) Upon consideration of the factors listed above and the purposes of this article, the 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. 2009-01, art. 5, 1-5-09)

Secs. 5-59, 5-60. - Reserved.