

ARTICLE III. - FLOOD DAMAGE PREVENTION<sup>[3]</sup>

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

## Sec. 42-151. - Statutory authorization.

Whereas, the legislature of the State of Alabama has in Code of Ala. 1975 § 11-52-1-84 and § 41-9-166, authorized local government units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry, the City of Orange Beach does ordain as follows.

(Ord. No. 2005-982, art. 1(A), 5-17-2005; Ord. No. 2005-934, Art. 1(A), 10-4-2005)

## Sec. 42-152. - Findings of fact.

- (a) The flood hazard areas of Orange Beach are subject to periodic inundation, which results in hazards to property, health and safety and may disrupt commerce and governmental services. Also, this inundation can result in extraordinary public expenditures for flood protection and relief and impairment of the tax base 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, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

(Ord. No. 2005-982, art. 1(B), 5-17-2005; Ord. No. 2005-934, Art. 1(B), 10-4-2005)

## Sec. 42-153. - Statement of purpose.

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

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

(Ord. no. 2005-982, art. 1(C), 5-17-2005; Ord. No. 2005-934, Art. 1(C), 10-4-2005)

## Sec. 42-154. - Objectives.

The objectives of this division are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

- (4) To minimize business interruptions;
- (5) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in floodplains;
- (6) to help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize flood blight areas;
- (7) to ensure that potential homebuyers are notified that property is in a flood hazard area.

(Ord. No. 2005-982, art. 1(D), 5-17-2005; Ord. No. 2005-934, Art. 1(D), 10-4-2005)

Secs. 42-155—42-169. - Reserved.

## DIVISION 2. - GENERAL PROVISIONS

Sec. 42-170. - Lands to which this division applies.

This division shall apply to all areas of special flood hazard within the jurisdiction of Orange Beach.

(Ord. No. 2005-982, art. 2(A), 5-17-2005; Ord. No. 2005-934, Art. 2(A), 10-4-2005)

Sec. 42-171. - Basis for areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in its Baldwin County Flood Insurance Study preliminarily dated July 31, 2017, with accompanying maps and other supporting data and any revisions thereto, are adopted by reference and declared to be a part of this division. 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 an FIS.

(Ord. No. 2005-982, art. 2(B), 5-17-2005; Ord. No. 2005-934, Art. 2(B), 10-4-2005; Ord. No. 2017-1266, § 1, 8-15-2017)

Sec. 42-172. - Establishment of floodplain development permit.

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

(Ord. No. 2005-982, art.2(C), 5-17-2005; Ord. No. 2005-934, Art. 2(C), 10-4-2005)

Sec. 42-173. - Compliance.

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

(Ord. No. 2005-892, art. 2(D), 5-17-2005; Ord. No. 2005-934, Art. 2(D), 10-4-2005)

Sec. 42-174. - Abrogation and greater restrictions.

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

(Ord. No. 2005-892, art. 2(E), 5-17-2005; Ord. No. 2005-934, Art. 2(E), 10-4-2005)

## Sec. 42-175. - Interpretation.

In the interpretation and application of this division, 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. 2005-892, art. 2(F), 5-17-2005; Ord. No. 2005-934, Art. 2(F), 10-4-2005)

## Sec. 42-176. - Warnings and disclaimer of liability.

The degree of flood protection required by this division is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on occasion. Flood heights may be increased by man-made or natural causes. This division 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 division shall not create liability on the part of the City of Orange Beach or on any officer or employee for any flood damages that result from reliance on this division or any administrative decision lawfully made thereunder.

(Ord. No. 2005-982, art. 2(G), 5-17-2005; Ord. No. 2005-934, Art. 2(G), 10-4-2005)

## Sec. 42-177. - Penalties for violation.

Violation of the provisions of this division 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 or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$100.00.00 or imprisoned for not more than one day, 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 contained herein shall prevent the City of Orange Beach from taking such other lawful action as is necessary to prevent or remedy any violation.

(Ord. No. 2005-982, art. 2(H), 5-17-2005; Ord. No. 2005-934, Art. 2(H), 10-4-2005)

## Sec. 42-178. - Definitions.

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

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

*Appeal* means a request for a review of the local administrator's interpretation of any provision of this division or a request for a variance.

*Area of shallow flooding* means a designated AO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

*Area of special flood hazard* is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

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

*Base flood elevation* means the elevation shown on the FIRM for Zones AE, AH, A1—A30, AR, AR/A, AR/AR, AR/A1—A30, AR/AH, AR/AO, VI-V30, and VE that indicates the water surface elevation resulting from a flood that has a one-percent or greater change 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, excavating, drilling operations, or storage of materials or equipment.

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

*Existing construction* means any structure for which the "start of construction" commenced before the effective date of the first floodplain management code, ordinance or standard based upon specific technical base flood elevation data which established the area of special flood hazard or specific data.

*Existing manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community (before the effective date of the first floodplain management code, ordinance or standard based upon specific technical base flood elevation data which established the area of special flood hazard) or (specific date).

*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, 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;
- (b) The unusual and rapid accumulation or runoff of surface waters from any source;
  - (1) A general and temporary condition of partial or complete inundation of normally dry land areas from:
    - a. The overflow of inland or tidal waters.
    - b. The unusual and rapid accumulations of runoff of surface waters from any source.
    - c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry and areas, as when earth is carried by a current of water and deposited along the path of the current.
  - (2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

*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 (i.e., mudflow) and/or flood-related erosion hazards.

*Flood hazard boundary map (FHBM)* means an official map of Orange Beach, issued by the federal emergency management agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

*Flood insurance rate map (FIRM)* means an official map of a community on which the federal emergency management agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

*Flood insurance study.* See "flood elevation study."

*Flood proofing* means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

*Floodway.* See "regulatory floodway."

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

*Functionally dependent facility* means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing 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) next to the proposed walls of a building.

*Historic structure* means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the secretary of the interior) or preliminarily determined by the secretary of the interior as meeting the requirements for individual listing on the national register,
- (2) 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,
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the secretary of the interior, or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either 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.

*Local administrator* means the person or office designated to administer this division and is the building official.

*Lowest floor* means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of division 4.

*Manufactured home* means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on site for 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 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 division, the term is synonymous with North American Vertical Datum (NAVD).

*North American Vertical Datum (NAVD) of 1988* is a vertical control used as a reference for establishing varying elevations within the floodplain.

*New construction* means structures for which the "start of construction" commenced on or after the September 20, 1996.

*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 the effective date of floodplain management regulations adopted by the community.

*Recreational vehicle* means a vehicle which is built on a single chassis, 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 temporary living quarters for recreational, camping, travel or seasonal use, and is onsite less than 180 consecutive days.

*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.

*Repetitive loss* means flood-related damages sustained by a structure on two 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 25 percent of the market value of the structure before the damage occurred.

*"Section 1316 property": Denial of flood insurance coverage* means 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 flood-prone areas.

*Special flood hazard area* means an area having special flood, mudslide (i.e., mudflow), or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1—30, AE, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, A99, AH, VO, V1—30, VE, V, M, or E.

*Start of construction* (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of street lights 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 accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

*Structure* means for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:

- (1) A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;

- (2) A manufactured home ("a manufactured home," also known as a mobile home, is a structure built on a permanent foundation); or
- (3) A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

For the latter purpose, "structure" does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in paragraph (3) of this definition, or 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 50 percent of the market value of the structure before the damage occurred.

*Substantial improvement* means any reconstruction, rehabilitation, alteration or addition or other improvements to a building, the cost of which equals or exceeds fifty percent of the market value of the building before the "start of construction" of the improvement. The market value of the building should be (1) the appraised value of the building prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the building prior to the damage occurring. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

*Substantially improved existing manufactured home parks or subdivisions* is where the repair, reconstruction, rehabilitation or improvement of streets, utilities and pads equals or exceeds 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 division that permits construction in a manner otherwise prohibited by this division where specific enforcement would result in unnecessary hardship.

*Violation* means the failure of a structure or other development to be fully compliant with the floodplain management regulations of the City of Orange Beach. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this division is presumed to be in violation until such time as that documentation is provided.

(Ord. No. 2005-982, art. 6, 5-17-2005; Ord. No. 2005-934, Art. 6, 10-4-2005; Ord. No. 2011-1135, § 1, 9-6-2011)

Secs. 42-179—42-188. - Reserved.

### DIVISION 3. - ADMINISTRATION

Sec. 42-189. - Designation of ordinance administrator.

The building official is hereby appointed to administer and implement the provisions of this division.

(Ord. No. 2005-934, Art. 3(A), 10-4-2005)

Sec. 42-190. - Permit procedures.

Application for a floodplain development permit shall be made to the local administrator 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, and dimensions of existing or proposed structures, earthen 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 flood-proofed;
  - c. Design certificate from a registered professional engineer or architect that any proposed nonresidential flood-proofed structure will meet the flood-proofing criteria of sections 42-190(2) and 42-206(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 section 42-207(5);
  - e. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development, and
- (2) *Construction stage:* For all new construction and substantial improvements, the permit holder shall provide to the administrator of this division an as-built certification of the regulatory flood elevation or flood-proofing level using appropriate FEMA elevation or flood-proofing certificate immediately after the lowest floor or flood-proofing is completed, and where a structure is subject to the provisions applicable to coastal high hazard areas, after placement of the lowest horizontal structural member. Any regulatory flood 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 flood proofing 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 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. 2005-982, art. 3(A), 5-17-2005; Ord. No. 2005-934, Art. 3(B), 10-4-2005)

Sec. 42-191. - Duties and responsibilities of the administrator.

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

- (1) Review all development permits to assure that the permit requirements of this ordinance 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 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 42-171, then the building official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source 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 flood level, including basement, of all new construction or substantially improved structures in accordance with section 41-190(2);
- (5) Verify and record the actual elevation in relation to mean sea level to which the new or substantially improved structures have been flood-proofed in accordance with division 4, section 42-204(2) and 42-206(2);
- (6) When flood-proofing is utilized for a structure, the building official shall obtain a certification of design criteria from a registered professional engineer or architect in accordance with division 3, section 42-190(1)c. and



division 4, section 42-204(2) or 42-206(2); flood-proofing shall only be used for nonresidential structures.

- (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 division 4, 42-207(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 FEMA and the Alabama Emergency Management Agency (AEMA);
- (9) Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;
- (10) Where interpretation is needed as to the exact location of boundaries of the special flood hazard areas (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 division;
- (11) All records pertaining to the provisions of the ordinance shall be maintained in the office of the building official and shall be open for public inspection.

(Ord. No. 2005-982, art. 3(B), 5-17-2005; Ord. No. 2005-934, Art. 3(C), 10-4-2005; Ord. No. 2011-1135, § 2, 9-6-2011)

Secs. 42-192—42-202. - Reserved.

#### DIVISION 4. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 42-203. - General standards.

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

- (1) New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) New construction or substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- (3) New construction or substantial improvement of existing structures shall be constructed by methods and practices which minimize flood damage;
- (4) Elevated buildings—All new construction and substantial improvements of nonresidential structures within Zones A1—30m AE and AH zones on the community's firm (i) have the lowest floor (including basement) elevated to a minimum of two feet above the base flood level or, (ii) together with attendant utility and sanitary facilities, be designed so that to two feet above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. All new construction or substantial improvements of existing residential structures which 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 for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

- a. Provide a minimum of two openings having a total net area of not less than one square inch for every square area subject to flooding;
  - b. the bottom of all openings shall be no higher than one foot above grade;
  - c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions;
  - d. So as not to violate the "lowest floor" criteria of this division, the unfinished or nonresidential 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
  - e. 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 sanitary sewer systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
  - (8) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
  - (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 division shall be undertaken only if the non-conformity is not furthered, extended or replaced; and
  - (11) The dumping or disposal of any debris into a drainage ditch is prohibited.

(Ord. No. 2005-934, Art. 4(A), 10-4-2005)

Sec. 42-204. - Specific standards.

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

- (1) *New construction and substantial improvements:* Where base flood elevation data is available, new construction or substantial improvement of any structure or manufactured home along with all attendant utility and sanitary facilities shall have the lowest floor, including basement, elevated no lower than two feet above the base flood elevation. Should elevation be by means of engineered pilings, a soils bore test shall be submitted along with the pile design criteria. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to allow the unimpeded movements of flood waters shall be provided in accordance with standards of division 4, section 42-203(4), "elevated buildings". New construction or substantial improvement of any structure or manufactured home on the south side of Alabama Highway 182 shall have the first floor elevated no lower than three feet above the base flood. No slab-on-grade foundations will be permitted south of Alabama Highway 182, and all foundation plans shall be reviewed and stamped by an Alabama-registered engineer.
- (2) *Nonresidential construction-new construction or substantial improvement of any nonresidential structure located in an AE or AH Zone may be flood-proofed in lieu of elevation.* The structure and attendant utility and sanitary facilities must be designed to be water tight to two feet 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 for meeting the provisions above, and shall provide such certification to the official as set forth above and in division 3, section 42-191(6).

- (3) *Standards for manufactured homes and recreational vehicles.* Where base flood elevation data are available, all manufactured homes placed or substantially improved on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in new or substantially improved manufactured home parks or subdivisions, or on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as a result of a flood must have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that either the lowest floor of the manufactured home is elevated no lower than one foot above the level of the base flood elevation, or 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 60 inches in height above grade. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. All recreational vehicles placed on sites must either be on the site for fewer than 180 consecutive days, fully licensed and ready for highway use if it is 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 the RV must meet all the requirements for "new construction", including anchoring and elevation requirements of division 4, section 42-190(1) above.
- (4) *Floodway-located within special flood hazard areas established in division 2, section 42-171, are areas designated as floodways.* 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. Prohibit encroachments including earthen fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices 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. Only if division 4 section 42-171 above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of division 4.

(Ord. No. 2005-934, Art. 4(B), 10-4-2005; Ord. No. 2006-978, § 1, 8-1-2006)

Sec. 42-205. - Building standards for streams without established base elevations and/or floodways (A zones).

Located within special flood hazard areas established in division 2, section 42-171, where streams exist but where no base flood data has been provided (A zones), or where base flood data has been provided, but a floodway has not been determined, the following provisions apply:

- (1) When base flood elevation data or floodway data have not been provided in accordance with division 2, section 42-171, then the building official 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 (2) and (3) shall apply:
- (2) No encroachments, including fill material or structures, shall be located within an area equal to the width of

the stream or 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 area (including basement) elevated no less than three 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 division 4, section 42-203(4) "elevated buildings". The building official shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(Ord. No. 2005-934, Art. 4(C), 10-4-2005)

Sec. 42-206. - Standards for areas of shallow flooding (AO zones).

Special flood hazard areas established in division 2, section 42-171 may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three 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 two feet above the flood depth number specified on the FIRM, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of division 4, section 42-203(4), "elevated buildings". The building official shall certify the lowest floor elevation level, and the record shall become a permanent part of the permit file.
- (2) New construction and substantial improvements of nonresidential buildings may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus two feet above the 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 sections 42-190(1)c. and 42-190(2).
- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(Ord. No. 2005-892, art. 4(A), 5-17-2005; Ord. No. 2005-934, Art. 4(D), 10-4-2005)

Sec. 42-207. - Coastal high hazard areas (V and VE zones).

Located within special flood hazard areas established in division 2, section 42-171, are areas designated as coastal high hazard areas (V and VE 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 improvement of existing structures shall be located landward of the reach of the mean high tide.
- (2) All new construction and substantial improvement 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 member (excluding pilings or columns) is located no lower than three feet above the base flood elevation

- level. All space below the lowest supporting member shall remain free of obstruction. Open latticework 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 paragraph (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 nonstructural 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 standard building code adopted by the city.
  - (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 paragraphs (2), (3), and (4) herein.
  - (6) Non-supporting breakaway walls. Open latticework or decorative screening may be permitted below the base flood elevation provided they are not part of the structural support of the building and are designed to breakaway in the event of abnormal wave action without causing damage to the supporting foundation or elevated portion of the structure. The following design specifications apply:
    - a. Design safe loading resistance of each wall shall be not less than ten nor more than 20 pounds per square foot; or
    - b. If more than 20 pounds per square foot, a registered professional engineer or architect shall certify that the design wall collapse would result from a water load less than that which would occur during the base flood event, and the elevated portion of the structure and supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components during the base flood event. Maximum wind and water loading values to be used in this determination shall each have one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
    - c. If breakaway walls, aesthetic latticework 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 breakaway walls, 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 breakaway walls, latticework or decorative screening, as provided in this section.
  - (9) There shall not be fill material used as structural support. Noncompacted fill may be used around the perimeter of a building for landscaping or 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:
    - a. 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;
    - 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 home 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. 2005-892, art. 4(B), 5-17-2005; Ord. No. 2005-934, Art. 6(E), 10-4-2005; Ord. No. 2006-978, § 2, 8-1-2006; Ord. No. 2007-1035, § 1, 11-6-2007)

Sec. 42-208. - 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 other proposed development (including manufactured home parks and subdivisions).

(Ord. No. 2005-892, art. 4(C), 5-17-2005; Ord. No. 2005-934, Art. 4(F), 10-4-2005)

Secs. 42-209—42-214. - Reserved.

## DIVISION 5. - VARIANCE PROCEDURES

Sec. 42-215. - Variances.

- (a) The flood damage prevention ordinance board of adjustment as established by the city council shall hear and decide appeals and requests for variances from the requirements of this division.
- (b) The board shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the building official in the enforcement or administration of this division.
- (c) Any person aggrieved by the decision of the board 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 (see definition) upon determination that the proposed repair or rehabilitation will not preclude the structure's continuing designation as a 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 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 requests, the board shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this division.

(Ord. No. 2005-892, art. 5, 5-17-2005; Ord. No. 2005-934, Art. 5, 10-4-2005)

Sec. 42-216. - Conditions for variances.

- (a) A variance shall be issued only when there is a finding of good and sufficient cause;
- (b) A determination that failure to grant the variance would result in exceptional hardship;
- (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 a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

The provisions of this division 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 interest 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.

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.

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.

Upon consideration of the factors listed above and the purposes of this division, the board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this division.

(Ord. No. 2005-892, art. 5(G), 5-17-2005; Ord. No. 2005-934, Art. 5(G), 10-4-2005)

Secs. 42-217—42-220. - Reserved.