

DIVISION 4. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 5-87. - General standards.

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

- (1) Require copies of all necessary permits from governmental agencies from which approval is required by federal or state law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Maintain such permits be on file.
- (2) New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse and lateral movement of the structure.
- (3) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage.
- (4) New construction and substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage:
 - 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.
- (5) All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces.
- (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- (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 ordinance, shall be undertaken only if the non- conformity is not furthered, extended or replaced.
- (11) Proposed new construction and substantial improvements that are partially located in an area of special flood hazard shall have the entire structure meet the standards for new construction.
- (12) Proposed new construction and substantial improvements that are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations shall have the entire structure meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.

(Ord. No. 1324, art. 4, § A, 5-14-20)

Sec. 5-88. - Specific standards.

In all areas of special flood hazard designated as AI—30, AE, AH, A (with engineered or estimated base flood elevation), the following provisions are required:

(1) *Residential and non-residential structures.* Where base flood elevation data is available, new construction and substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no less than one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings shall be sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of 5-88(3).

(2) *Non-residential structures.* New construction and substantial improvement of any non-residential structure located in AI—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 water tight to one (1) foot above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in subsection 5-86(6).

Dry floodproofing is allowed only where flood velocities are less than or equal to five (5) feet per second. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. A flood emergency operation plan and an inspection and maintenance plan must be provided by the design professional for the building. Such certification shall be provided to the floodplain administrator.

(3) *Enclosures for elevated buildings.* All new construction and substantial improvements of existing structures that include any fully enclosed area below the base flood elevation, located below the lowest floor formed by the 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 flood waters.

- a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - (i) Provide a minimum of two openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding (if a structure has more than one (1) enclosed area below the base flood elevation, each shall have openings on exterior walls);
 - (ii) The bottom of all openings shall be no higher than one (1) foot above grade; and
 - (iii) Openings may be equipped with screens, louvers, valves and other coverings and devices provided they permit the automatic flow of floodwater in both directions.
- b. So as not to violate the "lowest floor" criteria of this article, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.
- c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms. All interior walls, ceilings and floors below the base flood elevation shall be unfinished and/or constructed of flood resistant materials.
- d. Mechanical, electrical or plumbing devices shall not be installed below the base flood elevation. The interior portion of such enclosed area(s) shall be void of utilities except for essential lighting and power as required.
- e. Property owners shall be required to execute a flood openings/venting affidavit acknowledging that all openings will be maintained as flood vents, and that the elimination or alteration of the openings in any way will violate the requirements for enclosures below the base flood elevation. Periodic inspections will be conducted by the floodplain administrator to ensure compliance.
- f. Property owners shall agree, certify, and declare to the following conditions and restrictions placed on the

affected property as a condition for granting a permit. A binding agreement, referred to as a non-conversion agreement, is required to be executed and recorded with the deed. It shall obligate the owner to the following terms and conditions:

- (i) That the enclosed area(s) shall remain fully compliant with all parts of subsection 5-88(3), enclosures for elevated buildings unless otherwise modified to be fully compliant with the applicable sections of this article in effect at the time of conversion.
 - (ii) A duly appointed representative of the City of Citronelle is authorized to enter the property for the purpose of inspecting the exterior and interior of the enclosed area to verify compliance with the agreement and permit.
 - (iii) The community may take any appropriate legal action to correct any violation pertaining to the agreement and the subject permit.
- (4) *Standards for manufactured homes and recreational vehicles.* Where base flood elevation data are available:
- a. All manufactured homes placed and substantially improved on:
 - (i) Individual lots or parcels;
 - (ii) In new or substantially improved manufactured home parks or subdivisions;
 - (iii) in expansions to existing manufactured home parks or subdivisions; ;or
 - (iv) On a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement elevated no lower than one (1) foot above the base flood elevation.
 - b. Manufactured homes placed and substantially improved in an existing manufactured home park or subdivision may be elevated so that either:
 - (i) The lowest floor of the manufactured home is elevated no lower than one (1)foot above the level of the base flood elevation; or
 - (ii) Where no base flood elevation exists, the manufactured home chassis and supporting equipment is supported by reinforced piers or other foundation elements of at least equivalent strength and a maximum of sixty (60) inches (five (5) feet) above grade and must meet the standards of subsection 5-90(5).
 - c. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - d. All recreational vehicles placed on sites must either:
 - (i) Be on the site for fewer than one hundred eighty (180) consecutive days, fully licensed and ready for highway use if it is licensed, on 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 subsections 5-88(3)a. and 5-88(3)c.
- (5) *Require, until a regulatory floodway is designated,* that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones AI—30 and AE on the City of Citronelle FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.
- (6) *Accessory structures (also referred to as appurtenant structures).* This provision generally applies to new and substantially improved accessory structures. When an accessory structure complies with all other provisions of this article (including floodway encroachment), represents a minimal investment (less than five hundred dollars

(\$500.00)), and meets the requirements outlined below, these structures may be wet-floodproofed and do not have to be elevated or dry floodproofed.

Accessory structures include, but are not limited to, residential structures such as detached garages, storage sheds for garden tools or woodworking, gazebos, picnic pavilions, boathouses, small pole barns, and similar buildings. The following provisions apply to accessory structures built below the base flood elevation:

- a. A permit shall be required prior to construction or installation.
- b. Must be low value (less than five hundred dollars (\$500.00)) and not be used for human habitation.
- c. Use must be restricted to parking of personal vehicles or limited storage (low-cost items that cannot be conveniently stored in the principal structure).
- d. Must be designed with an unfinished interior and constructed with flood damage-resistant materials below the BFE.
- e. Must be adequately anchored to prevent flotation, collapse, or lateral movement.
- f. Must have adequate flood openings as described in subsection 5-87(5) and be designed to otherwise have low flood damage potential.
- g. Shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- h. Any mechanical and other utility equipment in the structure must be elevated to or above the BFE or must be floodproofed.
- i. Under limited circumstances communities may issue variances to permit construction of wet-floodproofed accessory structures. Communities should not grant variances to entire subdivisions for accessory structures, especially detached garages. Variances should only be reviewed and issued on an individual or case-by-case basis and be based on the unique characteristics of the site.

(Ord. No. 1324, art. 4, § B, 5-14-20)

Sec. 5-89. - Floodways.

Located within areas of special flood hazard established in section 5-75, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

- (1) The community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one (1) foot at any point;
- (2) Encroachments, including fill, new construction, placement of manufactured homes, substantial improvements, and other development, are prohibited.
- (3) As long as no fill, structures (including additions), or other impediments to flow are added, permissible uses within the floodway may include: lawns, gardens, athletic fields, play areas, picnic grounds, and hiking/biking/horseback riding trails, general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife, and related uses. The uses in this subsection are permissible only if and to the extent that they do not cause any increase in flood levels during the base flood discharge.

(Ord. No. 1324, art. 4, § C, 5-14-20)

Sec. 5-90. - Building standards for streams without established base flood elevations (approximate A zones).

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

- (1) Base flood elevation data shall be provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty (50) lots or five (5) acres, whichever is the lesser.
- (2) When base flood elevation data or floodway data have not been provided in accordance with 5-75 then the floodplain administrator 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 3 of this article. Only if data are not available from these sources, then subsections 5-90(5) and (6) shall apply:
- (3) 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.
- (4) All development in zone A must meet the requirements of section 5-87 and subsections 5-88(1) through (4).
- (5) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor (for the lowest enclosed area; including basement) elevated no less than three (3) feet above the highest adjacent grade. If the requirement as set forth in subsections 5-88(1) and (2) require the lowest floor to be elevated no less than one (1) foot about the base flood elevation, then the structure for this condition shall be elevated no less than four (4) feet about the highest adjacent grade.
- (6) In the absence of a base flood elevation, a manufactured home must also meet the elevation requirements of subsection 5-88(4)b.(ii) in that the structure must be elevated to a maximum of sixty (60) inches (five (5) feet).
- (7) Openings sufficient to facilitate automatic equalization of flood water hydrostatic forces on exterior walls shall be provided in accordance with standards of subsection 5-88(3)a. The floodplain administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (8) Fill within the area of special flood hazard shall result in no net loss of natural floodplain storage. The volume of loss of floodwater storage due to filling in the special flood hazard area shall be offset by providing an equal volume of flood storage by excavation or other compensatory measures at or adjacent to the development site. Any excavation or other measures taken for compensatory storage shall be properly designed to provide protection against erosion or overgrowth of vegetation in order to preserve the storage volume.
- (9) Proper maintenance measures shall also be undertaken to ensure the intended storage volume remains in perpetuity.

(Ord. No. 1324, art. 4, § D, 5-14-20)

Sec. 5-91. - Standards for areas of shallow flooding (AO zones).

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

- (1) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified on the flood insurance rate map (FIRM) plus one (1) foot of freeboard. If no depth number is specified,

the lowest floor, including basement, shall be elevated at least three (3) feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of subsection 5-88(3), "Enclosures for elevated buildings."

The floodplain administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

- (2) New construction and the substantial improvement of a non-residential structure 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 flood level in subsection 5-91(1) or three (3) feet (if no depth number is specified), above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in subsection 5-85(b)(1)c. and 5-85(b)(2).
- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(Ord. No. 1324, art. 4, § E, 5-14-20)

Sec. 5-92. - 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.
- (d) Base flood elevation data shall be provided for all new subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres; whichever is the lesser.
- (e) All subdivision and other development proposals which involve disturbing more than five acres of land shall include a stormwater management plan which is designed to limit peak runoff from the site to predevelopment levels for the one, ten, and 100-year rainfall event. These plans shall be designed to limit adverse impacts to downstream channels and floodplains. Single residential lots involving less than one acre of land disturbance are not subject to this regulation.
- (f) All preliminary plans for platted subdivisions shall identify the flood hazard area and the elevation of the base flood.
- (g) All final subdivision plats will provide the boundary of the special flood hazard area, the floodway boundary, and the base flood elevations.
- (h) In platted subdivisions, all proposed lots or parcels that will be future building sites shall have a minimum buildable area outside the natural (non-filled) 1% chance annual floodplain. The buildable area shall be, at a minimum, large enough to accommodate any primary structure and associated structures such as sheds, barns, swimming pools, detached garages, on-site sewage disposal systems, and water supply wells, where applicable.

(Ord. No. 1324, art. 4, § F, 5-14-20)

Sec. 5-93. - Critical facilities.

Construction of new and substantially improved critical facilities shall be located outside the limits of the special flood hazard area (one-percent annual chance floodplain). Construction of new critical facilities shall be permissible within the SFHA only if no feasible alternative site is available and access to the facilities remains available during a 0.2-percent chance flood.

- (1) Critical facilities constructed within the SFHA shall have the lowest floor elevated three (3) feet above the base flood at the site (or to the 0.2 percent chance flood elevation whichever is greater).
- (2) Floodproofing and sealing measures must be implemented to ensure that any and all on-site toxic substances will not be displaced by or released into floodwaters.
- (3) Multiple access routes, elevated to or above the 0.2-percent flood elevation, shall be provided to all critical facilities to the maximum extent possible.
- (4) Critical facilities must be protected to or above the 0.2-percent chance flood and must remain operable during such an event.
 - a. The community's flood response plan must list facilities considered critical in a flood.
 - b. Other facilities in low risk flood zones that may also be needed to support flood response efforts must be included on the critical facility list.
- (5) The use of any structure shall not be changed to a critical facility, where such a change in use will render the new critical facility out of conformance with this section.

(Ord. No. 1324, art. 4, § G, 5-14-20)