

City of Bellaire

ORDINANCE NO. 22-054

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BELLAIRE, TEXAS, AMENDING CHAPTER 9, BUILDINGS, ARTICLE II-A, FLOOD DAMAGE PREVENTION, DIVISION 5, PROVISIONS FOR FLOOD HAZARD REDUCTION, SECTION 9-70.17, GENERAL STANDARDS, AND SECTION 9-70.18, SPECIFIC STANDARDS, OF THE CODE OF ORDINANCES OF THE CITY OF BELLAIRE, TEXAS, FOR THE PURPOSE OF REQUIRING MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE PLACED AT FREEBOARD HEIGHT OR OTHERWISE PROTECTED TO PREVENT FLOOD DAMAGE, AND MODIFYING THE LOWEST FLOOR ELEVATION OF RESIDENTIAL AND NON-RESIDENTIAL STRUCTURES AND MANUFACTURED HOMES, IN ACCORDANCE WITH NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMMUNITY RATING SYSTEM (CRS) STANDARDS.

WHEREAS, the City Council (the “City Council”) of City of Bellaire, Texas (the “City”) has previously adopted a Flood Hazard Mitigation Plan (the “Plan”) with the City’s regulatory focus as one of the City’s three major themes for flood mitigation efforts; and

WHEREAS, the City intends to implement the flood mitigation actions suggested in the Plan by providing clear regulatory guidelines for the City and public; and

WHEREAS, the City desires to participate in the National Flood Insurance Program’s Community Rating System program and update its minimum flood damage prevention regulations in accordance with the Community Rating System program standards; **NOW, THEREFORE**,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BELLAIRE, TEXAS THAT:

Section 1. *Chapter 9, Buildings, Article II-A, Flood Damage Prevention, Division 5, Provisions for Flood Hazard Reduction, Section 9-70.17, General Standards, and Section 9-70.18, Specific Standards, of the Code of Ordinances of the City of Bellaire, Texas (“City’s Code”), is hereby amended for the purpose of requiring mechanical, electrical and plumbing equipment to be placed at freeboard height or otherwise protected to prevent flood damage, and modifying the lowest floor elevation of residential and non-residential structures and manufactured homes, in accordance with National Flood Insurance Program Community Rating System standards. The amended Division 5, Provisions for Flood Hazard Reduction, Section 9-70.17, General Standards, and Section 9-70.18, Specific Standards, of the City’s Code shall read as set out in Appendix A, attached hereto. All other portions of Chapter 9, Buildings, Article II-A, Flood Damage Prevention, Division 5, Provisions for Flood Hazard Reduction, of the City’s Code not specifically amended hereby shall remain in full force and effect.*

Section 2. If any word, phrase, clause, sentence, paragraph, section or other part of this Ordinance or the application thereof to any person or circumstance, shall ever be held to be invalid or unconstitutional by any court of competent jurisdiction, neither the remainder of this Ordinance, nor the application of such word, phrase, clause, sentence, paragraph, section or other part of this Ordinance to any other persons or circumstances, shall be affected thereby.

Section 3. The City Council officially finds, determines and declares that a sufficient written notice of the date, hour, place and subject of each meeting at which this Ordinance was discussed, considered or acted upon was given in the manner required by the Texas Open Meetings Act, as amended, and that each such meeting has been open to the public as required by law at all times during such discussion, consideration and action. The City Council ratifies, approves and confirms such notices and the contents and posting thereof.

Section 4. This Ordinance shall be effective immediately upon its passage and adoption.

PASSED, APPROVED and ADOPTED this, the 18th day of July, 2022.

Andrew S. Friedberg, Mayor
City of Bellaire, Texas

(SEAL)

ATTEST:

Tracy Dutton, TRMC, City Clerk
City of Bellaire, Texas

APPROVED AS TO FORM:

Alan P. Petrov, City Attorney
City of Bellaire, Texas

Appendix A

(Language to be added shown by underline, language to be deleted shown by strike-out)

CHAPTER 9 - BUILDINGS

ARTICLE II-A. - FLOOD DAMAGE PREVENTION

DIVISION 5. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 9-70.17. General standards.

In all areas of special flood hazards and moderate flood hazards, the following provisions are required for all new development activity, construction and substantial improvements:

- (1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (4) All new replacement work, new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent flood damage from contact with buoyant debris and/or from water ~~from~~ entering or accumulating within the components during conditions of flooding;
- (5) All new and replacement water supply systems shall be designed and/or located as to minimize or eliminate infiltration of floodwaters into the system;
- (6) New and replacement sanitary sewage systems shall be designed and/or located as to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters; and
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- (8) Compensating floodplain mitigation will be required for any fill placed below the more restrictive of 1' above the base flood elevation and/or 500-year floodplain elevation for any new development activity, construction or substantial improvements.

Sec. 9-70.18. Specific standards.

In all areas of special flood hazards and moderate flood hazards where base flood elevation and 500-year floodplain elevation data has been provided as set forth in section 9-70.7, section 9-70.14(8), or 9-70.19(d), the following provisions are required:

- (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated as a minimum to the highest of: one foot above the base flood elevation shown on the effective FIRM, ~~one foot above the base flood elevation shown on the flood hazard recovery data map,~~ or the 500-year floodplain elevation, together with attendant utility and sanitary facilities elevated to the freeboard height. A registered professional engineer, architect or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection, as proposed in section 9-70.15(a)(1), is satisfied.
- (2) *Nonresidential construction.* New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to the highest of: one foot above the base flood elevation shown on the effective FIRM, ~~one foot above the base flood elevation shown on the flood hazard recovery data map,~~ or the 500-year floodplain elevation; or, together with attendant utility and sanitary facilities, be designed so that below the 500-year floodplain elevation 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. A registered professional engineer or architect shall develop and/or review structural design, specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.
- (3) *Enclosures.* New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and hydrostatic flood forces on exterior walls by allowing for the entry and exit by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net ~~free~~ area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - b. The bottom of all openings shall be no higher than four inches above grade;
 - c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) *Manufactured homes.*
 - a. Require that all manufactured homes to be placed within zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist 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 requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

-
- b. Require that manufactured homes that are placed or substantially improved within zones A1-30, AH, AE, and Shaded X on the community's FIRM on sites: (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated at a minimum to the highest of: one foot ~~to or~~ above the base flood elevation shown on the effective FIRM, or ~~to or above~~ the 500-year floodplain elevation, together with attendant utility and sanitary facilities elevated to the freeboard height; whichever is higher; and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- c. Require that all manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH, AE, and Shaded X on the community's FIRM that are not subject to the provision of subsection (4) be elevated so that ~~either~~:
- (i) The manufactured home shall have the lowest floor elevated as a minimum to the highest of: one foot above the base flood elevation shown on the effective FIRM, ~~one foot above the base flood elevation shown on the flood hazard recovery data map,~~ or the 500-year floodplain elevation, together with attendant utility and sanitary facilities elevated to the freeboard height; ~~or and~~
 - (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (5) *Recreational vehicles.* Require that recreational vehicles placed on sites within zones A1-30, AH, and AE on the community's FIRM either: (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of article 4, section C.(1), and the elevation and anchoring requirements for "manufactured homes" in subsection (4). A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.