One-Reading Ordinance amending Chapter 14, Article V, Flood Hazard Prevention Code of the Corpus Christi Code to update certain provisions to comply with Federal Emergency Management Agency (FEMA) requirements and the updated Flood Insurance Rate Map (FIRM); Providing for a penalty not to exceed \$500 and publication.

**WHEREAS,** the Insurance Service Office ("ISO") on behalf of the Federal Emergency Management Agency ("FEMA") recently completed an audit of the City of Corpus Christi's flood plain areas and the City's Flood Hazard Prevention Code;

**WHEREAS,** ISO and FEMA made some recommendations for changes to the City's Flood Hazard Prevention Code which the City wishes to adopt through this Ordinance;

**WHEREAS**, by adopting the ISO/FEMA recommended changes to the City's Flood Hazard Prevention Code the City will minimize public and private losses due to changing flood conditions in areas of special flood hazard and improve the public health, safety and welfare of its citizens:

WHEREAS, the City is a participant in a voluntary program of the National Flood Insurance Program called the Community Rating System. This program awards points for going above and beyond the minimum standards of a participating community; and

**WHEREAS,** adopting higher flood hazard prevention standards provides additional points to the City that can help reduce flood insurance premiums for flood insurance policies in Special Flood Hazard Areas in the City.

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CORPUS CHRISTI THAT:

**SECTION 1.** That Corpus Christi Code of Ordinances, Chapter 14 "Development Services", Article V "Flood Hazard Prevention Code" is hereby amended by adding the following language that is underlined (added) and deleting the language that is stricken (deleted) as delineated below:

## "ARTICLE V. - FLOOD HAZARD PREVENTION CODE

## **DIVISION 1. - FINDINGS OF FACT AND PURPOSES**

Sec. 14-501. - Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- (b) These flood losses are created by the cumulative effect of obstructions in floodplains, which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood-proofed, or otherwise protected from flood damage.

Sec. 14-502. - Statement of purpose.

It is the purpose of this flood hazard prevention code (the code) 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) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- (6) 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 future flood blight areas; and
- (7) Ensure that potential buyers are notified that property is in a flood area.

Sec. 14-503. - Methods of reducing flood losses.

In order to accomplish its purposes, this code uses the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases 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, which are involved in the accommodation of floodwaters
- (4) Control filling, grading, dredging and other development which may increase flood damage;
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Secs. 14-504—14-520. — Reserved.

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

Alluvial fan flooding means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

Apex means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

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

Appurtenant Structure- means a structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

<u>Area of Future Conditions Flood Hazard- means the land area that would be inundated</u> by the one-percent annual chance (100 year) flood based on future conditions hydrology.

Areas of shallow flooding means a designated AO, AH, or VO zone on a city's flood insurance rate map (FIRM) with a one (1) per cent chance or greater annual chance of flooding to an average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within a community subject to a one (1) per cent or greater chance of flooding in any given year. The area may be designated as zone A on the flood hazard boundary map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, zone A usually is refined into zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

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

Base Flood Elevation (BFE)- The elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year- also called the Base Flood.

Basement means any area of the building having its floor subgrade (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 supporting foundation system.

Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high-velocity wave action from storms or seismic sources.

*Critical feature* means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be comprised.

Development means any manmade change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Development permit means any permit, plan approval or other authorization required from any department of the city prior to commencing any development work regulated by the city building code, electrical code, energy conservation code, fuel gas code, mechanical code, plumbing code, platting ordinance, zoning ordinance, excavation ordinance, or any other applicable ordinance of the city.

Elevated buildings means a non-basement building:

- (1) In the case of a building in zones A1-30, AE, A, A1-99, AH, B, C, X, and D, built to have the top of the elevated floor, or in the case of a building in zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water; and
- (2) Adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood.
- (3) In the case of zones A1-30, AE, A, A1-99, AO, AH, B, C, X, and D, elevated building includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters.
- (4) In the case of zones V1-30, VE, or V, elevated building includes a building otherwise meeting the definition of elevated building, even though the lower area is enclosed by means of breakaway walls if the breakaway walls met the standards of section 60.3(e)(5) of the National Flood Insurance Program regulations.

Existing construction means for the purposes of determining rates, structures for which the start of construction commenced before the effective date of the FIRM or before January 1, 1975, for FIRM's effective before that date.

Existing construction may also be referred to as existing structures.

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.

Expansions 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).

FEMA means the Federal Emergency Management Agency.

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

- (1) The overflow of inland or tidal waters.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

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 a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards.

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 hazards and the risk premium zones applicable to the community.

Flood insurance study is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the flood boundary-floodway map.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source (see definition of flooding).

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood protection system means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a special flood hazard and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Flood-proofing means any combination of structural and nonstructural 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 (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 use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Habitable floor means any floor usable for the following purposes: which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purposes only is not a habitable floor.

<u>Hazardous Materials- Those chemicals or substances that are physical hazards or health hazards as classified in the adopted Building and Fire codes, whether the materials are in usable or waste condition.</u>

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

Historic structure means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the department of 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 interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  - a. By an approved state program as determined by the secretary of the interior or;
  - b. Directly by the secretary of the interior in states without approved programs.

Levee means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee system means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or 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 section 60.3 of the National Flood Insurance Program regulations.

Manufactured home means a structure transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term manufactured home does not include a recreational vehicle.

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

*Mean sea level* means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a city's flood insurance rate map are referenced.

New construction means for the purpose of determining insurance rates, structures for which the start of construction commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community 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 the effective date of floodplain management regulations adopted by a community.

Non-Residential Structure- includes, but is not limited to: small business concerns, churches, schools, farm buildings (including grain bins and silos), pool houses, club houses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, hotels and motels with normal room rentals for less than 6 months' duration, and nursing homes.

Permanent foundation means construction of grillages of steel, of masonry, of reinforced concrete or timber and designed in accordance with accepted engineering practice to provide adequate support and anchorage. For floodplain management purposes guidelines and methods for manufactured homes are contained in FEMA 85/September 1985 publication entitled Manufactured Home Installation in Flood Hazard Areas.

Primary frontal dune means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Recreational vehicle means a vehicle which is:

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

Residential Structure- Any one-family or two-family dwelling or portion thereof including townhouses, that is used, or designated or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, and shall include accessory structures thereto.

<u>Riverine- means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.</u>

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

Start of construction (for other than new construction of 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, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the 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 streets and/or walkways; nor does it include excavation for 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 structure. 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, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

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) per cent of the market value of the structure before the damage occurred.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) per cent of the market value of the structure before start of construction of the improvement. This includes structures which have incurred substantial damage, regardless of the actual repair work performed. 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 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.

Variance is a grant of relief to a person from the requirement of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. (For full requirements see section 60.6 of the National Flood Insurance Program regulations.)

*Violation* means the failure of a structure or other development to be fully compliant with the city's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), or (e)(5) [of the National Flood Insurance Program regulations] is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal

or riverine areas.

Secs. 14-522—14-530. - Reserved.

# **DIVISION 3. - GENERAL PROVISIONS**

Sec. 14-531. - Lands to which this code applies.

This code applies to all areas of special flood hazard within the jurisdiction of the city. Sec. 14-532. - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in <a href="mailto:the-current">the current</a> scientific and engineering reports entitled, The Flood Insurance Study (FIS) for Corpus Christi, dated September 17, 1992, The Flood Insurance Study for Nueces County, <a href="mailto:Texas">Texas</a>, and Unincorporated Incorporated Areas, dated May 4, 1992, and the Preliminary Flood Insurance Study for Corpus Christi, dated October 23, 2015 October 13, 2022, with accompanying Flood Insurance Rate Maps (FIRM) dated July 18, 1985 for the City of Corpus Christi, March 18, 1985 for Nueces County Unincorporated, and preliminary flood insurance rate maps dated October 23, 2015 October 13,2022 and flood boundary-floodway maps (FIRM and FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this Code. Base flood elevation construction requirements are determined by utilizing the most stringent requirement in either the effective or the preliminary flood insurance study or flood insurance rate maps.

Sec. 14-533. - Establishment of development permit.

A development permit <u>in the floodplain</u> is required to ensure conformance with the provisions of this code.

Sec. 14-534. - Compliance.

No structure or land may be located, altered, or have its use changed without full compliance with the terms of this code and other applicable regulations.

Sec. 14-535. - Abrogation and greater restrictions.

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

Sec. 14-536. - Interpretation.

In the interpretation and application of this code, all provisions shall be:

- (1) Considered as a 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. 14-537. - Warning and disclaimer of liability.

The degree of flood protection required by this code is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This code does not imply that land outside the areas of special flood hazards or uses permitted within special flood hazard areas will be free from flooding or flood damages. This code does not create liability on the part of the City or any official or employee of the City for any flood damages that result from reliance on this code or any administrative decision lawfully made under this code.

Secs. 14-538—14-540. - Reserved.

#### **DIVISION 4. - ADMINISTRATION**

Sec. 14-541. - Designation of the floodplain administrator.

- (a) The city manager, or the city manager's designee, is appointed the floodplain administrator to administer and implement the provisions of this code and other appropriate sections of <u>44</u> CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.
- (b) The floodplain administrator is to be assisted by the floodplain review committee consisting of three (3) positions as follows:
  - (1) Senior design engineer with knowledge of subdivision development, hydrology, and representing engineering services.
  - (2) Senior planner with knowledge of subdivision planning, platting, and representing planning.
  - (3) Engineer/inspector with knowledge of construction practices and representing developmental services.

Sec. 14-542. - Duties and responsibilities of the floodplain administrator.

Duties and responsibilities of the floodplain administrator include, but [may] not be limited to, the following:

- (a) Maintain and hold open for public inspection all records pertaining to the provisions of this code.
- (b) Review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- (c) Review, approve, or deny all applications for <u>floodplain</u> development permits required by adoption of this code.

- (d) Review permits for proposed development to assure that all necessary permits have been obtained from those federal, state, or local governmental agencies (including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
- (e) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the floodplain administrator will make the necessary interpretation.
- (f) Notify, in riverine situations, adjacent communities and the state coordinating agency which is the <u>Texas Water Development Board (TWDB)</u>, as <u>well as the</u> Texas Commission on Environmental Quality, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (g) Assure that flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (h) When base flood elevation data has not been provided in accordance with section 14-522, the floodplain administrator will obtain, review, and reasonable utilize any base flood elevation data and floodway data available from a federal, state, or other source, in order to administer the provisions of division 5 of article V of this chapter.
- (i) When a regulatory floodway has not been designated, the floodplain administrator may not allow new construction, substantial improvements, or other development (including fill) to be permitted within zones A1-30 and AE on the city's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot on any point within the community.
- (j) Under the provisions of <u>44</u> CFR <u>chapter 1</u>, section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in zones A1-30, AE, AH, on the city's FIRM, which increases the water surface elevation of the base flood by more than one (1) foot, if the community first applies for a conditional FIRM revision through FEMA.
- (k) Right of entry and stop work orders.
  - a. Whenever necessary to make an inspection to enforce any of the provisions of this code, or whenever the floodplain administrator, or the floodplain administrator's duly authorized representative, has reasonable cause to believe that there exists in any building or upon any premises any condition or code violation, which makes such building or premises unsafe, dangerous, or hazardous, the floodplain administrator, or his duly authorized representative, may:
    - 1. Enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the floodplain administrator by this code.

- 2. If the building or premises is occupied, the floodplain administrator, or the floodplain administrator's authorized representative, will first present proper credentials and request entry.
- 3. If the building or premises is unoccupied, the floodplain administrator, or the floodplain administrator's authorized representative, will first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.
- 4. If entry is refused, the floodplain administrator has recourse to every remedy provided by law to secure entry.
- b. When the floodplain administrator has first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care, or control of any building or premises may fail or neglect, after proper request is made, to promptly permit entry by the floodplain administrator or the floodplain administrator's authorized representative for the purpose of inspection and examination under this code.
- c. Upon notice from the floodplain administrator or the floodplain administrator's authorized representative, that work on any building, structure, dike, bridge or any improvement, which would affect water drainage, is being done contrary to the provisions of this code or in a dangerous or unsafe manner, the work must be immediately stopped.
- d. Any notice to stop work must be in writing and be given to the owner of the property, or to the owner's agent, or the person doing the work, and shall state the conditions under which work may be resumed.
- e. Where an emergency exists, no written notice is required to be given by the floodplain administrator. However, written notice must follow within twenty-four (24) hours from the time oral notice to stop work is issued.

# Sec. 14-543. - Permit procedures.

- (a) Application for a <u>Floodplain</u> development permit must be presented to the floodplain administrator on forms furnished by the floodplain administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard.
- (b) Additionally, the following information is required:
  - (1) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
  - (2) Elevation in relation to mean sea level to which any nonresidential structure shall be flood-proofed;
  - (3) A certificate from a registered professional engineer or architect that the

- nonresidential flood-proofed structure shall meet the flood proofing criteria of subsection <u>14-552(2)</u>;
- (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
- (5) Maintain a record of all such information in accordance with subsection <u>14-542(1)</u>.
- (c) Approval or denial of a development permit by the floodplain administrator may be based on all of the provisions of this code and the following relevant factors:
  - (1) The danger to life and property due to flooding or erosion damage;
  - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - (3) The danger that materials may be swept onto other lands to the injury of others;
  - (4) The compatibility of the proposed use with existing and anticipated development;
  - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
  - (6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
  - (7) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site:
  - (8) The necessity to the facility of a waterfront location, where applicable;
  - (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
  - (10) The relationship of the proposed use to the comprehensive plan for that area.
- (d) Revocation of permits.
  - (1) Misrepresentation of application. The floodplain administrator may revoke a permit or approval, issued under the provisions of this code, in case there has been any false statement or misrepresentation as to a material fact in the application or plans on which the permit or approval was based or whenever the permit or approval was issued in error.
  - (2) Violation of code provisions. The floodplain administrator may revoke a permit upon determination by the floodplain administrator that the construction, erection, alteration or repairs of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this code.

# Sec. 14-544. - Variance procedures.

(a) The construction trade advisory & appeals board hears and renders judgement on requests for variances from the requirements of this code.

- (b) The construction trade advisory & appeals board hears and renders judgement on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this code.
- (c) Any person or persons aggrieved by the decision of the construction trade advisory & appeals board may appeal such decision to a court of competent jurisdiction.
- (d) The floodplain administrator maintains a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this code.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in subsection 14-541(1) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (g) Upon consideration of the factors noted above and the intent of this division, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter, section 14-502.
- (h) Variances may not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character of design of the structure.
- (j) Prerequisites for granting variances:
  - (1) Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - (2) Variances may only be issued upon:
    - a. Showing a good and sufficient cause:
    - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
    - 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 nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
  - (3) Any applicant, to whom a variance is granted, may be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

- (k) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
  - (1) The criteria outlined in subsections <u>14-544(a)</u> through (i) are met; and
  - (2) The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

Secs. 14-545—14-550. - Reserved.

## **DIVISION 5. - PROVISIONS FOR FLOOD HAZARD REDUCTION**

Sec. 14-551. - General standards.

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

- (a) All new construction or substantial improvements must 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;
- (b) All new construction or substantial improvements must be constructed by methods and practices that minimize flood damage;
- (c) All new construction or substantial improvements must be constructed with materials resistant to flood damage;
- (d) All new construction or substantial improvements must be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (e) All new and replacement water supply systems must be designed to minimize or eliminate infiltration of floodwaters into the system;
- (f) New and replacement sanitary sewage systems must be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters;
- (g) On-site waste disposal systems must be located to avoid impairment to them or contamination from them during flooding; and
- (h) Additional protection is specifically recommended such that the lowest floor of any building be elevated to a level of one (1) foot higher or more above the base flood elevation since such additional protection may provide for significant reductions in insurance premiums.

Sec. 14-552. - Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 14-521, subsection 14-542(h), or subsection 14-543(c), the following provisions are

required:

- (a) Residential construction. New construction of any residential structure must have the lowest floor (including basement) and machinery or equipment, elevated to one (1) foot above the base flood elevation. Substantial damage and substantial improvement must have the lowest floor (including basement) and machinery or equipment, elevated to at or above one (1) foot above the base flood elevation. Attached garages and enclosures below elevated buildings must meet the minimum NFIP requirements (elevated to the base flood elevation or have proper openings). 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 subsection 14-533(b)(1), is satisfied.
- (b) Nonresidential construction. New construction of any commercial, industrial, or other nonresidential structure must either have the lowest floor (including basement) elevated to one (1) foot above the base flood level or together with attendant utility and sanitary facilities, be designed so that below 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. Substantial damage and substantial improvement must have the lowest floor (including basement), elevated to at or above the base flood elevation or together with attendant utility and sanitary facilities, be designed so that below 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. 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.
- (c) 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 which are subject to flooding must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
  - a. 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 must be provided.
  - b. The bottom of all openings must be no higher than one (1) foot 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.
- (d) Manufactured homes.
  - a. All manufactured homes to be placed within zone A on a city's FHBM or FIRM

must be installed using methods and practices which minimize flood damage.

- For the purposes of this requirement, a manufactured home must be elevated and anchored to resist flotation, collapse or lateral movement.
- 2. Methods of anchoring may include, but are not limited to, use of overthe-top or frame ties to ground anchors.
- 3. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- b. Manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on the city's FIRM must be on sites:
  - 1. Outside of a manufactured home park or subdivision.
  - 2. In a new manufactured home park or subdivision.
  - 3. In an expansion to 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 to one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- c. Manufactured homes must be placed on substantially improved on sites in an existing manufactured home park or subdivision with zones A1-30, AH, and AE on the city's FIRM that are not subject to the provisions of subsection (4) of this section must be elevated so that either:
  - 1. The lowest floor of the manufactured home is one (1) foot above the base flood elevation, or
  - 2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (e) Recreational vehicles. Recreational vehicles placed on sites within zones A1-30, AH, and AE on the city's FIRM either:
  - a. Must be on the site for fewer than one hundred eighty (180) consecutive days,
  - b. Must be fully licensed and ready for highway use, or
  - c. Must meet the permit requirements of subsection 14-545(a), and the elevation and anchoring requirements for manufactured homes in subsection (4) of this section.
- (f) 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.

Sec. 14-553. - Standards for subdivision proposals.

(a) All subdivision proposals including the placement of manufactured home parks and subdivisions must be consistent with sections 14-501, 14-502, and 14-503 of

this Code.

- (b) All proposals for the development of subdivisions, including the placement of manufactured home parks and subdivisions, must meet development permit requirements of section 14-523, section 14-533, and the provisions of division 5 of article V of this chapter.
- (c) Base flood elevation data must be generated for subdivision proposals and other proposed developments, including the placement of manufactured home parks and subdivisions, which is greater than fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided under section 14-522 or subsection 14-532(8) of this Code.
- (d) All subdivision proposals, including the placement of manufactured home parks and subdivisions, must have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals, including the placement of manufactured home parks and subdivisions, must have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

Sec. 14-554. - Standards for areas of shallow flooding (AO/AH zones).

Locations within the areas of special flood hazard established in section 14-522 are designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet, where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- (1) All new construction, of residential structures must have the lowest floor (including basement) and machinery or equipment elevated above the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two (2) feet if no depth number is specified) plus one (1) foot. Substantial damage and substantial improvement must have the lowest floor (including basement) and machinery or equipment, elevated to at or above the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two (2) feet if no depth number is specified) plus one (1) foot. Attached garages and enclosures below elevated buildings must meet the minimum NFIP requirements (elevated to the base flood elevation or have proper openings).
- (2) All new construction of nonresidential structures:
  - a. Must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two (2)) feet plus one (1) foot, if no depth number is specified; or
  - b. Substantial damage and substantial improvements must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two (2)) feet, if no depth number is specified; or
  - c. Together with attendant utility and sanitary facilities must be designed so that below 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 of effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this section, as proposed in subsection <u>14-533(b)(1)</u>, are satisfied.
- (4) Structures within zones AH or AO must have adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

# Sec. 14-555. - Floodways.

- (a) Channels of streams, which must be kept clear of encroachments to enable a 100-year flood to pass without an increase in flood height, and which are located within areas of special flood hazard established in section 14-522 are designated as regulatory floodways.
- (b) Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions shall apply:
  - (1) Encroachments are prohibited, 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 an increase in flood levels within the community during the occurrence of the base flood discharge.
  - (2) If subsection (b)(1) of this section, is satisfied, all new construction and substantial improvements must comply with all applicable flood hazard reduction provisions of division 5 of article V of this Code.
  - (3) Under the provisions of <u>44</u> CFR 65.12, of the National Flood Insurance Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revision through FEMA.
  - (4) The placement of manufactured homes is prohibited, except in an existing manufactured home park or existing manufactured home subdivision.
  - (5) The storage of hazardous materials, in any form, is prohibited within the adopted regulatory floodway.

# Sec. 14-556. - Coastal high hazard areas.

- (a) Areas that are subject to possible high-energy wave action, and which are identified as areas of special flood hazard established in section 14-522, are areas designated as coastal high hazard areas (zones V1-30, VE, and/or V).
- (b) These areas have special flood hazards associated with high-velocity waters from tidal surges and hurricane wave wash; therefore, in addition to meeting all provisions outlined in this Code, the following provisions also apply:
  - (1) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures

- contain a basement. The floodplain administrator maintains a record of all this information.
- (2) All new construction must be located landward of the reach of mean high tide.
- (3) All new construction and substantial damage must be elevated on pilings and columns so that:
  - a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to one (1) foot above the base flood elevation.
  - b. Substantial improvements must have the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) elevated to at or one (1) foot above the base flood elevation.
  - c. The pile or column foundation and structure attached to the foundation is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
    - 1. Water loading values used must be those associated with the base flood.
    - 2. Wind loading values used shall be those required by applicable state or local building standards.
- (4) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (3)a. and (3)b. of this section.
- (5) All new construction and substantial improvements must have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.
- (6) For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than ten (10), and not more than twenty (20) pounds per square foot.
- (7) Use of breakaway walls, which exceed a design safe loading resistance of twenty (20) pounds per square foot (either by design or when so required by local or state codes), may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
  - a. Breakaway wall collapse must result from a water load less than that which would occur during the base flood; and
  - b. The elevated portion of the building and supporting foundation system may 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 (structural and nonstructural).
    - 1. Water loading values used shall be those associated with the base flood.
    - 2. Wind loading values used shall be those required by applicable state or local

## building standards.

- (8) Enclosed space below the lowest floor may be useable solely for parking of vehicles, building access or storage. The enclosed space below the lowest floor may not be used for human habitation.
  - a. All enclosed areas below base flood elevation that are greater than five
    (5) feet in height will be required to sign a non-conversion agreement that will be filed with the deed.
- (9) The use of fill or structural support of buildings is prohibited.
- (10) The use of manmade alteration of sand dunes and mangrove stands, which would increase potential flood damage, is prohibited.
- (11) Manufactured homes, which have incurred substantial damage as the result of a flood, must meet the standards of subsections (b)(1) through (b)(10) of this section, if they are placed or substantially improved within zones V1-30, V, and VE on the city's FIRM on sites:
  - a. Outside of a manufactured home park or subdivision,
  - b. In a new manufactured home park or subdivision,
  - c. In an expansion to an existing manufactured home park or subdivision.
- (12) Manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision within zones V1-30, V, and VE on the city's FIRM meet the requirements of subsection <u>14-542(4)</u> of this Code.
- (13) Recreational vehicles, which are placed on sites within zones V1-30, V, and VE on the city's FIRM, must either:
  - a. Be on the site for fewer than one hundred eighty (180) consecutive days,
  - b. Be fully licensed and ready for highway use, or
  - c. Meet the requirements in section 14-522 of this article and subsections (b)(1) through (b)(10) of this section.
- (14) 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."

Sec. 14-557. – Penalties for Non-Compliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this code and other applicable regulations. Violation of the provisions of this code by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with the conditions) shall constitute a misdemeanor. Any person who violates this code or fails to comply with any of its requirements shall upon conviction therof be fined not more than \$500 for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation."

## Secs. 14-558 – 14-600 Reserved.

Corpus Christi, Texas

**SECTION 2.** All provisions of the ordinances of the City of Corpus Christi in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the ordinances of the City of Corpus Christi not in conflict with the provisions of this Ordinance shall remain in full force and effect.

**SECTION 3.** Should any sentence, paragraph, subdivision, clause, phrase or section of this Ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this Ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Code of Ordinances as a whole.

**SECTION 4.** Publication shall be made one time in the official publication of the City of Corpus Christi by publishing the caption stating the purpose of the ordinance. This ordinance to become effective upon such publication.

**SECTION 5.** A violation of this ordinance, or requirements implemented under this ordinance, constitutes an offense punishable as provided in Section 1-6 of the Corpus Christi Code of Ordinances.

**SECTION 6.** Upon the written request of the Mayor or majority of the members of the Council,

immediate action necessary for the efficient suspends the City Charter rule that requires regular meetings so that this ordinance is pa	and declares an emergency due to the need for and effective administration of City affairs; and (2) consideration of and voting upon ordinances at two assed and takes effect upon first reading as an
emergency measure on this the day o	f, 2022.
ATTEST:	CITY OF CORPUS CHRISTI
Rebecca Huerta	Paulette Guajardo
City Secretary	Mayor
day of	, 2022

PASSED AND APPRO	VED on this the	day of	F	, 2022.
TO THE MEMBERS OI Corpus Christi, Texas	THE CITY COUNCI	L		
For the reasons set fo exists requiring suspen two regular meetings: ordinance finally on the	sion of the Charter rul I/we, therefore, reque	le as to considest that you sus	eration and voting pend said Char	ng upon ordinances at rter rule and pass this
Respectfully,		Respectfully,		
		Paulette Gua Mayor	njardo	
Council Members				
The above ordinance w	as passed by the follo	owing vote:		
Paulette Guajardo _ Roland Barrera _ Gil Hernandez _ Michael Hunter _ Billy Lerma _			Ben Molina	