

On motion by **Councilman Rau** and seconded by **Councilman Crosby**, the following ordinance was offered:

ORDINANCE NO. 4809

An ordinance repealing - Flood Damage Prevention Ordinance of the City of Gretna Code of Ordinances in its entirety and adopting a new Flood Damage Prevention Ordinance (FDPO) in order to comply with the requirements of the Federal Emergency Management Agency (FEMA) and the National Flood Insurance Program (NFIP) and to provide for related matters. (Parishwide)

WHEREAS, The Federal Emergency Management Agency (FEMA) provided The City of Gretna with a Letter of Final Determination on August 2, 2017 declaring the Preliminary Flood Insurance Rate Maps as final with an effective date of February 2, 2018; and

WHEREAS, these changes to the revised FDPO of the City of Gretna Code of Ordinances for Floodplain Management are necessary to comply with the current requirements of FEMA and the NFIP:

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Gretna, acting as legislative authority for said City, that:

SECTION 1. The Flood Damage Prevention Ordinance is hereby repealed in its entirety and is hereby reenacted as follows:

ARTICLE II - FLOOD DAMAGE PREVENTION ORDINANCE

DIVISION I. - (28-25) Introductory provisions

Sec. 28-25.1. - Statutory authorization.

La.R.S. 38:84 delegates responsibility to local governmental units to adopt regulations designed to minimize flood losses to comply with the Federal Flood Insurance Act. In the event of conflict between these regulations and state or federal laws or regulations the more restrictive requirement shall take precedence.

Sec. 28-25.2. - Findings of fact.

- (1) The special flood hazard areas and local flood hazard areas of the Parish are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental service, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) Flood losses may be avoided by development standards described in this Ordinance including elevating new construction safely above the recognized flood hazard and minimizing cumulative effect of encroachments in special and local flood hazard areas, which may increase flood heights and velocities.

Sec. 28-25.3. - Statement of purpose.

It is the principal purpose of this section to prescribe minimum requirements for land use and control measures for flood-prone areas in the parish as determined by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA). These regulations are based upon relevant technical storm data specific to the parish, as developed by the U.S. Corps of Engineers for the Federal Insurance Administration. These measures must be applied uniformly throughout the community to all privately and publicly owned land within flood-prone areas based upon standards set forth in these regulations as prescribed by the Federal Insurance Administration. It is the purpose of this chapter 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; and
- (2) Minimize expenditure of public money for costly flood control projects; and
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; and
- (4) Minimize prolonged business interruptions; and
- (5) Minimize damage to public facilities located in special flood hazard areas and local flood hazard areas; and
- (6) Ensure that current flood hazard data is available for property owners, prospective buyers, insurance agents, real estate agents, and other interested parties; and

- (7) Ensure that those who develop in special flood hazard areas or local flood hazard areas do so pursuant to this ordinance; and
- (8) Ensure that those who develop special flood hazard areas or local flood hazard areas assume responsibility for their actions.

Sec. 28-25.4. - Methods of reducing flood losses.

In order to accomplish its purposes, this ordinance includes methods and provisions to:

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

(28-26) DEFINITIONS

Sec. 28-26.1. - [Definitions].

As used in this ordinance, the following words and phrases shall have the meaning given in this ARTICLE.

ADVERSE IMPACT. Causing increased flood stages, increased flood velocity, or increased flows in or near a special or local flood hazard area, to an extent including to but not limited to an increase in base flood elevation equal or greater than foot on upstream, downstream, or adjacent properties.

ANCHORED. Adequately secured to prevent flotation, collapse or lateral movement.

APPEAL. A request for a review of the Floodplain Administrator's determination or action pursuant to, or interpretation of, any provision of this ordinance.

APPLICANT. Any person who submits an application for a permit pursuant to this ordinance.

APPURTENANT/ACCESSORY STRUCTURE. A structure which is on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure provided the structure is solely used for parking and storage or access and does not exceed one thousand (1,000) square feet. (If exceed 1,000 sq ft, see Non-Residential)

AREA OF FUTURE CONDITIONS FLOOD HAZARD. The land area that would be inundated by the 1% annual chance flood based on future conditions hydrology.

BASE FLOOD. A designated flood elevation on any property having a 1% annual chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE). The water surface elevation resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones AE and VE.

BASEMENT. An area of a building having its floor below ground level on all sides.

BREAKAWAY WALL. 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.

BUILDING. A structure with 2 or more outside rigid walls and fully secured roof, that is affixed to a permanent site; or a manufactured home build on a permanent chassis, transported to its site in 1 or more sections, and affixed to a permanent foundation; or a travel trailer without wheels, build on a chassis and affixed to a permanent foundation. *Note – Building does not mean a gas or liquid storage tank or a recreational vehicle, a park trailer, or other similar vehicle, except as described above.*

COASTAL HIGH HAZARD AREA. A Special Flood Hazard Areas (SFHAs) along the coasts that have additional hazards due to wind and wave action. These areas are identified on Flood Insurance Rate Maps (FIRMs) as zone VE.

Community Rating System (CRS). A program developed by FEMA to provide incentives for those communities in the Regular Program that has gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Crawlspace. An under-floor space that has its interior floor area (finished or not) no more than 5 feet below the top of next-higher floor. Crawlspaces generally have solid foundation walls. See Diagram 8 in the Elevation Certificate Instructions.

Critical feature. An integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Date of Construction. The date that the building permit was issued provided the actual start of construction, repair, reconstruction or improvement was within 180 days of the permit date.

DEVELOPMENT. any man-made change to 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.

ENCLOSURE OR ENCLOSED AREA. An area below the base flood elevation that is either partially or fully shut with rigid walls.

FLOOD, FLOODING, OR FLOODWATER. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, the unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD BOUNDARY AND FLOODWAY MAP. The official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the floodway.

FLOOD HAZARD BOUNDARY MAP. The official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated the areas of flood hazards.

FLOOD INSURANCE RATE MAP (FIRM). The official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazard and the risk premium zones applicable to the Parish.

FLOOD INSURANCE STUDY (FIS). The official report of the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the FEMA base flood, represented as a flood with a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood").

FLOODPLAIN OR FLOOD-PRONE AREA. Any land area susceptible to flooding in the base flood.

FLOODPLAIN ADMINISTRATOR. The Director of Inspection and Code Enforcement or his/her designee.

FLOODPLAIN MANAGEMENT. The operation of a program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain.

FLOODPLAIN MANAGEMENT REGULATIONS. This ordinance, zoning ordinances, subdivision regulations, building codes, special purpose ordinances such as grading and erosion control and other Parish ordinances and regulations which control development in flood-prone areas.

FLOOD-PROOFING. 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.

FREEBOARD. An additional amount of height above the Base Flood Elevation used as a factor of safety in determining the level at which a structure's lowest flood must be elevated or flood-proofed to be in accordance with state or community floodplain management regulations.

FUNCTIONALLY DEPENDENT USE. A use which must be located in close proximity to water, including only docking facilities, port facilities necessary for the loading and unloading of cargo or passengers, and ship building and repair facilities, and not including long-term storage or manufacturing facilities.

GARAGE. A building on the same lot as a dwelling or a portion of a main building for the housing of noncommercial vehicles of the occupants of the dwelling. A garage has an opening 10 feet or more in width.

- (1) An attached garage is constructed horizontally adjacent to a house or underneath a house.
- (2) A detached garage is not structurally connected to a house.

GRADING. The act or result of digging, excavating, transporting, spreading, depositing, filling, compacting, settling, or shaping of land surfaces and slopes, and other operations performed by or controlled by human activity involving the physical movement of rock or soil.

HIGHEST ADJACENT GRADE. The highest natural elevation of the ground surface prior to construction next to the proposed perimeter of a building.

HISTORIC BUILDING. A pre-FIRM building or structure that is:

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

LETTER OF MAP AMENDMENT (LOMA). An amendment to the currently effective FEMA map which establishes that a property is not located in a Special Flood Hazard Area (SFHA). A LOMA is issued only by FEMA.

LEVEE. A man-made structure or earthen embankment, which contains, controls or diverts the flow of water to provide protection from flooding.

LEVEE SYSTEM. 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 ADJACENT GRADE. The lowest elevation of the ground surface after construction next to the perimeter of a building.

LOWEST FLOOR ELEVATION. The lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered the lowest floor, provided that such enclosure is not built so as to render the building in violation of the applicable non-elevation design requirements of this ordinance.

MANUFACTURED HOME. A building, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" may include a mobile home that does not constitute a "recreational vehicle".

MANUFACTURED HOME PARK OR SUBDIVISION. A parcel, or contiguous parcels, of land divided into two (2) or more manufactured home lots for rent or sale.

- (1) **EXISTING MANUFACTURED HOME PARK OR SUBDIVISION.**
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 was completed pre-FIRM.

- (2) **EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION.**

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.

- (3) **NEW MANUFACTURED HOME PARK OR SUBDIVISION.**

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 issuance of the first FIRM

MARKET VALUE. The price that the seller is willing to accept and the buyer is to pay on the open market and in an arm's length transaction.

NEW CONSTRUCTION. Any construction of a new structure commencing on or after the date of this ordinance.

NON-RESIDENTIAL BUILDING. A commercial or mixed-use building where the use is commercial or non-habitational.

NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. The vertical control datum established for vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988. It replaced the NGVD 1929.

OUT-AS-SHOWN DETERMINATION. An alternative outcome of the FEMA LOMA review process stating that a specific property is located outside the SFHA on the FIRM.

POST-FIRM BUILDING. A building for which construction or substantial improvement occurred on or after July 9, 1976.

PRE-FIRM BUILDING. A building for which construction or substantial improvement occurred before July 9, 1976.

RECREATIONAL VEHICLE. A vehicle which is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projection;
- (3) Self-propelled or permanently towable by a light-duty truck; and
- (4) Used for temporary living quarters (less than 180 consecutive days); or for recreation, camping, travel, or seasonal use.

REPETITIVE LOSS STRUCTURE. A structure that has sustained flood-related damages resulting in two (2) or more claim payments of more than one thousand dollars (\$1,000.00) each from the National Flood Insurance Program (NFIP) within any rolling ten-year period for a home or business.

RESIDENTIAL BUILDING. A non-commercial building, or portion thereof, designed for habitation by one or more families or a mixed-use building that qualifies as a single-family, 2-4 family, or other residential building not including trailers, hotels, motels, and motor lodges.

SEVERE REPETITIVE LOSS STRUCTURE. A building that is covered under an NFIP flood insurance policy, having two (2) of the referenced claims within any ten-year period but greater than ten (10) days apart, and either:

- (1) Has at least four (4) NFIP claim payments (including building and contents) over five thousand dollars (\$5,000.00) each, and the cumulative amount of such claims payments exceeds twenty thousand (\$20,000.00); or
- (2) For which at least two (2) separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the fair market value of the building.

SPECIAL FLOOD HAZARD AREA (SFHA). An area shown in the FEMA Flood Insurance Study and FIRM as Zone AE or VE

START OF CONSTRUCTION. (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348) includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 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. For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank (not including water tanks smaller than 5000 gallons), a manufactured home that is affixed to a permanent site or foundation and a travel trailer without wheels. For floodplain management purposes, a utility box is not a structure unless it is large enough to allow human walk-in access.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a building whereby the cost of restoring the building to the before damaged condition would equal or exceed 50 percent of the market value of the building before the damage occurred.

SUBSTANTIAL IMPROVEMENTS. Any reconstruction, rehabilitation, addition, or alteration of a building, or any part thereof, the cumulative cost of which equals or exceeds 50 percent of the market value of the building prior to start of construction. Start of construction is the point at which a building permit for the improvements is issued. The term does not include either:

- (1) Any project for improvement of a building to correct existing violations or state or local, health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
- (2) Any alteration of a "historic building" provided that the alteration would not preclude the building's continued designation as a "historic building".

SURGE. The mass of water causing an increase in elevation of water surface at the time of a hurricane or storm.

VERTICAL DATUM. The National Geodetic Survey Vertical Datum North American Vertical Datum 1988 (NAVD88) used parish wide for floodplain mapping.

(Note: NAVD88 replaces the previous parish vertical datum NGVD29. All flood insurance rate maps preceding March 23, 1995 are in NGVD29.)

VARIANCE. A grant of relief from the requirements of this ordinance which allows development in a manner that would otherwise be prohibited by this ordinance.

VIOLATION. The failure of a structure or other development to be fully compliant with this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

WATER SURFACE ELEVATION. The height, in relation to currently adopted Vertical Datum, where specified, of floods of various magnitudes and frequencies in floodplain areas.

WATERCOURSE. A river, stream, creek, tributary, basin, lake, pond, waterway, or channel, natural or man-made having a defined bed and banks on or over which water flows at least periodically.

ZONE AE. A Special Flood Hazard Area as shown in the FEMA Flood Insurance Study and depicted on the FIRM with an assigned Base Flood Elevation.

ZONE VE. A Special Flood Hazard Area as shown in the FEMA Flood Insurance Study and depicted on the FIRM with an assigned Base Flood Elevation.

ZONE X, X-Protected by Levee, and 0.2% Chance. A Local Flood Hazard Area as shown in the FEMA Flood Insurance Study and depicted on the FIRM.

(28-27) GENERAL PROVISIONS

Sec. 28-27.1. - Lands to which this chapter applies.

This ordinance shall apply to all special flood hazard areas (SFHAs) and local flood hazards within the jurisdiction of the City of Gretna.

Sec. 28-27.2. - Basis for establishing the areas of special flood hazard.

The special flood hazard areas represented as zone AE and zone VE identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the

most recent effective Flood Insurance Study (FIS) dated February 2, 2018 for the City of Gretna and accompanying Flood Insurance Rate Maps and their subsequent amendments and/or revisions, are hereby adopted by reference and declared a part of this ordinance. This FIS and FIRM are the minimum area of applicability of this ordinance. Current and Historic maps are on file with the Department of Inspection and Code Enforcement.

Sec. 28-27.3. – Basis for establishing the areas of local flood hazard.

The areas of local flood hazard are represented by Zones X, X-Protected by Levee, and 0.2% Chance of Flooding by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the most recent effective Flood Insurance Study (FIS) dated February 2, 2018 for the City of Gretna and accompanying Flood Insurance Rate Maps and their subsequent amendments and/or revisions.

Sec. 28-27.4. - Compliance.

No structure or land shall hereafter be filled, graded, developed, constructed, reconstructed, rehabilitated, or altered without complying with the terms of this ordinance and 44 CFR Part 60.

Sec. 28-27.5. - Abrogation and greater restrictions.

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions or ordinances. Where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Sec. 28-27.6. - Interpretation.

In the interpretation and application of this ordinance, all provisions shall be considered as minimum requirements and shall be liberally construed in favor of the Parish and shall not be deemed to limit or repeal any other powers granted by state statutes.

Sec. 28-27.7. - Warning and disclaimer or liability.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside of areas designated as special flood hazard areas or local flood hazard areas or uses allowed within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Gretna, any officer or employee thereof, for any damages or injuries that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

(28-28) FLOODPLAIN ADMINISTRATORS

Sec. 28-28.1. - Designation of the floodplain administrator.

The Director of the Department of Inspection and Code Enforcement or designee is authorized to administer and implement this ordinance and to enforce such rules or regulations consistent with and necessary to implement the purposes, intent and express terms of this ordinance.

Sec. 28-28.2. - Responsibilities of the floodplain administrator.

The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to the following:

Director of the Department of Inspection and Code Enforcement or designee shall ensure that permits issued:

a) **Review and Use of Any Other Base Flood Data.**

When base flood elevation data has not been provided the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or other source, other flooding studies, measured high water elevations from historic flooding events, local topography, or other available information in order to administer this ordinance and establish base flood elevations. Any base flood elevation established by the Floodplain Administrator shall not be lower than the base flood elevation established in the FIS for the same location.

b) **Notification of Other Agencies.** In alteration or relocation of a watercourse:

- i. Notify affected communities prior to alteration or relocation;
- ii. Submit evidence of such notification to the Federal Insurance Administration of the Federal Emergency Management Agency; and
- iii. Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

c) **Map Determinations.** Make interpretations as to the location of the boundaries of the areas of special flood hazard where there is conflict between a mapped boundary and actual field conditions.

- d) **Map Changes.** Notify FEMA of changes to the floodplain.
- e) **Community Rating System.** Prepare, obtain, and maintain all documentation necessary for the annual certification of the community rating system program review and designated renewal period to complete certification of the program.
- f) **Comply with General Standards.** Any new or substantial damage/improvement structure within zones AE and VE (SFHAs) complies with the General Standards of this chapter.
- g) **Comply with Elevation Standards.**
 - i. The elevation of any new or substantial damage/improvement structure within zones AE and VE (SFHAs) complies with the Elevation Standards of this chapter; and
 - ii. The elevation of new structures within zone X (local flood hazard) complies with the Elevation Standards of this chapter
- h) **Review Elevation Certificate.**
 - i. Upon application for a building permit, notation of the required first floor elevation shall be made on the face of building permits.
 - ii. Prior to the issuance of a completion certificate a final elevation certificate shall prove the structure meets the Elevation Standards of this chapter.

(28-29) FLOODPLAIN MANAGEMENT PERMITS

Sec. 28-29.1 – Securing a permit

- (1) (a) In the City of Gretna, it shall be unlawful to proceed with any new development, construction, substantial improvement, to include "repetitive loss" and "substantial damaged structures", or manufactured homes, without having obtained a permit properly numbered and approved from the Director of the Department of Inspection and Code Enforcement.
- (2) It shall be the duty of the Department of Inspection and Code enforcement to see that such work requiring a permit is authorized. All work must comply with the building code, as well as this chapter, and shall be subject to inspection whether a permit is required or not, and is subject to citation at the discretion of the director.
- (3) All necessary permits must be received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Pollution Control Act Amendments of 1973, 33 U.S.C. 1334.

Sec. 28-29.2 – Permit application

Application for a floodplain development building permit shall be presented to the Department of Inspection and Code Enforcement on forms furnished by the department and may include, but not be limited to:

- (1) Plans drawn to scale showing the nature, location, dimensions,; and
- (2) Proposed elevation in NAVD 88 to which any non-residential structure will be flood-proofed. A certificate from a registered professional engineer or architect that the nonresidential flood-proofed structure shall meet the flood proofing criteria of this chapter;
- (3) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; and
- (4) Maintain a record of all such information in accordance with this chapter.

Sec. 28-29.3. – Permit review.

Approval or denial of a floodplain development building permit by the Department of Inspection and Code Enforcement shall be based on all of the provisions of this chapter and may consider the following relevant factors:

- (1) The danger to life and property due to flooding or erosion damage; and
- (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner; and
- (3) The danger that materials may be swept onto other lands to the injury of others; and
- (4) The compatibility of the proposed use with existing and anticipated development; and
- (5) The safety of access to the property in times of flood for ordinary and emergency vehicles; and
- (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; and
- (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; and
- (8) The necessity to the facility of a waterfront location, where applicable; and
- (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

(28-30) STANDARDS OF CONSTRUCTION

Sec. 28-30.1. - General standards.

In all areas of special flood hazards, the following provisions for permits are required for all new construction and substantial damage/improvement to insure sites are reasonably safe from flooding:

- (1) **Anchoring.** All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the building resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy. All manufactured homes shall also meet the standards of Section 14-06.05.
- (2) **Construction materials and methods.** All new construction and substantial damage/improvement shall be constructed with materials and utility equipment resistant to flood damage and using methods and practices that minimize flood damage. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during flooding.
- (3) **Tanks.** Underground and above-ground tanks shall be designed, constructed, installed and anchored to prevent flotation, collapse and lateral movement resulting from floodwater loads, including the effects of buoyancy, hydrostatic pressure, and velocity. Tank inlets, fill openings, outlets, and vents shall be installed 1-foot above the base flood elevation or fitted with covers designed to prevent the inflow of floodwater and outflow of the contents of the tank during the base flood.
- (4) **Foundations.** Foundations and walls constructed below the base flood elevation shall be vented to equalize hydrostatic pressures.
- (5) **Vents.** Vent openings shall be permanent openings in the walls that allow for the free passage of water automatically in both directions without human intervention. Such venting shall be on at least two sides of the structure, or enclosure, have a bottom at no more than one-foot above the ground elevation. The total area of such venting shall be at least one square inch per square foot of enclosed footprint. Openings may be equipped with screens, louvers, or automated float control in accordance with FEMA Technical Bulletin TB #1-08 Foundations and walls below the base flood elevation shall be constructed of flood resistant materials in accordance with FEMA Technical Bulletin TB #2-08. Alternatively, the project proponent may submit a design that will allow for automatic equalization of hydrostatic flood forces on exterior walls, signed and stamped by a registered civil engineer and approved by the Floodplain Administrator. A window, a door, or a garage door is not considered a vent opening. If there are multiple enclosed areas within the foundation, each area must be vented as herewith described.

Sec. 28-30.2. – Elevation standards.

In all areas of special flood hazards (Zone AE and VE) and areas of Local Flood Hazard (Zone X, X Protected by Levee, and 0.2% Annual Chance), the following higher regulatory provisions for permits are required for all new construction and substantial damage/improvement (as further denied below) to insure sites are reasonably safe from flooding. In all instances of higher regulatory standards written below the term **lowest floor includes basement, mechanical and utility equipment, and ductwork**. A registered professional engineer, architect, or land surveyor shall submit a certification to the Department of Inspection and Code Enforcement that the standard of this chapter is satisfied.

Sec. 28-30.2.1 – Residential elevation – New construction

Permits issued for new construction of any residential structure, must have the required NAVD 88 elevation of the lowest floor or lowest horizontal portion of the structural member and the base flood elevation noted on the permit.

- (1) In Zone X, X Protected by Levee, and 0.2% Annual Chance the lowest floor shall be at thirty-six (36) inches above the Centerline of the Street
- (2) In Zone AE the lowest floor shall be at the **highest** of either:
 - a) The BFE on the FIRM; or
 - b) Thirty-six (36) above the Centerline of the Street.

Sec. 28-30.2.2 Residential elevation – Substantial damage/improvement

Permits issued for substantial damage/improvement of any residential structure, must have the required NAVD 88 elevation of the lowest floor (including basement) and the base flood elevation noted on the permit.

- (1) In Zone AE the lowest floor shall be at the BFE on the FIRM.

Sec. 28-30.2.3 Non-Residential elevation and/or floodproofing – New construction

Permits issued for new construction of any non-residential structure including accessory structure greater than 1000 sq ft, must have the required NAVD 88 elevation of the lowest floor and the base flood elevation noted on the permit. In Lieu of meeting the elevation requirement stated below, a Non-Residential structures in Zone X and Zone AE may be flood-proofed so that

Structural components are capable of resisting hydrostatic and hydrodynamic loads including the effects of buoyancy and be certified by a registered professional engineer or architect that the standards of this section are satisfied.

- (1) In Zone X, X Protected by Levee, and 0.2% Annual Chance the lowest floor shall be elevated or flood-proofed to be at thirty-six (36) inches above the Centerline of the Street.
- (2) In Zone AE the lowest finished floor shall be elevated or dry-floodproofed to the **highest** of either:
 - (1) The BFE on the FIRM; or
 - (2) Thirty-six (36) above the Centerline of the Street

Sec. 28-30.2.4 Non-Residential elevation and/or floodproofing – Substantial damage/improvement

Permits issued for substantial damage/improvement of any non-residential structure including accessory structure greater than 1000 sq ft, must have the required NAVD 88 elevation of the lowest floor and the base flood elevation noted on the permit. In Lieu of meeting the elevation requirement stated below, a Non-Residential structures in Zone AE may be flood-proofed so that Structural components are capable of resisting hydrostatic and hydrodynamic loads including the effects of buoyancy and be certified by a registered professional engineer or architect that the standards of this section are satisfied.

- (1) In Zone AE the lowest finished floor shall be at BFE on the FIRM

Sec. 28-30.3. – Enclosure standards.

New construction and substantial damage/improvement, 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 shall 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:

- (1) A minimum of two (2) openings on separate walls having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided; and
- (2) The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

Sec. 28-30.4. - Standards for subdivision proposals.

All subdivision development proposals including the placement of manufactured home parks and subdivisions shall:

- (1) Be consistent with this chapter; and
- (2) Meet floodplain development permit requirements of this chapter; and
- (3) Generate Base Flood Elevation data for subdivision proposals and other proposed development 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 pursuant to this chapter; and
- (4) Have adequate drainage provided to reduce exposure to flood hazards; and
- (5) Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and
- (6) Detain stormwater runoff as follows:
 - a) For all proposed developments, other than single-family residential, totaling ten thousand (10,000) square feet or more (all phases), and all single-family residential developments totaling five (5) acres or more (all phases), the ten-year storm event post-development rate of run-off shall not exceed the ten-year storm event pre-development rate of run-off. To insure that the post-development rate of run-off does not exceed the pre-development rate of run-off, on site detention will be required in a manner approved by the Department of Public Works. The detention system cannot release water from the site at a rate greater than the pre-development rate of run-off; and
 - b) The design concepts for detention facilities and determination of storm run-off shall be consistent with sound hydrological and hydraulic engineering principles and practices, and the provisions of the Jefferson Parish "Storm Drainage Design Manual" dated 1981, or any subsequent revision thereof, and "Parking Lot Storm Run-Off Detention Manual" prepared by the Engineering Division of the Jefferson Parish Department of Public Works. The director of public works shall approve any and all modifications to the drainage manuals; and
 - c) The developer shall submit drainage design calculations including a drainage map along with engineering plans to the department of public works for approval by the director of the department of engineering and the director of the department of capital projects. The drainage map shall include a lien diagram

reflecting the existing drainage system from the outfall end of the proposed development to the receiving outfall canal, reflected in the applicable current master drainage plan. The developer shall also submit calculations showing the impacts to the detention facility from a one hundred-year storm event; and

- d) Drainage calculations shall consider all relevant information that would affect the hydraulics of the drainage system including, but not limited to, the following: (1) drainage basin characteristics; (2) system hydraulics; and (3) other external influences upstream and downstream from the drainage system that may impact or be impacted by the proposed system. Drainage calculations shall consist of: (1) ten-year pre-development flow; (2) ten-year post-development flow; (3) description of release facility and volume of release versus depth of storage in detention facility for ten-year and one hundred-year storm events; (4) maximum depth of water in the detention facility for design storms; (5) description of impact to the proposed facility resulting from increased depth of storage; and (6) the description of how the system will be maintained; and
- e) Unless unstable or highly erosive soil conditions indicate a lower design velocity is desirable, or unless ditch paving at the outlet is provided, the maximum velocity for culvert design shall adhere to the criteria in the Jefferson Parish "Storm Drainage Design Manual" dated 1981, or any subsequent revision thereto; and
- f) The Director of the Department of Public Works shall review for approval each proposed development covered by this section prior to the issuance of permits to proceed with said development. Any decision in which the Director of Public Works denies a request or which requires a variance shall be submitted to the board of standards and appeals for review and recommendation. Decisions of the board of standards and appeals recommending approval of a variance shall be submitted for final approval by the parish council; and
- g) Any denial of a variance request by the board of standards and appeals may be appealed to the parish council for final resolution.

Sec. 28-30.5. - Standards for manufactured homes.

Require that all new or substantial damage/improvement manufactured homes within the special flood hazard area outside of a manufactured home park or subdivision, in a new or existing manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, shall be installed using methods and practices which minimize flood damage and shall:

- (1) Be 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 including but not limited to:
 - a) Over-the-top ties at each of the four (4) corners of the manufactured home, with two (2) additional ties per side at intermediate locations, and manufactured homes less than fifty (50) feet long requiring one (1) additional tie per side;
 - b) Frame ties at each corner of the home with five (5) additional ties per side at intermediate points, and manufactured homes less than fifty (50) feet long requiring four (4) additional ties per side;
 - c) All components of the anchoring system be capable of carrying a force of four thousand eight hundred (4,800) pounds; and
 - d) Any additions to the manufactured home are similarly anchored.
- (2) Be elevated on a permanent foundation of compacted fill or pilings such that the lowest floor of the manufactured home is elevated at or above the elevation standards of this chapter (Section 14-06)
 - a) If pilings are used for elevation:
 - i. Lots shall be large enough to permit steps; and
 - ii. Piling foundations shall be placed in stable soil no more than ten (10) feet apart; and
 - iii. Reinforcement shall be provided for pilings more than six (6) feet above the ground level; and
- (3) Adequate access and drainage shall be provided and access for a hauler are provided; and
- (4) Upon the completion of an installation the elevation of the lowest floor shall be certified by a registered professional engineer or surveyor, and verified by the community building-inspector to be properly elevated; and
- (5) No new manufactured home shall be placed in a coastal high hazard area, except in an existing manufactured home park or subdivision.

Sec. 28-30.6. – Standards for recreational vehicles.

All new recreational vehicle parks or additions to parks in a special flood hazard area shall clearly post the hazard and methods of flood warning. All recreational vehicles placed on sites within special flood hazard areas shall:

- (1) Be on wheels, mobile, fully licensed, attached to the site only by quick disconnect type utilities and security devices; and
- (2) Be on the site few than one hundred eighty (180) consecutive days; and
- (3) Have no attached additions on adjoining foundation; or
- (4) Meet the anchoring and elevation requirements for Manufactured Homes of this chapter

Sec. 28-30.7. – Certification requirements

When development occurs on property that has been identified by the Floodplain Administrator as being located in a special flood hazard area or local flood hazard area, the following shall be certified by a registered civil engineer or licensed land surveyor and provided to the Department of Inspection and Code Enforcement:

- (1) Flood Zone; and
- (2) Base Flood Elevation; and
- (3) Elevation of the lowest floor of all detached buildings; and
- (4) Elevation of the lowest adjacent grade; and
- (5) Elevation of the highest adjacent grade; and
- (6) Elevation of the centerline of the street; and
- (7) Elevation to which a structure has been flood-proofed (if applicable); and
- (8) Elevation of swimming pools, utilities, and any other structures, as requested by the Floodplain Administrator; and
- (9) Calculation of vent space for crawlspaces.

(28-31) Administration.

Sec. 28-31.1. - Variances.

The board of standards and appeals, as established by the community, shall hear and render judgment on requests for variances from the requirements of this chapter.

- (1) Any applicant for a permit from the department of inspection and code enforcement required by this chapter whose application has been refused or revoked, or any person who has been ordered by the Director in incurring any expense, or any person who feels that there are practical difficulties or unnecessary hardships involved in carrying out the strict letter of this chapter, or where it is alleged that there is an error in any order, requirement, decision, or any determination made by the director may, within fifteen (15) days after being notified of such refusal or order, appeal from the decision of the Director to the Board of Standards and Appeals by giving the Director notice in writing that he does so appeal. Said notice shall be accompanied by a check in the amount indicated in Chapter 8 Building Code Amendments of the City of Gretna, "Schedule of Appeal Fees" payable to the City of Gretna, which amounts is to be retained by the city.
- (2) It shall be the duty of the Board of Standards and Appeals to:
 - a) Hear and decide appeals where it is alleged there is error in any order, requirement, decision, or determination made by the Director in the enforcement of this chapter; and
 - b) Hear and decide all matters referred to it or upon which it is required to pass under this chapter; and
 - c) Pass upon appeals where there are practical difficulties or unnecessary hardships in the way of carrying out the strict letter of this chapter, to vary or modify the application of any of the regulations or provisions of this chapter relating to the construction or alteration of buildings or structures so that the spirit of this chapter shall be observed, public safety and welfare secured, and substantial justice done; and
 - d) Interpret the intent or meaning of this chapter and so advise the Director and to recommend to the council such amendments or revisions which may be required to clarify the wording as well as recommend amendments or revisions as may be required from time to time to meet the changing condition.
- (3) Variances may be issued:
 - a) In cases generally limited to construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, in conformance with:
 - i. A showing of good and sufficient cause; and
 - ii. A determination that failure to grant the variance would result in:
 - a. increased flood heights; or
 - b. additional threats to public safety; or
 - c. extraordinary public expense; or
 - d. create nuisances; or
 - e. cause fraud on or victimization of the public; or

- f. conflict with existing local laws or ordinances.
 - b) Only upon a determination that the variance is the minimum necessary, considering the flood hazard to affect relief and for other development necessary for the conduct of a functionally dependent use; and
 - c) In situations which could result in an undue delay in construction when all of the above conditions have been met and the requested variance will not increase the cost of the flood insurance, the board may grant a variance.
- (4) In order to execute the above mentioned powers, the Board of Standards and Appeals may reverse or affirm wholly or in part, or may modify the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination of the Director, or to decide in favor of the applicant on any matters on which it is required to pass under this chapter.
 - (5) Decisions of the Board of Standards and Appeals should state the variances or denials granted and conditions, if any, as they may require in such action. The decisions shall be filed in the Department of Inspection and Code Enforcement within ten (10) working days after the hearing and a certified copy sent to the applicant by certified mail. The Director must abide in the actions taken by the Board.
 - (6) In those instances where a variance is granted, the appellate shall be given a written notice that a structure built with the lowest floor elevation below the BFE will then have the cost of flood insurance commensurate with the increased risk resulting from the reduced lowest floor elevation.

Sec. 28-31.2. Appeals

If the applicant for a Permit, the permittee, or other persons whose property rights may be affected, is dissatisfied with any determination made by the Floodplain Administrator or Board of Standards and Appeals such person may appeal to the City of Gretna Council. Any such appeal shall be in writing, shall state the specific reasons therefore and grounds asserted for relief, and shall be filed with the Clerk of the Parish Council. If it is deemed that the proposed variance may negatively affect the Parish's standing in the National Flood Insurance Program, adequate public notice and public hearing shall be required before the Parish Council may act on the proposal.

Sec. 28-31.3 Recording of a variance affidavit.

Any applicant whose variance from the base flood elevation is approved by the Board of Standards and Appeals or the Parish Council shall record in the conveyance records of the Clerk of Court of Jefferson Parish an affidavit indicating that the applicant's property does not meet the required base flood elevation of the parish. Verification of the applicant's recorded affidavit shall be presented to the Department of Inspection and Code Enforcement prior to the issuance of a use and occupancy certificate.

Sec. 28-31.4 Penalties for non-compliance

Under the authority of the Building Code of the City of Gretna, the director of the department of inspection and code enforcement is authorized to enforce the provisions of the current adopted technical codes. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. The owner or general agent of the building or premises where a violation of any regulation pertinent to the special flood hazard areas has been committed or exists, or the general agent, architect, building contractor, or any other person who assists in any violation of the pertinent flood regulations or who maintains any building or premises in which the violation exists shall be punished as provided in Chapter 1, section 1-10, "Penalty: maximum: continuing violations" of the City of Gretna Code of Ordinances.

Sec. 28-31.5 Adjoining communities

- (1) Consideration of overall flood management in the Metropolitan New Orleans area shall be given to individual floodplain management programs in:
 - a) The incorporated city of New Orleans; and
 - b) The parishes of Jefferson, Orleans, and Plaquemines.
- (2) In riverine situations, adjacent communities and the state coordinating office will be notified prior to any alteration or relocation of a watercourse, and copies of such notification will be submitted to FIA. The flood-carrying capacity of altered or relocated portions of any watercourse will be maintained.

Sec. 28-31.6 Priority of flood-prone area regulations

All regulations described in this chapter represent minimum standards and supersede all existing ordinances which require lower standards.

SECTION 2. That all ordinances in conflict with the provisions of this proposed ordinance are hereby repealed.

