

Ordinance No. _____

AN ORDINANCE AMENDING CHAPTER 46, Sections 21 thru 86 OF THE CODE OF ORDINANCES OF THE CITY OF DEER PARK IN ITS ENTIRETY (AND ANY INCONSISTENT PROVISIONS OF PREVIOUS FLOOD REGULATION ORDINANCES SHALL BE DELETED FROM THE CODE OF ORDINANCES), PROVIDING COMPREHENSIVE FLOOD DAMAGE RULES AND REGULATIONS; PROVIDING OTHER DETAILS; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEER PARK:

1. Chapter 46 Sections 21 thru 86 of the Code of Ordinances of the City of Deer Park is hereby amended in its entirety (and any inconsistent provisions of previous flood regulation ordinances shall be deleted from the code of ordinances) so that it shall hereafter read as follows:

FLOOD DAMAGE PREVENTION

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in Article 8230-13 V.A.T.S. delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of Deer Park, Texas, does ordain as follows:

SECTION B. FINDINGS OF FACT

1. The flood hazard areas of Deer Park 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 diversely affect the public health, safety and general welfare.
2. These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

SECTION C. STATEMENT OF PURPOSE

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions and specific reasons 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. Insure that potential buyers are notified that property is in a flood area.

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purpose, this ordinance 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 the initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
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 flood waters or which may increase flood hazards to other lands.

ARTICLE 2

DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted to give them the meaning they have in common usage and to give this ordinance it's 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 characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition, and unpredictable flow paths.

ANCHORED – means adequately secured to prevent flotation, collapse or lateral movement.

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

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 ie., a detached garage servicing a 1 – 4 family dwelling

AREA OF SHALLOW FLOODING – means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent chance or greater annual chance of flooding to an average depth of one to three 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 – See "Special Flood Hazard Area"

BASE FLOOD ELEVATION (BFE) – means 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 one-percent chance (100-year) of equaling or exceeding that level in any given year – also called base flood.

BASEMENT – means any area of the building, including sunken room or sunken portion of a room, having its floor below ground level (subgrade) 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.

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 compromised.

CURVILINEAR LINE - means the border on either the FHBM or FIRM that delineates the special flood, mudslide (i.e. mudflow) and/or flood-related erosion hazard areas and consists of curved or contour line that follows the topography.

DEVELOPMENT – means any man-made 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 equipment or materials.

Development Permit – means “floodplain development permit” - the permit describing the fill, drainage, grading for the property to be developed.

ELEVATED BUILDING – means, for insurance purposes, a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

EXISTING CONSTRUCTION – means for the purpose of determining rates, structures for which the “start of construction” commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs 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.

EXISTING STRUCTURES – see “existing construction”

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION – mean 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).

Fill – means the placement of earth or other solid material above the natural ground surface elevation.

- (1) **FLOOD OR FLOODING** –means general and temporary condition of partial or complete inundation of normally dry land areas from: 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 mud- slide (i.e., mudflow) and/or flood-related erosion 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 (FIS) – means and 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.

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 standard 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.

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

FLOODWAY (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.

FREEBOARD– means an additional amount of height above the Base Flood Elevation (BFE) used as a factor of safety (e.g., 1 foot above the BFE) in determining the level at which a structure’s lowest floor must be elevated or floodproofed to be in accordance with the State or Community floodplain management regulations.

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 repair facilities, but does not include long-term storage or related manufacturing facilities.

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:

- (a) 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;

- (b) 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 designated by the Secretary to qualify as a registered historic district;
- (c) 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
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior or;
 - (2) Directly by the Secretary of the Interior in states without approved programs.

LEVEE- means a man-made 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 of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

MANUFACTURED HOME – means a structure transportable in one or more sections, which is built in 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 or more manufactured home lots for rent or sale.

MEAN SEA LEVEL – means, for purposes of the National Flood Insurance Program, The North American Vertical Datum (NAVD) 1988, 2001 adjusted or most recent vertical datum adopted by FEMA, to which base flood elevations shown on a community'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 improvement 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.

RECREATIONAL VEHICLE – means a vehicle which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projections; (iii) designed to self-propel or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

SPECIAL FLOOD HAZARD AREA (SFHA) – is the land in the floodplain within the community subject to a one percent 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, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO or V1-30, VE OR V. for purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

START OF CONSTRUCTION – (for other than new construction or substantial improvement under the Coastal Barrier Resource 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 of 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, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE – means damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT – means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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: (i) 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 (ii) Any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation of a “historic structure”.

VARIANCE – means a grant of relief by a community from the terms of the floodplain management regulations. (For full requirements see Section 60.6 of the National Flood Insurance Program Regulations)

VIOLATION – means the failure for a structure or other development to be fully compliant with the community’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), (e)(4), or (e)(5) 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 American Vertical Datum (NAVD) 1988, 2001 adjusted or most recent vertical datum adopted by FEMA (where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE 3

GENERAL PROVISION

SECTION A - LANDS TO WHICH THIS ORDINANCE APPLIES

The ordinance shall apply to all areas of special flood hazard with the jurisdiction of Deer Park, TX.

SECTION B - BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled “The Revised Flood Insurance Study for The City of Deer Park, Community No. 480291 dated January 6, 2017 with accompanying Flood Insurance Rate Maps 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 ordinance.

SECTION C – ESTABLISHMENT OF DEVELOPMENT PERMIT

A Floodplain Development Permit shall be required for any development within the Special Flood Hazard Area (SFHA), to ensure conformance with the provisions of this ordinance. For areas outside the SFHA a Building Permit will be required to ensure conformance with freeboard requirements.

SECTION D – COMPLIANCE

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

SECTION E – ABROGATION AND GREATER RESTRICTIONS

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

SECTION F – INTERPRETATION

In the interpretation and application of this ordinance, all provisions shall be; (i) considered as minimum requirements; (ii) liberally construed in favor of the governing body; and (iii) deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION G – 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. On rare occasions greater floods can and will occur and flood heights may be increased by manmade or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

ARTICLE 4

ADMINISTRATION

SECTION A – DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The City Manager, or his/her designated appointee, is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION B – DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not limited to, the following:

- (1) Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.
- (2) Review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- (3) Review, approve, or deny all applications for development permits required by adoption of this ordinance.
- (4) 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.
- (5) 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 an actual field conditions) the floodplain Administrator shall make the necessary interpretation.
- (6) Notify, in riverine situations, adjacent communities and the State Coordinating Agency which is Texas Water Commission, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (8) When base flood elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Article 5.
- (9) When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted with Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect on 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 foot at any point within the community.
- (10) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision through FEMA.
- (11) In addition to the areas designated on the FIRM map as susceptible to flooding, the administrator should indicate additional areas that, through experience, he/she has found to be susceptible to flooding and make the information available to the public.

SECTION C – PERMIT PROCEDURES

- (1) Application for a development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not 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. Additionally, the following information is required:
 - (a) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
 - (b) Elevation in relation to mean sea level to which any non-residential structure shall be flood proofed;
 - (c) A certificate from a registered professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria of Article 5, Section B(2);
 - (d) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
 - (e) Maintain a record of all such information in accordance with Article 4, Section (B) (1).
- (2) Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:
 - (a) The danger to life and property due to flooding or erosion damage;
 - (b) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (c) The danger that materials may be swept onto other lands to the injury of others;
 - (d) The compatibility of the proposed use with existing and anticipated development;
 - (e) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (f) 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;
 - (g) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
 - (h) The necessity to the facility of a waterfront location, where applicable;
 - (i) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - (j) The relationship of the proposed use to the comprehensive plan for that area.
 - (k) The floodplain administrator may revoke a permit or approval issued under the provisions of this regulation, in cases where there has been any false statement or misrepresentation as to a material fact in the application or plans upon which the permit or approval was based:
 - (l) Upon notice from the floodplain administrator that work on any building, structure, bridge or any improvement which would affect water drainage, is being done contrary to the provisions of this regulation, or in a dangerous or unsafe manner, such work shall be immediately stopped. Such a notice shall be in writing and shall be given to the owner of the property or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed. Where an emergency exists, no written notice shall be required to be given by the floodplain administrator, provided written notice shall follow within twenty-four (24) hours from the time the oral notice to stop work was issued.

- (m) The floodplain administrator, or his duly authorized representative, may enter any building, structure, or premise to perform any duties imposed upon him by this regulation.

SECTION D. - VARIANCE PROCEDURES

- (1) The Appeal Board as established by the community shall hear and render judgment on requests for variances from the requirements of this ordinance.
- (2) The Appeal Board shall hear and render judgment 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 ordinance.
- (3) Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision in the courts of competent jurisdiction.
- (4) The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (5) Variance may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Registry of Historic Places or the State inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.
- (6) 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 factor in Section C(2) of this Article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (7) Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance (Article 1, Section C).
- (8) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (9) 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 and design of the structure.
- (10) Prerequisites for granting variances;
 - (a) Variance shall only be used upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (b) Variance shall only be issued upon, (i) showing a good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and (iii) 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.
 - (c) Any application to whom a variance is granted shall 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.

(11) Variances may be issued by a community for new construction and substantial improvements and for other developments necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Article 4, section D (1)-(911) are met, and (ii) the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to the public safety.

ARTICLE 5 PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A GENERAL STANDARDS

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

- (1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

- (8) An elevation certificate (Standard FEMA form) signed by a professional engineer is required for each and every building within the City of Deer Park, regardless of its location with respect to the flood hazard boundary. No final building inspection nor certificate of occupancy will be issued until the elevation certificate has been received and reviewed for accuracy

There shall be no adverse flooding impact on any property from any fill placed in the same or nearby watershed.

SECTION B – SPECIFIC STANDARDS

In areas outside the special flood hazard area the following provisions are required:

- (1) All new construction of both residential and non-residential structures shall have the lowest floor (including basement) elevated two (2) feet above the centerline of the street or 1 foot above the highest adjacent grade, whichever is higher.

In all areas of special flood hazard area (SFHA) where base flood elevation data has been provided as set forth in (i) Article 3, Section B, (ii) Article 4, Section B (8), or (iii) Article 5, Section C(3), the following provisions are required:

- (1) **Residential Construction** – new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated one (1) foot above the centerline of the street or one (1) foot above the base flood elevation (BFE), whichever is higher. 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 Article 4, Section C (1)a, is satisfied.
- (2) **Non- residential Construction** – new construction and substantial improvements of any commercial, industrial or other non-residential structure shall either have the lowest floor (including basement) elevated one (1) foot above the centerline of the street or one (1) foot above the base flood elevation (BFE), whichever is higher, 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 flood proofed shall be maintained by the Floodplain Administrator.
- (3) **Enclosures** – new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access of 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:

- a. A minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- b. The bottom of all openings shall be no higher than 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.

(4) Manufactured Homes –

- a. Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over the top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- b. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to two (2) feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- c. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either :
 - (i) the lowest floor of the manufactured home is two (2) feet above the base flood elevation, or
 - (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

- (5) RECREATIONAL VEHICLES –** Require that recreational vehicles placed on sites within Zones A1-30, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of Article 4, Section C;(1), and the elevation and anchoring requirements for

“manufactured homes” in paragraph (4) of this Section. 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.

- (6) **Critical Facilities** – There shall be no critical facilities constructed in the 100-year (1%) flood zone.
- (7) **Floodplain Storage Capacity** – Fill placed within the 100-year (1%) flood zone shall be mitigated such that no flood storage capacity is lost.
- (8) **Construction on Engineered Fill** – In addition to all other applicable requirements set forth in this Code or any other applicable laws or regulations, all filling of lots or vacant property, new construction or substantial improvements proposed to be constructed on engineered fill shall apply for a development permit prior to filling to verify that location is in an authorized area or of special flood hazards and must be constructed on properly designed and compacted fill that extends beyond the building walls before dropping below the base flood elevation and must be appropriately protected from erosion and scour. The design of the fill must be sealed by a registered engineer in the State of Texas demonstrating that proper compaction has been obtained and NPDES regulations have followed, the fill is not with the 100-year floodplain and has not changed the BFE.

SECTION C – STANDARDS FOR SUBDIVISION PROPOSALS

- (1) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article 1, Sections B, C, and D of this ordinance.
- (2) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of Article 3, Section C; Article 4, Section C; and the provisions of Article 5 of this ordinance.
- (3) Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Article 3, Section b or Article 4, Section B (8) of this ordinance.
- (4) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (5) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

SECTION D – STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1-3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and 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 and substantial improvement of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least above the base flood elevation (BFE) specified in feet on the community's FIRM (at least two feet above the centerline of the street, whichever is higher, if no base flood elevation is specified).
- (2) All new construction and substantial improvements of non-residential structures;
 - (i) Shall have the lowest floor (including basement) elevated above the highest adjacent grade at least above the base flood depth (BFD) specified on the community's FIRM or at least two (2) feet above the centerline of the street, whichever is higher, if no base flood depth is specified, or
 - (ii) 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 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 Article 4, Section C (1) a., are satisfied.
- (4) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

SECTION E - FLOODWAYS

Floodways – located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions 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 standards engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- (2) If Article 5, Section E (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.
- (3) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance 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.

ARTICLE 6

It is hereby found and declared by The City of Deer Park that severe flooding has occurred in the past within its jurisdiction and will certainly occur within the future; that flooding is likely to result in infliction of serious personal injury or death, and is likely to result in substantial injury or destruction of property within its jurisdiction; in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program; and in order to effectively remedy the situation described herein, it is necessary that this ordinance become effective immediately.

Due to the circumstances as set out in Article 6 above, the City Council finds that this ordinance relates to the immediate preservation of the public peace, health, safety and welfare in that it is necessary that the present inadequacies in the ordinances of the City of Deer Park can be corrected at the earliest possible moment, so as to assure adequate health and protection for the remainder of the City, to prevent flood damage, and to insure proper fire and police protection, thereby creating an emergency, for which the Charter requirement providing for the reading of ordinances on three several days should be dispensed with and this ordinance be passed finally on its introduction; and , accordingly, such requirement is dispensed with, and this ordinance shall take effect upon its passage and approval by the Mayor.

In accordance with Article VIII, Section 1 of the City Charter, this Ordinance was introduced before the City Council of the City of Deer Park, Texas, **PASSED, APPROVED AND ADOPTED** on this the _____ day of _____, 2017 by a vote of _____ "Ayes" and _____ "Noes".

MAYOR, City of Deer Park

ATTEST:

Deputy City Secretary

APPROVED:

City Attorney