Attachment 6
Local Floodplain Ordinances
The Trinity River Authority does not have floodplain ordinances. The local jurisdictions have floodplain ordinances and are responsible for enforcing said ordinances. The following local floodplain ordinances are included in this attachment:

- City of Buffalo
- City of Crockett
- City of Fairfield
- Grimes County
- Leon County
- City of Madisonville
- City of Palestine
- Polk County
- Walker County
60.3 (b)
FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE 1
SECTION A. STATUTORY AUTHORIZATION
SECTION B. FINDINGS OF FACT
SECTION C. PURPOSE
SECTION D. METHODS OF REDUCING FLOOD LOSSES

ARTICLE 2
DEFINITIONS

ARTICLE 3
GENERAL PROVISIONS
SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES
SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD (FHB)
SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT
SECTION D. COMPLIANCE
SECTION E. ABROGATION AND GREATER RESTRICTIONS
SECTION F. INTERPRETATION
SECTION G. WARNING AND DISCLAIMER OR LIABILITY

ARTICLE 4
ADMINISTRATION
SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR
SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR
SECTION C. PERMIT PROCEDURES
SECTION D. VARIANCE PROCEDURES

ARTICLE 5
PROVISION FOR FLOOD HAZARD REDUCTION
SECTION A. GENERAL STANDARDS
SECTION B. SPECIFIC STANDARDS
SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS

ARTICLE 6
PENALTY, REPEALER AND SEVERABILITY (RECOMMENDED)
SECTION A. PENALTY
SECTION B. REPEALER
SECTION C. SEVERABILITY

CERTIFICATION
FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in Section 15.311, et seq., Texas Water Code, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of the City of Buffalo, Texas does ordain as follows:

SECTION B. FINDINGS OF FACT

(1) The flood hazard areas of the City of Buffalo are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(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 the occupancy of flood hazard 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 in specific areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;

(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
(7) 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 purposes, 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 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 its most reasonable application.

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

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

AREA OF SHALLOW FLOODING - means a designated AO, 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 - is the land in the floodplain within a 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 (FHBH). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, Al-99, VO, V1-30, VE or V.

BASE FLOOD - means the flood having a one percent chance of being equalled or
exceeded in any given year.

BASEMENT - means any area of the building having its floor subgrade (below ground level) on all sides.

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.

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 storage of equipment or materials.

ELEVATED BUILDING - means a nonbasement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In the case of Zones V1-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls met the standards of Section 60.3(e)(5) of the National Flood Insurance Program regulations.

EXISTING CONSTRUCTION - means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for 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.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FLOOD OR FLOODING - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters.
2. the unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD HAZARD BOUNDARY MAP (FIBM) - means an official map of a community, issued by the Administrator, where the boundaries of the flood, mudslide (i.e.,
mudflow) related erosion areas having special hazards have been designated as Zones A, M, and/or E.

**FLOOD INSURANCE RATE MAP (FIRM)** - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY** - is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

**FLOODPLAIN OR FLOOD-PRONE AREA** - means any land area susceptible to being inundated by water from any source (see definition of flooding).

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

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

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

**FLOOD PROOFING** - means any combination of structural and 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.

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

**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 determined 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 Interior; or

(d) Individually listed on a local inventory or 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 or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood insurance Program regulations.

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

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

MEAN SEA LEVEL - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, 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 improvements to such structures.
NEW MANUFACTURED HOME PARK OR SUBDIVISION - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

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 be self-propelled or permanently tovable 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.

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 - means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE - means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 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: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions or (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

VIOLATION - means the failure of a structure or other development to be fully compliant with the 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 Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
ARTICLE 3

GENERAL PROVISIONS

SECTION A. Lands to Which This Ordinance Applies

The ordinance shall apply to all areas of special flood hazard with the jurisdiction of the City of Buffalo, Texas.

SECTION B. Basis for Establishing the Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency on its Flood Hazard Boundary Map (FHBIM), Community Number 480904, dated 08-20-76, 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 Development Permit shall be required to ensure conformance with the provisions of this ordinance.

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; (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

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 man-made 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 Administration 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 & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be 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 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 the Texas Natural Resource Conservation 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.

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
be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. 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 nonresidential structure shall be floodproofed;

   c. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing 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.

SECTION D. VARIANCE PROCEDURES
(1) The appeal Board as established by the community shall hear and render judgement on requests for variances from the requirements of this ordinance.

(2) The Appeal Board shall hear and render judgement on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this 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) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this 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 factors 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. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

   b. Variances 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 development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Article 4, Section D(1)-(9) 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 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.

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards 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 to or above the base flood elevation. 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) Nonresidential Construction - new construction and substantial
improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

(3) Manufactured Homes -

Require that all manufactured homes to be placed within Zone A on a community's FEMR 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.

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.
PENALTY CLAUSE FOR FLOOD HAZARD PREVENTION ORDINANCE

SECTION A. Any person who shall violate any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed $50.00 Each day of violation shall constitute a separate offense.

SECTION B. City of Buffalo, Texas, ordinance adopted November 13, 2000 regarding Flood Hazard Prevention, together with all other ordinances or parts of ordinances, which are inconsistent or in conflict herewith, are hereby repealed.

SECTION C. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence or part of this ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair or invalidate this ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Buffalo, Texas, County of Leon, Texas, declares that it would have been passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional or whether there be one or more parts.
CERTIFICATION

It is hereby found and declared by the City of Buffalo, Texas, 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.

Therefore, an emergency is hereby declared to exist, and this ordinance, being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.

APPROVED: [Signature]
[community official] Mayor

PASSED: [Signature] [Date]

I, the undersigned, City Secretary, do hereby certify that the above is a true and correct copy of an ordinance duly adopted by the City Council of the City of Buffalo, at a regular meeting duly convened on [Date].

[Signature]
(Secretary)

(SEAL)
FLOODPLAIN ADMINISTRATOR
City of Buffalo, Texas 75831

DEVELOPMENT PERMIT APPLICATION
$500.00 PERMIT FEE

STATE OF TEXAS

COUNTY OF LEON

APPLICATION NUMBER

1. NAME OF APPLICANT:
MAILING ADDRESS:

2. LOCATION OF PROPERTY (complete as appropriate)
If located in a subdivision:

Name of Subdivision Section No. Block No. Lot No.

If NOT located in subdivision:

Name and No. of Survey/Abstract Acreage
Location Description (Attach a vicinity map)

3. NATURE OF PROPOSED DEVELOPMENT (check and complete all that apply)

( ) Residential ( ) Placement of Fill ( ) Other

( ) Alteration of a Natural Waterway or Drainage Course

( ) Non-Residential Name and Type of Business______________________________

( ) New Construction ( ) Substantial Improvement to Existing Structure

WARNING: Please read and acknowledge.
The flood hazard boundary maps and other flood data used by the City of Buffalo Floodplain Administrator in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes and are based on the best available scientific and engineering data. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. Issuance of an exemption certificate does not imply that developments outside the identified areas of special flood hazard will be free from flooding or flood damage. Issuance of an exemption certificate shall not create Liability on the part of___________________, the City of Buffalo Floodplain Administrator or any officer or employee of the City of Buffalo in the event flooding or flood damage does occur.

Additional federal, state or local, permits may be required.

Signature Date:

4. APPLICANT WILL PROVIDE ONE COPY OF PLANS AND SPECIFICATIONS OF THE PROPOSED CONSTRUCTION, IF IN A FLOOD PLAIN.

FOR USE BY FLOODPLAIN ADMINISTRATOR

Is the property located in an identified flood hazard area? ( )Yes ( )No
Is the property located in the floodway? ( )Yes ( )No
FIRM Zone Designation is: _______ FIRM Panel No. _______ Dated _______
Base Flood Elevation at the site is _______ ft NGVD (MSL) or is unavailable _______
Is additional information required (including Letter of Map Change)? ( )Yes ( )No
Ensure that applicant is receiving the necessary federal, state, or local permits.
( ) Variance Issued
( ) Permit Application Approved
( ) Permit Application Denied

Floodplain Administrator __________________________ Date: __________________

THIS PERMIT IS VALID FOR ONE YEAR FROM DATE ISSUED AND WILL NEED TO BE RENEWED IF WORK IS NOT COMPLETED AT THAT TIME.
ARTICLE I. - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

Sec. 8-1. - Statutory authorization.

The Legislature of the State of Texas has in the Flood Control Insurance Act, V.T.C.A. Water Code, § 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of the City of Crockett, Texas does ordain as follows.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-2. - Findings of fact.

(a) The flood hazard areas of Crockett are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-3. - Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health;
(2) Minimize expenditure of public money for costly flood control projects;
(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
(4) Minimize prolonged business interruptions;
(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
Sec. 8-4. - Methods of reducing flood losses.

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

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
4. Control filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Secs. 8-5—8-15. - Reserved.

ARTICLE II. - DEFINITIONS.

Sec. 8-16. - Defined terms.

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

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

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

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.

Area of future conditions flood hazard means the land area that would be inundated by the one (1) percent annual chance (100-year) flood based on future conditions hydrology.

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 (1) percent or greater annual chance of flooding to an average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within a community subject to a one (1) 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 rate making has been completed in preparation for

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

*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 (1) percent chance of equaling or exceeding that level in any given year; also called the base flood.

*Basement* means any area of the building having its floor subgrade (below ground level) on all sides.

*Breakaway wall* means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

*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.

*Development* means any manmade 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.

*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 purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for 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.

*Expansion to an existing manufactured home park or subdivision* means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

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

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

*Flood elevation study* means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

*Flood insurance rate map (FIRM)* means an official map of a community, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

*Flood insurance study (FIS)* see Flood elevation study.

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

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

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

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

_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 area 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.

_Floodway_ see Regulatory floodway.

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

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

_Historic structure_ means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the department of interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of 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.

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

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

_Lowest floor_ means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirement of Section 60.3 of the National Flood Insurance Program Regulations.
Manufactured home means a structure transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

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

Mean sea level means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, 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 floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

Recreational vehicle means a vehicle which is: (i) built on a single chassis; (ii) four hundred (400) square feet or less when measured at the largest horizontal projections; (iii) designed to be self-propelled 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.

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.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Special flood hazard area see Area of special flood hazard.

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 one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means, 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 its before damaged condition would equal or exceed fifty (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 fifty (50) percent of the market value of the structure
City of Crockett

before “start of construction” of the improvement. This term includes structures which have incurred
“substantial damage”, regardless of the actual repair work performed. The term does not, however,
include either: (1) any project for improvement of a structure to correct existing violations of state or local
health, sanitary, or safety code specifications which have been identified by the local code enforcement
official and which are the minimum necessary to assure safe living conditions; or (2) any alteration of a
"historic structure", provided that the alteration will not preclude the structure's continued designation as a
"historic structure."

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

Violation means the failure of a structure or other development to be fully compliant with the
community's floodplain management regulations. A structure or other development without the elevation
certificate, other certifications, or other evidence of compliance required in Sections 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 North American Vertical Datum (NAVD)
of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the
floodplains of coastal or riverine areas.

(Ord. No. O-03-11, § I, 3-21-11)

Secs. 8-17—8-20. - Reserved.

ARTICLE III. - GENERAL PROVISIONS

Sec. 8-21. - Lands to which this article applies.

This article shall apply to all areas of special flood hazard with the jurisdiction of City of Crockett.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-22. - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in the
current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Houston County,
Texas and Incorporated Areas," dated April 4, 2011, with accompanying flood insurance rate maps dated
April 4, 2011, and any revisions thereto are hereby adopted by reference and declared to be a part of this
article.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-23. - Establishment of development permit.

A floodplain development permit shall be required to ensure conformance with the provisions of this
article.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-24. - Compliance.
No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this article and other applicable regulations.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-25. - Abrogation and greater restrictions.

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

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-26. - Interpretation.

In the interpretation and application of this article, all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit, nor repeal any other powers granted under state statutes.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-27. - Warning and disclaimer or liability.

The degree of flood protection required by this article 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 article 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 article 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 article or any administrative decision lawfully made hereunder.

(Ord. No. O-03-11, § I, 3-21-11)

Secs. 8-28—8-35. - Reserved.

ARTICLE IV. - ADMINISTRATION

Sec. 8-36. - Designation of the floodplain administrator.

The city administrator is hereby appointed the floodplain administrator to administer and implement the provisions of this article and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-37. - Duties and responsibilities of the floodplain administrator.

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

(1) Maintain and hold open for public inspection all records pertaining to the provisions of this article.
City of Crockett

(2) Review permit application to determine whether to ensure that the proposed building site project, 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 article.

(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 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 the Texas Water Development Board (TWDB) and also the Texas Commission on Environmental Quality (TCEQ), 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 section 8-22, 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 V.

(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 within zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot 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 (1) foot, provided that the community first completes all of the provisions required by Section 65.12.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-38. - Permit procedures.

(a) Application for a floodplain development permit shall be presented to the floodplain administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

(1) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

(2) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
(3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of subsection 8-47(2);

(4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;

(5) Maintain a record of all such information in accordance with subsection 8-37(1);

(b) Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the provisions of this article and the following relevant factors:

(1) The danger to life and property due to flooding or erosion damage;

(2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(3) The danger that materials may be swept onto other lands to the injury of others;

(4) The compatibility of the proposed use with existing and anticipated development;

(5) The safety of access to the property in times of flood for ordinary and emergency vehicles;

(6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;

(7) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;

(8) The necessity to the facility of a waterfront location, where applicable;

(9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-39. - Variance procedures.

(a) The appeal board, as established by the community, shall hear and render judgment on requests for variances from the requirements of this article.

(b) 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 article.

(c) Any person or persons aggrieved by the decision of the appeal board may appeal such decision in the courts of competent jurisdiction.

(d) 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.

(e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this article.

(f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in subsection 8-38(b) 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.

(g) Upon consideration of the factors noted above and the intent of this article, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article (section 8-3).
(h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

(j) Prerequisites for granting variances:

1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

2. Variances 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.

3. Any application to which 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.

(k) Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that: (i) the criteria outlined in subsections (a)—(i) of this section 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 public safety.

(Ord. No. O-03-11, § I, 3-21-11)

Secs. 8-40—8-45. - Reserved.

ARTICLE V. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 8-46. - 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 floodwaters into the system;
Sec. 8-47. - Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in: (i) section 8-22; (ii) subsection 8-37(8); or (iii) subsection 8-48(c), 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 to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection as proposed in subsection 8-38(a)(1), is satisfied.

2. **Nonresidential construction.** New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.

3. **Enclosures.** New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 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.
   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 or 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 this subsection (4) of this section be elevated so that either:

1. The lowest floor of the manufactured home is at or above the base flood elevation; or
2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(5) Recreational vehicles. Require that recreational vehicles placed on sites within zones A1-30, AH, and AE on the community's FIRM either: (i) be on the site for fewer than one hundred eighty (180) consecutive days; or (ii) be fully licensed and ready for highway use; or (iii) meet the permit requirements of subsection 8-38(a), and the elevation and anchoring requirements for "manufactured homes" in subsection (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.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-48. - Standards for subdivision proposals.

(a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 8-2, 8-3 and 8-4 of this chapter.

(b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet floodplain development permit requirements of section 8-23; section 8-38; and the provisions of article V of this chapter.

(c) 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 fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to section 8-22 or subsection 8-37(8) of this article.

(d) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

(e) 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.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-49. - Standards for areas of shallow flooding (AO/AH zones).

Located within the areas of special flood hazard established in section 8-22, are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and
City of Crockett

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 improvements of residential structures have the lowest floor (including basement) elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified).

(2) All new construction and substantial improvements of nonresidential structures:
   a. Have the lowest floor (including basement) elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified); or
   b. Together with attendant utility and sanitary facilities be designed so that below the base specified flood depth in an AO zone, or below the base flood elevation in an AH zone, 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 section 8-38, are satisfied.

(4) Require within zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-50. - Floodways.

Floodways located within areas of special flood hazard established in section 8-22, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

(2) If subsection (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article V.

(3) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

(Ord. No. O-03-11, § I, 3-21-11)

Sec. 8-51. - Severability.

If any section, clause, sentence, or phrase of this article is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this article.

(Ord. No. O-03-11, § I, 3-21-11)
Sec. 8-52. - Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this article and other applicable regulations. Violation of the provisions of this article by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall upon conviction thereof be fined not more than five hundred dollars ($500.00) for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent city council from taking such other lawful action as is necessary to prevent or remedy any violation.

(Ord. No. O-03-11, § I, 3-21-11)

Secs. 8-53—8-59. - Reserved.

ARTICLE VI. - STORM DRAINAGE CONTROL

Footnotes:

--- (2) ---

Editor's note—Ord. No. O-03-11, adopted Mar. 21, 2011 added new arts. I—V, therefor renumbering existing art. IV as art. VI, as set out herein.

Sec. 8-60. - General provisions.

Each developer shall design and construct drainage facilities in accordance with this article. The following design criteria are the city's minimum methods and standards. Other hydrologic and hydraulic design methods may be used to satisfy drainage requirements with prior approval of the city.

(Ord. No. O-01B-07, § II, 1-16-07)

Sec. 8-61. - Stormwater detention.

All new development with proposed impervious surfaces exceeding fourteen thousand (14,000) square feet shall provide for on-site stormwater detention in accordance with the following criteria:

1. Twenty-five-year storm runoff exceeding existing amounts shall be detained on-site. Credit shall be given for runoff storage volumes equivalent to that generated by fourteen thousand (14,000) square feet of impervious surface.
2. SCS TR-55 methodology shall be used for detention facility design.
3. Outfall shall be to the nearest approved public drainage facility.
4. Minimum discharge pipe size shall be four (4) inches.
5. Discharge pipe materials: PVC-SDR 26 or Sch 40
   RCP-Class III
   CMP-14 Ga. Min., Aluminized
   HDPE-H2O per ASTM D 3350
(6) Overflow spillways shall be reinforced concrete unless otherwise approved by the city.
(7) All earthen areas shall have approved erosion protection.
(8) Freeboard appropriate to the volume of detention shall be provided.
(9) 3:1 maximum side slopes.
(10) Property owner shall be responsible for detention facility maintenance.

(Ord. No. O-01B-07, § III, 1-16-07)

Sec. 8-62. - Plans.

A drainage plan shall be provided for all proposed development. For projects requiring runoff detention or drainage facility construction, the plan shall be prepared and sealed by a registered professional engineer in the state and shall be supported by a detailed drainage study. The drainage study shall include hydrologic and hydraulic calculations and other design support documentation. This drainage plan shall be a complete construction document from which the proposed improvements can be constructed.

Drainage information on-site plans required for issuance of building permits or land use must include all information required by the city administrator.

(Ord. No. O-01B-07, § IV, 1-16-07)

Sec. 8-63. - Upstream conditions.

Each developer shall design all drainage facilities based on potential and fully developed upstream conditions in accordance with current land zoning.

(Ord. No. O-01B-07, § V, 1-16-07)

Sec. 8-64. - Discharge points.

Each developer shall terminate all drainage improvements at a discharge point approved by the city. Drainage flow patterns from developed property shall follow historic, predevelopment patterns where such flow crosses property lines. Flow at the discharge point shall not exceed the capacity of downstream receiving facilities. The developer shall design and construct such discharge point, or outlet, to prevent damage to or overflowing into adjacent property. The city may require creek improvements, channel lining, energy dissipaters or other improvements for such outlet to prevent erosion or increase the downstream flow capacity.

(Ord. No. O-01B-07, § VI, 1-16-07)

Sec. 8-65. - Public streets as drainage facilities.

(a) Construction of new streets shall require installation of storm drain facilities.
(b) Maximum depth of water to be allowed in local streets at ten-year design flow shall be at the top of crown, or top of curb, whichever is least.
(c) Maximum spread of water in collector streets at ten-year design flow shall allow for one (1) clear lane of traffic (twelve (12) feet wide).
City of Crockett

(d) Maximum spread of water in arterial streets at ten-year design flow shall allow for two (2) clear lanes of traffic (twenty-four (24) feet wide).

(e) Street classification (local, collector, arterial) shall be as defined in the city's comprehensive plan or otherwise determined by the city.

(Ord. No. O-01B-07, § VII, 1-16-07)

Sec. 8-66. - Drainage channels and structures.

(a) The developer shall install an underground storm drain on curb and gutter streets beginning at the point where the calculated stormwater runoff is of such a quantity that it exceeds the height specified above (see also Table 2). The developer shall construct the storm drain system from this point to an approved outlet.

(b) If the developer proposes to construct a channel, the city shall approve the right-of-way width and channel configuration. The developer shall design and construct all channels to terminate at an approved outlet.

(Ord. No. O-01B-07, § VIII, 1-16-07)

Sec. 8-67. - Habitable structures.

The developer shall provide adequate means for stormwater runoff in excess of the street and drainage system capacity to flow around habitable structures. See Figures 1 and 2.

(a) If adjacent topography rises away from the street, the developer shall provide a grading/drainage plan which shows that all building sites can provide a finished floor elevation at least one (1) foot above the top of the curb using the highest point along the portion of such curb directly fronting the building site.

(b) If adjacent topography falls away from the street, the developer shall provide a grading/drainage plan that shows that all building sites can provide a finished floor elevation at least one (1) foot above the ground elevation along all sides of the building site.

(c) The developer shall design and construct all streets to minimize any fill required to bring building pads into compliance with these criteria.

(d) The city upon submittal of detailed engineering plans may consider alternate methods of building protection to those above.

(Ord. No. O-01B-07, § IX, 1-16-07)

Sec. 8-68. - Improvements.

(a) Inlet and outlet structures. Headwalls, wingwalls, splash pads and riprap shall be provided at the inlet and outlet of all pipe systems. Design shall be appropriate for the individual situation and subject to approval of the city.

(b) Pipe vs. channel. If an underground drainage system is required, and a sixty-inch or smaller pipe will handle the design flow, pipe shall be used. If a sixty-inch pipe is not adequate, the developer has the option to use concrete pipe or natural and/or a lined open drainage channel. Lining materials, if used, shall be approved by the city.

(c) Line of flow. The developer shall allow water courses to follow their natural lines of flow; provided however, that rechanneling or re-routing of water courses may be allowed where approved by the city and where the point at which the water course enters the tract and the point at which it leaves
the tract are not changed. Upstream and downstream water surface elevations shall not be increased unless a study prepared by a registered professional engineer demonstrates that no potential damage due to flooding will be created.

(d) **Bridges and box culverts.** The developer shall design and construct bridges or box culverts at all street crossings over all drainage ways and floodways in accordance with Table 2.

(e) **Valley gutters.** The developer shall provide concrete valley gutters if the gutter flow must be carried across intersections of curbed streets. Maximum valley depth shall be one (1) inch and minimum width shall be six (6) feet.

(f) **Public easements required.** All public drainage facilities shall be placed in public easements subject to approval by the city. Minimum easement width is twenty (20) feet.

(Ord. No. O-01B-07, § X, 1-16-07)

Sec. 8-69. - Design.

(a) **Basis for storm discharge.** The following methods of stormwater runoff calculation shall be used for the design of drainage improvements:

1. For watershed areas of two hundred (200) acres or less, use the Rational Formula as shown below. Figure 1 and Table 1 show average velocities to be used in calculating the time of concentration.

2. For watershed areas of greater than two hundred (200) acres the Regional Regression Equations as described in the Texas Department of Highways Hydraulic Manual shall be used.

Figure 1:

THE RATIONAL FORMULA

THE RATIONAL FORMULA

\[ Q = CIA \]

where:

\[ Q = \text{the maximum storm flow rate at a given point (in cubic feet per second)} \]

\[ C = \text{a runoff coefficient which varies with the topography, land use and moisture content of the soil at the time. The runoff coefficient shall be based on the ultimate use of the land. The runoff coefficient can be selected from the major use classification shown below or other coefficients may be used when supported in an approved drainage study.} \]

<table>
<thead>
<tr>
<th>Paved Areas</th>
<th>0.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping Centers</td>
<td>0.90</td>
</tr>
<tr>
<td>Business Centers</td>
<td>0.80</td>
</tr>
<tr>
<td>Industrial Areas</td>
<td>0.85</td>
</tr>
</tbody>
</table>
City of Crockett

<table>
<thead>
<tr>
<th>Residential Areas:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 lots/acre</td>
<td>0.40</td>
</tr>
<tr>
<td>Greater than 2 lots/acre,</td>
<td>0.50</td>
</tr>
<tr>
<td>but less than 4 lots/acre</td>
<td></td>
</tr>
<tr>
<td>Greater than 4 lots/acre,</td>
<td>0.60</td>
</tr>
<tr>
<td>but less than 8 lots/acre</td>
<td></td>
</tr>
<tr>
<td>Greater than 8 lots/acre</td>
<td>0.75</td>
</tr>
<tr>
<td>Apartments</td>
<td>0.75</td>
</tr>
<tr>
<td>Park and Open Space</td>
<td>0.30</td>
</tr>
</tbody>
</table>

\[ I = \frac{b}{(t+d)^c} \]

The Texas Department of Highways Hydraulic Manual shows that in Houston County:

- \( d = 8.3 \) and

<table>
<thead>
<tr>
<th></th>
<th>5 year</th>
<th>10 year</th>
<th>25 year</th>
<th>50 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>b=</td>
<td>73</td>
<td>78</td>
<td>86</td>
<td>93</td>
</tr>
<tr>
<td>e=</td>
<td>.780</td>
<td>.757</td>
<td>.748</td>
<td>.740</td>
</tr>
<tr>
<td>t= Time of concentration in minutes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TIME OF CONCENTRATION

t= \frac{D}{V \times 60}

where:

\[ t = \text{Time of concentration in minutes. The minimum time of concentration shall be ten (10) minutes.} \]

\[ D = \text{Distance in feet from point of concentration to the hydraulically most distant part of the drainage basin under construction.} \]

\[ V = \text{Velocity in feet per second from Figure 3 or Table 1 or velocity calculated by an engineer for streets and/or storm sewers.} \]

\[ A = \text{The drainage area, in acres, tributary to the point under design calculated from the drainage map of the area. The drainage map shall be submitted with any drainage plans submitted for consideration by the City.} \]

**Table 1**

**AVERAGE VELOCITIES OF RUNOFF**

<table>
<thead>
<tr>
<th>% SLOPE OF GUTTER</th>
<th>ASSUMED VELOCITY (FT/SEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5%</td>
<td>1.5</td>
</tr>
<tr>
<td>1.0%</td>
<td>2.2</td>
</tr>
<tr>
<td>2.0%</td>
<td>3.1</td>
</tr>
<tr>
<td>3.0%</td>
<td>3.8</td>
</tr>
<tr>
<td>4.0%</td>
<td>4.3</td>
</tr>
<tr>
<td>5.0%</td>
<td>4.9</td>
</tr>
<tr>
<td>6.0%</td>
<td>5.3</td>
</tr>
<tr>
<td>8.0%</td>
<td>6.1</td>
</tr>
<tr>
<td>10.0%</td>
<td>6.9</td>
</tr>
</tbody>
</table>
(b) Storm frequency. Design storm frequencies for storm drainage improvements are shown in Table 2.

<table>
<thead>
<tr>
<th>TYPE OF FACILITY</th>
<th>DESCRIPTION OF AREA TO BE DETAINED</th>
<th>MINIMUM DESIGN FREQUENCY (YRS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streets and Storm</td>
<td>Residential, Local</td>
<td>10</td>
</tr>
<tr>
<td>Sewers or Side</td>
<td>Commercial and Collector</td>
<td>10</td>
</tr>
<tr>
<td>Ditches Combined*</td>
<td>Industrial, Arterial</td>
<td>10</td>
</tr>
<tr>
<td>Culverts, Bridges,</td>
<td>Any type of area</td>
<td>25</td>
</tr>
<tr>
<td>Channels and Creeks</td>
<td>less than 200 acres</td>
<td></td>
</tr>
<tr>
<td>Culverts, Bridges,</td>
<td>Any type of area</td>
<td>100</td>
</tr>
<tr>
<td>Channels and Creeks</td>
<td>greater than 200 acres</td>
<td></td>
</tr>
</tbody>
</table>

* If in a storm drain system, an inlet is located at a low point so that flow in excess of the storm drain capacity would be directed onto private property, and such overflow could cause damage or serious inconvenience in the opinion of the city, the design frequency shall be twenty-five (25) years.

(c) Underground drainage facility design. The engineer shall calculate underground drainage facility (storm drain) capacity by Manning's Formula as follows:

\[
Q = \frac{1.486 AR^n S^{\frac{2}{3}}}{n^{\frac{1}{2}}}
\]

where:

- Q = The discharge in cubic feet per second.
- A = The cross-sectional area of flow in square feet.
- R = The hydraulic radius in feet = area/wetted perimeter.
- S = The slope of the hydraulic gradient in feet per foot.
- n = The coefficient of roughness.

The elevation of the hydraulic gradient of the storm sewer shall be a minimum of 1.5 feet below the elevation of the adjacent street gutter. The developer shall use storm drain pipe sized so that the average velocity in the pipe will not exceed fifteen (15) feet per second and the outlet velocity will not exceed velocities shown in Table 4 for the discharge conditions.
Open channel design. The engineer shall design and construct open channel facilities based on frequencies shown in Table 2 and calculated by Manning's Formula with roughness coefficients and velocities as shown in Table 3. Side slopes of channels shall be no steeper than 3:1 in earth and 1:1 when lined with concrete.

<table>
<thead>
<tr>
<th>OPEN CHANNELS</th>
<th>MAXIMUM PERMISSIBLE VELOCITY (FT/SEC)</th>
<th>COEFFICIENT &quot;n&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td>15</td>
<td>0.011 to 0.020</td>
</tr>
<tr>
<td>Asphalt</td>
<td>15</td>
<td>0.013 to 0.017</td>
</tr>
<tr>
<td>Rubble or Riprap</td>
<td>15</td>
<td>0.017 to 0.030</td>
</tr>
<tr>
<td>Earth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bare, sandy silt, weathered</td>
<td>2.0</td>
<td>0.020</td>
</tr>
<tr>
<td>Silt Clay or soft shale</td>
<td>3.5</td>
<td>0.020</td>
</tr>
<tr>
<td>Clay</td>
<td>6.0</td>
<td>0.020</td>
</tr>
<tr>
<td>Soft sandstone</td>
<td>6.0</td>
<td>0.020</td>
</tr>
<tr>
<td>Clean gravelly soil</td>
<td>6.0</td>
<td>0.030 to 0.150</td>
</tr>
<tr>
<td>Turf</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow Flow</td>
<td>6.0</td>
<td>0.06 to 0.06</td>
</tr>
<tr>
<td>Depth of flow over 1 foot</td>
<td>6.0</td>
<td>0.04 to 0.06</td>
</tr>
</tbody>
</table>

1 Will vary with the straightness of alignment, smoothness of bed and side slopes and whether channel has light vegetation or is choked with weeds and brush.
(e) **Culvert design.** The developer shall install enclosed culverts with end treatments if a creek or ditch crosses proposed roadway improvements. The size of the culvert required shall be the larger size, checking both inlet and outlet flow control.

Design of culverts shall include the determination of upstream backwater conditions as well as downstream velocities and flooding conditions. The developer shall not design or install culverts with discharge velocities that exceed those provided in Table 4.

<table>
<thead>
<tr>
<th>CULVERT DISCHARGING ONTO</th>
<th>MAXIMUM ALLOWABLE VELOCITY (FT/SEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth</td>
<td>6</td>
</tr>
<tr>
<td>Sod Earth</td>
<td>8</td>
</tr>
<tr>
<td>Paved or riprap apron</td>
<td>15</td>
</tr>
<tr>
<td>Shale</td>
<td>10</td>
</tr>
<tr>
<td>Rock</td>
<td>15</td>
</tr>
</tbody>
</table>

(f) **Minimum design standards.** The design requirements set forth in this policy are minimum design standards. The city reserves the right to require additional precautions or treatments consistent with sound engineering practice and the protection of public health and safety, to provide for conditions not specifically covered in this policy. Drainage requirements for developments adjacent to or draining into state highway right-of-way shall be subject to all requirements of the Texas Department of Transportation.

(Ord. No. O-01B-07, § XI, 1-16-07)

Sec. 8-71. - Appeals.

The owner of a property affected by the provisions of this article may appeal a decision of the city to the board of adjustment whenever one of the following conditions are alleged:

1. The provisions of this article do not apply to a specific case.
2. An equally good or more desirable design or installation can be employed in a specific case.
3. The true intent and meaning of this article has been misconstrued or incorrectly interpreted.

(Ord. No. O-01B-07, § XI, 1-16-07)
Division 1. Generally

Sec. 3.07.001  Applicability
This article shall apply to all areas of special flood hazard within the jurisdiction of the city. (1987 Code, sec. 10-1)

Sec. 3.07.002  Findings of fact
(a) The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed, or otherwise protected from flood damage.

(1987 Code, sec. 10-2)

Sec. 3.07.003  Statement of purpose
It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;

(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and

(7) Ensure that potential buyers are notified that property is in a flood area.

(1987 Code, sec. 10-3)

Sec. 3.07.004  Definitions
Unless specifically defined in this section, words or phrases used in this article shall be interpreted to give them the meaning they have in common usage and to give this article its most reasonable application.

*Appeal*. A request for a review of the building official’s and/or city engineer’s interpretation of any provision of this article or a request for a variance.

*Area of shallow flooding*. A designated AO zone on a community’s flood insurance rate map (FIRM) with base flood depths from one (1) to three (3) feet. This condition occurs where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

*Area of special flood hazard*. The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year.
Base flood. The flood having a one (1) percent chance of being equaled or exceeded in any given year.

Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Existing mobile home park or mobile home subdivision. A parcel (or contiguous parcels) of land divided into two (2) or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) was completed before September 14, 1982.

Expansion to an existing mobile home park or mobile home subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from:

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

Flood hazard boundary map (FHBM). An official map of a community, issued by the Federal Insurance Administration, where the areas within the boundaries of special flood hazards have been designated as zone A.

Flood insurance rate map (FIRM). An official map of a community on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood insurance study. The official report provided by the Federal Insurance Administration. The report contains flood profiles, and the water surface elevation of the base flood, as well as the flood hazard boundary-floodway map.

Floodway. 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 one (1) foot.

Habitable floor. Any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purposes only is not a “habitable floor.”

Mean sea level. The average height of the sea for all stages of the tide.

Mobile home. A structure, transportable in one (1) or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers.

New mobile home park or mobile home subdivision. A parcel (or contiguous parcels) of land divided into two (2) or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) was completed on or after September 14, 1982.

Start of construction. The first placement of permanent construction of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation. 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 a 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 as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the “start of construction” includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes within mobile home parks or mobile home subdivisions, “start of construction” is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

Structure. A walled and roofed building that is principally above ground, as well as a mobile home.

Substantial improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure, either (i) before the improvement or repair is started, or (ii) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall,
ceiling, floor, or other structural part of the building commences, whether or not the alteration affects the external dimensions of the structure. The term does not, however, include either any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

_Variance_. A grant of relief to a person from the requirements of this article when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article.

(1987 Code, sec. 10-4)

**Sec. 3.07.005**   Methods of reducing flood losses

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

(1) Restricting or prohibiting uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;

(2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwater;

(4) Controlling filling, grading, dredging, and other development which may increase flood damage;

(5) Preventing or regulating the construction of flood barriers which will increase flood hazards to other lands.

(1987 Code, sec. 10-5)

**Sec. 3.07.006**   Basis for establishing areas of special flood hazard

The areas of special flood hazard identified by the Federal Insurance Administration on its flood hazard boundary map (FHBIM), No. 480498, dated December 27, 1974, and any revisions thereto, are hereby adopted by reference and declared to be a part of this article. (1987 Code, sec. 10-6)

**Sec. 3.07.007**   Establishment of development permit

A development permit shall be required to ensure conformance with the provisions of this article. (1987 Code, sec. 10-7)

**Sec. 3.07.008**   Compliance

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this article and other applicable regulations. (1987 Code, sec. 10-8)

**Sec. 3.07.009**   Abrogation and greater restrictions

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (1987 Code, sec. 10-9)

**Sec. 3.07.010**   Interpretation

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

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(1987 Code, sec. 10-10)
Sec. 3.07.011  Warning and disclaimer of liability
The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur, and flood heights may be increased by man-made or natural causes. This article 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 article shall not create liability on the part of the city or any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder. (1987 Code, sec. 10-11)

Secs. 3.07.012–3.07.040  Reserved
60.3(d)

FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Commissioner’s Court of Grimes County, Texas does ordain as follows:

SECTION B. FINDINGS OF FACT

(1) The flood hazard areas of Grimes County are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(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 the occupancy of flood hazard 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 in specific areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;
(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and

(7) 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 purposes, 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 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 its most reasonable application.

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

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

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

AREA OF FUTURE CONDITIONS FLOOD HAZARD – means the land area that would be inundated by the 1-percent-annual chance (100 year) flood based on future conditions hydrology.

AREA OF SHALLOW FLOODING - means a designated AO, AH, AR/OA, AR/AH, or VO zone on a community’s Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD - is the land in the floodplain within a community subject to a 1 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 rate-making 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/OA, AR/AH, AR/A, VO, V1-30, VE or V.

BASE FLOOD - means the flood having a 1 percent chance of being equaled or exceeded in any given year.

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

**BASEMENT** - means any area of the building having its floor subgrade (below
ground level) on all sides.

**BREAKAWAY WALL** – means a wall that is not part of the structural support
of the building and is intended through its design and construction to collapse
under specific lateral loading forces, without causing damage to the elevated
portion of the building or supporting foundation system.

**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.

**DEVELOPMENT** - means 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.

**ELEVATED BUILDING** – means, for insurance purposes, a non-basement
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 purposes of determining rates,
structures for which the "start of construction" commenced before the effective
date of the FIRM or before January 1, 1975, for 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.

**EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR
SUBDIVISION** - means the preparation of additional sites by the construction
of facilities for servicing the lots on which the manufactured homes are to be
affixed (including the installation of utilities, the construction of streets, and
either final site grading or the pouring of concrete pads).

**FLOOD OR FLOODING** - means a general and temporary condition of partial
or complete inundation of normally dry land areas from:
(1) the overflow of inland or tidal waters.
(2) the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD ELEVATION STUDY** – means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

**FLOOD INSURANCE RATE MAP (FIRM)** - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY (FIS)** – see Flood Elevation Study

**FLOODPLAIN OR FLOOD-PRONE AREA** - means any land area susceptible to being inundated by water from any source (see definition of flooding).

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

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

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

**FLOOD PROOFING** - means any combination of structural and 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 – see Regulatory Floodway

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

HIGHEST ADJACENT GRADE - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

(4) Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:

(a) By an approved state program as determined by the Secretary of the Interior or;

(b) Directly by the Secretary of the Interior in states without approved programs.

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

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

MANUFACTURED HOME PARK OR SUBDIVISION - means a parcel (or contiguous parcels) of land divided into two 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) of 1988 or other datum, 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 improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.
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 be self-propelled 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.

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.

RIVERINE – means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SPECIAL FLOOD HAZARD AREA – see Area of Special Flood Hazard

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 - 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 its 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 term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

VIOLATION - means the failure of a structure or other development to be fully compliant with the 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 Geodetic Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE 3

GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES

The ordinance shall apply to all areas of special flood hazard within the jurisdiction of Grimes County.
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 the current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Grimes County and Incorporated Areas,” dated April 3, 2012, with accompanying Flood Insurance Rate Maps (FIRM) dated April 3, 2012 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 to ensure conformance with the provisions of this ordinance.

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; (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

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 man-made 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 hereunder.

ARTICLE 4

ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The County Engineer or his/her designee is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be 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 to ensure that the proposed building site project, 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 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 the Texas Water Development Board (TWDB) and also the Texas Commission on Environmental Quality (TCEQ), 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 within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one 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 1 foot, provided that the community first completes all of the provisions required by Section 65.12.

SECTION C. PERMIT PROCEDURES

(1) Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. 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 nonresidential structure shall be floodproofed;

(c) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing 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 Floodplain 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 floodwaters 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.
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) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.

(6) Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C (2) of this Article have been fully considered. As the lot size increases beyond the 1/2 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) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(b) Variances 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 which 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 development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Article 4, Section D (1)-(9) 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 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.

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards 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 to or above the base flood elevation. 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) **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are
in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

(3) **Enclosures** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 openings on separate walls having a total net area of not less than 1 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 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
or 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 at or 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, AH, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, or (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.

**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 Floodplain 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 flood depths of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

(1) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community’s FIRM (at least 2 feet if no depth number is specified), or

(2) All new construction and substantial improvements of non-residential structures;

   (a) have the lowest floor (including basement) elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 2 feet if no depth number is specified), or

   (b) together with attendant utility and sanitary facilities be designed so that below the base specified flood depth in an AO Zone, or below the Base Flood Elevation in an AH Zone, 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 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 shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in 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 Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

**SECTION F. SEVERABILITY**

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Ordinance.

**SECTION G. PENALTIES FOR NON COMPLIANCE**

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

SECTION H. CERTIFICATION OF ADOPTION

APPROVED: __________________________________________
Betty Shiflett
Grimes County Judge

PASSED: March 13, 2012
(adoption date)

ORDINANCE BECOMES EFFECTIVE: April 3, 2012
(effective date)

I, the undersigned, County Clerk, do hereby certify that the above is a true and correct copy of an ordinance duly adopted by the Grimes County Commissioners Court, at a regular meeting duly convened on March 13, 2012.

_________________________________
David Pasket
LEON COUNTY
COMMISSIONERS' COURT

FLOOD DAMAGE PREVENTION COURT ORDER

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Leon County Commissioners Court of Leon County, Texas (Unincorporated Areas) does ordain as follows:

SECTION B. FINDINGS OF FACT

(1) The flood hazard areas of Leon County, Texas (Unincorporated Areas) are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(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 the occupancy of flood hazard 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 court order to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;
(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;

(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and

(7) 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 purposes, this court order uses the following methods:

(1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of 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 court order shall be interpreted to give them the meaning they have in common usage and to give this court order its most reasonable application.

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

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

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.

AREA OF FUTURE CONDITIONS FLOOD HAZARD - means the land area that would be inundated by the 1-percent-annual chance (100 year) flood based on future conditions hydrology.

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 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD - is the land in the floodplain within a community subject to a 1 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 rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A and AE.

BASE FLOOD - means the flood having a 1 percent chance of being equaled or exceeded in any given year.
BASE FLOOD ELEVATION (BFE) – The elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A and AE, that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year - also called the Base Flood.

BASEMENT - means any area of the building having its floor subgrade (below ground level) on all sides.

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.

DEVELOPMENT - means 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.

ELEVATED BUILDING – means, for insurance purposes, a non-basement 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 purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRM 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.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
FLOOD OR FLOODING - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

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

FLOOD ELEVATION STUDY – means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

FLOOD INSURANCE RATE MAP (FIRM) - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY (FIS) – see Flood Elevation Study

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

FLOOD PROTECTION SYSTEM - means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.
FLOOD PROOFING - means any combination of structural and 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 – see Regulatory Floodway

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

HIGHEST ADJACENT GRADE - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

(4) Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:

   (a) By an approved state program as determined by the Secretary of the Interior or;

   (b) Directly by the Secretary of the Interior in states without approved programs.
LEVEE - means a 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 or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

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

MANUFACTURED HOME PARK OR SUBDIVISION - means a parcel (or contiguous parcels) of land divided into two 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) of 1988 or other datum, 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 improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed
(including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

**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 be self-propelled 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.

**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.

**RIVERINE** - means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

**SPECIAL FLOOD HAZARD AREA** – see *Area of Special Flood Hazard*

**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** - 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 its 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 term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

**VIOLATION** - means the failure of a structure or other development to be fully compliant with the 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 North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
ARTICLE 3

GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THIS COURT ORDER APPLIES

The court order shall apply to all areas of special flood hazard with the jurisdiction of Leon County, Texas (Unincorporated Areas).

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 the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Leon County, Texas and Incorporated Areas," dated November 20, 2013, with accompanying Flood Insurance Rate Maps (FIRM) dated November 20, 2013 and any revisions thereto are hereby adopted by reference and declared to be a part of this court order.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A Floodplain Development Permit shall be required to ensure conformance with the provisions of this court order.

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 court order and other applicable regulations.

SECTION E. ABROGATION AND GREATER RESTRICTIONS

This court order is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this court order and another court order, 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 court order, all provisions shall be; (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.
SECTION G. WARNING AND DISCLAIMER OR LIABILITY

The degree of flood protection required by this court order is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This court order 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 court order 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 court order or any administrative decision lawfully made hereunder.

ARTICLE 4

ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Leon County Judge is hereby appointed the Floodplain Administrator to administer and implement the provisions of this court order and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

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

(1) Maintain and hold open for public inspection all records pertaining to the provisions of this court order.

(2) Review permit application to determine whether to ensure that the proposed building site project, 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 court order.
(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 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 the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ) 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 within Zones A1-30 and AE on the community’s FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one 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 1 foot, provided that the community first completes all of the provisions required by Section 65.12.
SECTION C. PERMIT PROCEDURES

(1) Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. 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 nonresidential structure shall be floodproofed;

(c) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing 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 Floodplain Development Permit by the Floodplain Administrator shall be based on all of the provisions of this court order 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 floodwaters 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.

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 court order.

(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 court order.

(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) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this court order.

(6) Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C (2) of this Article have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justification required for issuing the variance increases.
(7) Upon consideration of the factors noted above and the intent of this court order, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this court order (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) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(b) Variances 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 court orders.

(c) Any application to which 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 development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Article 4, Section D (1)-(9) 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 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.

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards 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 to at least one foot above the base flood elevation. 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) **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to at least one foot above the base flood level or together with attendant utility and sanitary facilities, be designed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

(3) **Enclosures** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 openings on separate walls having a total net area of not less than 1 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 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 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 Zone 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 bottom of the lowest horizontal structural member of the chassis is one foot 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 Zone 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 bottom of the lowest horizontal structural member of the chassis is one foot 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 A and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, or (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.

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 court order.

(2) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of Article 3, Section C; Article 4, Section C; and the provisions of Article 5 of this court order.

(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 court order.

(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. 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 shall apply:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in 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 Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

SECTION E. SEVERABILITY

If any section, clause, sentence, or phrase of this court order is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Court order.

SECTION F. PENALTIES FOR NON COMPLIANCE

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

SECTION H. CERTIFICATION OF ADOPTION

APPROVED: [Signature]

[community official]

PASSED: October 14, 2013

(adoption date)

COURT ORDER BECOMES EFFECTIVE: November 20, 2013

(effective date)
Byron Ryder, Leon County Judge
Joey Sullivan, Commissioner Pct#1
Dean Stanford, Commissioner Pct. #3
David Ferguson, Commissioner, Pct. #2
David Grimes, Commissioner, Pct. #4

I, the undersigned, Christie Wakefield, Leon County Clerk, do hereby certify that the above is a true and correct copy of a court order duly adopted by the Leon County Commissioners Court, at a regular meeting duly convened on October 14, 2013.

Christie Wakefield, Leon County Clerk

{SEAL}

9/30/13

21
ARTICLE II. - FLOOD DAMAGE PREVENTION

Footnotes:

--- (1) ---


DIVISION 1. - GENERALLY

Secs. 22-19—22-30. - Reserved.

DIVISION 2. - GENERAL PROVISIONS

Sec. 22-31. - Statutory authorization.

The legislature of the state has in V.T.C.A., Water Code § 16.315 delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses.

(Code 2014, § 22-19; Ord. No. 292A, art. 1, § A, 2-12-1990)

Sec. 22-32. - Findings of fact.

(a) The flood hazard areas of the city are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

(Code 2014, § 22-20; Ord. No. 292A, art. 1, § B, 2-12-1990)

Sec. 22-33. - Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Protect human life and health;
(2) Minimize expenditure of public money for costly flood control projects;
(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
(4) Minimize prolonged business interruptions;
(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
(6) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and
(7) Ensure that potential buyers are notified that property is in a flood area.
Sec. 22-34. - Methods of reducing flood losses.

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

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
4. Control filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Sec. 22-35. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

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

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

**Area of shallow flooding** means a designated AO, 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** means the land in the floodplain within a 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 (FHB). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zone A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year.

**Basement** means any area of the building having its floor subgrade (below ground level) on all sides.

**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.

**Development** means any manmade 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.

**Elevated building.** The term "elevated building" means:

1. A nonbasement building:
a. Built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zone V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water; and

b. Adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood.

(2) In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, the term "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters.

(3) In the case of Zone V1-30, VE, or V, the term "elevated building" also includes a building otherwise meeting the definition of the term "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls meet the standards of section 60.3(e)(5) of the National Flood Insurance Program regulations.

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

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

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

(1) The overflow of inland or tidal waters;

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

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

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 area 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.

Floodplain or flood prone area means any land area susceptible to being inundated by water from any source. (See 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 "floodplain management" describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

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.

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 "functionally dependent" includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

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

Historic structure means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:
   a. By an approved state program as determined by the Secretary of the Interior; or
   b. Directly by the Secretary of the Interior in states without approved programs.

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

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

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of section 60.3 of the National Flood Insurance Program regulations.

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

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
Mean sea level means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, 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, the term "new construction" means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

Recreational vehicle means a vehicle which is:

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

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 means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 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. The term "substantial improvement" includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term "substantial improvement" does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions; or
2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
**Variance** is a grant of relief to a person from the requirement of this article when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. (For full requirements see section 60.6 of the National Flood Insurance Program regulations.)

**Violation** means the failure of a structure or other development to be fully compliant with the 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) of the National Flood Insurance Program is presumed to be in violation until such time as that documentation is provided.

**Water surface elevation** means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(Code 2014, § 22-23; Ord. No. 292A, art. 2, 2-12-1990)

Secs. 22-36—22-49. - Reserved.

DIVISION 3. - SPECIAL FLOOD HAZARD

Sec. 22-50. - Lands to which this article applies.

This article shall apply to all areas of special flood hazard with the jurisdiction of the city (local unit).


Sec. 22-51. - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, The Flood Insurance Study for the Madisonville, Texas, dated March 5, 1990, 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 article.

(Code 2014, § 22-51; Ord. No. 292A, art. 3, § B, 2-12-1990)

Sec. 22-52. - Establishment of development permit.

A development permit shall be required to ensure conformance with the provisions of this article.


Sec. 22-53. - Compliance.

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


Sec. 22-54. - Abrogation and greater restrictions.
This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 2014, § 22-54; Ord. No. 292A, art. 3, § E, 2-12-1990)

Sec. 22-55. - Interpretation.

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

(1) Considered as minimum requirements;
(2) Liberally construed in favor of the city council; and
(3) Deemed neither to limit nor repeal any other powers granted under state statutes.


Sec. 22-56. - Warning and disclaimer of liability.

The degree of flood protection required by this article 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 article 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 article 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 division or any administrative decision lawfully made hereunder.


Secs. 22-57—22-85. - Reserved.

DIVISION 4. - ADMINISTRATION

Sec. 22-86. - Floodplain administrator—Designation.

The city manager is hereby appointed the floodplain administrator to administer and implement the provisions of this article and other appropriate sections of 44 CFR (National Flood Insurance Program regulations) pertaining to floodplain management.

(Code 2014, § 22-86; Ord. No. 292A, art. 4, § A, 2-12-1990)

Sec. 22-87. - Floodplain administrator—Duties and responsibilities.

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

(1) Maintain and hold open for public inspection all records pertaining to the provisions of this article.
(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 the ordinance from which this article is derived.
(4) Review permits for proposed development to ensure 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 USC 1344) from which prior approval is required.

(5) Make the necessary interpretation where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).

(6) Notify, in riverine situations, adjacent communities and the state coordinating agency which is the state water commission, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(7) Ensure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(8) Obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, when base flood elevation data has not been provided in accordance with section 22-51, in order to administer the provisions of division 5 of this article.

(9) a. Must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, when a regulatory floodway has not been designated, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

b. Under the provisions of 44 CFR 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.

(Code 2014, § 22-87; Ord. No. 292A, art. 4, § B, 2-12-1990)

Sec. 22-88. - Permit procedures.

(a) Application for a development permit shall be presented to the floodplain administrator on forms furnished by him and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

(1) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

(2) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;

(3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 22-108(2);

(4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;

(5) Maintain a record of all such information in accordance with section 22-87(1).

(b) Approval or denial of a development permit by the floodplain administrator shall be based on all of the provisions of this division and the following relevant factors:
City of Madisonville

(1) The danger to life and property due to flooding or erosion damage;
(2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
(3) The danger that materials may be swept onto other lands to the injury of others;
(4) The compatibility of the proposed use with existing and anticipated development;
(5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
(6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
(7) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
(8) The necessity to the facility of a waterfront location, where applicable;
(9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
(10) The relationship of the proposed use to the comprehensive plan for that area.

(Code 2014, § 22-88; Ord. No. 292A, art. 4, § C, 2-12-1990)

Sec. 22-89. - Variance procedures.

(a) The appeal board, as established by the community, shall hear and render judgment on requests for variances from the requirements of this article.

(b) 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 article.

(c) Any person aggrieved by the decision of the appeal board may appeal such decision in the courts of competent jurisdiction.

(d) 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.

(e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this division.

(f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in section 22-88(b) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

(g) Upon consideration of the factors noted in subsections (a) through (f) of this section and the intent of this division, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this division (section 22-21).

(h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
City of Madisonville

(j) Prerequisites for granting variances.
   (1) Variances shall only be issued upon a determination that the variance is the minimum
       necessary, considering the flood hazard, to afford relief.
   (2) Variances shall only be issued upon:
       a. Showing a good and sufficient cause;
       b. A determination that failure to grant the variance would result in exceptional hardship to the
          applicant; and
       c. A determination that the granting of a variance will not result in increased flood heights,
          additional threats to public safety, extraordinary public expense, create nuisances, cause
          fraud on or victimization of the public, or conflict with existing local laws or ordinances.
   (3) Any applicant to whom a variance is granted 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.

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

(Code 2014, § 22-89; Ord. No. 292A, art. 4, § D, 2-12-1990)

Secs. 22-90—22-106. - Reserved.

DIVISION 5. - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 22-107. - General standards.

In all areas of special flood hazard, 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 floodwaters into the system;
   (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate
       infiltration of floodwaters into the system and discharge from the systems into floodwaters; and
(7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.


Sec. 22-108. - Specific standards.

In all areas of special flood hazard where base flood elevation data has been provided as set forth in section 22-51, 22-87(8) or 22-109(c), 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 to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection (1), as proposed in section 22-88(a)(1), is satisfied.

2. **Nonresidential construction.** New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.

3. **Enclosures.** New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 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 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:
      1. Outside of a manufactured home park or subdivision;
      2. In a new manufactured home park or subdivision;
      3. In an expansion to an existing manufactured home park or subdivision; or
4. 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 or 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 this subsection (4) of this section be elevated so that either:

1. The lowest floor of the manufactured home is at or above the base flood elevation; or

2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 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. It is required that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either:

a. Be on the site for fewer than 180 consecutive days;

b. Be fully licensed and ready for highway use; or

c. Meet the permit requirements of section 22-88(a), and the elevation and anchoring requirements for manufactured homes in subsection (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.


Sec. 22-109. - Standards for subdivision proposals.

(a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 22-32 through 22-34.

(b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet development permit requirements of sections 22-52, 22-88, and the provisions of this division.

(c) 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 five acres, whichever is lesser, if not otherwise provided pursuant to section 22-51 or section 22-87(8).

(d) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

(e) 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.


Sec. 22-110. - Standards for areas of shallow flooding (AO/AH Zones).
Located within the areas of special flood hazard established in section 22-51 are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

1. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community’s FIRM (at least two feet if no depth number is specified).

2. All new construction and substantial improvements of nonresidential structures:
   a. Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community’s FIRM (at least two feet if no depth number is specified); or
   b. 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 section 22-88(a)(1), are satisfied.

4. Require within Zone AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Code 2014, § 22-110; Ord. No. 292A, art. 5, § D, 2-12-1990)

Sec. 22-111. - Floodways.

Located within areas of special flood hazard established in section 22-51 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

2. If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this division.

3. Under the provisions of 44 CFR 65.12 of the National Flood Insurance Program regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revision through FEMA.

(Code 2014, § 22-111; Ord. No. 292A, art. 5, § E, 2-12-1990)
Sec. 40-227. - Flood damage prevention.

(a) Permit required. The developer shall obtain a development permit (floodplain development permit) from development services prior to locating, altering, or changing the use of any structure or land within an area of special flood hazard. An application for a permit shall be accompanied by the payment of a fee in accordance with the duly adopted schedule of fees.

(b) Designation of flood hazard zones. The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Anderson County, Texas, and Incorporated Areas" dated February 3, 2010, with accompanying Flood Insurance Rate Maps and Flood Boundary/Floodway Maps (FIRM and FBFM) dated February 3, 2010, and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter.

(c) Designation of the floodplain administrator. The building official is hereby appointed the floodplain administrator to administer and implement the provisions of this subsection and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

(d) Duties and responsibilities of the floodplain administrator. Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:

1. Maintain and hold open for public inspection all records pertaining to the provisions of this section.
2. Review permit applications to determine whether proposed building sites will be reasonably safe from flooding.
3. Review, approve or deny all applications for development permits required by adoption of this section.
4. Review permits for proposed development to ensure that all necessary permits have been obtained from those federal, state or local governmental agencies (including section 404 of the Federal Clean Water Act Amendments of 1972, 33 USC 1334) from which prior approval is required.
5. Determine the flood hazard boundary line where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).
6. Notify, in riverine situations, adjacent communities and the state coordinating agency, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
7. Ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.
8. 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 the section when base flood elevation data has not been provided in accordance with subsection (b) of this section.
9. Require that no new construction, substantial improvements or other development (including fill) shall be permitted within zones A1-30 and AE on development services' FIRM, when a regulatory floodway has not been designated, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(e) Permit procedures for flood hazard zone areas.
Application for a floodplain development permit shall be presented to development services on forms furnished by development services and may include, but not be limited to, a site plan as described in subsection 40-6(d) showing the location, dimensions and elevation of proposed landscape alterations, existing and proposed structures, 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 the basement) of all new and substantially improved structures;

b. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;

c. A certificate from an engineer or architect registered in the state that the nonresidential floodproofed structure shall meet the floodproofing criteria contained in subsection 40-227(h)(2) below; and

d. Description of the extent to which any water coverage 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 subsection 40-227(d)(1) above.

Approval or denial of a floodplain development permit by development services shall be based on all of the provisions of this section and emphasizing 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 floodwaters and the effects of wave action, if applicable, expected at the site;

h. The necessity to the facility of a waterfront location, where applicable; and

i. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

Variance procedures. A developer may appeal the decision of the floodplain administrator to the city council when it is alleged there has been an error in any requirement, decision or determination in the enforcement or administration of the district floodplain hazard regulations. The procedure for an appeal shall be according to the variance procedures contained in section 40-19. A developer aggrieved by the decisions of the city council may appeal such decision in the courts of competent jurisdiction. The council may attach such conditions to the granting of a variance as it deems necessary to further the purpose and objectives of this subsection. Variances shall not be issued within any designated floodway. Prerequisites for granting variances are:

1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

2. Variances shall only be issued upon showing a good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship to the applicant and a determination that the granting of a variance will not result in increased flood heights, additional
threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(3) Variances may be granted by development services for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that the criteria outlined in subsection 40-227(e)(2) above, and this subsection are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(4) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in subsection 40-227(e)(2) above, has been fully considered. As the lot size increase beyond the one-half acre, the technical justification required for issuing the variance increases.

(5) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge result.

(6) Variances may be issued for the reconstruction, rehabilitation, or restoration of structure listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in this subsection.

(7) 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.

(8) Any application to which 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.

(9) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that (a) the criteria outlined in this section are met, and (b) the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(10) 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.

(g) General standards for flood hazard reduction. 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 floodwaters into the system;
(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters; and

(7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(h) Specific standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in subsections 40-227(b), (d)(8), and (i)(2) of this article, the following provisions are required:

(1) Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including the basement), elevated to a minimum of one foot above the base flood elevation. A land surveyor registered in the state shall submit a certification to development services prior to receiving a development permit that the standard of this subsection is satisfied.

(2) Nonresidential construction. New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall have the lowest floor (including the basement) elevated to a minimum of one foot above the base flood level or, together with attendant utility and sanitary facilities, be designed so that 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. An engineer or architect registered in the state shall develop and/or review structural design, specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the city as part of the permanent development permit file.

(3) Enclosures. New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and that 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 be certified by an engineer or architect registered in the state that meet or exceed the following minimum criteria:

a. A minimum of two 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 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. All HUD code manufactured homes to be placed within flood zone A shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

b. Require that manufactured homes that are placed or substantially improved within zones A1-30, AH, 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 or 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 within zones A1-30, AH and AE on the community’s FIRM that are not subject to the provisions of subsection (4) of this section be elevated so that either:

1. The lowest floor of the manufactured home is one foot above the base flood elevation,
or

2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

d. A person commits an offense if he places any manufactured home in the regulatory floodway in other than an existing manufactured home park or manufactured home subdivision.

(5) Recreational vehicles. Require that recreational vehicles placed on sites within zones A1-30, AH, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, or (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of subsection 40-227(e) of this article. 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.

(i) Standards for subdivision proposals.

1. The developer of subdivisions, including manufactured home parks and subdivisions, shall obtain a development permit prior to final platting.

2. Base flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks and subdivisions which are greater than 50 lots or five acres, whichever is lesser, if not otherwise provided pursuant to subsection 40-227(b) and subsection 40-227(d)(8) of this article.

3. All subdivision proposals, including manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.

4. All subdivision proposals, including manufactured home parks and subdivisions, shall have public utilities and facilities (sewer, gas, electrical and water systems) located and constructed to minimize or eliminate flood damage.

(j) Standards for areas of shallow flooding (AO/AH zones). Located within the areas of special flood hazard established in subsection 40-227(b) are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

1. All new construction and substantial improvements of residential structures shall have the lowest floor (including the basement) elevated one foot above the depth number specified in feet on development services' FIRM (at least one foot if no depth number is specified).

2. All new construction and substantial improvements of nonresidential structures:

   a. Shall have the lowest floor (including the basement) elevated one foot above the depth number specified in feet on development services' FIRM (at least one foot if no depth number is specified); or

   b. 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) An engineer or architect registered in the State of Texas shall submit a certification to development services which shall become part of the permanent development permit file that the standards of subsection 40-227(e)(1)a., above, are satisfied.

(4) Within zones AH or AO the developer shall provide adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Ord. No. O-48-14, § I(Exh. A), 12-8-2014)
ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Commissioners Court of Polk County, Texas, does ordain as follows:

SECTION B. FINDINGS OF FACT

(1) The flood hazard areas of Polk County are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(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 the occupancy of flood hazard 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 order to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in all areas by provisions designed to:

(1) Protect human life and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;
(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and

(7) 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 purposes, this order uses the following methods:

(1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of 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 order shall be interpreted to give them the meaning they have in common usage and to give this order its most reasonable application.

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

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

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.

AREA OF FUTURE CONDITIONS FLOOD HAZARD - means the land area that would be inundated by the 1-percent-annual chance (100 year) flood based on future conditions hydrology.

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 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD - is the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHB M). After detailed rate-making 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, V1-30, VE or V.

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

BASEMENT - means any area of the building having its floor subgrade (below ground level) on all sides.

BREAKAWAY WALL - means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

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.

DEVELOPMENT - means 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.

ELEVATED BUILDING - means, for insurance purposes, a non-basement 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 purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for 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.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be
affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**FLOOD OR FLOODING** - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters.
2. the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD ELEVATION STUDY** - means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

**FLOOD HAZARD BOUNDARY MAP (FHBM)** - means an official map of a community, issued by the Administrator, where the boundaries of the flood, mudslide (i.e., mudflow) related erosion areas having special hazards have been designated as Zones A, M, and/or E.

**FLOOD INSURANCE RATE MAP (FIRM)** - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY (FIS)** - see *Flood Elevation Study*

**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 orders, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain order, grading order and erosion control order) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.
FLOOD PROTECTION SYSTEM - means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

FLOOD PROOFING - means any combination of structural and 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 - see Regulatory Floodway

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

HIGHEST ADJACENT GRADE - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
(4) Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:

(a) By an approved state program as determined by the Secretary of the Interior or;

(b) Directly by the Secretary of the Interior in states without approved programs.

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

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

**MANUFACTURED HOME PARK OR SUBDIVISION** - means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**MEAN SEA LEVEL** - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, 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 improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

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 be self-propelled 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.

RIVERINE - means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SPECIAL FLOOD HAZARD AREA - see Area of Special Flood Hazard

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** - 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 its 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 term includes structures, which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

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

**VIOLATION** - means the failure of a structure or other development to be fully compliant with the 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 Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
ARTICLE 3

GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THIS ORDER APPLIES

The order shall apply to all areas of special flood hazard with the jurisdiction of Polk County.

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 the Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM), Community Number 480526, dated September 3, 2010, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT SYSTEM

A Floodplain Development Permit shall be required to ensure conformance with the provisions of this ordinance. A Development Permit System is hereby established to ensure compliance with the provisions of this Court Order. This system will consist of a County-wide Application Review Procedure and the issuance of Class B Permits only for those developments located within the identified flood hazard areas. Developments located outside of identified flood hazard areas will be given a Class A Permit stating that the proposed development is not located within an identified flood hazard area and that the construction standards contained in this Court Order are not applicable to the proposed development.

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 order 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 order, all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION G. WARNING AND DISCLAIMER OR LIABILITY

The degree of flood protection required by this order is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This order 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 order 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 order or any administrative decision lawfully made hereunder.

ARTICLE 4

ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Permits Inspector is hereby appointed the Floodplain Administrator to administer and implement the provisions of this order and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:
(1) Maintain and hold open for public inspection all records pertaining to the provisions of this order.

(2) Review permits application to determine whether to ensure that the proposed building site project, 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 order.

(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 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 the Texas Water Development Board (TWDB) and also the Texas Commission on Environmental Quality (TCEQ), 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.

SECTION C. PERMIT PROCEDURES

(1) Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the
location of the foregoing in relation to areas of special flood hazard. 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 nonresidential structure shall be floodproofed;

(c) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing 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 Floodplain 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 floodwaters 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.

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 order.

(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) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.

(6) Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C (2) of this Article have been fully considered. As the lot size increases beyond the 1/2 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) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

   (b) Variances 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 order.

   (c) Any application to which 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 development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Article 4, Section D (1)-(9) 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 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.

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards 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 to at least two feet above the base flood elevation. 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) **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to at least two feet above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

(3) **Enclosures** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 openings on separate walls having a total net area of not less than 1 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 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 FIRM shall be installed using methods and practices that 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 or 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 at least two 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.

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 Floodplain 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. SEVERABILITY

If any section, clause, sentence, or phrase of this Order is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Ordinance.

SECTION E. PENALTIES FOR NON COMPLIANCE

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

APPROVED: Sydney Murphy, County Judge

PASSED: July 23, 2019 (adoption date)

ORDINANCE BECOMES EFFECTIVE: August 2, 2019 (effective date)

I, the undersigned, Schelana Hock, County Clerk of Polk County, Texas, do hereby certify that the above is a true and correct copy of an order duly adopted by the Polk County Commissioner Court, at a regular meeting duly convened on July 23, 2019.

Schelana Hock
County Clerk
Polk County, Texas

(SEAL)
REGULATIONS FOR FLOOD PLAIN MANAGEMENT

WALKER COUNTY, TEXAS

OUTLINE

ARTICLE 1
Section 1:01 ESTABLISHMENT OF REGULATIONS
Purpose.................................................................................................................................................. 18
Authority............................................................................................................................................ 18
Abrogation and Greater Restrictions................................................................................................ 18
Interpretation....................................................................................................................................... 18
Severability.......................................................................................................................................... 18
Enforcement I Penalties.................................................................................................................... 18
Warning and Disclaimer of Liability.................................................................................................. 18

ARTICLE 2
DEFINITIONS........................................................................................................................................... 2B

ARTICLE 3
GENERAL PROVISIONS
Section 3:01 Lands to Which this Court Order Applies................................................................. 5B
Section 3:02 Basis for Establishing The Areas of Special Flood Hazard........................................ 5B
Section 3:03 Establishment of Development Permit System......................................................... 5B
Section 3:04 Compliance.................................................................................................................... 5B
Section 3:05 Development Permit Application Form......................................................................... 5B
Section 3:06 Development Permit Form............................................................................................ 5B
Section 3:07 Development Permit Exemption Certificate................................................................. 5B
Section 3:08 Promulgation of Forms.................................................................................................. 5B
Section 3:09 Establishment of Fees.................................................................................................... 5B
Section 3:10 Unrestricted Uses of The Flood Hazard Area............................................................ 5B
Section 3:11 Restricted Uses of The Flood Hazard Area............................................................... 9B

ARTICLE 4
ADMINISTRATION
Section 4:01 Designation of County Flood Plain Administrator.................................................. 10B
Section 4:02 Duties and Responsibilities of The County Administrator....................................... 10B
Section 4:03 Application and Permit Procedures............................................................................. 11B
Section 4:04 Appeals and Variance Procedures................................................................................ 12B

ARTICLE 5
PROVISIONS FOR FLOOD REDUCTION
Section 5:01 General Standards......................................................................................................... 13B
Section 5:02 Specific Standards........................................................................................................ 13B
Section 5:03 Standards For Subdivision Proposals......................................................................... 14B

APPENDIX
ADDITIONAL FORMS
Appendix A Notice to Development Permit Applicant................................................................. 15B
Appendix B Notice to Purchaser - Property In Flood Hazard Area.............................................. 16B
Appendix C Notice - Insurance of Variance To Flood Plain Management Regulations............... 17B

(Handwritten stamp and signature)
REGULATIONS FOR FLOOD PLAIN MANAGEMENT

WALKER COUNTY, TEXAS

UNINCORPORATED AREAS

For information or applications

Contact: Walker County Utility Inspector

Walker County
AN ORDER ESTABLISHING A DEVELOPMENT PERMIT SYSTEM AND ADOPTING REGULATIONS REQUIRING DEVELOPMENT PERMITS FOR CONSTRUCTION IN FLOOD PLAIN AREAS HAVING SPECIAL FLOOD HAZARDS, PROVIDING FOR REVIEW OF SUBDIVISIONS, PROVIDING FOR ADMINISTRATION AND ENFORCEMENT OF THE REGULATIONS, AND MAKING PROVISIONS RELATED TO DEVELOPMENT WITHIN THE COUNTY'S DESIGNATED FLOOD PLAINS

STATE OF TEXAS:

COUNTY OF WALKER:

WHEREAS, the Commissioners Court of Walker County is the governing body of Walker County, Texas;

WHEREAS, the County of Walker wishes to establish eligibility in the National Flood Insurance program, and in order to do so must meet the minimum requirements of Section 60.3(b) of the Program Regulations as published by the Federal Emergency Management Agency, and;

WHEREAS, under the National Flood Insurance Act of 1968, as amended, residents of Walker County can qualify for flood insurance coverage if Walker County adopts and enforces flood plain management criteria consistent with the need to establish minimum development standards within unincorporated land areas designated as flood prone by the Federal Emergency Management Agency-Texas Water Commission and/or Walker County;

WHEREAS, under Subchapter I, Section 16.313 of the Texas Water Code, counties are defined as authorized political subdivisions of the State;

WHEREAS, under Subchapter I, Section 16.313 of the Texas Water Code, all political subdivisions are authorized to take all necessary and reasonable actions to comply with the requirements and criteria of the National Flood Insurance Program;

WHEREAS, the Commissioners Court desires to establish a development permit system and draft regulations to implement and enforce the system to qualify and maintain the eligibility of residents in the unincorporated areas of Walker County to purchase federal flood insurance;

WHEREAS, the development permit system and regulations as drafted, require certain duties of officials of Walker County and;

WHEREAS, the Commissioners Court of Walker County has considered the regulations as drafted and desires to adopt them as the official floodplain management regulations of Walker County, and;

WHEREAS, a copy of the regulations as drafted are attached hereto, and are by reference incorporated in, and made a part of, this Court Order;

NOW, THEREFORE, on this 4th day of May, 1987, in a meeting of the Commissioners Court of Walker County, Texas, duly convened and acting in its capacity as governing body of Walker County, the following members being present:

[Signatures]

on motion of Commissioner Joe Malak, seconded by Commissioner Sam Parkin, duly put and carried, it is ORDERED by the Commissioners Court of Walker County, Texas that the regulations attached and appended hereto, entitled "REGULATIONS FOR FLOOD PLAIN MANAGEMENT, WALKER COUNTY, TEXAS" are made a part of this Order and are adopted as the regulations of Walker County, and all officials of Walker County having duties under said regulations are ORDERED and DIRECTED to perform such duties as required of them under said regulations.

[Signature]

A TRUE COPY HEREOF CERTIFIED

[Signature]

D. PATTON

COURT DEPUTY
CERTIFICATION

It is hereby found and declared by Walker County 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 these regulations become effective immediately.

Therefore, an emergency is hereby declared to exist, and these regulations being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.

Adopted this 4th day of May, 1987, A.D. by vote of the Walker County Commissioners Court, Huntsville, Texas. There were 5 ayes and 0 nays.

Frank J. Robinson, County Judge
Sam Park, Commissioner, Pct. 1
Cecil Williams, Commissioner, Pct. 2
Curtis Ellisor, Commissioner, Pct. 3
Joe Malak, Commissioner, Pct. 4

ATTEST:
James D. Patton, County Clerk

A TRUE COPY
HEREOF
JAMES D. PATTON
DEPUTY
CERTIFICATION

It is hereby found and declared by Walker County 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 these regulations become effective immediately.

Therefore, an emergency is hereby declared to exist, and these regulations being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.

Adopted this 8th day of September 1987, A.D. by vote of the Walker County Commissioners Court, Huntsville, Texas. There were ___ ayes and ___ nays.

[Signatures of officials]

ATTEST: James D. Patten, County Clerk

REvised SEPTEMBER 8, 1987

THEREOF ENTERED

James D. Patten, County Clerk of Walker County Texas, and shown to me to be a true and correct copy of the original and its record thereon.
REGULATIONS FOR FLOOD PLAIN MANAGEMENT
WALKER COUNTY, TEXAS
UNINCORPORATED

ARTICLE 1
ESTABLISHMENT OF REGULATIONS

SECTION 1:01 - PURPOSE
The purpose of these regulations is to provide flood plain management standards
to qualify unincorporated areas of Walker County for flood insurance coverage
under the National Flood Insurance Act of 1968, as amended.

SECTION 1:02 - AUTHORITY
These regulations are adopted by the Commissioners Court of Walker County,
Texas acting in its capacity as the governing body of Walker County.
County is a "political subdivision" as defined in Subchapter 1, Section 16.313 of
the Texas Water Code and as authorized under Sections 16.315 and 16.318 of the
Texas Water Code may adopt and promulgate reasonable rules and regulations which
are necessary for the orderly effectuation of the respective authorizations herein.

SECTION 1:03 - ABRIDGEMENT AND GREATER RESTRICTIONS
This court order is not intended to repeal, abrogate or impair any existing
assessments, covenants or deed restrictions. However, where this court order and
another conflict or overlap, whichever imposes the more stringent restrictions
shall prevail.

SECTION 1:04 - INTERPRETATION
In the interpretation and application of this court order, all provisions shall
be: (a) considered as minimum requirements; (b) liberally construed in favor of the
County; and (c) deemed neither to limit nor repeal any other powers granted under
State statutes.

SECTION 1:05 - SEVERABILITY
It is hereby declared to be the intention of the Court that the sections, para-
graphs, sentences, clauses and phrases of this Court Order are severable, and if any
section, paragraph, sentence, clause or phrase of this Order shall be declared void,
ineffective or unconstitutional by the valid judgement or final decree of any court
of competent jurisdiction, such unconstitutionality shall not affect any of the
remaining sections, paragraphs, sentences, clauses or phrases hereof, since the
same would have been enacted by this Court without the incorporation herein of any
such unconstitutional section, paragraph, sentence, clause or phrase.

SECTION 1:06 - ENFORCEMENT & PENALTIES
Any violation of this Court Order is a Class C Misdemeanor. Each day a violation
occurs is a separate offense. The Commissioners Court may file suit for injunctive
relief or civil penalties or both for any violation or threatened violation of this
Court Order.

SECTION 1:07 - WARNING & DISCLAIMER OF LIABILITY
The degree of flood protection required by this Court Order is considered
reasonable for regulatory purposes and is based on scientific and engineering
considerations. On rare occasions greater floods can and will occur and flood
heights may be increased by man-made or natural causes. This Court Order does not
imply that land outside the areas of special flood hazard or uses permitted within
such areas will be free from flooding or flood damages. This Court Order shall
not create liability on the part of Walker County or any officer or employee
thereof for any damages that result from reliance on this Court Order or any
administrative decision lawfully made thereunder.

[Signature]
JAMES D. PAYTON
WALKER COUNTY DEPUTY
ARTICLE 2

DEFINITIONS

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

Section 2:01
APPEAL - means a request for a review of the Flood Plain Administrator's interpretation of any provision of this court order or a request for a variance.

Section 2:02
AREA OF SPECIAL FLOOD HAZARD - is the land in the floodplain within a 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 Insurance Rate Map (FIRM). After detailed re-making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, Al-99, VO, VI-30, VE or V.

Section 2:03
BASE FLOOD - means the flood having a one percent chance of being equaled or exceeded in any given year.

Section 2:04
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.

Section 2:05
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.

Section 2:06
ELEVATED BUILDING - means a nonbasement building (i) built, in the case of a building in Zones Al-30, AE, A, AO, AH, AO, Al-99, VO, VI-30, VE, or V, to have the top of the elevated floor, or in the case of a building in Zones VI-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood with the magnitude of the base flood. In the case of Zones Al-30, AE, A, AO, AH, AO, Al-99, VO, VI-30, VE, or V, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeached movement of flood waters. In the case of Zones VI-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls meet the standards of Section 603(e)(5) of the National Flood Insurance Program regulations.

Section 2:07
EXISTING CONSTRUCTION - means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRM's effective before that date. "Existing construction" may also be referred to as "existing structures."

Section 2:08
FLOOD OR FLOODING - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters.
2. the unusual and rapid accumulation or runoff of surface waters from any source.

Section 2:09
Flood Insurance Rate Map (FIRM) - means an official map of a community on which the Federal Emergency Management Agency has delineated the boundaries of the flood, mudslide (i.e., mudflow) related erosion areas having special hazards have been designated as Zone A, H, and/or E.
Section 2:10
FLOODPLAIN OR FLOOD-PRONE AREA - means any land area susceptible to being inundated by water from any source (see definition of flooding).

Section 2:11
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 as 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.

Section 2:12
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.

Section 2:13
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.

Section 2:14
LOWEST FLOOR - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

Section 2:15
MANUFACTURED HOME - means a structure 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 connected to the required utilities. For flood plain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

Section 2:16
MEAN SEA LEVEL - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

Section 2:17
NEW CONSTRUCTION - means, for flood plain management purposes, structures for which the "start of construction" commenced on or after the effective date of a flood plain management regulation adopted by a community.

Section 2:18
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, 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 piers, 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.

[Signature]

AT TRUE COPY
HEREBY CERTIFY JAMES D. PATTON
CLERK OF THE CIRCUIT COURT
COUNTY OF CLINTON COUNTY, CLINTON COUNTY, DEPUTY
Section 2:10
STRUCTURE - means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Section 2:20
SUBSTANTIAL IMPROVEMENT - means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purpose of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

Section 2:21
VARIANCE - is a grant of relief to a person from the requirements of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance. (For full requirements see Section 60.6 of the National Flood Insurance Program regulations.)

Section 2:22
VIOLATION - means the failure of a structure or other development to be fully compliant with the community's flood plain 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.

Section 2:23
WATER SURFACE ELEVATION - means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.
ARTICLE 3
GENERAL PROVISIONS

SECTION 3:01 - LANDS TO WHICH THIS COURT ORDER APPLIES
This Court Order shall apply to all areas of special flood hazard within the jurisdiction of Walker County.

SECTION 3:02 - BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD
Areas of special flood hazard are identified on the Walker County Flood Insurance Rate Map (FIRM), Community No. 461042, dated May 1, 1987, published by the Federal Insurance Administration. These maps and any revisions thereto are hereby adopted by reference and declared to be a part of this Court Order.

SECTION 3:03 - ESTABLISHMENT OF DEVELOPMENT PERMIT SYSTEM
A Development Permit System is hereby established to ensure compliance with the provisions of this Court Order. This system will consist of a County-wide Application Review Procedure and the issuance of Class A permits only for those developments located within the identified flood hazard areas. Developments located outside of identified flood hazard areas will be given a Class B permit stating that the proposed development is not located within an identified flood hazard area and that the construction standards contained in this Court Order are not applicable to the proposed development.

SECTION 3:04 - COMPLIANCE
No structure or land in the unincorporated areas of Walker County shall hereafter be located, altered or have its use changed without first submitting a Development Permit Application Form to the County Administrator. A county-wide application system is a necessary and reasonable action to ensure that all necessary permits for development within identified flood hazard areas have been obtained. Additional flood plain data may be generated which will improve the accuracy of flood plain boundary identification. Since the county will constantly be aware of map changes and additional data, the final responsibility for determining whether a property or development is within an identified flood hazard area must rest with the county. Special Flood Hazard Boundary Maps published by the Federal Insurance Administration delineate only the major flood prone areas within the county. With a county-wide review procedure, the County Administrator may be able to make recommendations for construction standards which will minimize or eliminate the possibility of damage from a localized drainage problem.

SECTION 3:05 - DEVELOPMENT PERMIT APPLICATION FORM

SECTION 3:06 - DEVELOPMENT PERMIT FORM

SECTION 3:07 - DEVELOPMENT PERMIT EXEMPTION CERTIFICATE

SECTION 3:08 - PROMULGATION OF FORMS
The County Commissioners Court with the assistance of the County Administrator will promulgate any additional forms as may be necessary for the implementation of this Court Order.

SECTION 3:09 - ESTABLISHMENT OF FEES
The Commissioners Court with the assistance of the County Administrator will establish fees commensurate with the service rendered by the county.

SECTION 3:10 - UNRESTRICTED USES OF THE FLOOD HAZARD AREA
3:10(a) Development for agricultural purposes which is constructed to standards of the United States Department of Agriculture, Soil Conservation Service.
COUNTY OF WALKER, TEXAS

DEVELOPMENT PERMIT APPLICATION FORM

OUTSIDE CORPORATED AREAS

STATE OF TEXAS
COUNTY OF WALKER

APPLICATION NUMBER: ___________________________ DATE: ___________________________

1. NAME OF APPLICANT: ___________________________

   MAILING ADDRESS: ____________________________________________

2. LOCATION OF PROPERTY (complete as appropriate)
   If located in a subdivision:

   Name of Subdivision __________________ Section No. __ Block No. __ Lot No. __

   If NOT located in subdivision:

   Name & No. of Survey/Abstract __________________ Acreage __________

   Location Description — (Attach a vicinity map)

3. NATURE OF PROPOSED CONSTRUCTION (check and complete as appropriate)
   ( ) Residential ( ) Non-Residential ( ) Other
   ( ) Alteration of a Natural Waterway or Drainage Course
   ( ) Placement of Fill

4. DESCRIPTION OF PROPOSED CONSTRUCTION (check and complete as appropriate)
   ( ) New Construction ( ) Substantial Improvement to Existing Structure
   ( ) House ( ) Mobile Home ( ) Non-Residential ( ) Commercial
      (Name and Type of Business)
   ( ) Other__________________________

5. APPLICANT WILL PROVIDE-ONE COPY OF PLANS AND SPECIFICATIONS OF THE PROPOSED
   CONSTRUCTION.

=================================================================================================

FOR USE BY COUNTY FLOOD PLAIN ADMINISTRATOR

IS THE PROPERTY LOCATED IN AN IDENTIFIED FLOOD HAZARD AREA?
   ( ) YES ( ) NO

IS ADDITIONAL INFORMATION REQUIRED? ( ) YES ( ) NO

ARE OTHER FEDERAL, STATE OR LOCAL PERMITS REQUIRED? ( ) YES ( ) NO

ARE OTHER COUNTY REGULATIONS APPLICABLE? ( ) YES ( ) NO

( ) EXEMPTION CERTIFICATE ISSUED
( ) PERMIT APPLICATION APPROVED
( ) PERMIT APPLICATION REJECTED

Date __________________________

Signature of County Flood Plain Administrator

A TRUE COPY
I HEREBY CERTIFY, __________________________
COUNTY CLERK, WALKER COUNTY

6B
COUNTY OF WALKER, TEXAS

CLASS B

DEVELOPMENT PERMIT

OUTSIDE CORPORATION AREAS

STATE OF TEXAS:
COUNTY OF WALKER:

APPLICATION NO.:

PERMIT NO.:

NAME OF PERMITTEE

THE ABOVE NAMED PERMITTEE APPLIED FOR A DEVELOPMENT PERMIT ON
THE APPLICATION HAS BEEN REVIEWED BY THE COUNTY FLOOD PLAIN ADMINISTRATOR AND IT IS
HIS DETERMINATION THAT THE PROPOSED DEVELOPMENT APPEARS TO BE LOCATED WITHIN AN
IDENTIFIED FLOOD PLAIN OF WALKER COUNTY, TEXAS.

THE COUNTY FLOOD PLAIN ADMINISTRATOR HAS REVIEWED PLANS AND SPECIFICATIONS OF THE
PROPOSED DEVELOPMENT FOR CONFORMANCE WITH THE DEVELOPMENT STANDARDS REQUIRED BY
WALKER COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS. YOU ARE HEREBY AUTHORIZED TO
PROCEED WITH THE FOLLOWING DESCRIBED WORK:

ON THE FOLLOWING DESCRIBED PROPERTY:

TO MAINTAIN COMPLIANCE WITH THE DEVELOPMENT STANDARDS OF WALKER COUNTY FLOOD PLAIN
MANAGEMENT REGULATIONS AND TO ELIMINATE OR MINIMIZE FLOOD DAMAGE POTENTIAL TO THE PRO-
POSED DEVELOPMENT, YOU ARE HEREBY DIRECTED TO CONSTRUCT YOUR PROPOSED DEVELOPMENT IN
ACCORDANCE WITH THE FOLLOWING SPECIAL PROVISIONS:

( ) For residential structures, the lowest floor (including basement) must be elevated to
feet mean sea level.
( ) For non-residential structures, the lowest floor (including basement) must be
elevated or floodproofed to
feet mean sea level.
( ) Permittee must submit a certification from a registered professional engineer,
architect or land surveyor that the finished floor level of the residential
structure has been constructed at the specified elevation.
( ) For non-residential floodproofing, a registered professional engineer or architect
must certify that the floodproofing methods are adequate to withstand the flood
depths, pressures, velocities, impact and uplift forces and other factors associ-
ated with the base flood.
( ) The foundation of the structure must, as a minimum, comply with the specifications
attached.
( ) The materials used in the structure must be from the list attached.
( ) The water supply inlet and sanitary sewage outlet must have an automatic back
water or back flow device installed.
( ) Provide a certified copy of all final plans or as-built drawings to the County
Flood Plain Administrator.
( ) Other provisions (see attached list)

Acknowledgement of conditions by permittee

Date

Signature of County Flood Plain Administrator

Date
COUNTY OF WALKER, TEXAS

CLASS A

DEVELOPMENT PERMIT EXEMPTION CERTIFICATE

STATE OF TEXAS:
COUNTY OF WALKER:

APPLICATION NO. _________:

NAME OF APPLICANT:

THE ABOVE NAMED APPLICANT APPLIED FOR A DEVELOPMENT PERMIT ON
THE APPLICATION HAS BEEN REVIEWED BY THE COUNTY FLOOD PLAIN ADMINISTRATOR AND IT IS HIS
DETERMINATION THAT THE PROPOSED DEVELOPMENT APPEARS NOT TO BE WITHIN AN IDENTIFIED
FLOOD PLAIN OF WALKER COUNTY.

THIS CERTIFICATE EXEMPTS THE APPLICANT FROM DEVELOPMENT STANDARDS REQUIRED BY Walker
COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS. WORK IS HEREBY AUTHORIZED TO PROCEED ON THE
FOLLOWING DESCRIBED PROPERTY:

________________________________________

THE COUNTY FLOOD PLAIN ADMINISTRATOR HAS REVIEWED THE PLANS AND SPECIFICATIONS OF THE
PROPOSED DEVELOPMENT AND DESIRES TO MAKE THE FOLLOWING RECOMMENDATIONS FOR DEVELOPMENT
OR DESIGN ALTERATION:

________________________________________

WARNING:
The flood hazard boundary maps and other flood data used by the County Flood Plain
Administrator in evaluating flood hazards to proposed developments are considered
reasonable and accurate for regulatory purposes and are based on the best available
scientific and engineering data. On rare occasions, greater floods can and will occur
and flood heights may be increased by man-made or natural causes. This exemption cer-
tificate does not imply that developments outside the identified areas of special
flood hazard will be free from flooding or flood damage. Issuance of this exemption
certificate shall not create liability on the part of the County or the County Flood
Plain Administrator or any officer or employee of Walker County in the event flood-
ing or flood damage does occur.

Acknowledgement of Warning by Applicant

Signature of County Flood Plain Administrator

Date of issuance _______________________

A TRUE COPY
I HEREBY CERTIFY: JAMES D. PATTON
COUNTY FLOOD PLAIN ADMINISTRATOR
COUNTY OF WALKER, TEXAS
DEPUTY
3:10 (b) - The following uses having a low flood-damage potential shall be permitted to the extent that they cause no obstruction of flood flows, are not prohibited by any other court order, and provided that they do not require the construction of structures, placement of fill, alteration of stream channels or storage of materials or equipment.

(1) - Other agricultural uses such as general farming, pasture grazing, outdoor plant nurseries, horticulture, viticulture, sod farming, game farming and fish hatcheries.

Categorized under general farming are temporary structures such as animal pens, cribs, temporary crop covers, machinery storage sheds, wells and well installations primarily for stock or crop use, open wire fences such as stranded barbed wire and wire netting sheep and goat fences and, in general, any type of open agricultural fence (break-away wire gaps should be provided on all fences crossing streams or drainage channels.)

(2) - Private and public recreational uses such as golf courses, picnic grounds, parks, wildlife and nature preserves, target ranges, hunting and fishing areas, hiking, bike and horseback riding trails.

(3) - Residential uses such as lawns, gardens, parking areas, and play areas. Lawn or yard fences such as chain link or wooden privacy fences will not be permitted to cross stream channels or drainage easements unless provisions are made for the unobstructed passage of flood water flows.

(4) - Other similar uses which are consistent with the provisions of this Court Order.

SECTION 3:11 - RESTRICTED USES OF THE FLOOD HAZARD AREA

3:11 (a) - Any development in the flood hazard area not classed as an unrestricted use shall be considered a restricted use and shall require a County Development Permit.

3:11 (b) - Agricultural development for which a permit will be required will, for most farm and ranch operations, be limited to residential structures and large permanent barns, shops, poultry facilities and other similar structures which are proposed for construction in the identified flood hazard area.

3:11 (c) - Certain uses of the flood plain may not be appropriate, and the County Administrator may deem it necessary to restrict or prohibit uses that are dangerous to health, safety or property in times of flood. These uses may include, but are not limited to, the following:

(1) - Hospitals, nursing homes and any other facility where elderly or invalid persons reside.

(2) - Boarding schools, orphanages and any other facility where young children reside.

(3) - Detention facilities, sanitariums and any other facility where movements of persons may be restricted.

(4) - Refuge center, disaster relief centers, disaster shelters and any other operation which may be utilized during times of emergency.

(5) - Permanent storage of materials or equipment.
3:11 (d) – Until a floodway is designated for streams in the county, the County Administrator may deem it necessary to make a preliminary determination of the area of the stream needed to pass the 100-year flood flows. Certain uses are not appropriate within a floodway where extreme velocities and flood depths pose serious threats to life and property, and the County Administrator may deem it necessary to restrict or prohibit uses that are dangerous to health, safety, property or which may cause an increase in flood heights. These uses include, but are not limited to:

(1) – Land fills and obstructive structures.

(2) – Floatable storage.

(3) – Disposal of garbage, rubbish or trash.

(4) – And other uses as may be restricted or prohibited under Section 3:11 (c).

ARTICLE 4
ADMINISTRATION

SECTION 4:01 – DESIGNATION OF COUNTY FLOOD PLAIN ADMINISTRATOR

The Office of Flood Plain Administrator is hereby created by the Walker County Commissioners Court to administer and implement the provisions of this Court Order.

Walker County Utility Inspector is hereby appointed to the Office of Flood Plain Administrator and is directed to assume full responsibility for this post in addition to any other normal duties.

SECTION 4:02 – DUTIES AND RESPONSIBILITIES OF THE COUNTY ADMINISTRATOR

Duties and responsibilities of the County Flood Plain Administrator shall include, but are not limited to, the following:

4:02 (a) – Maintain and hold open for public inspection all records pertaining to the provisions of this Court Order;

4:02 (b) – Maintain a repository of flood hazard boundary maps and any other pertinent flood plain data;

4:02 (c) – Assist county residents in obtaining flood hazard boundary map amendments where flood plain data justifies such an amendment and maintain a record of such amendments;

4:02 (d) – Upon occurrence, notify the Federal Insurance Administration in writing whenever a community incorporates from the county or if an area of the county is no longer under the jurisdiction of the county by virtue of annexation by incorporated cities or by special agreements such as industrial or navigation districts;

4:02 (e) – Review all Development Permit Applications submitted to the county and issue or deny the appropriate permit;

4:02 (f) – Review all Development Permit Applications submitted to the county to assure that all necessary permits or plan approvals have been obtained from those Federal, State or local governmental agencies from which prior approval is required. Those agencies from which permits or plan of approval may be required includes, but is not limited to:

(1) – The Texas Department of Health for sanitary land fill permits and solid waste disposal permits;

(2) – The Texas Water Commission for dam or water impoundment permits, waste discharge and/or septic tank permits and plan of approval prior to placement of fill within the 100-year flood plain or construction of any levee or modification of stream channels;

(3) – The U.S. Army Corps of Engineers for Section 404 permits pertaining to dredging or filling wetlands.
4:02 (g) - Make interpretations as needed as to the exact location of flood hazard boundaries where there appears to be a conflict between a mapped boundary and actual field conditions;

4:02 (h) - Notify adjacent communities and the Texas Water Commission prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

4:02 (i) - Notify the Texas Water Commission of any map amendments, new projects or flood plain data which will change flood plain boundaries, and any changes in local jurisdiction and modification of this Court Order;

4:02 (j) - Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished. The Administrator may require from the applicant additional engineering data so as to make this determination;

4:02 (k) - Until the Federal Insurance Administration supplies base flood elevation data, the County Administrator will obtain, review and reasonably utilize any base flood elevation data available from a Federal, State or other source;

4:02 (l) - Submit on the anniversary date of the County's initial eligibility an annual report to the Federal Insurance Administration on the progress made during the past year within the County in the development and implementation of flood plain management measures.

SECTION 4:03 - APPLICATION AND PERMIT PROCEDURES

4:03 (a) - A completed Development Permit Application Form must be submitted to the County Administrator prior to the start of construction or development within the unincorporated areas of Walker County;

4:03 (b) - The County Administrator will review all applications to determine whether such construction or other development is proposed within the identified flood hazard areas of Walker County. If a proposed development is not within the identified flood hazard area, the Administrator will issue a Class A Permit, along with any suggested changes, to the applicant. The applicant should be aware that the recommendations or suggested changes offered for developments outside of identified flood hazard areas are not binding by the provisions of this Court Order. However, other Walker County Court Orders, such as the Subdivision Policy & Septic Tank Regulations, may place certain restrictions on developments outside of identified flood hazard areas.

4:03 (c) - When the County Administrator determines that a proposed development is within the identified flood hazard area, he/she will request additional information from the applicant. This additional information will include, but is not necessarily limited to the following:

(1) - Plans in duplicate drawn to scale showing the location, dimensions and elevation of proposed landscape alterations, existing and proposed structures and the location of the foregoing in relation to areas of special flood hazard;

(2) - Elevation in relation to mean sea level, of the lowest floor (including basement) of all proposed structures;

(3) - Elevation in relation to mean sea level to which any non-residential structure shall be floodproofed;

(4) - A certificate from a registered professional engineer or architect that the non-residential floodproofed structure shall meet the floodproofing criteria of Article 5, Sect. 5:01 (b).

(5) - Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;

(6) - All specifications and details necessary for complete review of design for such building construction as may require any floodproofing and for any filling, dredging, grading, channel improvement, storage of materials, water supply, utilities and sanitary facilities (septic tanks) proposed within the identified flood hazard area.

A TRUE COPY
HEREBY CERTIFY JAMES D. PATTON
COUNTY CLERK WALKER COUNTY

[Signature]

[Deputy]
4:03 (d) - On receipt of all requested information, the County Administrator shall evaluate the proposed construction for effects on flood heights and velocities, potential flood damage, adequacy of the plans for protection of life and property, location within the flood hazard area and other technical matters in view of the limitations on proposed development in flood hazard areas noted elsewhere in this Court Order.

4:03 (e) - The County Administrator shall then prepare a written statement to the applicant with a copy to the Commissioners Court indicating approval or rejection of the application, and conditions for approval or reasons for rejection. Appeal of the County Administrator's decisions may be made to the Commissioners Court.

4:03 (f) - Upon issuance of the Development Permit, the recipient shall be required to sign the permit, indicating that the recipient accepts the permit with any specified conditions and that he will construct the development in strict conformance with the approved plans and conditions attached.

SECTION 4:04 - APPEALS AND VARIANCE PROCEDURES

4:04 (a) - The Walker County Commissioners Court shall hear and render judgment on an appeal only when it is alleged that there is an error in any requirement, decision or determination made by the County Administrator in the enforcement or administration of this Court Order.

4:04 (b) - The Walker County Commissioners Court shall hear and render judgment on requests for variances from the requirements of this Court Order.

4:04 (c) - Any person or persons aggrieved by the decision of the Commissioners Court may appeal such decision in the courts of competent jurisdiction.

4:04 (d) - The County Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Insurance Administration upon request.

4:04 (e) - Variances may be issued for the reconstruction, restoration or rehabilitation of structures listed on the National Register of Historic Places or the State Inventory of Historical Places, without regard to the procedures set forth in the remainder of this Court Order.

4:04 (f) - Generally, 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 elevation, provided the relevant factors in this Court Order have been fully considered. As the lot size increases beyond the one-half acre size, the technical justification required for issuing the variance increases.

4:04 (g) - Variances shall only be issued upon a determination that the variance is the minimum necessary considering the flood hazard, to afford relief.

4:04 (h) - Variances shall only be issued upon:

(1) - A showing of good and sufficient cause;

(2) - A determination that failure to grant the variance would result in exceptional hardship to the applicant;

(3) - 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 or victimization of the public, or conflict with existing local laws or Court Orders.

4:04 (i) - Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

4:04 (j) - Upon consideration of the factors noted above and the intent of this Court Order, the Commissioners Court may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Court Order.

4:04 (k) - Any applicant to whom a variance is granted shall be given written notice that the lowest elevation to be permitted for construction of the first floor below the base flood level. In some cases, the lowest elevation permitted below the base flood level will not exceed two feet. The written notice shall also state that the cost of flood insurance premiums will increase commensurate with the lower first floor construction below the base flood level. The applicant shall sign this written notice indicating he understands all conditions and consequences of accepting the variance.
ARTICLE 5
PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION 5:01 - GENERAL STANDARDS
In all areas of special flood hazard the following provisions are required:
5:01 (a) - 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;
5:01 (b) - All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
5:01 (c) - All new construction or substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
5:01 (d) - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
5:01 (e) - New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters;
5:01 (f) - On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
5:01 (g) - 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.

SECTION 5:02 - SPECIFIC STANDARDS
In all areas of special flood hazard where base flood elevation data has been provided as set forth in the provisions of this Court Order, the following standards are required:
5:02 (a) - Residential Construction - New Construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of twelve (12) inches above the base flood elevation. The permit recipient shall submit to the County Administrator a certification from a registered professional engineer, architect or land surveyor that the elevation requirements or other conditions specified on the permit have been satisfied.
5:02 (b) - Non-residential Construction - New Construction or substantial improvement of any commercial, industrial or other non-residential structure shall have either the lowest floor, including basement, elevated to a minimum of twelve (12) inches above the base flood elevation or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components have the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall submit a certification to the County Administrator that the design standards have been satisfied. A record of such certification which includes the specific elevation (in relation to mean sea level) to which structures are flood proofed shall be maintained by the county administrator.
5:02 (c) Manufactured Homes
   a. Require that all manufactured homes to be placed within Zone A, shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
   b. All manufactured homes shall be in compliance with Article 5, Section 5:02 (a)
SECTION 5:03 – STANDARDS FOR SUBDIVISION PROPOSALS

5:03 (a) – All subdivision plats of proposed development in the unincorporated areas of the county shall be submitted to the Commissioners Court and/or the County Administrator for plat approval. Plat specifications and details for submission will be governed by the County Subdivision Court Order.

5:03 (b) – All proposals for the development of subdivisions, including manufactured home parks and subdivisions, shall be consistent with the provisions contained in this Court Order and shall meet Development Permit requirements as specified in this Court Order.

5:03 (c) – Base flood elevation data shall be generated for subdivision proposals and other proposed development including 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 of Article 4, Section B (8) of these regulations.

5:03 (d) – All subdivision plats shall have the flood hazard area clearly delineated on the plat and where appropriate, shall have minimum floor elevations for all lots located within flood hazard areas.

5:03 (e) – All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards and lots shall be shaped and sized so as to provide adequate building space.

5:03 (f) – All subdivision proposals including manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

5:03 (g) – The developer, builder, seller, or agent shall inform in writing, each prospective buyer of subdivision lots located in flood hazard areas that such property is in an identified flood hazard area and that a Development Permit will be required before a structure can be placed on the property.
COUNTY OF WALKER, TEXAS
NOTICE TO DEVELOPMENT PERMIT APPLICANT

STATE OF TEXAS:
COUNTY OF WALKER:

APPLICATION NO.: 

NAME OF APPLICANT:

THE ABOVE NAMED APPLICANT APPLIED FOR A DEVELOPMENT PERMIT ON
THE APPLICATION HAS BEEN REVIEWED BY THE COUNTY FLOOD PLAIN ADMINISTRATOR AND IT IS HIS
DETERMINATION THAT THE PROPOSED DEVELOPMENT APPEARS TO BE LOCATED WITHIN AN IDENTIFIED
FLOOD PLAIN OF WALKER COUNTY.

THE COUNTY FLOOD PLAIN ADMINISTRATOR HAS REVIEWED PLANS AND SPECIFICATIONS OF THE
PROPOSED DEVELOPMENT FOR CONFORMANCE WITH THE DEVELOPMENT STANDARDS REQUIRED BY WALKER
COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS.

BASED ON THIS REVIEW, THE COUNTY FLOOD PLAIN ADMINISTRATOR DEEMS IT APPROPRIATE TO:

( ) APPROVE THE APPLICATION FOR DEVELOPMENT
( ) REJECT THE APPLICATION FOR DEVELOPMENT

CONDITIONS FOR APPROVAL/REASONS FOR REJECTION ARE AS FOLLOWS:

WARNING:
The flood hazard boundary maps and other flood data used by the County Flood Plain
Administrator in evaluating flood hazards to proposed developments are considered
reasonable and accurate for regulatory purposes and are based on the best available
scientific and engineering data. On rare occasions, greater floods can and will occur
and flood heights may be increased by man-made or natural causes. Construction
standards required by Walker County Flood Plain Management Regulations are the minimum
standards deemed necessary to minimize or eliminate flood damage, but reliance on these
minimum standards shall not create liability on the part of County Commissioners,
County Flood Plain Administrator or any other officer or employee of Walker County in
the event flooding or flood damage occurs.

I, the undersigned applicant, do hereby:
( ) acknowledge the warning and disclaimer of liability of the County;
( ) agree with the conditions of permit approval;
( ) agree to construct my development in strict compliance with the specified
conditions once a permit has been issued;
( ) agree to provide certifications of work as may be required;

OR
( ) disagree with the reasons for rejection of my application and desire to make
a formal appeal to the Commissioners' Court of Walker County;
( ) disagree with the conditions for approval of a development permit and desire
to make a formal appeal to the Commissioners' Court of Walker County.

Signature of applicant
Date

Copy to Commissioner's Court

County Flood Plain Administrator
Date
COUNTY OF WALKER, TEXAS

NOTICE TO PURCHASER
PROPERTY IN FLOOD HAZARD AREA

STATE OF TEXAS
COUNTY OF WALKER

THE PROPERTY DESCRIBED BELOW HAS BEEN FOUND TO BE SUBJECT TO FLOODING OR LOCATED, ALL OR IN PART, IN A FLOOD HAZARD AREA AS DETERMINED ON OFFICIAL MAPS LOCATED IN THE OFFICE OF THE COUNTY FLOOD PLAIN ADMINISTRATOR. THE DEVELOPER OF THE PROPERTY HAS MADE APPLICATION AND HAS BEEN ISSUED A PERMIT FOR THE SUBDIVISION IN WHICH THIS PROPERTY IS LOCATED. AS ONE CONDITION OF THE PERMIT, THE DEVELOPER HAS SIGNED A STATEMENT CERTIFYING HE WILL PROVIDE THIS WRITTEN NOTICE TO ALL PERSONS PURCHASING PROPERTY LOCATED IN THIS SUBDIVISION WHICH IS LOCATED IN A FLOOD HAZARD AREA.

CONSTRUCTION OF A RESIDENCE, OR OTHER DEVELOPMENT, ON THIS PROPERTY WILL BE DEPENDENT ON QUALIFICATION FOR AND RECEIPT OF A DEVELOPMENT PERMIT TO BE ISSUED BY THE COUNTY FLOOD PLAIN ADMINISTRATOR IN ACCORDANCE WITH THE PROVISIONS OF WALKER COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS.

CONDITIONS OF THE SUBDIVISION PERMIT WHICH APPLY TO THIS PROPERTY ARE:

The location of the property is as follows:

Subdivision Name
Lot No. Block No. Section No.
Street Address

(Date) (Signature of Seller)

The undersigned Purchaser hereby acknowledges receipt of the foregoing notice prior to closing of the purchase of the property described above, and acknowledges he has read and understands the condition of the permit as stated above:

(Date) (Signature of Purchaser)

(Date) (Signature of Purchaser)

STATE OF TEXAS
COUNTY OF WALKER

Before me, the undersigned authority, on this day personally appeared

known to me to be the person(s) whose name(s) subscribed to the foregoing instrument, and acknowledged to me that executed the same for purposes and consideration therein expressed.

Given under my hand and seal of office on this, the day of 198

Notary Public for the State of Texas

(Seal)

COUNTY CLERK, DEPUTY

16B
JUNI OF WALKER, TEXAS

NOTICE

ISSUANCE OF VARIANCE TO FLOOD PLAIN MANAGEMENT REGULATIONS

STATE OF TEXAS

COUNTY OF WALKER

APPLICATION NO.

PERMIT NO.

NAME OF PERMITTEE

THE ABOVE NAMED PERMITTEE MADE AN APPEAL OF THE COUNTY FLOOD PLAIN ADMINISTRATOR'S CONDITIONS FOR PERMIT APPROVAL AND REQUESTED A VARIANCE FROM THE CONSTRUCTION STANDARDS REQUIRED BY WALKER COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS FOR PROPOSED DEVELOPMENTS WITHIN AN IDENTIFIED FLOOD HAZARD AREA.

AFTER CAREFUL CONSIDERATION OF THE REASONS FOR REQUEST OF VARIANCE, THE COMMISSIONERS' COURT OF WALKER COUNTY HAS DETERMINED THAT IT IS WITHIN THE SCOPE OF VARIANCE PROCEDURES AS OUTLINED IN WALKER COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS TO GRANT THIS REQUEST FOR VARIANCE FROM FLOOD PLAIN CONSTRUCTION STANDARDS.

THE BASE FLOOD ELEVATION AT THE LOCATION OF YOUR PROPOSED DEVELOPMENT HAS BEEN DETERMINED AT ______ FEET MEAN SEA LEVEL.

YOU ARE HEREBY AUTHORIZED TO CONSTRUCT YOUR LOWEST FLOOR (INCLUDING BASEMENT) AT ELEVATION ______ FEET MEAN SEA LEVEL.

ADDITIONAL VARIANCES FROM DEVELOPMENT STANDARDS:

NOTICE: ALL DEVELOPMENT MUST BE IN STRICT CONFORMANCE WITH THE VARIANCES STATED HERE AND OTHER CONDITIONS STATED ON THE DEVELOPMENT PERMIT. ANY VARIATION WILL RESULT IN IMMEDIATE SUSPENSION OF THIS VARIANCE AND THE DEVELOPMENT PERMIT. FLAGRANT VIOLATION OF THE CONDITIONS OF THIS VARIANCE WILL RESULT IN THE COMMISSIONERS' COURT SEEKING INJUNCTIVE RELIEF OR CIVIL PENALTIES.

WARNING: THE GRANTING OF A VARIANCE IS FOR CONSTRUCTION STANDARDS ONLY. IT IS NOT A VARIANCE FROM THE REQUIREMENT TO PURCHASE FLOOD INSURANCE. PREMIUMS FOR FLOOD INSURANCE COVERAGE ON THE STRUCTURE WILL INCREASE AS A RESULT OF CONSTRUCTING THE FIRST FLOOR BELOW THE LEVEL OF THE BASE FLOOD. LOWERING THE FIRST FLOOR BELOW THE BASE FLOOD LEVEL HAS ALSO INCREASED THE RISK OF FLOOD DAMAGE AND POSSIBLE LOSS OF LIFE.

DISCLAIMER OF LIABILITY: THE COMMISSIONERS' COURT OF WALKER COUNTY AND ANY OFFICER OR EMPLOYEE OF WALKER COUNTY ARE NOT LIABLE FOR DAMAGES OR LOSS OF LIFE RESULTING FROM FLOODING OF THE PROPERTY FOR WHICH A VARIANCE HAS GRANTED.

I, ___________________________ , do hereby acknowledge that I have read the variance provisions stated above and that I understand them and intend to comply fully with them. I also acknowledge that my flood insurance costs will increase and flood damage potential to my structure will increase. I am fully aware that Walker County is not liable for damages to my property or structure and that I accept full responsibility for the risks associated with this variance. I also certify that in the event I sell my property or structure in the future, I will give notice of this variance to the purchaser.

Signature of Permittee

Date

[Signature]

HEREBY CERTIFY, JAMES B. PENNY
COUNTY COMMISSIONER, WALKER COUNTY
AMENDMENT TO SECTION 3:02 OF THE ORDER ESTABLISHING A DEVELOPMENT PERMIT SYSTEM AND ADOPTING REGULATIONS REQUIRING DEVELOPMENT PERMITS FOR CONSTRUCTION IN FLOOD PLAIN AREAS HAVING SPECIAL FLOOD HAZARDS, PROVIDING FOR REVIEW OF SUBDIVISIONS, PROVIDING AND MAKING PROVISIONS RELATED TO DEVELOPMENT WITHIN THE COUNTY'S DESIGNATED FLOOD PLAIN.

This Amendment shall change section 3:02 of the order cited above to read:

Section 3:02 - BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

AREAS OF SPECIAL FLOOD HAZARD ARE IDENTIFIED ON THE WALKER COUNTY FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY No. #1042, DATED MAY 7, 2001, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. THESE MAPS AND ANY REVISIONS THERETO ARE HEREBY ADOPTED BY REFERENCE AND DECLARED TO BE A PART OF THE COURT ORDER.

THE STATE OF TEXAS
COUNTY OF WALKER

This is to certify that the Commissioner Court of Walker County, Texas has on this 14th day of MAY 2001, approved this.

[Signatures]

CHARLES H. WAGAMON

H. GAINES, JR. Comm. Prec. 1

ROBERT AUERTY, Comm. Prec. 2

JAMES C. REYNOLDS, Comm. Prec. 3

TIM FAULSEL, Comm. Prec. 4

THE STATE OF TEXAS
COUNTY OF WALKER

I, James D. Patton, County Clerk in and for said county, do hereby certify that this plat was filed for record in my office the ____ day of ___________ 20___ and recorded in Volume______ Page_______ of the Official Public Records of Walker County, Texas.

James D. Patton, County Clerk

[Signature]

A TRUE COPY

I HEREBY CERTIFY, JAMES D. PATTON
COUNTY CLERK, WALKER COUNTY

[Signature]

DEPUTY
Amendments to the Regulations for Flood Plain Management
Walker County, Texas

Section 1:06 shall be changed to read:

Section 1:06 – Penalties for Non-compliance:

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this court order and other applicable regulations. Violation of the provisions of this order by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this court order or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $500.00 for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent Walker County from taking such other lawful action as is necessary to prevent or remedy any violation. An offense under this section is a Class C misdemeanor. Each violation of this order and each day of continuing violation is a separate offense.

Section 3:02 shall be changed to read:

Areas of Special Flood Hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Walker County, Texas and incorporated areas” dated August 16, 2011, with the accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) dated August 16, 2011, and any revisions thereto are hereby adopted by reference and declared to be a part of this order. Future revisions to the report or maps shall take effect immediately without further action by Commissioners Court.

Section 4:02 shall be changed to read:

Section 4:02 DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

The Floodplain Administrator has the authority wherever he/she deems appropriate to authorize and/or require contractors and/or other public personnel to assist in the discharge of any of the duties described below, or deemed necessary to the proper administration or enforcement of this order. The duties and responsibilities of the Floodplain Administrator shall include, but not be 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 to ensure that the proposed building site project, 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 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 the Texas Water Development Board (TWDB) and also the Texas Commission on Environmental Quality (TCEQ), 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. The Floodplain Administrator shall have the right to require applicants to submit any necessary reports (engineering or otherwise), data, or information at developer's expense in order to assist in the administration of the provisions of this order.

(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 within Zones A1-30 and AE on the community’s FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one 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 1 foot, provided that the community first completes all of the provisions required by Section 65.12.

Section 5:04 shall be added as follows:

**Section 5:04 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 shall apply:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would
not result in 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 Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

CERTIFICATION OF ADOPTION

APPROVED:  
(community official)

PASSED:  8-15-2011    
(adoptions date)

ORDINANCE BECOMES EFFECTIVE:  8-16-2011    
(effective date)

I, the undersigned,  

Danny Pierce  

{Signature of Certifying Official}

{Signature of Certifying Official}

I, the undersigned,  

Danny Pierce  

{Signature of Certifying Official}

{Signature of Certifying Official}

Page 3 of 3