

Chapter 54 FLOODS¹

ARTICLE I. IN GENERAL

Secs. 54-1—54-25. Reserved.

ARTICLE II. FLOOD DAMAGE PREVENTION

DIVISION 1. GENERALLY

Sec. 54-26. Statutory authorization.

The legislature of the state has in V.T.C.A. Water Code Ch. 16.315 delegated the responsibility to local government units to adopt regulations designed to minimize flood losses. Therefore, the city council does ordain as provided in this article.

Sec. 54-27. Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation which results in loss of life 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 the lands because they are inadequately elevated or otherwise protected from flood damage.

Sec. 54-28. 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~~ 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

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

Sec. 54-29. Methods of reducing flood losses.

In order to accomplish its purposes, the following methods are used in this article:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood or that 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.
- (6) Require analysis of contributing areas of any size and not part of a FEMA designated floodplain for subdivision proposals.
- (7) Require the use of Best Available Data for all engineered flood study submittals.

Sec. 54-30. Definitions.

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

Appeal means a request for a review of the floodplain administrator's interpretation of any section of this article or a request for a variance.

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 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 (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/AO, AR/AH, AR/A, 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.

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, A1-30, AR, V1-30 or VE that indicates the water

surface elevation resulting from the flood that has a one 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.

Best available data means any and all existing flood hazard information adopted by a community and reflected on an effective FIRM, DFIRM, or within a FIS report; or draft or preliminary flood hazard information supplied by FEMA or from another source accepted by the City.

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 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, 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 floodprone 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.

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 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.

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

Letter of Map Amendment (LOMA) is an official amendment, by letter, to an effective National Flood Insurance Program (NFIP) map. A LOMA establishes a property's location in relation to the Special Flood Hazard Area (SFHA).

Letter of Map Change (LOMC) is a term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter, for instance a Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-F).

Letter of Map Revision (LOMR) is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both.

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

Manufactured home means a structure transportable in one or more sections, which is built 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.

Market Value means the value of an improvement established by the Guadalupe County Appraisal District, unless a property owner demonstrates to the administrator, by use of a certified appraisal, that another value is appropriate.

Mean sea level means, for purposes of the National Flood Insurance Program, the ~~National Geodetic Vertical Datum (NGVD) of 1929~~ North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a 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) Four hundred square feet or less when measured at the largest horizontal projections;
- (iii) Designed to be self-propelled or permanently towable by a light 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 resource Act (Pub. L. 97-348)), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab 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 aboveground, as well as a manufactured home or recreational vehicle.

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 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 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-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.

Sec. 54-31. Lands to which article applies.

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

Sec. 54-32. 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 Guadalupe County, Texas and Incorporated Areas," dated November 2, 2007effective 3-27-2024, with accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) dated November 2, 20073-27-2024, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance effective November 1, 2007.

~~The FIS and FIRMs identified above for purposes of improvements to property and new construction before November 1, 2007, shall immediately become effective.~~

Sec. 54-33. Establishment of development permit.

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

Sec. 54-34. Compliance.

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

Sec. 54-35. 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.

Sec. 54-36. Interpretations.

In the interpretation and application of this article, all sections 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. 54-37. 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 for any official or employee thereof for any flood damages that result from reliance on this article or any administration decision lawfully made thereunder.

Sec. 54-38. Designation of the floodplain administrator.

The building official 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.

Sec. 54-39. Duties and responsibilities of 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.
- (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 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.

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- (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 as of September 1, 2007), 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 54-32, 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 chapter 54, article II, division 2, flood hazard reduction.
 - (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 one foot, provided that the community first completes all of the provisions required by Section 65.12.

Sec. 54-40. 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 section 54-52(2);
 - (d) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a proposed development.
 - (e) Maintain a record of all such information in accordance with section 54-39.
 - (f) Detailed drawings for the proposed development. Drawings must clearly indicate that all provisions of these regulations will be met. On developments other than residential accessory buildings less than 150 square feet or other insignificant developments (carports, well houses, gazebos, etc.) drawings must be sealed by a licensed professional engineer or registered architect certifying that all provisions of these regulations will be met if the development is completed in accordance with the sealed drawings.
 - (g) A topographic survey of the property to be developed. This requirement may be waived for fences or other insignificant types of development.

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- (h) In cases where a determination must be made as to whether the construction is substantial improvement, additional information may need to be submitted as outlined in these regulations.
 - (i) the top of the slab of the lowest habitable floor must be elevated to two feet or more above the base flood elevation.
 - (j) A form board survey with elevations sealed by a registered professional land surveyor (R.P.L.S.) will be required before framing begins. Approval must be given by the floodplain administrator to begin framing if the survey meets all requirements.
 - (k) A completed elevation certificate, as prepared and sealed by a LPLS, Architect, or Engineer, with the necessary base flood elevations, hydrological and hydraulic data as needed must be submitted to establish the BFE during the permit application process, prior to concrete foundation being installed, and when the structure is completed (completed and ready for habitation for residential structures).
 - (l) All structures will be constructed and anchored to prevent flotation, collapse or lateral movement of the structure resulting from the hydrodynamic and hydrostatic loads, including the effect of buoyancy.
 - (m) Construction shall use methods that will minimize flood damage and construction materials and utility equipment that are resistant to flood damage. FEMA technical bulletins will serve as the guideline for this requirement.
 - (n) Unless dry-proofed, enclosed areas below the base flood elevation must be equipped with flood openings or vents capable of equalizing water levels and hydrostatic loads. Covers for these openings must not interfere with the equalization of water levels in the event of a flood and should minimize potential blockage by debris. FEMA Bulletin 1 or subsequent revisions shall serve as the guideline for this requirement. A licensed architect or licensed professional engineer shall certify the flood openings. (This can only be done within the floodplain not the floodway.)
 - (o) Thermal insulation used below the base flood elevation shall be of a type that does not absorb water.
 - (p) Water heaters, furnaces, air conditioning systems, electrical distribution panels and any other mechanical or electrical equipment must be elevated at least two feet above the base flood elevation. Separate electrical circuits shall serve any level below the base flood elevation and shall be dropped from above.
 - (q) All air ducts, loose pipes, propane tanks and storage tanks located at or below the base flood level shall be firmly anchored to prevent flotation. Tanks and ducts shall be vented to at least two feet above the base flood elevation.

- (2) 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:
 - (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;

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- (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 the area.

(3) Construction. Upon placement of the lowest floor, or floodproofing by whatever construction means, the permit holder must submit to the floodplain administrator a certification of the elevation of the lowest flood or floodproofed elevation, as built, in relation to mean sea level. Certification must be prepared by or under the direct supervision of a registered land surveyor or professional engineer who is authorized to certify such information in the state and certified by same. Any work undertaken prior to submission of the certification will be at the permit holder's risk. The floodplain administrator will review the lowest flood elevation and floodproofing certificate. If these documents or any other construction activities do not conform to the requirements of this chapter, the permit holder must immediately cease further work, and correct any deficiencies. Failure of the permit holder to submit the surveyed lowest flood elevation, floodproofing certificate or failure to correct any deficiencies will result in a stop-work order for the project.

(4) Revocation of permit. The floodplain administrator may revoke a floodplain development permit or approval issued under the provisions of this chapter or other ordinance of the city when the applicant has provided information that is inaccurate or no longer valid or made a false statement or misrepresentation of a material fact in the application of plans upon which the permit or approval was based.

(5) Expiration. In accordance with Section 1.4.

Sec. 54-41. Variances procedures.

- (a) The appeal board as established by the city shall hear and render judgment on requests for variances from the requirements of this article.
- (b) The appeal board may 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 one-half acre or less in size contiguous to and surrounded by lots with existing structures contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing relevant factors in section 54-40(~~b~~2) have been fully considered. As the lot size increases beyond 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 54-28).
- (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 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 (i) the criteria outlined in subsections 54-41(a)—(k) 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.

Secs. 54-42. — Infrastructure design standards.

Design requirements for all drainage infrastructure, including storm sewers, channels, detention facilities and other structures and facilities used to collect, convey, and store storm runoff, are set fourth in the latest approved version of the City of Seguin’s Stormwater Criteria Manual. The City’s drainage design standards apply to all areas regardless of location inside or outside of the special flood hazard area.

Sec. 54-43 - 54-50. Reserved.

DIVISION 2. FLOOD HAZARD REDUCTION

Sec. 54-51. 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) The total value of improvements, repairs, modifications, and additions to existing buildings are counted cumulatively over the past five years;

- (56) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (67) 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 the floodwaters; and
- (78) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Sec. 54-52. Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 54-32, 54-39(8) or 54-53(c), the following are required:

- (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to a minimum of ~~one foot~~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 section 54-40(a1)(1a), 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 a minimum of ~~one foot~~two feet above the base flood elevation or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic 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 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 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 a minimum of ~~one foot~~two feet above base flood elevation and be securely anchored to an adequately 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 a minimum of ~~one foot~~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.
- (5) *Recreational vehicles.* Require that recreational vehicles placed on sites within zones A1-30, AH, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of subsection 54-40(a), 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.

Sec. 54-53. Subdivision proposals.

- (a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 54-27 through 54-29.
- (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet development permit requirements of section 54-33, section 54-40 and section 54-51 through 54-57 of this article.
- (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 54-32 or 54-39(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. 54-54. Standards for areas of shallow flooding (AO/AH zones).

Located within areas of special flood hazard established in section 54-32 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:

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- (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 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 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 subsection 54-40~~(a)(1)~~, 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. However, drainage paths can not deflect flow onto adjacent properties.

Sec. 54-55. Floodways.

Located within areas of special flood hazard established in section 54-32 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) ~~(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. All encroachments must stipulate No Impact or No Change to the 25-year storm event flood elevation and base flood elevation, regulatory floodway elevations, or regulatory floodway widths at existing and proposed cross-sections for a sufficient distance upstream and downstream of the development site or at the discretion of the Floodplain Administrator to insure "No-Rise / No-Impact" Certifications. .

The "No-Rise / No-Impact" Certification shall include, but not be limited to:

- a. Copy of the current effective FIS hydraulic models
- b. Existing and proposed conditions hydraulic models
- c. Annotated effective FIRM or FBFM and topographic map, showing regulatory floodplain or floodway boundaries, the additional cross-sections, and the site location along with the proposed topographic modifications.
- d. Documentation clearly stating analysis procedures. All modifications made to the effective hydraulic models to correctly represent existing conditions, as well as those made to the existing condition models to represent proposed conditions should be well documented and submitted with all supporting information.
- e. Annotated effective Floodway Data Table (from FIS report)

- f. Statement defining source of additional cross-sections, topographic data, and other supporting information.
- g. Cross-section plots of the additional cross-sections for existing and proposed hydraulic models.
- h. Certified planimetric (boundary survey) information indicating the location of structures on the property.
- i. Hard copy of all output files.
- j. Clear explanation of how roughness parameters were obtained (if different from those used in the hydraulic models).
- k. Engineering certification.
- l. No wall enclosures over the allowed 120 square feet or breakaway walls within the floodway.

(1)(2) Foundations and structures attached thereto (not including breakaway walls) shall be anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State and local building standards. A registered professional engineer or architect shall develop the structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with acceptable standards of practice.

- (23) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of division sections 54-51 to 54-57.
- (34) Under the provisions of 44 CFR Chapter 1, section 65.12, of the National Flood Insurance regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

Sec. 54-56. 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.

Sec. 54-57. Penalties for noncompliance.

- (1) 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 the maximum allowed by law for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city council from taking such other lawful action as is necessary to prevent or remedy any violation.
- (2) Penalty for violation. Any person violating any provision of chapter 54, floods, incorporated by reference in this section shall be subject to the penalties set forth in Ssection 1-14.