ORDINANCE NO. 2020-20

AN ORDINANCE AMENDING THE CODE OF ORDINANCES, CITY OF BOERNE, TEXAS, BY AMENDING CHAPTER 9 OF THE CODE OF ORDINANCES OF THE CITY OF BOERNE, TEXAS ENTITLED "FLOOD DAMAGE PREVENTION"; SECTION 9-5. DEFINITIONS, SECTION 9-6. LANDS TO WHICH THIS ORDINANCE APPLIES, SECTION 9-7. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD AND LOCAL FLOODPLAIN; ARTICLE II. ADMINISTRATION, SECTION 9-42. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR, SECTION 9-44. VARIANCE PROCEDURES; ARTICLE III. PROVISIONS FOR FLOOD HAZARD REDUCTION, SECTION 9-66. GENERAL STANDARDS, SECTION 9-67. SPECIFIC STANDARDS FOR A & AE ZONES, SECTION 9-68. STANDARDS FOR SUBDIVISION PROPOSALS, SECTION. 9-69. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES), SECTION 9-70. LOCAL FLOODPLAIN, 9-71. FLOODWAYS; CONTAINING A SEVERABILITY CLAUSE; AND PROVIDING FOR A PENALTY OF NOT MORE THAN $1,000.00 FOR EACH VIOLATION

WHEREAS, it becomes necessary, from time to time, to amend ordinances and/or resolutions in the best interest of the citizens;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS, AS FOLLOWS:

That any sections of Chapter 9 not amended herein will remain in effect. The following sections of Chapter 9, Flood Prevention and Control, of the Code of Ordinances, City of Boerne, Texas, are hereby amended to read as follows:

FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE I. IN GENERAL

Sec. 9-5. – 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 one percent (1%) 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 (1%) 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 (1%) 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, A 1-30, AE, A99, AR, AR/A 1-30, AR/AE, AR/AO, AR/AH, ARIA , VO, V1-30, VE or V.

BASE FLOOD - means the flood having a one percent (1%) 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, A 1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a one percent (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 buildings roads and other structures; storage of equipment or materials, construction; and excavation, dredging, grading, filling, and clearing or removing vegetation associated with residential or nonresidential construction.

DRAINAGEWAY – A route or course along which water moves or may move to drain a region. Drainageway Protection Zone – An area that extends horizontally landward a specified distance from the center line of a route or course along which water moves or may move to drain a region. Area that contains the Protection Zones as detailed in Section 6.03.005 of the Boerne Subdivision ordinance, current version.

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 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 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.

LOCAL FLOOD PLAINS - shall be designated as the area inundated by the 100-year flood for all watersheds draining 25 acres or more that do not have a FEMA regulatory floodplain and are defined as a drainageway per this ordinance. Local floodplains are further defined by a minimum 1-foot flow depth to exclude shallow concentrated or sheet flows from being identified as elevated risk zones per FEMA guidelines.

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 (NAVO) 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.

REDEVELOPMENT - any development on previously developed land, other than rebuilding activity.

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.

STREAM - A natural water course - A natural intermittent or perennial stream flowing in a well-defined bed or channel; one formed by the natural flow of the water, as determined by the general surfaces or conformation of the surrounding country, as distinguished from an "artificial" water course, formed by the work of man, such as a ditch or canal.

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)(S) 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 (NAVO) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Sec. 9-6. LANDS TO WHICH THIS ORDINANCE APPLIES

The ordinance shall apply to all areas of special flood hazard (SFH) and local floodplain with the jurisdiction of Boerne.

Sec. 9-7. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD AND LOCAL FLOODPLAIN

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 City of Boerne, Texas, Kendall County," dated March of 1983, with accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) dated September 1983, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance. Local Flood Plains shall be designated as the area inundated by the one percent (1%) annual chance (100-year) flood for all watersheds draining 25 acres or more that do not have a regulatory floodplain and are defined as a drainageway per this ordinance. Local floodplains are further defined by a minimum 1-foot flow depth to exclude shallow concentrated or sheet flows from being identified as elevated risk zones per FEMA guidelines.

ARTICLE II – ADMINISTRATION

Sec. 9-42. 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 require the owner of the property, or his representative, to perform the necessary hydraulic studies to determine the one percent (1%) annual chance (100-year) flood plain, base flood elevation and floodway to obtain a letter of map revision from FEMA.

(9) The Floodplain Administrator may obtain, review and reasonably utilize any base flood elevation data, hydrology and floodway data available from a Federal, State or other source, in order to administer the provisions of Article III.

(10) When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other redevelopment or development (including fill) shall be permitted within local floodplains, Zones A 1-30 and AE on the community's FIRM, unless that the cumulative effect of the proposed development complies with Article III of this ordinance.

(11) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain redevelopment in Zones A 1- 30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood provided that the community first completes all of the provisions required by Section 65.12.

Sec. 9-44. VARIANCE PROCEDURES

(1) The Zoning Board of Adjustments, as established by the community, shall hear and render judgment on requests for variances from the requirements of this ordinance.

(2) The Zoning Board of Adjustments 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 Zoning Board of Adjustments 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 Zoning Board of Adjustments 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

(a) the criteria outlined in Article 4, Section D (1)-(9) 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.

ARTICLE III - PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 9-66. 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 City of Boerne standards to minimize or eliminate infiltration of flood waters into the system;

(6) New and replacement sanitary sewage systems shall be designed to City of Boerne standards minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,

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

(8) New construction and substantial improvements, when located in multiple flood zones with varying base flood elevations or in same flood zone with multiple base flood elevations must meet the requirements for the flood zone with the most stringent requirements and the highest base flood elevation.

(9) The developer of new construction, substantial improvements, and other development proposals must assure that all necessary permits have been obtained from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act, as amended, or by other regulating agencies.

(10) For all construction (residential and non-residential) and substantial improvements within, where allowed, or adjacent to the 1% annual chance (100-year) local or FEMA floodplain limits, the lowest floor (including basements), shall be elevated as follows:

Basis of Study	Minimum building slab elevation
Atlas 14 Rainfall	1.0 foot above the Base Flood Elevation
Rainfall other than Atlas 14	2.0 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.

(11) Filling or the disposal of any materials which will diminish the water flow capacity of any waterway or floodplain defined by this ordinance must be compensated with remedial action. An equal amount of storage volume must be created in another location of the same local watershed to compensate for the storage capacity lost.

Sec. 9-67. SPECIFIC STANDARDS FOR A & AE ZONES

In all areas of special flood hazards where base flood elevation data has been provided as set forth in this ordinance, the following provisions are required:

(1) Compliance with section 9-66 of this ordinance.

(2) Residential Construction.

(a) New Construction on existing undeveloped lots

New Construction of a habitable structure on existing platted lots, platted prior to the effective date of this ordinance, is allowed if the proposed structure is outside the 1% annual chance (100-year) local or FEMA floodplain.

(b) Redevelopment of existing structures

Redevelopment of existing habitable structure, other than rebuilding activity, within the 1% annual chance (100-year) local or FEMA floodplain limits is not allowed. Rebuilding activity shall raise the finished floor above the Base Flood elevation as described in Article 5, Section A of this ordinance.

(3) Nonresidential Construction

New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated, as required in section 9-66, 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 flood proofed shall be maintained by the Floodplain Administrator.

(4) Floodway Encroachments

Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted local floodplain and regulatory floodway, except for activities allowed within drainageway protection zones as described in the Subdivision Ordinance, current version.

(5) 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 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.

(6) 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 A 1-30, 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 A 1-30, 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.

(7) Recreational Vehicles

Require that recreational vehicles placed on sites within Zones A 1-30, 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 section 9-43(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.

Sec. 9-68. STANDARDS FOR SUBDIVISION PROPOSALS

(1) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 9-2, 9-3, and- 9-4 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 section 9-8 and section 9-43; and the provisions of Article 5 of this ordinance.

(3) Base flood elevation data, for local and regulatory floodplains, shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks. Elevations for regulatory floodplains shall be submitted to FEMA for inclusion in the City of Boerne FIRM maps.

(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.

(7) Existing channels shall not be modified, except for as allowed for activities within drainageway protection zone as described in the Subdivision Ordinance, current version. Floodplain engineering and procedures requirements for subdivision within FEMA or United States Corps of Engineers official flood prone areas shall conform to the engineering criteria as set out in the Subdivision Ordinance, Article 6, current version.

(8) All proposed subdivisions shall have unflooded access, the area is accessible to high ground by a street elevated above the one percent (1%) annual chance (100-year) flood the base flood, i.e., no "island" will be considered for platting, unless adequate connecting structures, capable of passing the base flood, are provided to high ground (not subject to the controlling flood of the same floodplain).

(9) Unflooded access shall be accessible to an arterial street that is not adjacent to the development or to a distance of one-quarter (1/4) mile, whichever is less, during a four percent (4%) annual chance (twenty-five year) flood event.

(10) All proposed Residential subdivisions shall layout the lots as follows:

(a) Lot size less than 1.0 acres
All residential lots, with an acreage of less than 1.0 acres, shall be designed such that no portion of the lot is located within the 1% annual chance (100-year) local or FEMA floodplain limits.

(b) Lot size of 1.0 acres or greater
All residential lots, with an acreage of 1.0 acres or greater, may allow the construction of habitable structures outside the 1% annual chance (100-year) local or FEMA floodplain. Any lot traversed by an area of local or special flood hazard where the "buildable" portion of the subdivision is severed by the floodplain shall be provided with adequate access. Adequate access shall be a structure that will pass the 1% annual chance (100-year) storm without overtopping the structure. Upstream property must not be affected by backwater, and velocities in the vicinity of the structure must be controlled to prevent scour, erosion or structural damage.

Sec. 9-69. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the areas of special flood hazard established in section 9-7, 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, 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) Compliance with section 9-66 of this ordinance.

(2) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated as required section 9-66 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).

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

(a) have the lowest floor (including basement) elevated as required in section 9-66 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, 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.

(4) 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.

(5) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

(6) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway, except for activities allowed within drainageway protection zones as described in the Subdivision Ordinance.

Sec. 9-70. LOCAL FLOODPLAIN

Local Floodplain shall be designated as the area inundated by the one percent (1%) annual chance (100-year) flood for all watersheds draining 25 acres or more that do not have a FEMA regulatory floodplain and are defined as a drainageway per this ordinance. Local floodplains are further defined by a minimum 1-foot flow depth to exclude shallow concentrated or sheet flows from being identified as elevated risk zones per FEMA guidelines.

In all areas of local floodplain, the following provisions are required for all new construction and substantial improvements:

(1) Compliance with section 9-66 of this ordinance.

(2) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the local floodplain, except for activities allowed within drainageway protection zones as described in the Subdivision Ordinance.

Section 9-71. FLOODWAYS

Floodways - located within areas of special flood hazard established in section 9-7. 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, except for activities allowed within drainageway protection zones as described in the Subdivision Ordinance, current version.

(2) 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.

(3) Existing structures and uses within a floodway shall not be expanded or enlarged unless the effect of proposed expansion or enlargement does not cause an additional increase in floodway elevation during the occurrence of the base flood discharge, as certified by a registered professional engineer.

Sec. 9-72. 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.

Sec. 9-73. PENALTIES FOR NONCOMPLIANCE

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 $1000 for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the City of Boerne from taking such other lawful action as is necessary to prevent or remedy any violation.

PASSED AND APPROVED on this the first reading the 11th day of August, 2020.

PASSED, APPROVED AND ADOPTED on this the second reading the 26th day of August, 2020.

APPROVED:

Tim Handen

Mayor

ATTEST:

Lori A Carroll

City Secretary

APPROVED AS TO FORM:

Barbara L. Quinn

City Attorney