

**COURT ORDER
2019-0322**



Dallas County Floodplain Management Regulations

On a motion made by Commissioner John Wiley Price, District 3, and seconded by Commissioner Dr. Elba Garcia, District 4, the following order was passed and adopted by the Commissioners Court of Dallas County, State of Texas:

BRIEFING DATE: 3/19/2019
FUNDING SOURCE: n/a

Be it resolved and ordered that the Dallas County Commissioners Court does hereby authorize the County Judge to implement the changes to the Floodplain Management Regulations listed above.

Done in open court March 19, 2019, by the following vote:

IN FAVOR: Honorable Clay Lewis Jenkins, County Judge
Commissioner Dr. Theresa M. Daniel, District 1
Commissioner J.J. Koch, District 2
Commissioner John Wiley Price, District 3
Commissioner Dr. Elba Garcia, District 4

OPPOSED: None
ABSTAINED: None
ABSENT: None

Recommended by: Alberta Blair
Originating Department: Public Works

COMMISSIONERS COURT BRIEFING



DATE: 3/19/2019

SUBMITTING DEPARTMENT: Public Works

THROUGH:

SUBJECT: Dallas County Floodplain Management Regulations

BACKGROUND:

Dallas County manages development in the floodplain by administering FEMA's floodplain management standards. These standards are defined in Dallas County's Floodplain Management Regulations, which were last updated in 2005. Since that time, FEMA has updated floodplain management standards and recently revised the Flood Insurance Rate Maps and the Flood Insurance Study for portions of Dallas County. Because of these changes, FEMA is requiring Dallas County to make modifications to the Dallas County Floodplain Regulations by March 21, 2019 in order to remain compliant with FEMA's National Flood Insurance Program.

Some of the changes that FEMA has mandated include identifying the effective Flood Insurance Study and Flood Insurance Rate Maps for Dallas County, adding definitions for common floodplain management terms, defining areas reserved for certain uses, and more clearly defining the process for changing Flood Insurance Rate Maps.

Development permits will be required for all development activity within the Special Flood Hazard Area and County's jurisdiction. Additionally, development permits will be for all proposed developments greater than fifty (50) lots or five (5) acres, whichever is lesser. This will allow County staff to perform a thorough review and ensure the applicant is in compliance with the Texas Water Code, Texas Commission for Environmental Quality, federal agencies, and has all necessary permits.

The regulations state that the Director of Public Works or his or her designee is the Dallas County Floodplain Administrator. Upon approval of this Court Order, Public Works will be the department that will issue Development Permits within the Special Flood Hazard Area. The application will be received and distributed by the Department of Unincorporated Area Services (DUAS). However, the development permit will be issued by the Floodplain Administrator for developments located within the Special Flood Hazard Area.

The Fire Marshal's office will continue to monitor locations within the Special Flood Hazard Area and work closely with the Floodplain Administrator upon observation of unpermitted fill in the Floodplain (as defined in Article 4, Section F.-Enforcement), so that the property will come into compliance with these regulations.

Additionally, higher standards for Floodplain Management have been incorporated into these regulations. These higher standards include the Corridor Development Certificate (previously

RECOMMENDED BY:	Public Works	PREPARED BY:	Linette Malloy
		APPROVED BY DEPT HEAD:	Alberta Blair

accepted through Court Order 89-283) and the Regionally Recommended Watershed Development Standards (Court Order 2017-1375).

OPERATIONAL IMPACT:

These changes to the Floodplain Management Regulations will allow County staff to operate more efficiently, while still maintaining the “One Stop Shop” for Development Review.

FINANCIAL IMPACT:

N/A

LEGAL IMPACT:

In 2001, the Texas Water Code was amended to authorize political subdivisions the ability to adopt more comprehensive floodplain management rules that the political subdivision determines are necessary to protect public health and safety and allows the use of regional, watershed, and multi-objective approaches to improve the long-range management and use of flood-prone areas.

PROJECT SCHEDULE:

These changes to the floodplain management regulations will be implemented with the approval by Commissioners Court.

SBE PARTICIPATION:

N/A

ADMINISTRATIVE PLAN COMPLIANCE:

Participation in the NFIP and implementing higher watershed development standards helps Dallas County to be safe, secure, and prepared and a proactive regional partner – two of the visions identified in the Administrative Plan.

RECOMMENDATION:

Authorize the County Judge to implement the changes to the Floodplain Management Regulations listed above.

DALLAS COUNTY



FLOODPLAIN MANAGEMENT REGULATIONS

AS ADOPTED: March 19, 2019

EFFECTIVE: March 19, 2019

COURT ORDER: 2019-0322

DALLAS COUNTY FLOODPLAIN MANAGEMENT REGULATIONS

INDEX

ARTICLE 1 STATUTORY AUTHORIZATION, FINDINGS OF FACT
PURPOSE AND METHODS.....4

SECTION A Statutory Authorization, Approval and Adoption of Flood
Insurance Study, Maps and Manuals.....4

SECTION B Findings of Fact.....4

SECTION C Statement of Purpose.....4

SECTION D Methods of Reducing Flood Losses.....5

ARTICLE 2 DEFINITIONS.....6

ARTICLE 3 GENERAL PROVISIONS.....14

SECTION A Lands to Which These Regulations Apply.....14

SECTION B Basis for Establishing the Areas of Special Flood Hazard.....14

SECTION C Establishment of Development Permit.....14

SECTION D Compliance.....14

SECTION E Abrogation and Greater Restrictions.....14

SECTION F Interpretation.....14

SECTION G Warning and Disclaimer of Liability.....15

SECTION H Severability.....15

ARTICLE 4 ADMINISTRATION.....16

SECTION A Scope.....16

SECTION B Designation of the Floodplain Administrator.....16

SECTION C Duties and Responsibilities of the Floodplain Administrator...16

SECTION D Permit Procedures.....17

SECTION E Variance Procedures.....19

SECTION F Enforcement; Penalties for Noncompliance.....21

SECTION G Forms, Records, and Fees.....24

ARTICLE 5 PROVISIONS FOR FLOOD HAZARD REDUCTION.....25

SECTION A General Standards.....25

SECTION B Specific Standards.....25

SECTION C Standards for Subdivision Proposals.....27

SECTION D Standards for Areas of Shallow Flooding (AO/AH Zones).....28
SECTION E Floodways.....29
SECTION F Standards for the Trinity River Corridor and the East Fork
of the Trinity and the Corridor Development Certificate.....29
ARTICLE 6 CERTIFICATION OF ADOPTION.....31

FLOOD DAMAGE PREVENTION REGULATIONS

ARTICLE 1

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION, APPROVAL AND ADOPTION OF FLOOD INSURANCE STUDY, MAPS AND MANUALS

These Dallas County Floodplain Damage Prevention Regulations (Regulations) are adopted by the Commissioners Court of Dallas County, Texas, acting in its capacity as the governing body of Dallas County. The authority of Dallas County to adopt these Regulations and for the contents hereof is derived from the following statute: The Flood Control and Insurance Act, Subchapter I of Chapter 16 of the Texas Water Code, as amended. These Regulations may be amended at any time by a majority of Commissioners Court as approved by the appropriate federal authorities.

The legislature of the State of Texas, has in the Flood Control and Insurance Act, Texas Water Code, Section 16.315 *et seq.*, delegated the responsibility to local governmental units to adopt regulations designed to protect public health and safety and to minimize flood losses. Therefore, the Commissioners Court of Dallas County, Texas, does ordain as follows:

SECTION B. FINDINGS OF FACT

1. It is hereby found by the Commissioners Court of Dallas County, Texas, that severe flooding has occurred in the past within its jurisdiction and is likely to occur in the future.
2. The flood hazard areas of Dallas County are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
3. 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 hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed, or otherwise protected from flood damage.

SECTION C. STATEMENT OF PURPOSE

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

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

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, these Regulations use the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
4. Control filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and
6. Provide a process for development review that controls the impact of development in the Special Flood Hazard Area and flood-prone areas within Dallas County's jurisdiction.

ARTICLE 2

DEFINITIONS

Unless specifically defined below, words or phrases used in these Regulations shall be interpreted to give them the meaning they have in common usage and to give these Regulations their 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.

APPEAL means a request for a review of the Floodplain Administrator or his/her designee's interpretation of any provision of these Regulations or a request for a variance.

APPURTENANT STRUCTURE means a structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

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

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

AREA OF SPECIAL FLOOD HAZARD is the land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones A, AE, AH, AO, A99, VO, VI-30, VE or V. For purposes of these Regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

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

BASE FLOOD ELEVATION (BFE) means the elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-30, AR, V1-V30 or VE that indicates the water surface elevation resulting from the

flood that has a one (1) percent chance of equaling or exceeding that level in any given year, which is 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.

CERTIFICATE OF APPROVAL means final approval of projects that meet all requirements of the Dallas County Floodplain Damage Prevention Regulations and other applicable regulations.

CONDITIONAL LETTER OF MAP AMENDMENT (CLOMA) means FEMA's comment or official letter on a proposed structure or group of structures that upon construction would be located on existing natural ground above the base flood elevation on a portion of a legally defined parcel of land that is partially inundated by the base flood.

CONDITIONAL LETTER OF MAP REVISION (CLOMR) means FEMA's comment or official letter on a proposed project that upon construction would affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing effective base flood elevations, the special flood hazard area, or the existing regulatory floodway.

CONDITIONAL LETTER OF MAP REVISION - FILL (CLOMR-F) means FEMA's comment or official letter on a proposed project that upon construction would result in a modification of the special flood hazard area through the placement of fill outside the existing regulatory floodway.

CONVEYANCE means the flow of water during the base flood with a velocity that is greater than one foot per second or a depth that is greater than one foot.

CRITICAL FACILITY means those facilities essential to the preservation of life and property, including, but not limited to, schools, nursing homes, hospitals, police stations, fire and emergency response installations, facilities used for the storage of critical records, and commercial installations which produce, use or store hazardous materials, or hazardous waste.

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. Fences and fence-type walls located within the floodplain are included within this definition.

DEVELOPMENT PERMIT means a permit for the construction of a development. It is also called a building permit or permit in these Regulations.

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.

ELEVATION CERTIFICATE means a document certified by a licensed professional land surveyor used for the purpose of establishing the lowest floor (including basement) elevation of a building. All new construction or substantial improvements to existing buildings in flood hazard areas shall obtain an elevation certificate and provide the necessary information in accordance with the FEMA's (FEMA) National Flood Insurance Program (NFIP) instructions.

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 or surface waters from any source.

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

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

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

FLOOD INSURANCE STUDY (FIS) a flood insurance study is a compilation and presentation of flood risk data for specific water courses, lakes, and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into an FIS,. The FIS report contains detailed flood elevation data in flood profiles and tables.

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 regulations (such as a floodplain regulations, grading regulations and erosion control regulations) 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 as system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

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

FLOODWAY see regulatory floodway.

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

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

HISTORIC STRUCTURE means any structure that is:

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

LETTER OF MAP AMENDMENT (LOMA) - means FEMA's comment or official letter of an amendment to the currently effective FEMA Flood Insurance Rate Map (FIRM) which established that a structure or group of structures is not located in a Special Flood Hazard Area (SFHA) as shown on the FIRM. A LOMA is issued only by FEMA.

LETTER OF MAP CHANGE (LOMC) - documents issued by FEMA that revise or amend the flood hazard information shown on the FIRM without requiring the FIRM to be physically revised and re-published

LETTER OF MAP REVISION (LOMR) - means FEMA's modification to an effective FIRM or flood boundary and floodway map or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the SFHA. The LOMR officially revises the FIRM or flood boundary and floodway map, and sometimes the flood insurance study report, and when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, flood boundary and floodway map, or the flood insurance study report. A LOMR is issued only by FEMA.

LETTER OF MAP REVISION – FILL (LOMR-F) - means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway. A LOMR-F is issued only by FEMA.

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.

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

LOWEST FLOOR means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non- elevation design requirement of 44 CFR, 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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

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

MEAN SEA LEVEL - means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

NEW CONSTRUCTION means, for the purpose of determining insurance rates, structures for which the "state 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:

- (1) built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projections;
- (3) designed to be self-propelled or permanently towable by a light duty truck; and
- (4) designed primarily not for use as a permanent dwelling but as temporary living

quarters for recreational, camping, travel, or seasonal use.

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 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 a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not 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 the alteration affects the external dimensions of the building.

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

SUBSTANTIAL DAMAGE means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT means any reconstructions, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure 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 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 44 CFR, 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 44 CFR, Sections 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

WATER SURFACE ELEVATION means the height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE 3

GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THESE REGULATIONS APPLY

These Regulations shall apply to all areas of special flood hazard within the jurisdiction of Dallas County.

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

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the current scientific and engineering report entitled, "The Flood Insurance Study for Dallas County and Incorporated Areas" (FIS), revised March 21, 2019, with accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary-Floodway Maps (FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of these Regulations.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be required to ensure conformance with the provisions of these Regulations or Court Orders.

SECTION D. COMPLIANCE

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of these Regulations; Dallas County Subdivision Regulations and County Road Construction Standards pursuant to Court Order 2017-1621, if applicable; other applicable regulations, or Court Orders.

SECTION E. ABROGATION AND GREATER RESTRICTIONS

These Regulations are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these Regulations and other regulations, court orders, easements, covenants, deed restrictions, or another authority conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION

In the interpretation and application of these Regulations, all provisions shall be;

- (1) considered as minimum requirements;

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

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

SECTION G. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by these Regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. These Regulations do not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. These Regulations shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on these Regulations or any administrative decision lawfully made hereunder.

SECTION H. SEVERABILITY

The provisions of these Regulations are severable. If any word, phrase, clause, sentence, section, provision, or part of these Regulations is held to be invalid or unconstitutional by any court of competent jurisdiction, it shall not affect the validity of the remaining portions of these Regulations. It is also hereby declared to be the intent of the Dallas County Commissioners Court that these Regulations would have been adopted as to the remaining portions, regardless of the invalidity of any part. In the event that any provision of these Regulations might be interpreted in such a way as exceeding the County's authority, such provision should be construed to apply only to the extent authorized by law.

ARTICLE 4

ADMINISTRATION

SECTION A. SCOPE

Provisions of these Regulations shall apply to all new construction or development, proposed subdivisions and to the construction, alteration, repair, use, location, or maintenance of every building or structure or any appurtenances connected to or attached to such buildings or structures, within the designated area affected by these Regulations.

SECTION B. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Director of the Dallas County Public Works Department or his or her designee is hereby appointed the Floodplain Administrator to administer and implement the provisions of these Regulations and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

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

1. Maintain and hold open for public inspection all records pertaining to the provisions of these Regulations.
2. Review permit applications to determine whether proposed building sites, 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 these Regulations.
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 hazard (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 Texas Water Development Board (TWDB), also the Texas Commission

on Environmental Quality (TCEQ) and all other appropriate regulatory agencies prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the FEMA;

7. Assure that the flood carrying capacity within the altered or relocated portion or any watercourse is maintained.
8. When base flood elevation data has not been provided in accordance with Article 3, Section B of these Regulations, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Article 5 of these Regulations.
9. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.
10. Under the provisions of 44 CFR Chapter 1, Section 65.12 of the National Flood Insurance Program Regulations, a community may 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.
11. The Floodplain Administrator shall appoint a qualified person to review all permit applications and approve any such permits in the absence of the administrator.
12. The designee of the Floodplain Administrator for assistance with enforcement actions and issuance of citations to violators of these Regulations may be a licensed peace officer.

SECTION D. PERMIT PROCEDURES

1. Application for a Development Permit within the scope of these Regulations, shall be presented to the Floodplain Administrator on forms furnished by him/her for proposed developments. Additionally, application for a Development Permit, shall be presented to the Floodplain Administrator on forms furnished by him/her for all proposed developments greater than fifty (50) lots or five (5) acres, whichever is lesser, and shall include, but not be limited to, plans in duplicate drawn to scale showing the locations, dimensions, and elevations 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

flood proofed;

- c) A certificate from a registered professional engineer or architect in the State of Texas that the nonresidential flood proofed structure shall meet the flood proofing criteria of Article 5, Section B (2) of these Regulations;
 - d) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; and
 - e) A site plan showing the proposed development, the proposed grading and drainage, and the effect of the site on adjacent developments designed by a registered professional engineer in the State of Texas.
2. Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of these Regulations and the following relevant factors:
- a) The danger to life and property due to flooding or erosion damage;
 - b) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - c) The danger that materials may be swept onto other lands to the injury of others;
 - d) The compatibility of the proposed use with existing and anticipated development;
 - e) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - f) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
 - g) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
 - h) The necessity to the facility of a waterfront location, where applicable;
 - i) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use; and
 - j) The relationship of the proposed use to the comprehensive plan for that area.
3. The Floodplain Administrator may require the submission of additional information, drawings, specifications or documents if he/she is unable to determine whether a permit should be issued from the information submitted.
4. Developments may require permits from other local, state, and federal agencies. The

applicant is responsible for compliance with all applicable regulations and permit requirements and may be required to provide documentation that this provision has been met.

SECTION E. VARIANCE PROCEDURES

1. A person or persons desiring to obtain a variance from any requirement of these Regulations or applicable statute must submit a detailed Request for Variance.
2. The request must cite the specific Regulation provision and/or statute from which the variance is sought, and must include detailed reasons for the Variance.
3. The Dallas County Commissioners Court shall hear and render judgement on Requests for variances from the requirements of these Regulations.
4. The Dallas County Commissioners Court shall hear and render judgement on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of these Regulations.
5. Any person or persons aggrieved by the decision of the Dallas County Commissioners Court may appeal such decision in the courts of competent jurisdiction. The appeal under this section must be filed within ten (10) business days from the date of the Dallas County Commissioners Court order in which the decision is rendered.
6. 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.
7. 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 these Regulations. However, such variances for the repair or rehabilitation of historic structures shall be based upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
8. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below two feet above the base flood level, providing the relevant factors in Article 4, Section D (2) of these Regulations have been fully considered. As the lot size increases beyond the one-half (1/2) acre, the technical justification required for issuing the variance increases.
9. Upon consideration of the factors noted above and the intent of these Regulations, the Dallas County Commissioners Court may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of these Regulations (Article 1, Section C).

10. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result, including but not limited to, the base flood water surface elevation.
11. 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.
12. 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, other regulations, or ordinances.
 - c) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below two feet above the base flood elevation, based on fully developed watershed conditions (if available) and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
13. 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 E (1)-(12) of these Regulations 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.

SECTION F. ENFORCEMENT: PENALTIES FOR NONCOMPLIANCE

1. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of these Regulations and other applicable regulations.
2. Violation of the provisions of these Regulations by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be punishable by the following:
 - a) Criminal Penalty: Pursuant to Section 16.3221, *et seq.* of the Texas Water Code, any violation of these Regulations is a Class C misdemeanor. Each violation of these Regulations and each day of a continuing violation is a separate offense.
 - b) Civil Penalty: Pursuant to Section 16.322, *et seq.* of the Texas Water Code, a person who violates these Regulations, a rule adopted, or order issued, is subject to a civil penalty of not more than \$100 for each act of violation and for each day of violation.
 - c) Civil Suit for Injunction: Pursuant to Section 16.323, *et seq.* of the Texas Water Code, if it appears that a person has violated, is violating, or is threatening to violate these Regulations, Dallas County may institute a civil suit in the appropriate court for:
 - (i) Injunctive relief to restrain the person from continuing the violation or threat of violation, including an order directing the person to remove illegal improvements and restore pre-existing conditions;
 - (ii) The assessment and recovery of the civil penalty provided by Section 16.322 of the Texas Water Code; or
 - (iii) Both the injunctive relief and the civil penalty.
 - (iv) Costs and expenses involved in the case.
3. Nothing contained herein shall prevent Dallas County from taking other lawful action as is necessary to prevent or remedy any violation.
4. Upon an initial discovery that a structure or land is in violation of these Regulations, the Floodplain Administrator and/or his/her designee may issue a Stop Work Order to the owner, lessee, occupant, agent and/or person in charge of the premises (collectively, the "violator"): to remove the stop work order, the violator must either:
 - a) Appeal the violation within the first ten (10) days by submitting appropriate data in writing to the Floodplain Administrator that proves that either the structure is in compliance with these Regulations or is not actually located within the floodplain;
 - b) Restore the land to its prior condition and/or remove the illegal structure and/or fill from the floodplain; or

- c) Bring the violation into compliance with these Regulations by obtaining a Development Permit as described in Article 4, Section D, of these Regulations, .
5. If after thirty (30) days from issuance of a Stop Work Order, the violation still exists, no appeal has been made, and the violator has not applied for a Development Permit:
- a) A citation may be issued pursuant to the Texas Water Code, Section 16.3221, *et. seq.* and a second warning to restore the land or remove the illegal structure and/or fill within thirty (30) days may be issued by the Floodplain Administrator and/or his/her designee to the violator.
 - b) If a violator has not complied with the stop work order after thirty (30) days, the Floodplain Administrator and/or his/her designee may inform the Criminal District Attorney of the violation/violations. The Criminal District Attorney may seek legal remedies pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including seeking an injunction against the violator.
6. If an appeal under Article 4, Section F (4) (a) of these Regulations is made to and subsequently denied by the Floodplain Administrator and/or his/her designee:
- a) A second warning letter from the Floodplain Administrator and/or his/her designee may be issued to the violator including notice to restore the land or remove the illegal structure and/or fill from the floodplain within sixty (60) days.
 - b) If the violator has not complied with the second warning after sixty (60) days, the Floodplain Administrator and/or his/her designee may inform the Criminal District Attorney. The Criminal District Attorney may seek legal remedies pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including but not limited to seeking an injunction against the violator.
7. If an application for a Development Permit is submitted to, but not approved by, the Floodplain Administrator, the violator may request a variance from these Regulations from the County Commissioners Court under Article 4, Section E of these Regulations. This request must be submitted in writing to the Commissioners Court within ten (10) days of written notification from the Floodplain Administrator and/or his/her designee that the Development Permit has been denied.
8. If an application for a Development Permit is submitted to, but not approved by, the Floodplain Administrator and/or his/her designee:
- a) A second warning letter may be issued by the Floodplain Administrator and/or his/her designee to the violator including notice to restore the land or remove the illegal structure and/or fill from the floodplain within sixty (60) days.
 - b) If the violator has not complied with the second warning after sixty (60) days, the Floodplain Administrator and/or his/her designee may inform the Criminal District

Attorney. The Criminal District Attorney may seek legal remedies pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including but not limited to seeking an injunction against the violator.

9. If a variance is requested, but not granted by the Commissioners Court:
 - a) A second warning letter by the Floodplain Administrator and/or his/her designee may be issued to the violator including notice to restore the land or remove the illegal structure and/or fill from the floodplain within sixty (60) days.
 - b) If the violator has not complied with the second warning after sixty (60) days, the Floodplain Administrator and/or his/her designee may inform the Criminal District Attorney. The Criminal District Attorney may seek legal remedies pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including but not limited to seeking an injunction against the violator.
10. If a Development Permit is granted, but the violation is not brought into compliance before the Development Permit expires:
 - a) A warning letter may be issued by the Floodplain Administrator and/or his/her designee to the violator including notice to either restore the land, remove the illegal structure and/or fill from the floodplain or to submit a satisfactorily complete application for another Development Permit within thirty (30) days.
 - b) If, after the aforementioned thirty (30) days, the violator has not restored the land, removed the illegal structure and/or fill from the floodplain, or submitted a satisfactorily complete application for another Development Permit, the Criminal District Attorney may seek legal remedies pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including but not limited to seeking an injunction against the violator.
11. A violator, as described in Article 4, Section F (4) of these Regulations, will be considered in continuing violation of these Regulations if the violator removes a structure and/or fill from one location within the floodplain in Dallas County and places the structure and/or fill in a non-compliant manner within another Dallas County floodplain location within one year of the initial violation.
12. If, in the sole discretion of the Floodplain Administrator or his/her designee, the violation or threatened violation, is of such a character to require immediate action, the Floodplain Administrator may notify the Criminal District Attorney and request that the Criminal District Attorney take whatever action is necessary to remedy the violation pursuant to Sections 16.322, 16.3221, 16.323, *et seq.* of the Texas Water Code, including but not limited to filing suit to enjoin the violation or threatened violation.

SECTION G. FORMS, RECORDS, AND FEES

1. The Floodplain Administrator shall maintain a record of all such information in accordance with Article 4, Section (C) (1) of these Regulations.
2. The Dallas County Public Works Department must maintain all applications for, file copies of, and approved applications for permits for a retention period of three (3) years.
3. Forms to be used in the administration of these Regulations shall be promulgated by the Dallas County Public Works Department.
4. Pursuant to Section 16.315(16) of the Texas Water Code, Dallas County will collect reasonable fees, as set by the Commissioners Court, to cover the cost of administering the local floodplain management program. A violator of these Regulations shall bear all costs of effecting compliance. Pursuant to Section 16.324 of the Texas Water Code, Dallas County may set a reasonable fee for the county's issuance of a permit authorized by these Regulations for which a fee is not specifically prescribed. The fee must be set and itemized in the budget as part of the county's budget preparation process. Reasonable fees for permits, *et al.*, are to be set by Commissioners Court. Fees shall be paid by exact cash, cashier's check, money order, or personal check. Should the check be returned for insufficient funds, the permit(s) issued become(s) null and void. Fees shall be paid at the time plans, *et al.*, are submitted for review unless other arrangements have been made and approved by the County Auditor. The County shall deposit all fees received in the County Treasury, to a fund that shall be used to cover the cost of administering its floodplain management program. The fees required under these Regulations are established by a separate Dallas County Commissioners Court Order.

ARTICLE 5

PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A. GENERAL STANDARDS

In all areas of special flood hazard, the following provisions are required for all new construction and substantial improvements:

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

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazard where base flood elevation data has been provided as set forth in these Regulations as included but not limited to, in (i) Article 3, Section B; (ii) Article 4, Section C (8); or (iii) Article 5, Section C (3), the following provisions are required:

1. **Residential Construction** - new construction and substantial improvements of any residential structure shall have the lowest floor (including basement), elevated to or above two (2) feet above the base flood elevation, based on a fully-developed watershed (if available). 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 D (1)(a) is satisfied.

2. **Non-residential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above two (2) feet above the base flood level, based on a fully-developed watershed (if available) or together with attendant utility and sanitary facilities, be designed so that below two (2) foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification, which includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed, shall be maintained by the Floodplain Administrator.
3. **Enclosures** - Enclosures are enclosed walled in areas below the lowest floor of an elevated building. Enclosures below the lowest floor may only be used for building access, vehicle parking, and storage. Enclosed areas below the lowest floor must be adequately anchored, built using flood resistant building material, and any utilities or service facilities must be designed and/or located to prevent flood damage. Flood insurance coverage for enclosures below the BFE is very limited.

In A Zones, fully enclosed areas below the lowest floor must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters. Designs must meet certain minimum criteria for openings in the enclosure walls or be certified by a registered design professional.

In V Zones, the space below the lowest floor of a building shall be free of obstruction or constructed with non-supporting breakaway walls, open wood lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. Designs to meet this criteria must be certified by a registered design professional or meet certain minimum criteria for breakaway walls.

4. **Manufactured Homes**

- a) Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- b) Require that manufactured homes that are placed or substantially improved within Zones AI-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 two (2) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.

- c) Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:
 - (i) The lowest floor of the manufactured home is at or above two (2) feet above the base flood elevation based on a fully-developed watershed (if available); 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 (thirty-six) 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist floatation, 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:
- a) Be on the site for fewer than one hundred eighty (180) consecutive days; or
 - b) Be fully licensed and ready for highway use; or
 - c) Meet the permit requirements of Article 4, Section D (1) of these Regulations, and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS

1. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article 1, Sections B, C, and D of these Regulations.
2. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of Article 3, Section C of these Regulations; Article 4, Section D of these Regulations; the provisions of Article 5 of these Regulations; and shall comply with Dallas County's Subdivision Regulations.
3. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which

is greater than fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to Article 3, Section B or Article 4, Section C (8) of these Regulations.

4. Base flood elevation shall be generated by a detailed engineering study for all Zone A areas, within one hundred (100) feet of the contour lines of Zone A areas, and other streams not mapped by FEMA, as indicated on the FIRM.
5. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
6. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.

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

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

1. All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as two (2) feet above the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified).
2. All new construction and substantial improvements of non-residential structures shall:
 - a) Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as two (2) feet above 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 two (2) foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
3. A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in Article 4, Section D, are satisfied.
4. Within Zones AH or AO adequate drainage paths shall be required around structures on slopes, to guide flood waters around and away from proposed structures.

SECTION E. FLOODWAYS

Floodways located within areas of special flood hazard established in Article 3, Section B, are areas designated as regulatory floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
2. If Article 5, Section E (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5 of these Regulations.
3. Under the provisions of 44 CFR Chapter 1, Section 65.12 of the National Flood Insurance Program Regulations, a community may permit encroachments within the adopted Regulatory floodway that would result in an increase in base flood elevations, provided that the community **first** completes all of the provisions required by Section 65.12.

SECTION F. STANDARDS FOR THE TRINITY RIVER CORRIDOR AND THE EAST FORK OF THE TRINITY AND THE CORRIDOR DEVELOPMENT CERTIFICATE

Dallas County is a member of the Trinity River Common Vision program, meaning that the County subscribes to higher floodplain management standards along the Trinity River Corridor and the East Fork of the Trinity. Therefore, if the proposed project is located in the Special Flood Hazard Area along the Trinity River Corridor or the East Fork of the Trinity, the Corridor Development Certificate (CDC) is necessary. The application requires the study of the stream (hydrology and hydraulics analysis) using future flow rates (year 2055). Additionally, the proposed project will need to meet the following criteria:

- a) No rise in the one hundred (100) year elevation or the Standard Project Flood for the proposed condition will be allowed.
- b) No loss in storage capacity.
- c) Alterations in the floodplain may not create or increase an erosive water velocity on or off-site.

The Standard Project Flood (SPF) is the flood that may be expected from the most severe combination of meteorological and hydrologic conditions that are considered to be reasonably

characteristic of the geographical region involved, excluding rare combinations.

The CDC Manual can be found online at <https://www.nctcog.org/nctcg/media/Environment-and-Development/Documents/Floodplain%20Management/4th-Edition-Amended-July-2017-FINAL.pdf>

The proposed development will need to be designed in accordance with the CDC Manual dated July 2017 and any revisions thereto, which are hereby adopted and incorporated herein by reference and declared to be a part of these Regulations.

