

# **MONTGOMERY COUNTY FLOOD PLAIN MANAGEMENT REGULATIONS**



## **THE COMMISSIONERS COURT**

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**ARTICLE I - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND  
METHODS**

**SECTION A. STATUTORY AUTHORIZATION**

The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315 delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Commissioners Court of Montgomery County, Texas establishes the following regulations.

**SECTION B. FINDINGS OF FACT**

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

(2) These flood losses are created by the cumulative effect of obstructions in flood plains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood-proofed 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 flood plains;

(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 flood plains, 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.

#### **SECTION E. 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, then said holding shall in no way affect the validity of the remaining portions of these regulations.

## ARTICLE II - 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 the 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 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 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 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.

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

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

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

**BREAKAWAY WALL** – means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading

forces, without causing damage to the elevated portion of the building or supporting foundation system.

**CRITICAL FEATURE** - means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

**DEVELOPMENT** - means any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

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

**EXISTING CONSTRUCTION** - means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing Construction" may also be referred to as "Existing Structures."

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

**EXISTING STRUCTURE** – See Existing Construction.

**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 DETERMINATION** – means a determination by the flood plain administrator of the water surface elevations of the base flood.

**FLOOD ELEVATION STUDY** – means an examination, evaluation, and determination of flood hazards and, if applicable, 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)** – means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway map.

**FLOOD PLAIN** – means the land area susceptible to being inundated by water during the base flood and indicated on the flood insurance rate map as Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE or V.

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

**FLOOD PLAIN ADMINISTRATOR** – The person appointed by Commissioners Court as having the responsibility to implement these regulations.

**FLOOD PLAIN 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 flood plain management regulations.

**FLOOD PLAIN MANAGEMENT REGULATIONS** – means these regulations, court orders, subdivision regulations, building codes, health regulations, special purpose orders (such as a flood plain orders, grading orders and erosion control orders) 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 (REGULATORY FLOODWAY)** - means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

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

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

**HISTORIC STRUCTURE** - means any structure that is:

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

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

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

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

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

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

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

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

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

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

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

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

**NEW CONSTRUCTION** - means, for the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For flood plain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a flood plain 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 flood plain 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** – See Floodway.

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

**SPECIAL FLOOD HAZARD AREA** – is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. This area is typically referred to as Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE or V on the Flood Insurance Rate Map.

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

**STRUCTURE** – means, for flood plain 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 percent of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT** - means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty 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."

**UNINCORPORATED AREA** – means land area within Montgomery County, Texas outside the incorporated areas of cities, towns, and villages.

**VARIANCE** – means a grant of relief by a community from the terms of a flood plain 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 flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

**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 flood plains of coastal or riverine areas.

## **ARTICLE III – GENERAL PROVISIONS**

### **SECTION A. LANDS TO WHICH THESE REGULATIONS APPLY**

These regulations shall apply to all unincorporated areas within the jurisdiction of Montgomery County, Texas.

### **SECTION B. BASIS FOR ESTABLISHING SPECIAL FLOOD HAZARD AREAS**

The special flood hazard areas identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, “The Flood Insurance Study for Montgomery County” (FIS) dated August 18, 2014, with accompanying Flood Insurance Rate Maps (FIRM) and any revisions thereto are hereby adopted by reference and declared to be a part of these regulations.

### **SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMITS**

A development permit shall be required to ensure conformance with the provisions of these regulations.

### **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 and other applicable regulations.

### **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 another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

### **SECTION F. INTERPRETATION**

In the interpretation and application of 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 special flood hazard areas 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.

**ARTICLE IV - ADMINISTRATION**

**SECTION A. DESIGNATION OF THE FLOOD PLAIN ADMINISTRATOR**

The Commissioners Court shall appoint the Flood Plain 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 flood plain management.

**SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOOD PLAIN ADMINISTRATOR**

Duties and responsibilities of the Flood Plain 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 development permit applications 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 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 special flood hazard areas, for example, where there appears to be a conflict between a mapped boundary and actual field conditions, the Flood Plain 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 III, Section B, the Flood Plain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of Article V.

(9) When a regulatory floodway has not been designated, the Flood Plain 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 at any point within the community.

(10) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, and 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 entitled Conditional Letter of Map Revision.

### **SECTION C. PERMIT PROCEDURES**

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

(a) a legal description of the land to be developed (subdivision – lot, block and section, metes and bounds, or property survey);

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

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

(d) a certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Article V, Section B (2);



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

(2) Approval or denial of permits by the Flood Plain 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 floodwaters and the effects of wave action, if applicable, expected at the site;

(h) the necessity to the facility of a waterfront location, where applicable; and/or

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

(3) When the application is filed, the Flood Plain Administrator will do the following:

(a) Determine if the land to be developed is in the flood plain or floodway.

(b) Determine if the proposed development, construction, or substantial improvement is in compliance with these regulations and any other County requirements.

(c) Issue a Class A development permit in areas outside the special flood hazard area once it has been determined that the proposed development complies with all applicable County regulations.

(d) Determine if a Class B development permit should be issued for areas located in or partially in a special flood hazard area. If the Flood Plain Administrator determines that a Class B development permit should be issued the following procedure applies:

1. If the permit is for a structure the Flood Plain Administrator will issue a temporary permit that allows construction to begin on the foundation.

2. The Flood Plain Administrator will issue a Class B development permit for a structure after receiving an elevation certificate and other necessary documentation demonstrating compliance with the requirements of these regulations.

3. If the permit is for a development other than a structure the Flood Plain Administrator will issue a Class B development permit once it is demonstrated that all the provisions of these regulations have been met.

(e) Deny the application if the proposed improvement is in violation of these regulations or other County requirements.

(4) When a permit has been issued and the permittee desires to change some aspect of the plans and/or specifications, the permittee shall submit supplemental plans and/or specifications reflecting the proposed changes to the Flood Plain Administrator. The Flood Plain Administrator will review the proposed change to determine if the change is in compliance with these regulations and other County requirements. If the change complies with County requirements, the documentation will be filed with the original permit and the original permit will be appended to include the approved change.

#### **SECTION D. VARIANCES AND APPEALS**

(1) The Commissioners Court shall hear and render judgment on requests for variances from the requirements of these regulations.

(2) 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: (1) showing a good and sufficient cause; (2) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud 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.

(3) 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.

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

(5) Upon consideration of the factors noted above and the intent of these regulations, the 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 I, Section C).

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

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

(8) Variances may be issued by the Commissioners Court 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 IV, Section D (1)-(7) 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.

(9) The Commissioners Court 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 Flood Plain Administrator in the enforcement or administration of these regulations.

(10) Any person or persons aggrieved by the decision of the Commissioners Court may appeal such decision in a court of competent jurisdiction.

(11) The Flood Plain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.

**SECTION E. FEES**

Fees shall be assessed for permits issued under these regulations. The amount of the fees will be established by Commissioners Court and may be amended by Commissioners Court action from time to time.

**SECTION F. RESPONSIBILITY OF OTHER OFFICIALS**

Under these regulations, the Flood Plain Administrator is responsible for administrative decisions and duties. Certain provisions of these regulations or other County regulations may place mandatory duties on other County officials. When mandatory duties are placed on other officials the Flood Plain Administrator will withhold action until the prerequisite duty has been performed by the other official. The Flood Plain Administrator has the discretion to seek assistance of other County officials and to proceed with a final decision as necessary.

## ARTICLE V - PROVISIONS FOR FLOOD HAZARD REDUCTION

### SECTION A. GENERAL STANDARDS

In all special flood hazard areas the following provisions are required:

(1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

(3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage.

(4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

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

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

(8) For excavation or fill in the flood plain a certificate from a registered professional engineer will be required indicating that the proposed excavation or fill will cause no increase to the base flood elevation. The engineer must also certify that the proposed excavation or fill will have no adverse impact to the drainage on, from, or through adjacent properties. A development permit must be obtained prior to excavation or fill activities in the flood plain.

### SECTION B. SPECIFIC STANDARDS

In all special flood hazard areas where base flood elevation data has been provided as set forth in Article III, Section B; Article IV, Section B; or Article V, Section C(3); the following provisions are required:

(1) **Residential Construction** - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated a minimum of one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit an elevation certificate to the Flood Plain Administrator demonstrating that the standard of this subsection is satisfied.

(2) **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to one foot above the base flood elevation or together with attendant utility and sanitary facilities, be designed so that below this elevation 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 Flood Plain Administrator.

(3) **Enclosures** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

(a) A minimum of two openings on separate walls having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.

(b) The bottom of all openings shall be no higher than one foot above grade.

(c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(4) **Manufactured Homes**

(a) All manufactured homes to be placed within Zone A on a community's FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated such that the lowest floor is at least one foot above the base flood elevation and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or

frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

(b) All manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to at least one-foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(c) All manufactured homes being placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A, A1-30, AH, AO, and AE on the community's FIRM that are not subject to paragraph 4 of this section shall be elevated so that either:

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

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

(5) Recreational Vehicles - Recreational vehicles placed on sites within Zones A, A1-30, AH, and AE on the community's FIRM shall either:

(a) be on the site for fewer than 180 consecutive days;

(b) be fully licensed and ready for highway use; or

(c) meet the permit requirements of Article IV, Section C (1), and the elevation and anchoring requirements for "manufactured homes" in paragraph 4 of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

### **SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS**

(1) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article I, 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 III, Section C; Article IV, Section C; and the provisions of Article V of these regulations.

(3) Base flood elevation data shall be generated for all subdivision proposals and other proposed development including the placement of manufactured home parks if not otherwise provided pursuant to Article III, Section B or Article IV, Section B (8) of these regulations.

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

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

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

Located within the special flood hazard areas established in Article III, Section B, 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) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated to at least one foot above the base flood elevation (Zone AH) or above the highest adjacent grade at least one foot higher than the depth number specified in feet on the community's FIRM (at least three feet if no depth number is specified).

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

(a) have the lowest floor (including basement) elevated to one foot above the base flood elevation (Zone AH) or the highest adjacent grade at least one foot higher than the depth number specified in feet on the community's FIRM (at least three feet if no depth number is specified), or

(b) together with attendant utility and sanitary facilities be designed so that below the base specified flood depth in an AO Zone, or below the Base Flood Elevation in an AH Zone, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.



(3) A registered professional engineer or architect or surveyor shall submit a certification to the Flood Plain Administrator that the standards of this Section, as proposed in Article IV, Section C are satisfied.

(4) Within Zones AH or AO adequate drainage paths are required around structures on slopes, to guide flood waters around and away from proposed structures.

### **SECTION E. FLOODWAYS**

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

(1) Encroachments are prohibited, including but not limited to 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. A development permit must be secured from the Flood Plain Administrator prior to the placement of fill or other encroachment in the floodway.

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

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

(4) Before a permit is issued for a structure in the floodway, the property owner will be required to comply with the provisions of these regulations including the requirement for an engineering study as outlined in Article V, Section E (1). In addition to the engineering study the owner shall also provide the following:

(a) a geotechnical report sealed by a Texas registered professional engineer that includes the geotechnical engineer's recommendations for the proposed foundation. The report shall also include the results of a soil boring(s) to a depth of five feet below the depth of any proposed piles; and

(b) a foundation design prepared by a Texas registered professional engineer with a certification that the foundation has been adequately designed to resist anticipated hydrodynamic

forces, erosion, scour, and debris impact forces. The engineer that designed the foundation shall provide a certification that the foundation has been constructed in accordance with his design. This certification shall be submitted to the permit office along with the elevation certificate required under Article IV, Section C (3) (d) 2 of these regulations.

#### **SECTION F. EXEMPTIONS**

(1) A development permit will not be required for the placement of fill material or excavation on land outside of a special flood hazard area.

(2) A development permit will not be required for a three-strand barbed wire fence.

(3) A development permit will not be required for the removal of trees or other vegetation.

(4) The engineer's certifications under Article V, Section A (8) will not be required for fill or landscape alterations in the flood plain with an affected area of less than or equal to 15,000 square feet. The property owner will still be required to obtain a development permit.

(5) The engineer's certifications under Article V, Section A (8) will not be required for excavation in the flood plain where all of the excavated material is completely removed from the flood plain. The property owner will still be required to obtain a development permit. This exemption does not apply to commercial mining or dredging operations.

#### **SECTION G. STANDARDS FOR COMMERCIAL DEVELOPMENTS**

The following provisions shall apply to all commercial developments. These provisions are cumulative of all other rules, regulations and requirements of Montgomery County in regards to commercial developments.

(1) If the design of a commercial development proposes greater than 15,000 square feet of impervious cover (building, asphalt or concrete pavement, compacted base, etc.), the developer shall submit a drainage plan prepared by a Texas registered professional engineer that provides for storm water detention. The detention shall be designed in accordance with the Montgomery County Drainage Criteria Manual.

**ARTICLE VI - PROCEDURES**

**SECTION A. INSPECTIONS**

The Flood Plain Administrator or his representative will make as many scheduled or unscheduled inspections as he may deem necessary to enforce these regulations in light of any peculiar circumstances of any particular project.

**SECTION B. NON-COMPLIANT WORK**

If at any time the Flood Plain Administrator or his representative finds deviations to the approved permit, he will require correction of the work so as to make it conform to the requirements of these regulations. Refusal of the permittee to make such corrections will be grounds for enforcement as indicated in these regulations.

**SECTION C. PERMIT TERM**

Any permit issued shall become invalid if the work authorized by the permit has not commenced within six months of issuance of the permit. If the work authorized by the permit is suspended or abandoned for a continuous period of one year after work has commenced, the permit will become invalid. Permit extensions may be allowed in writing by the Flood Plain Administrator or his designated representative.

**SECTION D. VIOLATION NOTICE**

When the Flood Plain Administrator learns of an actual or potential violation of these regulations, he or his representative shall inform the property owner in writing. If the property owner fails to comply with the provisions of these regulations the violation may be referred to the County Attorney's office for enforcement. If a violation continues, Montgomery County may file a Certificate of Non-Compliance in the Real Property Records of Montgomery County. Once the violation has been resolved a Certificate of Compliance may be filed in the Real Property Records of Montgomery County.

**SECTION E. ENFORCEMENT, VIOLATION AND PENALTIES**

(1) The Flood Plain Administrator may revoke a permit or approval under the provisions of these regulations in cases where there has been a false statement or misrepresentation as to a material fact in the application or plans upon which the permit or approval was based.

(2) Any person securing a permit under these regulations does so on the representation to Commissioners Court that he will comply with the terms of the permit and with these requirements and other County regulations.

(3) As provided in Texas Local Government Code Section 81.023, any person who violates a provision of these regulations or fails to comply therewith shall be subject to contempt proceedings before Commissioners Court.

(4) Procedures for contempt proceedings before Commissioners Court will be consistent with procedures in actions before other courts in this State for enforcement of court orders, and for the protection of the jurisdiction of Courts by the process of contempt.

(5) As provided in Texas Water Code Section 16.322, violators of these regulations shall be subject to a civil penalty of not more than \$100 for each act of violation and for each day of violation.

(6) As provided in Texas Water Code Section 16.3221, violations of these regulations are a Class C misdemeanor offense. Each violation and each day of continuing violation is a separate offense.

(7) If it appears that a party has violated, is violating or is threatening to violate these regulations in any manner, the County may institute a civil suit in the appropriate court for injunctive relief to restrain the party from continuing the violation or threat of violation including, but not limited to, an order directing the party to remove illegal improvements and restore the property to preexisting conditions. Injunctive relief may also include assessment of civil penalties.

(8) Nothing herein contained shall prevent the County from taking other such lawful action as is necessary to prevent or remedy any violation.