

ORDINANCE 2009-13

AN DIVISION OF THE CITY OF BRENTWOOD, TENNESSEE, PROVIDING THAT THE CODE OF ORDINANCES OF THE CITY OF BRENTWOOD BE AMENDED BY ADDING NEW PROVISIONS TO CHAPTER 56, TO REGULATE DEVELOPMENT SO AS TO MINIMIZE DANGER TO LIFE AND PROPERTY DUE TO FLOODING, AND TO MAINTAIN THE CITY'S ELIGIBILITY FOR PARTICIPATION IN THE NATIONAL FLOOD INSURANCE PROGRAM; BY REPEALING THE EXISTING DIVISION 15 OF CHAPTER 78, ARTICLE III, AND ADOPTING A NEW DIVISION 15 IN LIEU THEREOF; BY ADDING A NEW DEFINITION IN SECTION 78-3; AND BY REVISING DIVISION 2 OF CHAPTER 14, ARTICLE II IN REGARD TO MATTERS HEARD BY THE BOARD OF BUILDING CONSTRUCTION APPEALS

WHEREAS, since 1972, the City of Brentwood has incorporated floodplain management regulations into the Brentwood Municipal Code, with a goal of reducing flood risks to residents and property owners; and

WHEREAS, adoption and enforcement of effective floodplain management regulations allow the City to be eligible for participation in the National Flood Insurance Program; and

WHEREAS, amendments to the City's floodplain management regulations, as set forth in this ordinance, will more closely follow the Model Flood Damage Prevention Ordinance (the "Model Ordinance") promulgated by the State of Tennessee, while maintaining certain technical standards that are more stringent than those contained in the Model Ordinance; and

WHEREAS, the Municipal Code amendments set forth herein also reorganize the City's floodplain management regulations by relocating technical restrictions and regulations from Chapter 78 (Zoning) to Chapter 56 (to be retitled Stormwater Management, Erosion Control and Flood Prevention) of the Municipal Code; and by authorizing the City's Board of Building Construction Appeals to hear appeals and requests for variances in regard to development activities in the floodplain; and

WHEREAS, the proposed amendments set forth in this ordinance will allow the City to continue protecting the public health, safety and welfare through effective floodplain management.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF BRENTWOOD, TENNESSEE, AS FOLLOWS:

SECTION 1. That the title of Chapter 56 of the Code of Ordinances of the City of Brentwood shall hereafter be revised to read as follows:

**Chapter 56
STORMWATER MANAGEMENT, EROSION CONTROL
AND FLOOD PREVENTION**

SECTION 2. That Chapter 56 of the Code of Ordinances of the City of Brentwood shall be reorganized as follows:

- A. The existing Articles I, II, III and IV shall be redesignated as Divisions 1, 2, 3 and 4.
- B. The existing Division 1 (Grading Permits) and Division 2 (Waterway Natural Areas) of the existing Article II shall be redesignated as Subdivision I and Subdivision II.
- C. The existing sections 56-1 through 56-51 of Chapter 56 of the Code of Ordinances of the City of Brentwood shall remain as currently numbered and titled; provided, however, that said sections shall hereafter fall within a newly titled Article 1, the title of which shall read as follows:

Article I. Stormwater Management and Erosion Control

SECTION 3. That a new Article II of Chapter 56 of the Code of Ordinances of the City of Brentwood is hereby adopted, said new article to read as follows:

ARTICLE II. FLOOD PREVENTION

DIVISION 1. FINDINGS OF FACT, PURPOSE AND OBJECTIVES

Section 56-61. Findings of fact.

The city hereby finds:

- (1) The city and its board of commissioners wish to maintain eligibility in the National Flood Insurance Program (NFIP) and, in order to do so, must meet the regulations found in Title 44 of the Code of Federal Regulations (CFR), Ch. 1, Section 60.3.
- (2) Areas of the city are subject to periodic inundation which could result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- (3) Flood losses are caused by the cumulative effect of obstructions in floodplains, causing increases in flood heights and velocities; uses in flood hazard areas which are vulnerable to floods; or construction which is inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

Section 56-62. Purpose and objectives.

(a) It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas. This article is designed to:

- (1) Restrict or prohibit uses which are vulnerable to flooding or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities;
- (2) Require that uses vulnerable to floods, including community facilities, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- (4) Control filling, grading, dredging and other development which may increase flood damage or erosion; and
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

(b) The objectives of this article are:

- (1) To protect human life, health, safety and property;
- (2) To minimize expenditure of public funds for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in floodprone areas;
- (6) To help maintain a stable tax base by providing for the sound use and development of floodprone areas to minimize blight in flood areas;
- (7) To ensure that potential homebuyers are notified that property is in a floodprone area; and
- (8) To maintain eligibility for participation in the NFIP.

DIVISION 2. DEFINITIONS

Sec. 56-63. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. The definitions listed in this section apply exclusively to this article and are intended to provide assistance in the interpretation and enforcement of this article. Unless specifically defined below or elsewhere in this Code,, words or phrases used in this article shall be interpreted as to give them the meaning they have in common usage and to give this article its most reasonable application, given its stated purpose and objectives.

Accessory structure means a subordinate structure to the principal structure on the same lot and, for the purpose of this article, shall conform to the following:

- (1) Accessory structures shall only be used for parking of vehicles and storage.
- (2) Accessory structures shall be designed to have low flood damage potential.
- (3) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.

- (4) Accessory structures shall be firmly anchored to prevent flotation, collapse and lateral movement, which otherwise may result in damage to other structures.
- (5) Utilities and service facilities such as electrical and heating equipment shall be elevated or otherwise protected from intrusion of floodwaters.

Act means the statutes authorizing the National Flood Insurance Program that are incorporated in 42 U.S.C. 4001 *et seq.*

Addition (to an existing building) means any walled and roofed expansion to the perimeter or height of a building.

Administrator means the person designated by the city manager to be responsible for the implementation and administration of the provisions set forth herein for the floodway district.

Appeal means a request for a review of a local enforcement officer's interpretation of any provision of this article or a request for a variance.

Area of shallow flooding means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with 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 indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard - see "special flood hazard area."

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year. This term is also referred to as the 100-year flood or the one percent annual chance flood.

Basement means any portion of a building having its floor subgrade (below ground level) on all sides.

Buildable area means the area of a lot remaining after the minimum yard requirements for the specific zoning district have been met.

Building - means any man-made walled and roofed structure intended to stand more or less permanently in one place.

Conditional letter of map revision based on fill (CLOMR-F) means a letter from FEMA stating that a parcel of land or proposed structure that will be elevated by fill would not be inundated by the base flood if fill is placed on the parcel as proposed or the structure is built as proposed.

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

Development permit means any permit required for development activities under this Code, or under any other code which has been adopted by the city.

Elevate, in regard to a structure, means to have the lowest floor of the lowest enclosed area raised above the ground level by means of solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwater; pilings; columns; piers; or shear walls adequately anchored so as not to impair the structural integrity of the structure during a base flood event.

Erosion means the process of the gradual wearing away of land masses. This peril is not per se covered under the Program.

Existing construction means any structure for which the "start of construction" commenced before either November 27, 1972 (the effective date of the initial floodplain management code adopted by the city as a basis for participation in the NFIP) or the date the property was first included within a special flood hazard area, whichever occurred later.

Existing structures - see "existing construction."

FEMA means the Federal Emergency Management Agency of the United States government.

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

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

Flood Hazard Boundary Map (FHBM) means an official map of a community, issued by FEMA, where the boundaries of areas of special flood hazard have been designated as Zone A.

Flood Insurance Rate Map (FIRM) means an official map of a community, issued by FEMA, delineating the areas of special flood hazard or the risk premium zones applicable to the community.

Flood Insurance Study is the official report provided by FEMA, evaluating flood hazards and containing flood profiles and water surface elevation of the base flood.

Floodplain or *floodprone area* means any land area susceptible to being inundated by water from any source (see definition of "flood").

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.

Flood protection elevation means the elevation of the base flood plus two feet of freeboard at any given location in the special flood hazard area.

Flood protection system means those physical structural works for which funds have been authorized, appropriated and expended, and which have been constructed in conformance with sound engineering standards, 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. .

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

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. (See Illustration #1.)

Floodway fringe means the area extending from the boundaries of the floodway to the elevation of the base flood, as depicted on a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM.) (See Illustration #1.) The floodway fringe may include areas designated on the maps as Zones A, AO, AH, A1-30, AE or A99.

Freeboard means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge or culvert openings, and the hydrological effect of urbanization of the watershed.

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, adjacent 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 U.S. 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 the Tennessee inventory of historic places, pursuant to a historic preservation program which has been approved by the Secretary of the Interior; or
- (4) Individually designated as a historically significant site and determined as eligible under a historic preservation program that has been certified either:
 - a. By the approved Tennessee program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior.

Letter of map revision based on fill (LOMR-F) means a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.

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.

Lowest adjacent grade means the lowest natural elevation of the ground surface, prior to construction, adjacent to the proposed walls of a structure.

Lowest floor means the lowest floor of the lowest enclosed area, including a basement. An unfinished or flood resistant enclosure of five feet or less in height, measured from the lowest adjacent grade to the lowest floor, shall not be considered a building's lowest floor, provided that such enclosure is built in compliance with the applicable design requirements of this article.

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

Map means the Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by FEMA.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For the purposes of this

article, the term is synonymous with the National Geodetic Vertical Datum (NGVD) of 1929, 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.

National Geodetic Vertical Datum (NGVD) means, as corrected in 1929, a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means any structure for which the "start of construction" commenced on or after November 27, 1972, or the date the property was first included within a special flood hazard area, whichever occurred later, and includes any subsequent improvements to such structure.

NFIP (also referred to as "Program") means the National Flood Insurance Program authorized by 42 U.S.C. 4001 *et seq.*

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 November 27, 1972, or the date the property was first included within a special flood hazard area, whichever occurred later, .

Nonsubstantial means a reconstruction, rehabilitation, addition, alteration or other improvement which is not deemed a "substantial improvement," as defined herein.

North American Vertical Datum (NAVD) means, as corrected in 1988, a vertical control used as a reference for establishing varying elevations within the floodplain.

"100-year flood" - see "base flood."

Person includes any individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies.

Program means the National Flood Insurance Program authorized by 42 U.S.C. 4001 *et seq.*

Reasonably safe from flooding means base flood waters will not inundate the land or damage structures to be removed from the special flood hazard area and that any subsurface waters related to the base flood will not damage existing or proposed structures.

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 projection;

- (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 is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM, and includes the floodway and the floodway fringe. After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A may be refined into Zones A, AO, AH, A1-30, AE or A99.

Start of construction 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 (including a manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; and includes the placement of a manufactured home on a foundation. Permanent construction does not include initial 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 that alteration affects the external dimensions of the building.

Structure, for purposes of this article, means a walled and roofed building, a manufactured home, an above grade patio or deck, or a gas or liquid storage tank that is principally above ground.

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

Substantial improvement means any reconstruction, rehabilitation, addition, alteration or other improvement of a structure, taking place during a five-year period, in which the cumulative cost equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the initial improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The market value of the

structure should be the appraised value of the structure prior to the start of the initial improvement, or in the case of substantial damage, the value of the structure prior to the damage occurring. 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 pre-identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions and not solely triggered by an improvement or repair project, or;
- (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Variance is a grant of relief from the requirements of this article.

Violation means the failure of a structure or other development to be fully compliant with the regulations set forth in this article. A structure or other development without the elevation certificate, other certification, or other evidence of compliance required in this article is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, or other datum, where specified, of floods of various magnitudes and frequencies in the floodplains of riverine areas.

DIVISION 3. GENERAL PROVISIONS

Sec. 56-64. Special flood hazard areas.

The special flood hazard areas are identified by FEMA on the Flood Hazard Boundary Maps (FHBM) for the city, and in FEMA's Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM). [Community Number 470205 – Map Panel Numbers 47187C0070F, 47187C0086F, 47187C0087F, 47187C0088F, 47187C0089F, 47187C0091F, 47187C0092F*, 47187C0093F, 47187C0094F, 47187C0115F*, 47187C0204F, 47187C0205F, 47187C0206F, 47187C0207F, 47187C0208F, 47187C0209F, 47187C0220F, 47187C0230F, 47187C0235F, and 47187C0240F, along with any additional map panels for areas that are annexed into the city, (*Denotes panels not printed.)] . The FHBM, FIRM, FIS and all supporting technical data, including any amendments and any renumbering of map panels are adopted by reference and declared to be a part of this article. The special flood hazard areas shall comprise the boundaries of the flood hazard district established in Chapter 78 of this Code.

Sec. 56-65. Requirement for development permit.

A development permit shall be required in conformity with this article prior to the commencement of any development activities.

Sec. 56-66. Compliance.

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

Sec. 56-67. Abrogation and greater restrictions.

This article is not intended to repeal, abrogate, or impair any existing easements, covenants or deed restrictions. However, where this article conflicts or overlaps with another regulatory instrument, whichever imposes the more stringent restrictions shall prevail.

Sec. 56-68. Interpretation.

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

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under Tennessee statutes or this Code.

Sec. 56-69. Warning and disclaimer of liability.

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

Sec. 56-70. Penalties for violation.

(a) Any person who violates the provisions of this article or fails to comply with any of its requirements, including any conditions and safeguards established in connection with grants of variance shall be subject to punishment as provided in section 1-9 of this Code. In addition, any person who violates this article or fails to comply with any of its requirements shall pay all costs and expenses involved in the case. Each day any such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the city from taking such other lawful actions to prevent or remedy any violation.

(b) Any structure or development without certification or other evidence of compliance required in this article is presumed to be in violation until such time as the required

documentation is provided. Any structure or development for which the city's approval is required shall be in violation of this article if such approval is not obtained prior to the commencement of construction or development.

Secs. 56-71 – 56-75. Reserved.

DIVISION 4. ADMINISTRATION

Sec. 56-76. Designation of administrator.

The city manager shall designate an administrator to implement the provisions of this article.

Sec. 56-77. Duties and responsibilities of the administrator.

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

- (1) Review all development permits to assure that the permit requirements of this article have been satisfied, and that proposed building sites will be reasonably safe from flooding.
- (2) Require persons carrying out development activities within the special flood hazard areas to provide assurance that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (3) Notify adjacent communities and the Tennessee Department of Economic and Community Development, Local Planning Assistance Office, prior to any alteration or relocation of a watercourse and submit evidence of such notification to FEMA.
- (4) For any altered or relocated watercourse, submit engineering data/analysis within six months to FEMA to ensure accuracy of community FIRMs through the Letter of Map Revision process.
- (5) Assure that the flood carrying capacity within an altered or relocated portion of any watercourse is maintained.
- (6) Record the elevation, in relation to mean sea level, of the lowest floor (including basement) of all new and substantially improved buildings, in accordance with section 56-78.
- (7) Where interpretation is needed as to the exact location of 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), make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

- (8) When base flood elevation data and floodway data have not been provided by FEMA, require development permit applicants to provide certification of base flood elevation and floodway data by a Tennessee registered engineer, to assure that new construction, substantial improvements, or other development in special flood hazard areas on the city's FIRM meet the requirements of this article.
- (9) Maintain all records pertaining to the provisions of this article in the office of the administrator and provide for such records to be open for public inspection. Permits issued under the provisions of this article shall be maintained in a separate file or marked for expedited retrieval within combined files.

Sec. 56-78. Permit procedures.

(a) Application for a development permit shall be made to the administrator on forms furnished by the city prior to any development activities within a special flood hazard area,. The development permit application requirements shall include, but are not limited to the following: plans in duplicate drawn to scale and prepared by a Tennessee Registered surveyor or engineer, showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage facilities. The requirements herein shall be in addition to any and all requirements for development permits that may be imposed pursuant to other provisions of this Code. The following information is specifically required for permits for development within areas of special flood hazard:

- (1) *Application stage.*
 - a. Proposed elevation in relation to mean sea level of the proposed lowest floor, including basement.
 - b. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
 - c. For any location within a special flood hazard area where base flood elevation data is not initially available, or where the floodway has not been delineated, a Tennessee registered engineer shall determine the base flood elevation and establish the limits of the regulatory floodway. The engineer's certification shall be submitted with the permit application.
- (2) *Construction stage.*
 - a. Elevation of the lowest floor relative to mean sea level, as determined by or under the direct supervision of, a Tennessee registered land surveyor

and certified by a Tennessee registered land surveyor, to be provided upon completion of the foundation. Should the elevation of the lowest floor be lower than the proposed elevation on the approved permit, construction shall be discontinued until corrective action has been taken or the administrator is otherwise satisfied that the lowest floor elevation will comply with the provisions of this article. The administrator shall record the elevation of the lowest floor on the development permit.

- b. Upon completion of construction, the permit holder shall provide to the administrator an elevation certificate, certifying the as-built lowest floor elevation level.

(b) Any work undertaken prior to submission of any required engineer's certification shall be at the permit holder's risk. The administrator shall review the above-referenced certification data. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being allowed to proceed. Failure to submit the certification or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

Secs. 56-79 – 56-80. Reserved.

DIVISION 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 56-81. General standards.

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

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure.
- (2) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse and 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.
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (4) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (5) All electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water

from entering or accumulating within the components during conditions of flooding.

- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article.
- (10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this article shall be undertaken only if said nonconformity is not further extended or replaced.
- (11) All new construction and substantial improvement proposals shall include copies of all necessary federal and state permits, including Section 404 of the Federal Water Pollution Control Act amendments of 1972, 33 U.S.C. 1334.
- (12) All subdivision proposals and other proposed new development proposals shall meet the standards of section 56-82.
- (13) When proposed new construction and substantial improvements are partially located in an area of special flood hazard, the entire structure shall meet the standards for new construction.
- (14) When new construction or substantial improvements are proposed for a location that lies in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations, the entire structure shall meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.
- (15) *Standards for subdivisions and other new development proposals.* Proposals for subdivisions and other new developments, including manufactured home parks, shall be reviewed to determine whether such proposals will be reasonably safe from flooding. All such proposals shall meet the following standards:
 - a. All subdivision and other new development proposals shall be consistent with the need to minimize flood damage.

- b. All subdivision and other new development proposals shall have public utilities and facilities, such as sewer, gas, electrical and water systems, located and constructed to minimize or eliminate flood damage.
- c. All subdivision and other new development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- d. All new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than five acres shall include base flood elevation data. (See section 56-78.)
- e. Subdivision proposals shall not contain special flood hazard areas within the buildable area of the lots.
- f. The final maintenance security instruments for the subdivision or other development shall not be released until the administrator receives a copy of the LOMR-F, where required.

Sec. 56-82 Specific standards for areas other than the floodway.

In all areas of special flood hazard other than the floodway, the following provisions, in addition to those set forth in section 56-81, shall apply:

(1) *Buildings.*

- a. In areas where base flood elevation data is available and floodways have been designated, new construction and substantial improvement of any nonresidential (including commercial, industrial and institutional) or residential building (or manufactured home) may be permitted, provided that the lowest floor, including basement, shall be elevated to no lower than two feet above the base flood elevation. Solid foundation perimeter walls or piers may be used to elevate a structure, provided that:
 - 1. The height of any perimeter wall used to elevate a building shall not exceed five feet, measured from the lowest adjacent grade to the lowest floor, and openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with subsection (2) of this section.
 - 2. The minimum number of piers necessary to structurally support the building shall be used, and piers shall be designed to provide the least resistance to the flow of water.
- b. Within floodway fringe areas where base flood elevations have not been established, or where no floodways have been designated, and where

alternative data is not available, no construction may be permitted until a Tennessee registered engineer has determined the base flood elevation and established the limits of the regulatory floodway. Once the base flood elevation and floodway location have been established, construction shall comply with the building elevation requirements set forth in subsection (1)a. of this section.

(2) *Enclosures below the lowest floor.*

Enclosed areas formed by foundation and walls below the lowest floor shall be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

a. Designs for complying with this requirement must either be certified by a Tennessee professional engineer or architect or meet or exceed the following minimum criteria:

- 1) A minimum of two openings shall be provided, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
- 2) The bottom of all openings shall be no higher than one foot above the finished grade.
- 3) Openings may be equipped with screens, louvers, valves or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions.

b. The enclosed area shall not exceed five feet in height, measured from the lowest adjacent grade to the lowest floor.

c. The interior portion of such enclosed area shall not be finished or partitioned into separate rooms in such a way as to impede the movement of floodwaters. Any partitions shall comply with the provisions of this section.

(3) *Standards for manufactured homes and recreational vehicles.*

a. All manufactured homes must meet all the requirements for new construction, whether placed or substantially improved:

1. On individual lots or parcels; or
2. In manufactured home parks or subdivisions.

- b. All manufactured homes placed or substantially improved on an individual lot or parcel or in a manufactured home park or subdivision must be elevated so that the lowest floor of the manufactured home lies on a permanent foundation no lower than two feet above the level of the base flood elevation.
- c. Any manufactured home which has incurred “substantial damage” as the result of a flood must meet the standards of this division.
- d. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- e. All recreational vehicles placed in an identified special flood hazard area must either:
 - 1. Be on the site for fewer than 180 consecutive days;
 - 2. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions); or
 - 3. Meet all requirements for new construction.

(4) *Filling.*

- a. Filling may be permitted at locations outside the floodway. The volume of material shall be based upon an equal cut/fill quantity, so that the total amount of fill material added shall equal the amount of material removed. The building pad for each affected lot shall be filled to an elevation that equals or exceeds the flood protection elevation at that location. Approval for filling may be granted only if the administrator determines that the fill material proposed for a floodway fringe area will not unduly increase flood damage potential, and that the amount and dimensions of fill material in any location is not greater than is necessary to achieve the purpose of the fill as demonstrated in the plan submitted by the applicant.
- b. In granting approval to fill property within the special flood hazard area, the administrator shall require that precautions be taken against erosion through the use of rip-rap, vegetative cover, bulk heading, or other suitable means.

- c. Prior to the issuance of a development permit, the applicant shall secure a CLOMR-F from FEMA authorizing the proposed alterations to the special flood hazard area.
 - d. Prior to the issuance of a final certificate of occupancy, an as-built survey showing compliance with this division and a copy of the LOMR-F must be submitted to the administrator.
- (5) *Private utility facilities.* In lieu of elevation, private utility facilities, including heating and air conditioning equipment and pool equipment, may be floodproofed and located and designed so as to minimize or eliminate flood damage. The administrator shall require certification by a Tennessee registered professional engineer or architect that the floodproofing, location and/or design of the utility facilities are in accordance with accepted standards of practice for meeting the provisions of this article.
- (6) *Fences.* With the approval of the administrator, fences may be erected at any location within the special flood hazard area other than the floodway, provided that the administrator shall be satisfied that the fence is designed so as not to interfere with the flow of floodwaters.

Sec. 56-83. Special standards for floodways

Located within the special flood hazard areas established in section 56-64 are areas designated as floodways. A floodway may be an extremely hazardous area due to the velocity of floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights and velocities. Therefore, the following provisions shall apply:

- (1) Except as otherwise permitted in subsections (2) and (3) below, encroachments are prohibited within the floodway, including: earthen fill material; new construction; substantial improvements; decks or above-grade patios outside the existing building footprint; manufactured homes or recreational vehicles; and any other development.
- (2) Fences on lots of three or more acres in size may be permitted, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the cumulative effect of the proposed fence encroachments shall not result in any increase in the water surface elevation of the base flood, velocities, or floodway widths during the occurrence of a base flood discharge at any point within the city. The property owner shall submit certification from a Tennessee registered professional engineer that the requirements of this subsection have been met, along with supporting technical data, using the same methodologies as in the effective Flood Insurance Study for the city.

- (3) Nonsubstantial vertical additions to existing dwellings and nonsubstantial interior renovations within the existing building footprint may be permitted.

Sec. 56-86. Standards for unmapped streams.

Located within the city are unmapped streams where areas of special flood hazard are neither indicated nor identified. Adjacent to such streams, the following provisions shall apply:

- (1) No encroachments, including fill material or structures or other development, shall be located within an area of at least twice the width of the stream, measured from the top of each stream bank, unless certification by a Tennessee registered professional engineer is provided, demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the city.
- (2) If the stream and the adjacent area are subsequently identified as a special flood hazard area, all development, including new construction and substantial improvements, shall meet the standards established in accordance with Divisions 4 and 5 of this article.

Secs. 56-87 – 56-90. Reserved.

DIVISION 6. VARIANCES AND APPEALS

Sec. 56-91. Board of building construction appeals authority.

The city's board of building construction appeals, established pursuant to Chapter 14 of this Code, shall have the following powers in addition to those set forth in Chapter 14:

(1) *Administrative review.* To hear and decide appeals where it is alleged by the appellant that there is error in any order, requirement, permit, decision, determination, or refusal made by the administrator or other administrative official of the city in carrying out or enforcing any terms of this article.

(2) *Variances.* To hear and decide upon applications for variance from the terms of this article.

Sec. 56-92. Procedures.

(a) *Appeals and variance requests - how taken.* An appeal to the board of building construction appeals may be taken by any person, firm or corporation aggrieved or by any governmental officer, department or bureau affected by any decision of the administrator based in whole or in part upon the provisions of this article. A request for variance may be submitted

by any party owning an interest in property which is affected by the provisions of this article. Such appeal or request for variance shall be taken by filing with the board of building construction appeals a notice of appeal, specifying the grounds thereof, and paying the required fee established in this section. An appeal from a decision of the administrator must be filed within 30 days from the time the decision is rendered. . The administrator shall transmit to the board of building construction appeals all documents constituting the record upon which the appeal action was taken. The board of construction appeals shall fix a reasonable time for the hearing of the appeal, give public notice thereof, as well as due notice to parties in interest and decide the same within a reasonable time, which shall not be more than 35 days from the date of the hearing; provided, however, that the party bringing the appeal may consent to an extension of time for the board's decision. At the hearing, any person or party may appear and be heard in person or by agent or by attorney.

(b) *Fees.* In all cases where an appeal or request for variance is made by a property owner or other interested party, a fee of \$100.00 dollars shall be paid by the appellant. Such fee shall be refundable if the board of building construction appeals rules in the appellant's favor in an administrative review case. No refund shall be issued to a party who has requested a variance,

(c) *Meetings.* Meetings of the board of building construction appeals to consider appeals and variances in regard to this article shall be held in accordance with the board's adopted meeting schedule, or at such other times as the board shall determine, and shall be conducted in accordance with the board's adopted rules of procedure. All meetings of the board of building construction appeals shall be open to the public. The administrator shall keep records of applications for appeals and variances and determinations made by the board of building construction appeals, which shall be a public record. Upon request by FEMA, the administrator shall report any variances granted.

Sec. 56-93. Conditions for variances.

(a) In reviewing applications for variances, the board of building construction appeals shall consider all technical evaluations, all relevant factors, and all standards specified in other sections of this division. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result. Variances from the provisions of this article may be granted by the board of building construction appeals only upon:

- (1) A showing of good and sufficient cause; and
- (2) A determination that:
 - a. The variance is the minimum relief necessary, considering the flood hazard and each of the factors listed in subsection (b) of this section;
 - b. Failure to grant the variance would result in exceptional hardship; and

- c. The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense; create nuisance; cause fraud on or victimization of the public; or conflict with existing local laws or divisions.

(b) In addition to the general determinations set forth in subsection (a) above, the board of building construction appeals shall consider each of the following factors in considering a request for a variance from the provisions of this article:

- (1) The danger that materials may be swept onto other property to the injury of others;
- (2) The danger to life and property due to flooding or erosion;
- (3) The susceptibility of the proposed facility and its contents to flood damage;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity of the facility to a waterfront location, in the case of a functionally dependent use;
- (6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (7) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (8) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (9) 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; and
- (10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, and streets and bridges.

(c) When a variance is requested for the repair or rehabilitation of a historic structure as defined herein, each of the requirements set forth above shall apply. In addition, prior to granting a variance for the repair or rehabilitation of a historic structure, the board of building construction appeals shall determine that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure, and that the variance is the minimum necessary deviation from the requirements of this article to preserve the historic character and design of the structure. Each request for a variance for the repair or rehabilitation of a historic

structure shall be referred to the city's historic commission for a recommendation prior to consideration by the board of building construction appeals.

(d) Upon consideration of the factors listed above, and the purposes of this division, the board of building construction appeals may attach such additional conditions to the granting of variances as it deems necessary to effectuate the purposes of this division.

(e) Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance coverage, and that such construction below the base flood elevation increases risks to life and property.

SECTION 3. That section 14-37 of Chapter 14, Article II, Division 2 is hereby revised by deleting the existing subsection (c) inserting the following new subsections:

(c) The board of building construction appeals shall also hear appeals and requests for variances in regard to uses and development of property in areas of special flood hazard, as set forth in Chapter 56, Article II, Division 6.

(d) Notice of appeal shall be in writing and filed within 30 days from the time a decision is rendered by the building inspector, engineering department or other city official or department. An appeal shall be on forms provided by the city.

SECTION 4. That section 14-38 of Chapter 14, Article II, Division 2 is hereby revised by adding the following language at the end of said section:

Notwithstanding the foregoing, decisions of the board of building construction appeals in regard to appeals filed under Chapter 56, Article II, Division 6 of this Code shall be rendered as directed by Chapter 56, Article II, Division 6.

SECTION 5. That the existing section 14-45 of Chapter 14, Article II, Division 2 is hereby deleted in its entirety, a new section 14-45 is added, reading as follows:

Sec. 14-45. Decisions are final.

Each decision of the board of building construction appeals shall be final, subject only to such review or remedy as may be obtained in a court of law.

SECTION 6. That the existing Division 15 of Chapter 78, Article III of the Code of Ordinances of the City of Brentwood is hereby repealed.

SECTION 7. That a new Division 15 of Chapter 78, Article III of the Code of Ordinances of the City of Brentwood is hereby adopted, said new division to read as follows:

DIVISION 15. FLOOD HAZARD DISTRICT

Sec. 78-360. Statutory authorization.

The Legislature of the State of Tennessee has in T.C.A. Title 13, Chapter 7, Part 2, delegated the responsibility to municipalities to adopt zoning regulations designed to promote the public health, safety, and general welfare of its citizenry. Pursuant to said legislation, municipalities may establish special districts or zones in those areas deemed subject to seasonal or periodic flooding, and may apply regulations therein as will minimize danger to life and property, and as will secure the eligibility for flood insurance to the citizens of the city. In furtherance of the aforesated goals, the flood hazard district is hereby established.

Sec. 78-361. Flood hazard district established.

The flood hazard district is established to meet the needs of the city's rivers and local tributaries to carry the abnormal flows of water in times of flood; to prevent encroachment into the district which would increase flood heights and flood damage; and to prevent the loss of life and excessive damage to property in the area of greatest flood hazard.

Sec. 78-362. District boundaries.

The flood hazard district as established in this division shall consist of the special flood hazard areas as defined in Chapter 56, Article II of this Code.

Sec. 78-363. Development in the flood hazard district.

Within the flood hazard district, all uses and development of property shall be subject to the restrictions set forth in Chapter 56, Article II of this Code. The floodway district shall be an overlay district, and the requirements associated with the floodway district shall be in addition to the requirements associated with the primary zoning district.

SECTION 8. That section 78-3 of Chapter 78, Article I of the Code of Ordinances of the City of Brentwood is hereby revised to insert the following definition in appropriate alphabetical order:

Floodway overlay district means the "flood hazard district" established pursuant to Article III, Division 15 of this chapter.

SECTION 9. In case of conflict between this ordinance or any part hereof, and the whole or part of any existing ordinance of the City, the provision that establishes the higher standard shall prevail.

SECTION 10. If any section, subsection, clause, provision or portion of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance.

SECTION 11. That this ordinance shall take effect from and after its final passage and publication thereof, or fifteen days after its first passage, whichever occurs later, the general welfare of the City of Brentwood, Williamson County, Tennessee, requiring it.

| | | | | |
|----------------|----------------------|-------|----------------------|-------|
| PASSED: | 1st reading | _____ | PLANNING COMMISSION | _____ |
| | 2nd reading | _____ | NOTICE OF PASSAGE | |
| | | | Notice published in: | _____ |
| | | | Date of publication: | _____ |
| PUBLIC HEARING | | | | |
| | Notice published in: | _____ | | |
| | Date of publication: | _____ | | |
| | Date of hearing: | _____ | EFFECTIVE DATE | _____ |

MAYOR Betsy Crossley

RECORDER Deborah Hedgepath

Approved as to form:

CITY ATTORNEY Roger A. Horner

ILLUSTRATION #1

