

First Reading: November 18, 2025
Second Reading: December 2, 2025

ORDINANCE NO. 14298

AN ORDINANCE TO AMEND CHATTANOOGA CITY CODE, PART II, CHAPTER 38, THE CHATTANOOGA ZONING ORDINANCE AS ADOPTED BY ORDINANCE NO. 14137 ON JULY 23, 2024, MORE SPECIFICALLY ARTICLE II, DEFINITIONS, ARTICLE VIII, SPECIAL PURPOSE ZONES, SECTION 38-38, F/W FLOODWAY, SECTION 38-39, F/H FLOOD HAZARD, AND ARTICLE XVIII, NONCONFORMITIES, SECTION 38-98, NONCONFORMING STRUCTURE.

WHEREAS, the City of Chattanooga adopted a new zoning ordinance, Ordinance No. 14137, on July 23, 2024; and

WHEREAS, the new zoning ordinance was effective as of December 18, 2024, but amendments have been identified; and

WHEREAS, there is a proposal to amend the City of Chattanooga Zoning Regulations to update definitions related to the Flood Hazard Regulations and to update the standards related to Section 38-38 F/W Floodway Regulations as required to maintain eligibility for participation in the National Flood Insurance Program (NFIP); and

WHEREAS, the new Flood Insurance Rate Maps (FIRM), and the Community Panel Numbers have been updated and need to be incorporated into the Zoning Code;

SECTION 1. BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, TENNESSEE, That Chattanooga City Code, Part II, Chapter 38, Zoning Ordinance, be amended as follows:

Amend ARTICLE II – DEFINITIONS AND RULES OF MEASUREMENT, Section 38-9 General Definitions to add new definitions:

Appeal. A request for a review of an interpretation of any provision of this Ordinance or a request for variance.

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

Area of Shallow Flooding. 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-related Erosion Hazard. The land within a community which is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E on the Flood Hazard Boundary Map (FHBM). After the detailed evaluation of the special flood-related erosion hazard area in preparation for publication of the FIRM, Zone E may be further refined.

Elevated Building. A non-basement building built to have the lowest floor of the lowest enclosed area elevated 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 building during a base flood event.

Emergency Flood Insurance Program. A program as implemented on an emergency basis in accordance with Section 1336 of the Act. It is intended as a program to provide a first layer amount of insurance on all insurable structures before the effective date of the initial FIRM. Also called Emergency Program.

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

Existing Construction (Floodplain). Any structure for which the "start of construction" commenced before the effective date of the initial floodplain management code or ordinance adopted by the community as a basis for that community's participation in the NFIP.

FEMA. Federal Emergency Management Agency.

Fill. Any material including but not limited to soil, gravel, sand, rock or similar materials that is placed, deposited, or graded by human activity to raise the ground surface to a desired elevation or grade.

Flood Elevation Determination. A determination by the Federal Emergency Management Agency (FEMA) of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year.

Flood Elevation Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) or flood-related erosion hazards.

Flood Fringe. The portion of the one-percent annual chance floodplain located outside of the floodway.

Floodplain. Any land area susceptible to being inundated by water from any source (see definition of "flooding"). Also called Floodprone Area.

Floodplain Management. The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain Storage. The volume or quantity of stormwater surface runoff temporarily or permanently held within the boundaries of the regulatory floodplain. Net increase of floodplain storage as a result of fill refers to the *additional* volume or quantity of stormwater surface runoff temporarily or permanently held within the boundaries of the regulatory floodplain that exists as a direct result of the fill materials added to the floodplain that would have otherwise not existed.

Flood Protection System. 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.

Freeboard. 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. 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.

Exception (in Special Flood Hazard Areas). A waiver from the provisions of the Special Flood Hazard Area section of this Ordinance which relieves the applicant from the requirements of a rule, regulation, order or other determination made or issued pursuant to this Ordinance.

Expansion to an Existing Manufactured Home Park or Subdivision. 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).

General Floodplain. Those floodplains designated on the Flood Insurance Rate Maps referenced in Section 3.2, that are not VE or V zones, and that do not have a delineated floodway.

Highest Adjacent Grade. The highest natural elevation of the ground surface, prior to construction, adjacent to the proposed walls of a structure.

High Water Stage. The 100-year Floodplain Elevation.

Historic Structure. 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 and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on the City of Chattanooga, Tennessee inventory of historic places and determined as eligible by communities with historic preservation programs that have 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 Change (LOMC). An official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

Letter of Map Amendment (LOMA). An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property or structure is not located in a special flood hazard area.

Conditional Letter of Map Revision Based on Fill (CLOMR-F). A determination 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.

Letter of Map Revision Based on Fill (LOMR-F). A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional Letter of Map Revision (CLOMR). A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA, to revise the effective FIRM.

Letter of Map Revision (LOMR). Letter of Map Revisions are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The LOMR officially revises the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM), and sometimes the Flood Insurance Study (FIS) report, and when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.

Levee. 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. 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.

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

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

Reach. A hydraulic engineering term to describe a longitudinal segment of a stream or river influenced by a natural or man-made obstruction. In an urban area, the segment of a stream or river between two consecutive bridge crossings would most typically constitute a reach.

Reasonably Safe from Flooding. 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.

Regulatory Flood Protection Elevation (RFPE). An elevation that is one foot above the elevation of the base flood plus any increases in the water surface elevation caused by encroachments on the floodplain that result from designation of a floodway. These increases in water surface elevations are typically identified in the Floodway Data Tables, found in the Flood Insurance Study

Riverine. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Special Flood Hazard Area. The land in the floodplain within a community which is 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. After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE or A99.

Start of Construction. 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. Includes substantial improvements.

State Coordinating Agency. The Tennessee Emergency Management Agency, State NFIP Office, as designated by the Governor of the State of Tennessee at the request of FEMA to assist in the implementation of the NFIP for the State.

Watercourse. A channel in which a flow of water occurs either continuously or intermittently in a definitive direction. The term applies to either natural or artificially constructed channels.

Water Surface Elevation. 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.

Amend ARTICLE VIII. – SPECIAL PURPOSE ZONES, Section 38-38 F/W Floodway by deleting in its entirety and replacing with the following:

Sec. 38-38. Special Flood Hazard Area

(a) Applicability...

This section shall apply to all areas within the incorporated area of the City of Chattanooga, Tennessee.

(i) Statutory Authorization

(1) The Legislature of the State of Tennessee has in Sections 13-7-201 through 13-7-210, Tennessee Code Annotated delegated the responsibility

to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Chattanooga, Tennessee, Mayor and the Chattanooga City Council, do ordain as follows:

(ii) Finding of Facts

- (1) The City of Chattanooga, Tennessee, Mayor and its City Council wishes to MAINTAIN eligibility in the National Flood Insurance Program (NFIP) and in order to do so must meet the NFIP regulations found in Title 44 of the Code of Federal Regulations (CFR), Ch. 1, Section 60.3.
- (2) Areas of the City of Chattanooga, Tennessee 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; by uses in flood hazard areas which are vulnerable to floods; or construction which is inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(iii) Purpose

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

1. Regulate development in the flood hazard areas of the City of Chattanooga. These flood hazard areas are subject to periodic inundation, which may 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;
2. Restrict or prohibit uses which are vulnerable to flooding or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities;
3. Require that uses vulnerable to floods, including community facilities, be protected against flood damage at the time of initial construction;
4. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;

5. Control filling, grading, dredging and other development which may increase flood damage or erosion;
6. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands;
7. Promote sound land use practices - floodplains are a land resource to be developed in a manner which will result in minimum loss of life and threat to health, and reduction of private and public economic loss caused by flooding; and
8. Preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

(iv) Floodplain Definitions

For the purposes of this section of the ordinance, the following definitions apply:

Development. 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.

Exception. A waiver from the provisions of this Ordinance which relieves the applicant from the requirements of a rule, regulation, order or other determination made or issued pursuant to this Ordinance.

Variance. A grant of relief from the requirements of this Ordinance.

(v) Objectives

The objectives of this Ordinance 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, 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.

(vi) Abrogation and Greater Restrictions

It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or other private agreements. The standards in this ordinance take precedence over any less restrictive, conflicting local laws, ordinances, or codes. However, where this section conflicts or overlaps with another regulatory instrument, whichever imposes the more stringent restrictions shall prevail.

(vii) Interpretation

In the interpretation and application of these regulations, all provisions must be:

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

(viii) Warning and Disclaimer of Liability

The degree of flood protection required by this section 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 section 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 section shall not create liability on the part of the City of Chattanooga, Tennessee or by any officer or employee thereof for any flood damages that result from reliance on this section or any administrative decision lawfully made hereunder.

(ix) Severability

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

(b) Permitted Uses...

Any lawful use permitted in the various zones is also permitted in the portions of such zones underlying the Special Flood Hazard Area subject to all applicable zone standards,

off-street parking, and other regulations applicable in such zones. However, in the case of conflict, the provisions of this section for flood hazard reduction control.

(c) Jurisdiction and Districts...

(1) This ordinance applies to all lands within the jurisdiction of the City of Chattanooga within the Special Flood Hazard Areas identified on the Flood Insurance Rate maps. Areas within the SFHA are within one of three districts: the Floodway, Flood Fringe, General Floodplain.

(2) The Areas of Special Flood Hazard identified on the City of Chattanooga, Tennessee, as identified by FEMA, and in its Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM), Community Panel Numbers 47065C0214H, 47065C0217H, 47065C0218H, 47065C0219H, 47065C0228H, 47065C0229H, 47065C0236H, 47065C0237H, 47065C0238H, 47065C0239H, 47065C0241H, 47065C0243H, 47065C0245H, 47065C0265H, 47065C0319H, 47065C0326H, 47065C0327H, 47065C0328H, 47065C0329H, 47065C0331H, 47065C0332H, 47065C0333H, 47065C0334H, 47065C0336H, 47065C0337H, 47065C0338H, 47065C0339H, 47065C0341H, 47065C0342H, 47065C0343H, 47065C0344H, 47065C0351H, 47065C0352H, 47065C0353H, 47065C0354H, 47065C0356H, 47065C0357H, 47065C0358H, 47065C0359H, 47065C0361H, 47065C0362H, 47065C0363H, 47065C0364H, 47065C0366H, 47065C0367H, 47065C0368H, 47065C0369H, 47065C0378H, 47065C0379H, 47065C0380H, 47065C0381H, 47065C0383H, 47065C0386H, 47065C0387H, 47065C0388H, 47065C0432H, 47065C0451H, 47065C0452H, 47065C0456H, 47065C0477H, 47065C0481H, 47065C0482H, and 47065CIND0C dated November 28, 2025, along with all supporting technical data, are adopted by reference and declared to be a part of this Ordinance.

(3) In this section, "Map" means the Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by FEMA.

(4) Districts...

(i) Floodway District. Those areas within Zone AE delineated within floodway areas as shown on the Flood Insurance Rate Maps referenced in section (c) (2) and those areas within Zone A determined to be located in the floodway based on the delineation methods in General Floodplain District.

(ii) Flood Fringe District. Those areas within Zone AE located outside of the delineated floodway as shown on the Flood Insurance Rate Maps referenced in section (c) (2), and those areas within Zone A determined to be located in the flood fringe based on the delineation methods in the Zone standards.

(i) General Standards

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure;
- (2) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (3) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (4) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities must be 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 must be designed to minimize or eliminate infiltration of flood waters into the system in accordance with regulations of the Tennessee Department of Health;
- (6) New and replacement sanitary sewage systems must be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters in accordance with regulations of the Tennessee Department of Health. Sewers and manholes constructed below the 100-year elevation must be watertight. All manholes must be constructed so that the manhole covers are not below the High Water Stage;
- (7) On-site waste disposal systems are not allowed;
- (8) Any alteration, repair, reconstruction, or improvements to a building on which the start of construction was begun after the effective date of these regulations, must meet the requirements of "new construction" as contained in these regulations;
- (9) All new construction and substantial improvement proposals shall provide 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;
- (10) All subdivision proposals and other proposed new development proposals shall meet the standards of Article V, Section B;
- (11) 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; and
- (12) When proposed new construction and substantial improvements are located 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.

(ii) Specific Standards

In all areas of special flood hazard where base flood elevation data has been determined, the following specific provisions are required as determined by the intended land use in addition to those set forth in sec. 38-38 (d) (i), are required:

(1) Residential Structures

In AE Zones where Base Flood Elevation data is available, new construction and substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated to no lower than two (2) feet above the Base Flood Elevation if constructed of wood or one (1) foot above base flood elevation if constructed of concrete (slab on grade type of construction). Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with the standards of this section: "Enclosures" item (3) below.

Within approximate A Zones where Base Flood Elevations have not been established and where alternative data is not available, the administrator shall require the lowest floor of a building to be elevated to a level of at least three (3) feet above the highest adjacent grade (as defined in Article II). Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with the standards of this section: "Enclosures"

(2) Non- Residential Structures

In AE Zones, where Base Flood Elevation data is available, new construction and substantial improvement of any commercial, industrial, or non-residential building, shall have the lowest floor, including basement, elevated or floodproofed to no lower than one (1) foot above the level of the Base Flood Elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with the standards of this section: "Enclosures" item (3) below.

In approximate A Zones, where Base Flood Elevations have not been established and where alternative data is not available, new construction and substantial improvement of any commercial, industrial, or non-residential building, shall have the lowest floor, including basement, elevated or floodproofed to no lower than three (3) feet above the highest adjacent grade (as defined in Article II). Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate equalization of flood hydrostatic forces on both sides of exterior walls shall be provided in accordance with the standards of this section: "Enclosures"

Non-Residential buildings located in all A Zones may be floodproofed, in lieu of being elevated, provided that all areas of the building below the required elevation are watertight, with walls substantially impermeable to the passage of water, and are built with structural components having the

capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A Tennessee registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the Administrator as set forth in Article IV, Section B.

A registered professional engineer, architect, or license surveyor must certify that the standards of this subsection are satisfied. Such certification and the specific elevation (in relation to mean sea level) to which such structures are flood proofed must be provided to the Land Development Office.

(3) Enclosures

All new construction and substantial improvements that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor that are subject to flooding, shall be designed to preclude finished living space and 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.
 - i) Provide a minimum of two openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
 - ii) The bottom of all openings shall be no higher than one (1) foot above the finished grade; and
 - iii) 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 be the minimum necessary to allow for parking of vehicles, storage or building access.
- 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 and all such partitions shall comply with the provisions of Article V, Section B.

(iii) Permit Required.

A floodplain development permit shall be required for all proposed construction or other development, including the placement of manufactured homes, in the areas described in section (c) (2). No person, firm, corporation, or unit of government shall initiate any development or substantial-improvement or cause the same to be done without first obtaining a separate floodplain development permit for each structure or other development.

A permit must be obtained from the Director to verify compliance with all applicable standards outlined in this ordinance prior to the following uses or activities:

- (1) The erection, addition, modification, maintenance, rehabilitation, repair, or alteration of any building, structure, or portion thereof. Normal maintenance requires a permit to determine if such work, either separately or in conjunction with other planned work, constitutes a substantial improvement.
- (2) The construction of a fence, pool, deck, or placement of anything that may cause a potential obstruction.
 - a) The change or expansion of a nonconforming use.
 - b) The repair of a structure that has been damaged by flood, fire, tornado, or any other source.
 - c) The placement of fill, excavation, utilities, on-site sewage treatment systems, or other service facilities.
 - d) Relocation or alteration of a watercourse (including stabilization projects or the construction of new or replacement dams, culverts and bridges). A local permit is not required if a public waters work permit has been obtained from the Department of Natural Resources, unless a significant area above the ordinary high water level is also to be disturbed.
 - e) Any other type of "development," as defined in the definitions section of this ordinance.
- (iv) No permit for floodplain development shall be granted for new construction, substantial-improvements, and other improvements, including the placement of manufactured homes, within any numbered or unnumbered A zones and AE zones, unless the conditions of this Section are satisfied.
- (v) All areas identified as unnumbered A zones on the FIRM are subject to inundation of the 100-year flood; however, the base flood elevation is not provided. Development within unnumbered A zones is subject to all provisions of this Chapter. If Flood Insurance Study data is not available, the community shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from Federal, State, or other sources.
- (vi) All new construction, subdivision proposals, substantial-improvements, prefabricated structures, placement of manufactured homes, and other developments shall require:
 - a. Design or adequate anchorage to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
 - b. Construction with materials resistant to flood damage;

- c. Utilization of methods and practices that minimize flood damages;
- d. All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- e. New or replacement water supply systems and/or sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems be located so as to avoid impairment or contamination; and
- f. Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, located within special flood hazard areas are required to assure that:
 - i. All such proposals are consistent with the need to minimize flood damage;
 - ii. All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
 - iii. Adequate drainage is provided so as to reduce exposure to flood hazards; and
 - iv. All proposals for development, including proposals for manufactured home parks and subdivisions, of five (5) acres or fifty (50) lots, whichever is lesser, include within such proposals Base Flood Elevation data.

(vii) Storage, Material, And Equipment

The storage or processing of materials within the special flood hazard area that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal, or plant life is prohibited.

Storage of other material or equipment may be allowed if not subject to major damage by floods, if firmly anchored to prevent flotation, or if readily removable from the area within the time available after a flood warning.

(viii) Accessory Structures

For this section of the Section, Accessory Structures shall mean a subordinate structure to the principal structure on the same lot and, for the purpose of this Ordinance, shall conform to the following:

- (1) Accessory structures shall only be used for parking of vehicles and storage, not attached to any other structure on the site.
- (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.
 - (6) Accessory Structures shall be of limited investment value, and not larger than four hundred (400) square feet, may be constructed at-grade and wet-floodproofed provided there is no human habitation or occupancy of the structure; the structure is of single-wall design; a variance has been granted from the standard floodplain management requirements of this Chapter; and a floodplain development permit has been issued.
- (ix) Substantial Improvement and Substantial Damage Determinations. Prior to issuing any permits for additions, modifications, rehabilitations, repairs, alterations, or maintenance to nonconforming structures, the Director is required to determine if such work constitutes substantial improvement or repair of a substantially damaged structure. A determination must be made in accordance with the following procedures:
- (1) Estimate the market value of the structure. In the case of repairs, the market value of the structure shall be the market value before the damage occurred and before any restoration or repairs are made.
 - (2) Estimate the cost of the project. The property owner shall accommodate for inspection, and furnish other documentation needed by the Director to evaluate costs.
 - a) Improvement costs shall be comprised of the market rate of all materials and labor, as well as the costs of all ordinary maintenance and upkeep carried out over the past one year.
 - b) Costs to repair damages shall be comprised of the market rate of all materials and labor required to restore a building to its pre-damaged condition regardless of the work proposed, as well as associated improvement costs if structure is being restored beyond its pre-damaged condition.
 - (3) Compare the cost of the improvement, repairs, or combination thereof to the estimated market value of the structure and determine whether the proposed work constitutes substantial improvement or repair of a substantially damaged structure.
 - a) For the purposes of determining whether the proposed work would constitute substantial improvement, the evaluation shall also include all rehabilitations, additions, or other improvements completed since the community has adopted floodplain standards impacting this structure.

b) If any nonconforming structure experiences a repetitive loss it shall be considered substantially damaged and must not be reconstructed except in conformity with the provisions of this ordinance.

(4) Based on this determination, the Director shall prepare a determination letter and notify the property owner accordingly. Structures determined to be substantially damaged or substantially improved may not be reconstructed except in conformity with the provisions of this ordinance.

(d) Floodway District

(i) Established

(1) The Floodway District is all parcels on the FIS that are categorized as Floodway.

(ii) The F/W Floodway Zone is established to:

(1) Maintain the capability of the Tennessee River (Nickajack Lake), its tributaries, and their adjacent lands to drain flood waters

(2) Protect the river, creek channels, streams, and flood plains from encroachment, so that flood heights and flood damage will not be increased

(3) Provide necessary regulations for the protection of the public health and safety.

(4) Reduce the financial burdens imposed upon the community by floods and the inundation of land

(iii) Permitted Uses in Floodway.

Development allowed in the floodway district is limited to that which has low flood damage potential and will not obstruct flood flows, increase velocities, or increase the water surface elevations of the one-percent annual chance flood.

No structures are allowed in the Floodway District other than water control, public utility facilities, and water-oriented industries which are permitted in or adjacent to water courses for approved operation.

The following uses and activities may be allowed with a permit:

(1) Recreational uses, airport landing strips, water control structures, navigational facilities, as well as public open space uses.

(2) Roads, driveways, railroads, trails, bridges, and culverts.

(3) Public utility facilities and water-oriented industries which must be in or adjacent to watercourses.

(4) Grading, filling, and land alterations as it pertains to shoreline stabilization projects.

(iv) Standards for Permitted Uses in Floodway. In addition to the applicable standards detailed in Section 38-38 (d):

- (1) Permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, floodway width or base flood discharge, shall only be allowed if the applicant first has applied for a Conditional Letter of Map Revision (CLOMR) in accordance with 44 CFR § 65.12, and FEMA has issued the CLOMR prior to the start of construction. Upon completion of the project, the applicant shall apply for a Letter of Map Revision (LOMR) from FEMA. Submittal requirements and fees shall be the responsibility of the applicant as established under the provisions of § 65.12.
- (2) The applicant must demonstrate that the development will not result in any of the following during the one percent annual chance flood: cause a stage increase of 0.00 feet or greater, obstruct flood flows, or increase velocities. This shall be demonstrated through hydrologic and hydraulic analysis performed by a professional engineer or using other standard engineering practices (e.g. projects that restore the site to the previous cross-sectional area). This is commonly documented through a “no-rise certification.”
- (3) Any development resulting in a change to the water surface elevation of the base flood identified in the Flood Insurance Study requires a Letter of Map Revision (LOMR) following the procedure.

(e) Flood Fringe District

- (i) Established.
Located within the Special Flood Hazard Areas, where streams exist with base flood data provided but where no floodways have been designated (Zones AE, AH,) and/or there is no established Base Flood Elevations (Zone A, AO, A-99, Unmapped Streams).
- (ii) Permitted Uses in Flood Fringe.
Any uses or activities allowed in any applicable underlying zoning districts may be allowed with a permit, subject to the standards set forth in Section 38-38 (d) and the standards outlined below.
- (iii) Standards for Permitted Uses in Flood Fringe District.
Located within the Special Flood Hazard Areas are areas designated as floodways that 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) Standards for Special Flood Hazard Areas with Established Base Flood Elevations and With Floodways Designated

- a) Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development, including fill shall be permitted within Zone AE on the community's FIRM, unless it is demonstrated through hydrologic and hydraulic analyses performed that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.
- b) Permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, floodway width or base flood discharge, shall only be allowed if the applicant first has applied for a Conditional Letter of Map Revision (CLOMR) in accordance with 44 CFR § 65.12, and FEMA has issued the CLOMR prior to the start of construction. Upon completion of the project, the applicant shall apply for a Letter of Map Revision (LOMR) from FEMA. Submittal requirements and fees shall be the responsibility of the applicant as established under the provisions of § 65.12.
- c) ONLY if Section 38-38 (f) (iii), provisions (1) through (2) are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Section 38-38 (d), subsections (i) and (ii).

(2) Standards for Areas of Special Flood Hazard Zones AE with Established Base Flood Elevations but Without Floodways Designated

Located within the Special Flood Hazard Areas where streams exist with base flood data provided but where no floodways have been designated (Zones AE).

Therefore the following provisions apply:

- a) Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development, including fill shall be permitted within Zone AE on the community's FIRM, unless it is demonstrated through hydrologic and hydraulic analyses performed that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

- b) A community may permit encroachments within Zones AE on the community's FIRM, that would result in an increase in the water surface elevation of the base flood, provided that the applicant first applies for a Conditional Letter of Map Revision (CLOMR) from FEMA prior to the start of construction. Upon completion of the project, the applicant shall apply for a Letter of Map Revision (LOMR) from FEMA. Submittal requirements and fees shall be the responsibility of the applicant as established under the provisions of § 65.12.
 - c) ONLY if Article V, Section D, provisions (1) through (2) are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Article V, Sections A and B.
- (3) Standards for Streams without Established Base Flood Elevations and Floodways (A Zones)

Located within the Special Flood Hazard Areas where streams exist, but no base flood data has been provided and where a Floodway has not been delineated,

Therefore the following provisions shall apply:

- a) The Administrator shall obtain, review, and reasonably utilize any Base Flood Elevation and floodway data available from any Federal, State, or other sources, including data developed as a result of these regulations (see 2 below), as criteria for requiring that new construction, substantial improvements, or other development in approximate A Zones meet the requirements of Section 38-38(e), Section 38-38(f).
- b) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals Base Flood Elevation data.
- c) Within approximate A Zones, where Base Flood Elevations have not been established and where such data is not available from other sources, require the lowest floor of a building to be elevated or floodproofed to a level of at least three (3) feet above the highest adjacent grade. All applicable data including elevations or floodproofing certifications shall be recorded. Openings sufficient to facilitate automatic equalization of hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of Section 38-38(e).

- d) Within approximate A Zones, where Base Flood Elevations have not been established and where such data is not available from other sources, no encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty feet (20), whichever is greater, measured from the top of the 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 (1) foot at any point within the City of Chattanooga, Tennessee. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.
- e) New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of Section 38-38 (d), (i) and (ii). Within approximate A Zones, require that those subsections of Article V Section B dealing with the alteration or relocation of a watercourse, assuring watercourse carrying capacities are maintained and manufactured homes provisions are complied with as required.

(4) Standards For Areas of Shallow Flooding (Zone AO)

Located within the Special Flood Hazard Areas are areas designated as shallow flooding areas having special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Section 38-38 (d), (i) and (ii), all new construction and substantial improvements shall meet the following requirements:

- a) The lowest floor (including basement) shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of one (1) foot above the highest adjacent grade; or at least three (3) feet above the highest adjacent grade, if no depth number is specified.
- b) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Section 38-38 (f)(iii)(4)(a) so that the structure, together with attendant utility and sanitary facilities, below that level shall be 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. Certification is required by a Tennessee registered professional engineer.

- c) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

(5) Standards For Areas of Shallow Flooding (Zone AH)

Located within the Special Flood Hazard Areas are areas designated as shallow flooding areas. These areas are subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are one (1) to three (3) feet. In addition to meeting the requirements of Section 38-38 (d),(1) and (2), all new construction and substantial improvements shall provide adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(6) Standards For Areas Protected by Flood Protection System (A-99 Zones)

Located within the Areas of Special Flood Hazard are areas of the 100-year floodplain protected by a flood protection system but where Base Flood Elevations have not been determined. Within these areas (A-99 Zones) all provisions of Section 38-38 (d) and (i) shall apply.

(7) Standards for Unmapped Streams

Located within the City of Chattanooga, Tennessee, are unmapped streams where areas of special flood hazard are neither indicated nor identified.

Adjacent to such streams, the following provisions shall apply:

- a) No encroachments including fill material or other development including structures shall be located within an area of at least equal to 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 (1) foot at any point within the locality.
- b) When a new flood hazard risk zone, and Base Flood Elevation and floodway data is available, new construction and substantial improvements shall meet the standards established in accordance with Section 38-38 (d) and (i).

- c) ONLY if Section 38-38 (f)(iii)(7), provisions (a) and (b) are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Section 38-38 (d), (i) and (ii).

(f) Standards for Manufactured Homes and Recreational Vehicles

- (i) In this section, "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, final site grading or the pouring of concrete pads) is completed before the effective date of the first floodplain management code or ordinance adopted by the community as a basis for that community's participation in the NFIP.
- (ii) In this section, "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).
- (iii) In this section "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;
 - (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- (iv) All manufactured homes placed or substantially improved on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.
- (v) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that either:
 - (1) In AE Zones, with Base Flood Elevations, the lowest floor of the manufactured home is elevated on a permanent foundation to no lower than two (2) feet above the level of the Base Flood Elevation or
 - (2) In approximate A Zones, without Base Flood Elevations, the manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least equivalent strength) that are at least three (3) feet in height above the highest adjacent grade (as defined in Article II).

- (vi) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of items i and ii above.
- (vii) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (viii) 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 of Tennessee and local anchoring requirements for resisting wind forces.
- (ix) 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) The recreational vehicle must meet all the requirements for new construction.

(g) Administration

- (i) Duties. The Director of the Land Development Office must administer and enforce this ordinance.
 - (1) Duties of the Administrator shall include, but not be limited to, the following:
 - (2) Review all development permits to assure that the permit requirements of this Ordinance have been satisfied, and that proposed building sites will be reasonably safe from flooding.
 - (3) Review proposed development to assure 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.

- (4) Notify adjacent communities and the Tennessee Emergency Management Agency, State NFIP Office, prior to any alteration or relocation of a watercourse and submit evidence of such notification to FEMA.
- (5) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA to ensure accuracy of community FIRM's through the Letter of Map Revision process.
- (6) Assure that the flood carrying capacity within an altered or relocated portion of any watercourse is maintained.
- (7) Record the elevation, in relation to mean sea level or the highest adjacent grade, where applicable, of the lowest floor (including basement) of all new and substantially improved buildings, in accordance with Article IV, Section B.
- (8) Record the actual elevation, in relation to mean sea level or the highest adjacent grade, where applicable to which the new and substantially improved buildings have been Enclosed, in accordance with Section 38-38 (i)(ii).
- (9) When floodproofing is utilized for a nonresidential structure, obtain certification of design criteria from a Tennessee registered professional engineer or architect, in accordance with Section 38-38 (i)(ii).
- (10) 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 Ordinance.
- (11) When Base Flood Elevation data and floodway data have not been provided by FEMA, obtain, review, and reasonably utilize any Base Flood Elevation and floodway data available from a Federal, State, or other sources, including data developed as a result of these regulations, as criteria for requiring that new construction, substantial improvements, or other development in Zone A on the City of Chattanooga, Tennessee FIRM meet the requirements of this Ordinance.
- (12) Maintain all records pertaining to the provisions of this Ordinance in the office of the Administrator and shall be open for public inspection. Permits issued under the provisions of this Ordinance shall be maintained in a separate file or marked for expedited retrieval within combined files.
- (13) A final Finished Construction Elevation Certificate (the latest edition of FEMA Elevation Certificate Form) is required after construction is

completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy. The Finished Construction Elevation Certificate certifier shall provide at least 2 photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least 2 additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" x 3". Digital photographs are acceptable.

(ii) Permit Application Requirements.

To obtain a floodplain development permit, the applicant shall first complete an application, furnished for that purpose. Every floodplain development permit application shall:

- (1) Describe the land on which the proposed work is to be done by lot, block and tract, house and street address, or similar description that will readily identify and specifically locate the proposed structure or work;
- (2) Identify and describe the work to be covered by the floodplain development permit;
- (3) Indicate the use or occupancy for which the proposed work is intended;
- (4) Indicate the assessed value of the structure and the fair market value of the improvement;
- (5) Specify whether development is located in designated flood fringe or floodway;
- (6) Identify the existing base flood elevation and the elevation of the proposed development;

- (7) Be accompanied by plans drawn to scale and specifications for proposed construction;
 - (8) Be signed by the permittee or his/her authorized agent who may be required to submit evidence to indicate such authority; and
 - (9) Submit any other relevant information requested by the Director as necessary to properly evaluate the permit application.
- (iii) Recordkeeping. The Director must maintain applicable records in perpetuity documenting:
- (1) All certifications for dry floodproofing, alternative elevation methods, and construction in Coastal Districts, where applicable.
 - (2) Analysis of no-rise in the Floodway District, as detailed in Section 38-39 (e)(ii)(1), and encroachment analysis ensuring no more than one-half foot of rise in the General Floodplain District, as detailed in Section (g)(i)(3)(a) and 7.31.
 - (3) Final elevations, as applicable, detailing the elevation to which structures and improvements to structures are constructed or floodproofed. Elevations shall be determined by a Tennessee engineer, architect, surveyor or other qualified individual, as approved by the Director. In V Zones, the final elevations must be determined by a professional engineer or architect.
 - (4) Substantial damage as defined in Section 2.148 and substantial improvement as defined in Section 2.149 determinations, as detailed in Section 13.13, including the cost of improvements, repairs, and market value.
 - (5) The Director must maintain a record of all variance actions, including justification for their issuance, and must report such variances in an annual or biennial report to the Administrator of the National Flood Insurance Program, or when requested by the Federal Emergency Management Agency.
- (iv) Certificate of Zoning Compliance for a New, Altered, or Nonconforming Use. No building, land or structure may be occupied or used in any manner until land use, performance standard or conditional use permit has been issued by the Director stating that the finished fill and building floor elevations or other flood protection measures are in compliance with the requirements of this ordinance.
- (v) Notifications for Watercourse Alterations. Before authorizing any alteration or relocation of a river or stream, the Administrator must notify adjacent communities. A copy of the notification must also be submitted to FEMA.

- (vi) Notification to FEMA When Physical Changes Increase or Decrease Base Flood Elevations. Where physical changes affecting flooding conditions may increase or decrease the water surface elevation of the base flood, the applicant must notify FEMA of the changes in order to obtain a Letter of Map Revision (LOMR), by submitting a copy of the relevant technical or scientific data as soon as practicable, but no later than six months after the date such supporting information becomes available. Within the General Floodplain District, a map revision is only required if development results in stage increases greater than 0.5 feet.

(h) Procedure

(i) Application stage

- a) Elevation in relation to mean sea level of the proposed lowest floor, including basement, of all buildings where Base Flood Elevations are available, or to certain height above the highest adjacent grade when applicable under this Ordinance.
- b) Elevation in relation to mean sea level to which any non-residential building will be floodproofed where Base Flood Elevations are available, or to certain height above the highest adjacent grade when applicable under this Ordinance.
- c) A FEMA Floodproofing Certificate from a Tennessee registered professional engineer or architect that the proposed non-residential floodproofed building will meet the floodproofing criteria in Section 38-38 (d) (i-ii).
- d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- e) In order to determine if improvements or damage meet the Substantial Improvement or Substantial Damage criteria, the applicant shall provide to the Floodplain Administrator a detailed cost to repair all damages and/or cost of improvements which includes the complete costs associated with all types of work necessary to completely repair or improve a building. These include the costs of all materials, labor, and other items necessary to perform the proposed work. These must be in the form of:
 - i) An itemized costs of materials, and labor, or estimates of materials and labor that are prepared by licensed contractors or professional construction cost estimators
 - ii) Building valuation tables published by building code organizations and cost-estimating manuals and tools

available from professional building cost-estimating services.

- iii) A qualified estimate of costs that is prepared by the local official using professional judgement and knowledge of local and regional construction costs.
- iv) A detailed cost estimate provided and prepared by the building owner. This must include as much supporting documentation as possible (such as pricing information from lumber companies, plumbing and electrical suppliers, etc). In addition, the estimate must include the value of labor, including the value of the owner's labor.

(ii) Construction Stage

Within AE Zones, where Base Flood Elevation data is available, any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of, a Tennessee registered land surveyor and certified by same. The Administrator shall record the elevation of the lowest floor on the development permit. When floodproofing is utilized for a non-residential building, said certification shall be prepared by, or under the direct supervision of, a Tennessee registered professional engineer or architect and certified by same.

Within approximate A Zones, where Base Flood Elevation data is not available, the elevation of the lowest floor shall be determined as the measurement of the lowest floor of the building relative to the highest adjacent grade. The Administrator shall record the elevation of the lowest floor on the development permit. When floodproofing is utilized for a non-residential building, said certification shall be prepared by, or under the direct supervision of, a Tennessee registered professional engineer or architect and certified by same.

For all new construction and substantial improvements, the permit holder shall provide to the Administrator an as-built certification of the lowest floor elevation or floodproofing level upon the completion of the lowest floor or floodproofing.

Any work undertaken prior to submission of the 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.

(iii) Finished Construction Stage

A finished Construction Elevation Certificate is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Administrator will keep the certificate on file in perpetuity.

(i) Variance

(i) Authority

- (1) The City of Chattanooga, Tennessee City Council shall hear and decide appeals and requests for variances from the requirements of this section.

(ii) Procedure

- (1) Meetings of the City Council shall be held at such times, as the City Council shall determine. All meetings of the City Council shall be open to the public. The City Council shall adopt rules of procedure and shall keep records of applications and actions thereof, which shall be a public record.
- (2) An appeal to the City Council 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 Section. Such appeal shall be taken by filing with the Land Development Office a notice of appeal, specifying the grounds thereof. The Administrator shall transmit to the City Council all papers constituting the record upon which the appeal action was taken. The City Council shall hear 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 14 days from the date of the hearing. At the hearing, any person or party may appear and be heard in person or by agent or by attorney.
- (3) To hear and decide appeals where it is alleged by the applicant that there is error in any order, requirement, permit, decision, determination, or refusal made by the Director of the Land Development Office in carrying out or enforcement of any provisions of Section 38-38.
- (4) Any person aggrieved by the decision of the City Council or any taxpayer may appeal such decision to a court of competent jurisdiction.
- (5) Variances may be issued for the repair or rehabilitation of historic structures as defined, herein, 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 deviation

from the requirements of this Ordinance to preserve the historic character and design of the structure.

- (6) In passing upon applications which relate to areas of special flood hazard, the City Council will consider all technical evaluations, all relevant factors, standards specified in other sections of these regulations, and:
 - a) The danger that materials may be swept onto other lands to the injury of others.
 - b) The danger of life and property due to flooding or erosion.
 - c) The susceptibility of the proposed facility and its content flood damage and the effect of such damage on the individual owner.
 - d) The importance of the services provided by the proposed facility to the community.
 - e) The necessity to the facility of a waterfront location, in the case of a functionally dependent use.
 - f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
 - g) The compatibility of the proposed use with existing and anticipated development.
 - h) The relationship of the proposed use to the comprehensive plan and flood plain management program for that area.
 - i) The safety of access to the property in time of flood for ordinary and emergency vehicles.
 - j) 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.
 - k) The cost of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (7) Generally, 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. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (8) Upon consideration of the factors listed above and the purposes of these regulations, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of these regulations.
- (9) Variances will not be issued within the Floodway Zone if any increase in flood levels during the base flood discharge would result.

(iii) Conditions for Variances

- (1) Variances will only be issued upon a determination that the variance is the minimum relief necessary, considering the flood hazard, to afford relief. Variances will only be issued upon:
 - a) A showing of good and sufficient cause.
 - b) A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - c) 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 regulations.
- (2) Any applicant to whom a variance is granted will be given written notice specifying the difference between the base flood elevation and the elevation to which the building is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest flood elevation.
- (3) The Director of the Land Development Office will maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

(j) Penalties for Violation

- (i) Any person who violates these regulations or fails to comply with any of these requirements will, upon conviction thereof, be punished as provided in Article XVIII, and in addition pay all costs and expenses involved in the case. Each day such violation continues is considered a separate offense. Nothing prevents the City from taking such other lawful action as is necessary to prevent or remedy any violation.

Amend ARTICLE VIII. – SPECIAL PURPOSE ZONES, Section 38-39 F/H Flood Hazard by deleting in its entirety and replace with the following:

Sec. 38-39. RESERVED

Amend ARTICLE XVIII. – NONCONFORMITIES, Section 38-98 NONCONFORMING STRUCTURE, by adding the following:

(f) Within the Special Flood Hazard Area Districts

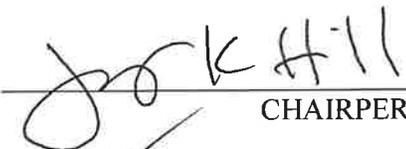
1. Within the floodway and general floodplain districts, any expansion or enlargement of uses or structures is prohibited.
2. Within all districts, any addition, modification, rehabilitation, repair, or alteration shall be in conformance with the provisions of this ordinance, shall not increase the flood damage

potential or increase the degree of obstruction to flood flows, and where applicable, must be protected to the Regulatory Flood Protection Elevation (RFPE).

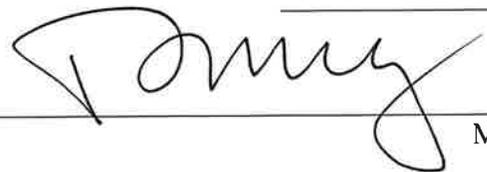
3. If any nonconforming structure is determined to be substantially damaged or substantially improved on the procedures outlined in the Substantial Damage and Substantial Improvement definitions, it may not be reconstructed except in conformity with the provisions of this ordinance. Any structures located outside the one-percent annual chance floodplain are exempt from this provision.
4. Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provision of this Ordinance, shall be undertaken only if said non-conformity is not further extended or replaced.

SECTION 2. BE IT FURTHER ORDAINED, That this Ordinance shall take effect two (2) weeks from and after its passage.

Passed on second and final reading: December 2, 2025



CHAIRPERSON
APPROVED: DISAPPROVED:



MAYOR

PAN/mem/v2