TITLE 14

ZONING AND LAND USE CONTROL

CHAPTER

- 1. MUNICIPAL PLANNING COMMISSION.
- 2. ZONING ORDINANCE.
- 3. FLOOD DAMAGE PREVENTION ORDINANCE.

CHAPTER 1

MUNICIPAL PLANNING COMMISSION

SECTION

- 14-101. Creation and membership.
- 14-102. Organization, powers, duties, etc.
- 14-103. Additional powers.
- 14-101. <u>Creation and membership</u>. Pursuant to the provisions of <u>Tennessee Code Annotated</u>, § 13-4-101 there is hereby created a municipal planning commission, hereinafter referred to as the planning commission. The planning commission shall consist of nine (9) members; two of these shall be the mayor and an aldermen selected by the board of mayor and aldermen; the other seven (7) members shall be appointed by the mayor. All members of the planning commission shall serve as such without compensation. Except for the initial appointments, the terms of the three (3) members appointed by the mayor shall be for three (3) years each. The three (3) members first appointed shall be appointed for terms of one, two, and three years respectively so that the term of one member expires each year. The terms of the mayor and the member selected by the board of mayor and aldermen shall run concurrently their terms of office. Any vacancy in an appointive membership shall be filled for the unexpired term by the mayor. (1984 Code, § 11-101)
- 14-102. <u>Organization, powers, duties, etc.</u> The planning commission shall be organized and shall carry out its powers, functions and duties in accordance with Tennessee Code Annotated, title 13. (1984 Code, § 11-102)
- 14-103. <u>Additional powers</u>. Having been designated as a regional planning commission, the municipal planning commission shall have the additional powers granted by, and shall otherwise be governed by the provisions of the state law relating to regional planning commissions. (1984 Code, § 11-103)

CHAPTER 2

ZONING ORDINANCE

SECTION

14-201. Land use to be governed by zoning ordinance.

14-201. <u>Land use to be governed by zoning ordinance</u>. Land use within the City of Waverly shall be governed by Ordinance Number 1987-4, titled "Zoning Ordinance, Waverly, Tennessee," and any amendments thereto.¹

¹Ordinance No. 1987-4, and any amendments thereto, are published as separate documents and are of record in the office of the city recorder.

CHAPTER 3

FLOOD DAMAGE PREVENTION ORDINANCE

SECTION

- 14-301. Definitions
- 14-302. Scope of application.
- 14-303. Basis for establishing the areas of special flood hazard.
- 14-304. Requirement for development permit.
- 14-305. Compliance.
- 14-306. Abrogation and greater restrictions.
- 14-307. Interpretation.
- 14-308. Warning and disclaimer of liability.
- 14-309. Penalties for violation.
- 14-310. Permit procedures.
- 14-311. Provisions for flood hazard reduction.
- 14-312. Variance procedures.
- 14-301. <u>Definitions</u>. Unless specifically otherwise defined, herein words or phrases used shall be interpreted to give them meaning they have in common usage and to assure the most reasonable application is given for the stated purposes and objectives of these regulations. Specific defined terms for the purposes hereof are as follows:
- (1) "Accessory structure" means a subordinate structure to a principal structure on the same lot which conforms to the following:
 - (a) Only used for parking of vehicles and storage;
 - (b) Designed to have low flood damage potential;
 - (c) Constructed and placed on the building site so as to offer minimum resistance to flow of flood waters;
 - (d) Firmly anchored to prevent flotation, collapse, and lateral movement which otherwise may result in damage to other structures; and
 - (e) Utilities and service facilities thereto, such as electrical and heating equipment, is elevated or otherwise protected from intrusion of flood waters.
- (2) "Act" means the statutes authorizing the National Flood Insurance Program as codified in 42 United States Code.
- (3) "Addition" when used in reference to existing building means any walled and roofed expansion to the perimeter or height of a building.
- (4) "Appeal" means a request for a review of the building inspector's interpretation of any provision of these regulations or a request for a permitted or authorized variance therefrom.
- (5) "Area of shallow flooding" means a designated AO or AH Zone on the Flood Insurance Rate Map ("FIRM") of the municipality with one percent (1%) or greater annual chance of flooding to an average depth of one to

- three feet (1'--3') 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.
- (6) "Area of special flood related erosion hazard" is land within the jurisdiction of the municipality 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.
 - (7) "Area of special flood hazard" see "special flood hazard area."
- (8) "Base flood" means a flood having a one percent (1%) 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 (1%) annual chance flood.
- (9) "Basement" means any portion of a building having its floor subgrade which is below ground level on all sides.
 - (10) "Building" see "structure."
- (11) "Building inspector" means that person designated as the administrator of regulatory codes and land uses enforcement from time to time by the municipality.
- (12) "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.
- (13) "Elevated building" means 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 flood water, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.
- (14) "Emergency flood insurance program" or "emergency program" means the 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.
- (15) "Erosion" means the process of the gradual wearing away of land masses. This process is not "per se" covered under NFIP.
- (16) "Exception" means a waiver from the provisions of these regulations which relieve the applicant from the requirements of a rule, regulation, order or other determination made or issued pursuant to these regulations.
- (17) "Existing construction" means any structure for which the start of construction commenced before the effective date of the initial or original flood plain management code, regulations or ordinances adopted for the municipality and which is the basis for the participation in the NFIP.

- (18) "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 pouring of concrete pads completed before the effective date of the first flood plain management code or ordinance adopted by the municipality as a basis for participation in the NFIP.
 - (19) "Existing structures" see "existing construction."
- (20) "Expansion to an existing manufactured home park or subdivision" means preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed and including installation of utilities, construction of streets, and either final site grading or pouring of concrete pads.
- (21) "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (a) Overflow of inland waters; and/or
 - (b) Unusual and rapid accumulation or runoff of surface waters from any source.
- (22) "Flood elevation determination" means a determination by the Federal Emergency Management Agency (FEMA) of the water surface elevations of a base flood.
- (23) "Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide or mudflow or flood related erosion hazards.
- (24) "Flood Hazard Boundary Map" or "FHBM" means an official map of the municipality and its designated planning region issued by FEMA where the boundaries of areas of special flood hazard have been designated as Zone A.
- (25) "Flood Insurance Rate Map" or "FIRM" means an official map of the municipality and its planning region issued by FEMA delineating the areas of special flood hazard or the risk premium zones applicable to the municipality.
- (26) "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.
- (27) "Flood plain" or "flood prone area" means any land area susceptible to being inundated by water from any source (see definition of "flood" or "flooding").
- (28) "Flood plain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and flood plain management regulations.
- (29) "Flood protection system" means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the

extent of the area within the municipality subject to a special flood hazard and the extent of the depths of associated flooding. Such a system typically includes dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

- (30) "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, water and sanitary facilities and structures and their contents.
- (31) "Flood related erosion" means the collapse or subsidence of land along the shore of a body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood, or by some similarly unusual and unforeseeable event which results in flooding.
- (32) Flood related erosion area" or flood related erosion prone area" means a land area adjoining the shore of a body of water which due to the composition of the shoreline or bank and high water levels or wind-driven currents is likely to suffer flood related erosion damage.
- (33) Flood related erosion area management" means the operation of an overall program of corrective and preventive measures for reducing flood related erosion damage, including but not limited to emergency preparedness plans, flood related erosion control works and flood plain management regulations.
- (34) "Floodway" means the channel of a 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.
- (35) "Freeboard" means a factor of safety usually expressed in feet above a flood level for purposes of flood plain 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.
- (36) "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 facilities that are necessary for the loading and unloading of cargo or passengers, but does not include long-term storage or related manufacturing facilities.
- (37) "Highest adjacent grade" means the highest natural elevation of the ground surface, prior to construction, adjacent to the proposed walls of a structure.
 - (38) "Historic structure" means any structure that is:
 - (a) Listed individually in the National Register of Historic Places as maintained by the U.S. Department of Interior (the "National

Register") or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- (b) 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;
- (c) Individually listed on the Tennessee Inventory of Historic Places determined as eligible by Tennessee's historic preservation program which has been approved by the Secretary of the Interior (the "Tennessee Program"); or
- (d) Individually listed by the municipality on its inventory of historic places and determined as eligible as an historic preservation program certified either:
 - (i) By the approved Tennessee program as determined by the Secretary of the Interior; or
 - (ii) Directly by the Secretary of the Interior.
- (39) "Levee" means a man-made structure, usually as 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.
- (40) "Levee system" means a flood protection system which consists of levees and associated structures such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.
- (41) "Lowest floor" means the lowest enclosed area of a building including a basement. An unfinished or flood resistant enclosure used solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of these regulations.
- (42) "Manufactured home" means a structure, transportable in one (1) 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. Manufactured home does not include a recreational vehicle.
- (43) "Manufactured home park" or "manufactured home subdivision" means a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.
- (44) "Map" means the Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for the municipality issued by FEMA.
- (45) "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 flood plain. For the purposes of these regulations 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 the FIRM.

- (46) "Municipality" means the City of Waverly, Tennessee, a municipal corporation and body politic existing under the laws of the State of Tennessee.
- (47) "National Geodetic Vertical Datum" or "NGVD" means, as corrected in 1929, a vertical control used as a reference for establishing varying elevations within the flood plain.
- (48) "New construction" means any structure for which the start of construction commenced on or after the effective date of the initial flood plain management regulations of the municipality and includes any subsequent improvements to such structure.
- (49) "New manufactured home park" or "new manufactured home subdivision" means a permitted land use development for use for manufactured homes and 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 these regulations or the effective date of the initial flood plain management regulations of the municipality and any subsequent improvements to such development and any structure therein.
- (50) "North American Vertical Datum" or "NAVD" means, as corrected in 1988, a vertical control used as a reference for establishing varying elevations within the flood plain.
 - (51) "100-year flood" see "base flood."
- (52) "Person" includes any individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies.
- (53) "Reasonably safe from flooding" means a condition of land in an area where 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.
 - (54) "Recreational vehicle" means a vehicle which is:
 - (a) Built on a single chassis;
 - (b) Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - (c) Designed to be self-propelled or permanently towable by a light duty truck;
 - (d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- (55) "Regulatory floodway" means the channel of a 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.
- (56) "Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

- (57) "Special flood hazard area" is the land in the flood plain within the municipality subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE or A99.
- (58) "Special hazard area" means an area having special flood, mudslide, mudflow and/or flood related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, or AH.
- "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 one hundred eighty (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.
- (60) "State coordinating agency" is the Tennessee Department of Economic and Community Development Local Planning Assistance Office, as designated by the governor at the request of FEMA to assist in the implementation of the NFIP.
- (61) "Structure" means a walled and roofed building or manufactured home or a gas or liquid storage tank which is principally above ground.
- (62) "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.
- (63) "Substantial improvement" means any reconstruction, rehabilitation, addition, alteration or other improvement of a structure in which the cost equals or exceeds fifty percent (50%) 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:
 - (a) The appraised value of the structure prior to the start of the initial improvement; or

- (b) In the case of substantial damage, the value of the structure prior to the damage occurring. The term does not, however, include either:
 - (i) 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
 - (ii) Any alteration of a historic structure; provided that the alteration will not preclude continued designation as a historic structure.
- (64) "Substantially improved existing manufactured home parks or subdivisions" is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.
- (65) "Variance" is a grant of relief from the requirements of these regulations.
- (66) "Violation" means the failure of a structure or other development to be fully compliant with municipal flood plain management regulations. A structure or other development without the elevation certificate, other certification, or other evidence of compliance required in these regulations is presumed to be in violation until such time as that documentation is provided.
- (67) "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 flood plains of riverine areas. (as added by Ord. #2009-8, June 2009)
- 14-302. <u>Scope of application</u>. These regulations shall govern land uses by owners and occupiers thereof in all areas within the municipality. (as added by Ord. #2009-8, June 2009)
- 14-303. <u>Basis for establishing the areas of special flood hazard</u>. The areas of special flood hazard are those geographical areas in the municipality (community no. 470095) as identified by FEMA, and in its Flood Insurance Study (FIS) 47085CVOOOA and Flood Insurance Rate Map (FIRM), community panel numbers 0050, 0153, 0154, 0156, 0157, 0158, 0159, 0176, 0155, 0177, 0179, 0178, 0190, 0170, 0165, and 0150, along with all supporting technical data, which are adopted by reference and declared to be a part of these regulations. A copy thereof shall be available for inspection by any interested person during normal business hours in the office of the building inspector. (as added by Ord. #2009-8, June 2009)

- 14-304. Requirement for development permit. No person shall commence any land use development activities before obtaining from the building inspector a development permit issued in conformity with these regulations. (as added by Ord. #2009-8, June 2009)
- 14-305. <u>Compliance</u>. No person shall locate, extend, convert or structurally alter land, structures or otherwise use the same without fully complying with the terms of these and other applicable municipal regulations. (as added by Ord. #2009-8, June 2009)
- 14-306. <u>Abrogation and greater restrictions</u>. Nothing contained herein is intended to repeal, abrogate, or impair any existing easement, covenant or deed restriction applicable to any parcel of land. However, where these regulations conflict or overlap with another regulatory or restrictive land use instrument then whichever imposes the more stringent restriction shall prevail. (as added by Ord. #2009-8, June 2009)
- 14-307. <u>Interpretation</u>. In the interpretation and application of these regulations all provisions shall be:
 - (1) Considered minimum requirements;
 - (2) Liberally construed in favor of the municipality; and
- (3) Deemed neither to limit nor repeal any other powers granted to the municipality pursuant to Tennessee law. (as added by Ord. #2009-8, June 2009)
- 14-308. Warning and disclaimer of liability. The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. These regulations and the adoption, enforcement or application of the same does not imply that there exists or may exist lands in the municipality which are outside of the areas of special flood or that hazards or uses permitted within areas of special flood will be free from flooding or flood damages. These regulations and the application and enforcement hereof shall not be deemed to create liability on the part of the municipality or any officer or employee thereof for any flood damages which may result from reliance on the same or any administrative decision lawfully made hereunder. (as added by Ord. #2009-8, June 2009)
- 14-309. <u>Penalties for violation</u>. A person who violates any provision of these regulations or who fails to comply with any of the requirements hereof, including violation of conditions and safeguards established in connection with grants of variance, on being found guilty thereof, shall be fined fifty dollars (\$50.00) for each such offense and in addition shall pay all costs assessed thereon. Each day that a violation continues shall be deemed a separate offense.

Nothing herein contained shall prevent the municipality from taking such other lawful action at law or in equity it deems appropriate to prevent or remedy any violation. (as added by Ord. #2009-8, June 2009)

- 14-310. <u>Permit procedures</u>. Application for a development permit as required by these regulations shall be made to the building inspector prior to commencement of any development activities. The development permit application shall be on forms furnished by the building inspector and shall include, but not be necessarily limited to, plans in duplicate drawn to scale 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. Specifically, the following information is required:
 - (1) <u>Application stage</u>. (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 these regulations.
 - (b) Elevation in relation to mean sea level to which any nonresidential building will be floodproofed where base flood elevations are available, or to certain height above the highest adjacent grade when applicable under these regulations.
 - (c) A FEMA floodproofing certificate from a Tennessee registered professional engineer or architect that the proposed nonresidential floodproofed building will meet the floodproofing criteria in these regulations.
 - (d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
 - (2) <u>Construction stage</u>. (a) 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 building inspector shall record the elevation of the lowest floor on the development permit. When floodproofing is utilized for a nonresidential building the certification shall be prepared by or under the direct supervision of a Tennessee registered professional engineer or architect and certified by same.
 - (b) 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 building inspector shall record the elevation of the lowest floor on the development permit. When floodproofing is utilized for a nonresidential building the certification shall be prepared by or under the direct supervision of a Tennessee registered professional engineer or architect and certified by same.

- (c) For all new construction and substantial improvements the permit holder shall provide to the building inspector an as-built certification of the lowest floor elevation or floodproofing level upon the completion of the lowest floor or floodproofing.
- (d) Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building inspector shall review the 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.
- (3) <u>Duties and responsibilities of the building inspector</u>. Duties of the building inspector include, but are not be limited to, the following:
 - (a) Review all development permits to assure that the permit requirements of these regulation have been satisfied and that proposed building sites will be reasonably safe from flooding.
 - (b) 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 USC 1334.
 - (c) 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.
 - (d) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA to ensure accuracy of community FIRMs through the letter of map revision process.
 - (e) Assure that the flood carrying capacity within an altered or relocated portion of any watercourse is maintained.
 - (f) 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.
 - (g) Record the actual elevation in relation to mean sea level or the highest adjacent grade where applicable to new and substantially improved buildings which have been floodproofed in accordance with these regulations.
 - (h) When floodproofing is utilized for a nonresidential structure, obtain certification of design criteria from a Tennessee registered professional engineer or architect in accordance with these regulations.
 - (i) 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 these regulations.

- (j) 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 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 of the FIRM meet the requirements of these regulations.
- (k) Maintain all records pertaining to the provisions of these regulations in the office of the building inspector which shall be open for public inspection. Permits issued under the provisions of these regulations shall be maintained in a separate file or marked for expedited retrieval within combined files. (as added by Ord. #2009-8, June 2009)
- 14-311. <u>Provisions for flood hazard reduction</u>. (1) <u>General standards</u>. In all special flood hazard areas, the following provisions are required:
 - (a) New construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure;
 - (b) 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;
 - (c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
 - (d) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;
 - (e) 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;
 - (f) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - (g) 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;

- (h) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (i) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of these regulations shall meet the requirements of new construction;
- (j) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provision of these regulations shall be undertaken only if said non-conformity is not further extended or replaced;
- (k) 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 USC 1334;
- (l) All subdivision proposals and other proposed new development proposals shall meet the standards of these regulations;
- (m) When proposed new construction and substantial improvements are partially located in an area of special hazard the entire structure shall meet the standards for new construction;
- (n) 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.
- (2) <u>Specific standards</u>. In all areas of special flood hazard, the following provisions, in addition to those set forth in these regulations are required:
 - (a) Residential structures. (i) 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 one foot (1') above 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 these regulations.
 - (ii) Within approximate A Zones where base flood elevations have not been established and where alternative data is not available, the building inspector shall require the lowest floor of a building to be elevated to a level of at least three feet (3') above the highest adjacent grade. 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 these regulations.
- (b) Nonresidential structures. (i) In AE Zones, where base flood elevation data is available, new construction and substantial improvement of any commercial, industrial, or nonresidential building, shall have the lowest floor, including basement, base flood elevated or floodproofed to no lower than one foot (1') 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 hereof.
- (ii) 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 nonresidential building, shall have the lowest floor, including basement, elevated or floodproofed to no lower than three feet (3') above the highest adjacent grade. 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 hereof.
- (iii) Nonresidential 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 building inspector as set forth in these regulations.
- (c) Enclosures. (i) 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.
- (ii) 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:

- (A) Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
- (B) The bottom of all openings shall be no higher than one foot (1') above the finished grade;
- (C) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of flood waters in both directions.
- (iii) The enclosed area shall be the minimum necessary to allow for parking of vehicles, storage or building access.
- (iv) 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 flood waters and all such partitions shall comply with the provisions of these regulations.
- (d) Standards for manufactured homes and recreational vehicles.
 - (i) All manufactured homes placed, or substantially improved, on:
 - (A) Individual lots or parcels;
 - (B) Expansions to existing manufactured home parks or subdivisions; or
 - (C) New or substantially improved manufactured home parks or subdivisions, must meet all the requirements of new construction.
 - (ii) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that either:
 - (A) In AE Zones, with base flood elevations, the lowest floor of the manufactured home is elevated on a permanent foundation to no lower than one foot (1') above the level of the base flood elevation;
 - (B) 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 feet (3') in height above the highest adjacent grade.
 - (iii) Any manufactured home, which has incurred substantial damage as the result of a flood, must meet the standards of these regulations.
 - (iv) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement;
 - (v) All recreational vehicles placed in an identified special flood hazard area must either:

- (A) Be on the site for fewer than one hundred eighty (180) consecutive days;
- (B) 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
- (C) The recreational vehicle must meet all the requirements for new construction.
- (e) Standards for subdivisions and other proposed new development proposals.
 - (i) Subdivisions and other proposed new developments including manufactured home parks shall be reviewed to determine whether such proposals will be reasonably safe from flooding.
 - (ii) All subdivision and other proposed new development proposals shall be consistent with the need to minimize flood damage.
 - (iii) All subdivision and other proposed 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.
 - (iv) All subdivision and other proposed new development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
 - (v) In all approximate A Zones require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks or subdivisions) greater than fifty (50) lots or five (5) acres, whichever is the lesser, include within such proposals base flood elevation data.
- (3) Standards for special flood hazard areas with established base flood elevations and with floodways designated. Located within the special flood hazard areas established in these regulations, 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:
 - (a) Encroachments are prohibited, including earthen fill material, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the cumulative effect of the proposed encroachments or

new development shall not result in any increase in the water surface elevation of the base flood elevation, velocities, or floodway widths during the occurrence of a base flood discharge at any point within the municipality. A Tennessee registered professional engineer must provide supporting technical data using the same methodologies as in the effective flood insurance study for the municipality and certification thereof;

- (b) New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of these regulations.
- (4) <u>Standards for areas of special flood hazard zones AE with established base flood elevations but without floodways designated</u>. Located within the special flood hazard areas established in these regulations where streams exist with base flood data, provided but where no floodway has been designated (Zones AE), the following provisions apply:
 - (a) No encroachments, including fill material, new construction and substantial improvements shall be located within special flood hazard areas 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 (1') at any point within the municipality. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles;
 - (b) New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of these regulations.
- (5) <u>Standards for streams without established base flood elevations</u> and floodways (A Zones). Located within the special flood hazard areas established in these regulations, where streams exist, but no base flood data has been provided, and where a floodway has not been delineated, the following provisions shall apply:
 - (a) The building inspector 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 (b) below), as criteria for requiring that new construction, substantial improvements, or other development in approximate A Zones meet the requirements of these regulations;
 - (b) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks or subdivisions) greater than fifty (50) lots or five (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 feet (3') above the highest adjacent grade. All applicable data including elevations or flood proofing certifications shall be recorded as set forth in these regulations. Openings sufficient to facilitate automatic equalization of hydrostatic flood forces on exterior walls shall be provided in accordance with the standards of these regulations;
- (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 foot (1') at any point within the municipality. 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 these regulations. Within approximate A Zones, these regulations require the provisions of these regulations, dealing with the alteration or relocation of a watercourse, that the watercourse carrying capacities are maintained and that manufactured home provisions are also complied with as required.
- (6) Standards for areas of shallow flooding (AO and AH Zones). Located within the special flood hazard areas established in these regulations are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1' 3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions, in addition to those otherwise set forth in herein, also:
 - (a) All new construction and substantial improvements of residential and nonresidential buildings shall have the lowest floor, including basement, elevated to at least one foot (1') above as many feet as the depth number specified on the FIRMs, in feet, above the highest adjacent grade. If no flood depth number is specified on the FIRM, the lowest floor, including basement, shall be elevated to at least three feet (3') above the highest adjacent grade. Openings sufficient to facilitate automatic equalization of hydrostatic flood forces on exterior walls shall be provided in accordance with standards of these regulations;

- (b) All new construction and substantial improvements of nonresidential buildings may be floodproofed in lieu of elevation. The structure together with attendant utility and sanitary facilities must be floodproofed and designed watertight to be completely floodproofed to at least one foot (1') above the flood depth number specified on the FIRM, with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If no depth number is specified on the FIRM, the structure shall be floodproofed to at least three feet (3') above the highest adjacent grade. 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 of these regulations and shall provide such certification to the building inspector and as required by these regulations;
- (c) Adequate drainage paths shall be provided around slopes to guide floodwaters around and away from proposed structures.
- (7) <u>Standards for areas protected by flood protection system (A-99 Zones)</u>. Located within the areas of special flood hazard established in these regulations are areas of the 100-year flood plain protected by a flood protection system but where base flood elevations have not been determined. Within these areas (A-99 Zones) provisions of these regulations.
- (8) <u>Standards for unmapped streams</u>. Located within the municipality 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 foot (1') 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 these regulations. (as added by Ord. #2009-8, June 2009)

14-312. Variance procedures. (1) Board of zoning appeals.

(a) Authority. The Board of Zoning Appeals (BZA) of the municipality shall hear and decide appeals and requests for variances from the requirements of these regulations.

- (b) Procedure. Meetings of the BZA shall be held at such times as it shall determine. All meetings shall be open to the public. The BZA shall adopt rules of procedure and shall keep records of applications and actions thereof which shall be a public record.
- Appeals: how taken. An appeal to the BZA may be taken by any person, firm or corporation aggrieved or by any governmental officer, department, or bureau affected by any decision of the building inspector based in whole or in part upon the provisions of these regulations. Such appeal shall be taken by filing with the BZA a notice of appeal specifying the grounds thereof. In all cases where an appeal is made by a property owner or other interested party a fee of five hundred dollars (\$500.00) for the cost of publishing a notice of such hearings and other administrative requirements shall be paid by the appellant. The building inspector shall transmit to the BZA all papers constituting the record upon which the appeal is taken. The BZA 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 sixty (60) days from the date of the hearing. At the hearing any person or party may appear and be heard in person, by agent and by attorney.
 - (d) Powers. The BZA shall have the following powers:
 - (i) Administrative review. 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 building inspector or other administrative official in carrying out or enforcement of any provisions of these regulations.
 - (ii) Variance procedures. In the case of a request for a variance the following shall apply:
 - (A) The BZA shall hear and decide appeals and requests for variances from the requirements of these regulations.
 - (B) 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 these regulations to preserve the historic character and design of the structure.
 - (C) In passing upon such applications the BZA shall consider all technical evaluations, all relevant factors, all standards specified in these regulations and:
 - (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 municipality;
- (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 flood plain 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.
- (D) Upon consideration of the factors listed above, and the purposes of these regulations, the BZA may attach such conditions to the granting of variances, as it deems necessary to effectuate the purposes of these regulations.
- (E) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (2) <u>Conditions for variances</u>. (a) Variances shall be issued upon a determination that the variance is the minimum relief necessary considering the flood hazard and the factors listed in these regulations.
- (b) Variances shall only be issued upon a showing of good and sufficient cause; determination that failure to grant the variance would result in exceptional hardship; or a determination that 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 other local laws or ordinances.

- (c) An 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 as high as twenty-five dollars (\$25.00) for each one hundred dollars (\$100.00) coverage, and that such construction below the base flood elevation increases risks to life and property.
- (d) The building inspector shall maintain the records of all appeal actions and report any variances to FEMA upon request. (as added by Ord. #2009-8, June 2009)