

## **ORDINANCE 2024-13**

**AN ORDINANCE TO REPEAL AND REPLACE IN ITS ENTIRETY CHAPTERS TWO (2), THREE (3), AND FOUR (4) OF TITLE 12 OF THE BELLE MEADE MUNICIPAL CODE (“THE STORMWATER ORDINANCE”) TO UPDATE LANGUAGE AND PROVISIONS WITHIN THE SAME.**

**WHEREAS**, Title 12 of the Municipal Code includes Chapter 2, Stormwater Ordinance, Chapter 3, Stormwater Fee Ordinance, and Chapter 4, Floodplain Zoning Ordinance; and

**WHEREAS**, the City of Belle Meade’s engineering consultants, Civil Engineering Consultants, Inc., reviewed and recommends changes to these Chapters in order to better meet the requirements of federal and state laws and regulations; and

**WHEREAS**, the City of Belle Meade first adopted a Stormwater Ordinance in 2004 and it has subsequently been amended as approved by the Board of Commissioners, with the most recent changes occurring by the adoption of Ordinances 2015-8, 2022-3, and 2023-9.

**NOW THEREFORE:**

**BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF BELLE MEADE AS FOLLOWS:**

**SECTION 1.** Title 12, Chapter 2 “Stormwater Ordinance” of the Belle Meade Municipal Code is hereby repealed and replaced in its entirety, as follows in Attachment A.

**SECTION 2.** Title 12, Chapter 3 “Stormwater Fee Ordinance” of the Belle Meade Municipal Code is hereby repealed and replaced in its entirety, as follows in Attachment A.

**SECTION 3.** Title 12, Chapter 4 “Municipal Floodplain Zoning Ordinance” of the Belle Meade Municipal Code is hereby repealed and replaced in its entirety, as follows in Attachment A.

**SECTION 4.** This ordinance shall become effective immediately after its passage, the health, safety, and welfare of the citizens of Belle Meade requiring it.

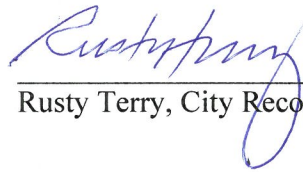
Passed on First Reading: July 17, 2024

Passed on Second Reading: August 21, 2024



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Rusty Moore, Mayor



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Rusty Terry, City Recorder



**TITLE 12****BUILDING, UTILITY, ETC. CODES<sup>1</sup>****CHAPTER**

1. BUILDING REGULATIONS.
2. STORMWATER ORDINANCE.
3. STORMWATER FEE ORDINANCE.
4. FLOOD DAMAGE PREVENTION ORDINANCE.
5. TREE MANAGEMENT AND PROTECTION.

**CHAPTER 1****BUILDING REGULATIONS<sup>2</sup>****SECTION**

- 12-101. International Residential Code for one and two family dwellings adopted.
- 12-102. Regulations for other structures.
- 12-103. Modifications to dwelling code.
- 12-104. Board of building code appeals.

**12-101. International Residential Code for one and two family dwellings adopted.** Two (2) copies of which are on file in the office of the building and zoning department being marked and designated as the 2015 International Residential Code, including chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 33, 40 and 42 together with appendix chapters F, H, J, and O as published by the International Code Council and is hereby adopted as the Building Code of the City of Belle Meade for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of one- and two-family dwellings and not more than three (3) stories in height in the City of Belle Meade, and providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, conditions and terms of such International Residential Code, 2015 edition, published by the International Code Council on file in the office of the City of Belle Meade are hereby referred to, adopted and made a part hereof as if fully set out in this section.

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<sup>1</sup>Chapters 2 "Stormwater Ordinance" and 4 "Flood Damage Prevention Ordinance" have been relocated to this title from title 14 by Ord. #2015-8, Feb. 2015.

<sup>2</sup>Municipal code reference  
Zoning code: title 14.

(2) Notwithstanding the foregoing, plumbing, electrical and/or gas mechanical construction, inspections and permits are covered by and subject to the provisions of the Building Code of the Metropolitan Government of Nashville and Davidson County, and are administered by the metropolitan department of codes administration.

(3) Each property owner is solely responsible for compliance with any applicable metropolitan government building codes and inspections by the City of Belle Meade do not relieve such owner of this responsibility.

(4) That if any section, subsection, sentence, clause or phrase of this section is, for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this section. The City of Belle Meade hereby declares that it would have passed the ordinance comprising this section, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

(5) That the building and zoning department is hereby ordered and directed to cause the ordinance comprising this section to be published.

(6) That this section and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect fifteen (15) days from and after the date of its final passage and adoption. (As replaced by ord. 84-13. 1987 Code, § 4-101, as amended by ord. 88-5, § 1; ord. 90-12, § 1; Ord. #94-7, § 1, Sept. 1997; Ord. #97-1, Feb. 1997; and Ord. #2002-12, January 2003, as replaced by Ord. #2007-8, Aug. 2007, and amended by Ord. #2015-7, Aug. 2015, and Ord. #2019-10, Dec. 2019 *Ch8\_01-19-22*)

**12-102. Regulations for other structures.** With respect to buildings or structures other than one and two family dwellings, applicability of Tennessee Code Annotated, title 68, ch. 120, is hereby recognized, and the Building Inspector of the City of Belle Meade is hereby designated as the municipal building official referred to in Tennessee Code Annotated, § 68-120-106. (As replaced by ord. 84-13. 1987 Code, § 4-102, as amended by Ord. #94-7, § 1, Sept. 1994)

**12-103. Modifications to dwelling code.** For the purposes of this chapter, the following sections of the International Building Code adopted hereby by reference are deleted, modified or amended to read as indicated:

(1) R-105. Permit required. A permit shall be obtained before beginning construction, alteration, or repairs, other than ordinary repairs, using application forms furnished by the Building Official. Ordinary repairs are nonstructural repairs and do not include addition to, alteration of, or replacement or relocation of water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric

# ATTACHMENT A of ORDINANCE 2024-13

## CHAPTER 2

### STORMWATER ORDINANCE

#### 12-201. General provisions.

(1) Purpose. It is the purpose of this ordinance to:

- (a) Protect, maintain, and enhance the environment of the City of Belle Meade and the public health, safety, and the general welfare of the citizens of the City, by controlling discharges of pollutants to the City's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the City;
- (b) Enable the City of Belle Meade to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR 122 for stormwater discharges;
- (c) Allow the City of Belle Meade to exercise the powers granted in Tennessee Code Annotated §68-221-1105, which provides that, among other powers cities have with respect to stormwater facilities, is the power by ordinance or resolution to:
  - (i) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the City, whether or not owned and operated by the City;
  - (ii) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;
  - (iii) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater pollutants as may be necessary to protect water quality;
  - (iv) Review and approve plans and plats for stormwater management for properties throughout the City;
  - (v) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;
  - (vi) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
  - (vii) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
  - (viii) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(2) Administering entity. The City of Belle Meade shall administer the provisions of this ordinance.

(3) Stormwater management ordinance. The intended purpose of this ordinance is to safeguard property and public welfare by regulating stormwater drainage and requiring temporary and permanent provisions for its control. It should be used as a planning and engineering implement to facilitate the necessary control of stormwater.

#### 12-202. Definitions.

For the purpose of this ordinance, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the

present tense shall include the future tense. The word “shall” is mandatory and not discretionary. The word “may” is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster’s Dictionary.

- (1) *“Administrative or Civil Penalties”* Under the authority provided in Tennessee Code Annotated §68-221-1106, the City declares that any person violating the provisions of this chapter may be assessed a civil penalty by the City of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.
- (2) *“Aquatic Resources Alteration Permit” (ARAP)* is a permit required to make an alteration to a stream, river, lake, or wetland. Physical alterations to properties of Waters of the State require an ARAP or a §401 Water Quality Certification (§401 certification). Examples of stream alterations that require a permit from the Division include:
  - (a) Dredging, excavation, channel widening, or straightening;
  - (b) Bank sloping and/or bank stabilization;
  - (c) Channel relocation;
  - (d) Water diversions or withdrawals;
  - (e) Dams, weirs, dikes, levees, or other similar structures;
  - (f) Flooding, excavating, draining, and/or filling a wetland;
  - (g) Road and utility crossings; and
  - (h) Structural fill

General ARAPs are developed and maintained by the Division to provide a streamlined, expedited means of authorizing projects that singularly or cumulatively proposed minor impacts to water resources.

- (3) *“As-Built”* or *“Record drawings”* means a set of drawings and documents that delineate and describe the as-built condition of stormwater control measures and stormwater management facilities as actually constructed, including but not limited to elevation, size, type, slope, location, etc. These drawings and associated documents shall be prepared by a registered professional engineer or registered landscape architect that is familiar with the city-approved stormwater management plan for the property and may be based on as-built survey information prepared by a registered land surveyor.
- (4) *“Best Management Practices” (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to Waters of the State. BMPs also include treatment requirements, operating procedures; and practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage. BMPs include source control practices (non-structural BMPs) and engineered structures designed to treat runoff. Where structural BMPs are facilities that help prevent pollutants in stormwater runoff from leaving the site and non-structural BMPs are techniques, activities and processes that reduce pollutants at the source.
- (5) *“Borrow Pit”* is an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this Ordinance.
- (6) *“Buffer Zone”* or *“Water Quality Riparian Buffer”* is a permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential

sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.

- (7) “City” is the City Manager or the Planning Director or their designee.
- (8) “Clearing” refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or powerlines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).
- (9) “Common plan of development or sale” is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.
- (10) “Community water” means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Belle Meade. It may be necessary to use methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17) to identify a community water.
- (11) “Design storm event” means a hypothetical storm event, of a given frequency interval and duration, as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent. The estimated design rainfall amounts, for any return period interval (i.e., 1-year, 2-year, 5-year, 10-year, 25-year, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the data available at: [https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_map\\_cont.html](https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html).
- (12) “Discharge” means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system.
- (13) “Disturbed area” means the total area presented as part of the development (and/or of a larger common plan of development or sale) subject to being cleared, graded, grubbed, filled or excavated during the life of the development. The area cannot be limited to only the portion of the total area that the site-wide owner/developer initially disturbs through the process of various land clearing activities or in the construction of roadways, sewers, drainfields, and water utilities, stormwater drainage structures, etc., to make the property marketable.
- (14) “Division” means the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.
- (15) “Easement” means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, city or other legal entity has in the land of another.



- (16) “*Erosion*” means the removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by human activities or effects.
- (17) “*Erosion prevention and sediment control plan (EPSC plan)*” means a written plan (including drawings or other graphic representations) that is designed to minimize the erosion and sediment runoff at a site during construction activities.
- (18) “*Exceptional Tennessee Waters (ETWs)*” are surface waters designated by the Division as having the characteristics set forth at Tennessee Rules, Chapter 0400-40-03-.06(4). Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designed as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.
- (19) “*Illicit connections*” means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.
- (20) “*Illicit discharge*” means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under §7(2).
- (21) “*Improved sinkhole*” is a natural surface depression that has been altered in order to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under TDEC’s Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices, such as those commonly associated with weathering of limestone.
- (22) “*Land Disturbance Permittee Inspector*” is a person with one of the following qualifications:
  - a. a valid certification for “Fundamentals of Erosion Prevention and Sediment Control Level I” course,
  - b. a registered professional engineer or landscape architect licensed in the State of Tennessee,
  - c. a Certified Professional in Erosion and Sediment Control (CPESC), or
  - d. a valid certification for “Design Principles for Erosion Prevention and Sediment Control for Construction Sites Level II” course.

An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

- (a) Oversee the requirements of other construction-related permits, such as Aquatic Resources Alteration Permit (ARAP) or Corps of Engineers permit for construction activities in or around Waters of the State;
- (b) update field SWPPPs;
- (c) conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial erosion prevention and sediment control (EPSC) measures have been installed per the city-approved plan(s);
- (d) Perform twice weekly inspections as described in the Tennessee Department of Conservation (TDEC) Construction General Permit (CGP) to verify and document the functionality and performance of the EPSC measure described in the EPSC plan and Stormwater Pollution Prevention Plan for all developments and redevelopments requiring a land disturbance permit as determined by this Ordinance; and

- (e) inform the permit holder of activities that may be necessary to gain or remain in compliance with the TDEC CGP, Land Disturbance Permit, and other environmental permits.
- (23) “*Linear project*” is a land disturbing activity as conducted by an underground/overhead utility or highway department, including, but not limited to, any cable line or wire for the transmission of electrical energy; any conveyance pipeline for transportation of gaseous or liquid substances; any cable line or wire for communications; or any other energy resource transmission ROW or utility infrastructure, e.g., roads and highways. Activities include the construction and installation of these utilities within a corridor. Linear project activities also include the construction of access roads, staging areas and borrow/spoil sites associated with the linear project. Land disturbance specific to the development of residential and commercial subdivisions or high-rise structures is not considered a linear project.
- (24) “*Maintenance*” means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.
- (25) “*Maintenance agreement*” means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
- (26) “*Municipal separate storm sewer system (MS4)*” is defined in 40 CFR §122.266(b)(8) to mean a conveyance or system of conveyances (e.g., roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that are:
  - (a) Owned and operated by the City;
  - (b) Designed or used for collecting or conveying stormwater;
  - (c) Not a combined sewer; and
  - (d) Not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR §122.2.
- (27) “*National Pollutant Discharge Elimination System permit*” or a “*NPDES permit*” means a permit issued pursuant to 33 U.S.C. 1342.
- (28) “*Off-site facility*” means a structural stormwater control measure located outside the subject property boundary described in the permit application for land development activity.
- (29) “*On-site facility*” means a structural stormwater control measure located within the subject property boundary described in the permit application for land development activity.
- (30) “*Peak flow*” means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
- (31) “*Permanent stabilization*” means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:
  - (a) A perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion;

- (b) Equivalent permanent stabilization measures such as the use of riprap; permanent geotextiles; hardened surface materials including concrete, asphalt, gabion baskets or Reno mattresses have been employed; or
  - (c) For construction projects on land used for agricultural or silvicultural purposes, permanent stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.
- (32) “*Person*” means any and all persons, any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.
  - (33) “*Point source*” means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure which pollutants are or may be discharged. This term does not include introduction of pollutants from non-point source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, forest lands, or return flows from irrigated agriculture or agricultural stormwater runoff. In short, outfall is a point where runoff leaves the site as a concentrated flow in a discrete conveyance.
  - (34) “*Pollutant*” means sewage, industrial wastes, or other wastes.
  - (35) “*Priority area*” means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.
  - (36) “*Priority construction activity*” means land disturbance and/or construction activities discharging directly into, or immediately upstream of, waters of the state recognized as unavailable parameters for siltation/sedimentation or Exceptional Tennessee Waters.
  - (37) “*Registered engineer*” or “*Registered landscape architect*” means someone certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.
  - (38) “*Runoff coefficient*” means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is not absorbed by the surface to the total amount of water that falls during a rainstorm.
  - (39) “*Sediment*” means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported; or has been moved from its site of origin by air, water, gravity, or ice as a product of erosion.
  - (40) “*Sediment basin*” is a temporary basin consisting of an embankment constructed across a wet weather conveyance, an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, impoundment, permanent pool, primary spillway, secondary or emergency spillway, and surface dewatering device. The size and shape of the basin depends on the location, size of the drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., waters with unavailable parameters, Exceptional Tennessee Waters, or waters with available parameters).
  - (41) “*Sedimentation*” means the action or processing of forming or depositing sediment.
  - (42) “*Significant contributor*” is defined as a source of pollutants where the volume, concentration, or mass of a pollutant in a stormwater discharge can cause or threaten to cause pollution, contamination, or nuisance that adversely impact human health or the environment and cause or contribute to a violation of any applicable water quality standards for receiving water.
  - (43) “*Soil*” means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for growth of plants.
  - (44) “*Steep slope*” means a natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff around or over a steep slope so as not to erode the slope. In addition, site



managers should focus on erosion prevention on the slopes and stabilize the slopes as soon as practicable to prevent slope failure or sediment discharges from the project.

- (45) “*Stormwater*” means stormwater runoff, snow melt runoff, surface runoff, and drainage.
- (46) “*Stormwater Control Measure (SCM)*” means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.
- (47) “*Stormwater management facilities*” means the drainage structures, conduits, ponds, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.
- (48) “*Stormwater management plan*” means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, SCMs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.
- (49) “*Stormwater management program*” refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system.
- (50) “*Stormwater Pollution Prevention Plan (SWPPP)*” means a written site-specific plan required by the Construction General Permit that includes a narrative pollution prevention plan and graphical erosion and sediment control plan. In its basic form, the plan contains a site map, a description of construction activities that could introduce pollutants to stormwater runoff, a description of measures or practices to control these pollutants, and erosion and sediment control plans and specifications. It must be prepared and submitted before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook.
- (51) “*Stream*” is a surface water that is not a wet weather conveyance. Therefore, as used in this ordinance, “*stream*” includes lakes, wetlands, and other non-linear surface waters.
- (52) “*Temporary stabilization*” is achieved when vegetation or non-erodible surface has been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease. However, if future construction activity is planned, permit coverage continues.
- (53) “*Tennessee Department of Environment and Conservation (TDEC) Level I & Level II Trained Individual*” means an individual who has successfully completed the Level I Fundamentals course and the Level II Design Principles for Erosion Prevention and Sediment Control at Construction Sites course conducted by the Tennessee Water Resources Research Center.
- (54) “*Tennessee Erosion and Sediment Control Handbook*” is guidance issued by the Division of Water Resources for the purpose of developing Stormwater Pollution Prevention Plans and Erosion and Sediment Control Plans required by the Construction General Permit. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state.
- (55) “*Total maximum daily load (TMDL)*” means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 C.F.R. 130.2(I)). TMDL is a study that quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. TMDLS can also be described by the follow equation:

TMDL = sum of nonpoint sources (LA) + sum of point sources (WLA) + margin of safety

- (56) “*Waste site*” means an area where waste material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.
- (57) “*Water Quality Riparian Buffer*” – See “*Buffer Zone*”.
- (58) “*Waters*” or “*Waters of the State*” means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.
- (59) “*Waters with unavailable parameters*” means any segment of surface waters that has been identified by the Division as failing to support one or more classified uses. Unavailable parameters exist where water quality is at, or fails to meet, the levels specified in water quality criteria in Rule 0400-40-03-.03, even if caused by natural conditions. In the case of a criterion that is a single response variable or is derived from measurement of multiple response variables, the unavailable parameters shall be the agents causing water quality to be at or failing to meet the levels specified in criteria. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages, and the results of recent field surveys.
- (60) “*Watershed*” means all the land area that contributes runoff to a particular point along a waterway.
- (61) “*Wet weather conveyances*” are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:
  - (a) The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
  - (b) The conveyance’s channels are at all times above the groundwater table.
  - (c) The flow carried by the conveyance is not suitable for drinking water supplies.
  - (d) Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Tennessee Rules, Chapter 0400-40-3-.04(3)).

**12-203. Construction Stormwater Management and Land Disturbance Permit Requirements**

- (1) All land disturbing activities shall employ adequate erosion prevention and sediment control (EPSC) measures to minimize erosion and prevent off-site sedimentation in conformance with the provisions of this ordinance and guidance materials referenced herein. Land disturbing or construction activities that do not employ erosion prevention and sediment controls in conformance with this ordinance and that cause off-site sedimentation or sediment discharges to Waters of the State or onto adjacent properties shall be in violation of this ordinance.
- (2) The City has adopted, for use in the design EPSC measures, the design storm requirements from the current Tennessee Construction General Permit (CGP) for all Waters as well as special conditions for unavailable parameters for siltation/sedimentation or Exceptional Tennessee Waters.
- (3) MS4 Stormwater Control Measure (SCM) design or Best Management Practice (BMP) manuals.

- (a) Adoption. The City adopts as its MS4 SCM design and BMP manuals for stormwater management, construction and permanent, the following publications, which are incorporated by reference in this ordinance as if fully set out herein:
  - (i) TDEC Erosion Prevention and Sediment Control Handbook; current edition.
  - (ii) Tennessee Permanent Stormwater Management and Design Guidance Manual, current edition.
  - (iii) A collection of MS4 approved SCMs and BMPs developed or collected by the MS4 that comply with the goals of the MS4 permit and/or the Construction General Permit (CGP).
- (b) The City's SCM and BMP manual(s) include a list of acceptable SCMs and BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. These include city-approved SCMs for permanent stormwater management including green infrastructure SCMs.
- (c) The City manual(s) may be updated and expanded from time to time, at the discretion of the governing body of the City, upon the recommendation of the City of Belle Meade, based on improvements in engineering, science, monitoring and local maintenance experience, or changes in federal or state law or regulation.
- (4) Development or redevelopment. This section shall be applicable to all development and redevelopment, including, but not limited to, site plan applications, subdivision applications, and land disturbance permit (LDP) applications. These standards apply to any new development or redevelopment sites according to Table 1 below:

Table 1 – LDP Requirements					
Total Disturbed area	LDP Required?	City forms/checklists to complete	Stormwater Management Plan required?	CGP coverage required?	Water Quality Riparian Buffer Required?
< 10,000 ft <sup>2</sup>	No, except see §12-203(4)(a)	None	No	No	No
<10,000 ft <sup>2</sup> , with swimming pool construction	Yes	General, Checklist 1-3	Yes; See Checklist 3 and Table 2	No	See Table 4
10,000 ft <sup>2</sup> – 0.99 acre	Yes	General, Checklist 1-3	Yes; See Checklist 3 and Table 2	No	See Table 4
1 acre or greater or part of a larger common plan of development of sale	Yes	General, Checklist 1-3	Yes; See Checklist 3 and Table 2	Yes	See Table 5

- (a) A LDP shall also be required if one of the following conditions apply:
  - (i) The City of Belle Meade has determined that the stormwater discharge from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;
  - (ii) The City of Belle Meade has determined that the stormwater discharge is, or is likely to be a significant contributor of pollutants to Waters of the State;
  - (iii) Changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale, or otherwise require construction, to obtain a LDP;

- (iv) Any new development or redevelopment, regardless of size, that is defined by the City of Belle Meade to be a priority area;
  - (v) New development or redevelopment within the floodplain;
  - (vi) New development or redevelopment that involves land development activity of one acre or more if such activities are part of a larger common plan of development, even multiple activities, that is part of a separate and distinct land development activity that may take place at different times on different schedules; or
  - (vii) A permit may also be required for other comparable activities as determined by the City. (e.g. increased impervious area).
- (b) LDP applications shall be approved only when the following is met:
- (i) For residential and non-residential developments requiring a LDP (See Table 1), EPSC plan(s), a Stormwater Pollution Prevention Plan (SWPPP) and a Stormwater Management Plan shall be required. Forms provided in Appendix A of this ordinance must be completed and submitted with the LDP application. These forms may be altered as deemed necessary by the City to modify the information required to be provided by the applicant provided that such modification preserves the intent of this ordinance and do not alter the design criteria, or the water quality standards contained therein.
- (5) Building permit. No building permit shall be issued until the applicant has obtained a LDP where the same is required by this ordinance.
- (6) Permit duration. Every LDP shall expire and become null and void if substantial progress authorized by such permit has not been completed within any six (6) month period following the issuance. Permit extension requests may be made in writing to the City.
- (7) Changes to Approved LDP Plans. The applicant must submit revised plans to the City for review and approval if changes are proposed to the originally city-approved plans. The revised plans must be submitted prior to changes being implemented in the field.
- (8) Construction site operators. Construction site operators are required to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites within the City to avoid adverse impacts to water quality.
- (9) Inspections and Maintenance.
- (a) Right of Entry.
    - (i) The City may enter upon any property which discharges or contributes, or is believed to discharge or contribute, to stormwater runoff or the stormwater system, stream(s), community water(s) or via any other private or public stormwater management facility and/or SCM during all reasonable hours to monitor, remove foreign objects or blockages, and to inspect for compliance with the provisions of this ordinance.
    - (ii) Where a property, site, or facility has security measures in place that require proper identification and clearance before entry into its premises, the person shall make necessary arrangement with its security personal so that, upon presentation of suitable identification, the City of Belle Meade will be permitted to enter without delay for the purposes of performing specific responsibilities as it relates to the provisions of this ordinance.
  - (b) LDP EPSC inspections. The LDP permittee shall perform routine inspections as follows:

- (i) Inspections shall be performed in conformance with the inspection requirements of the TDEC CGP. This requirement applies for all projects that require an LDP.
    - (ii) Inspections shall be documented and the permittee shall maintain records of the documented inspections on site (or other location accessible to the City).
    - (iii) All erosion prevention and sediment control (EPSC) measures shall be inspected to verify and document the functionality and performance of the measures as designed per the city-approved plans.
  - (c) All EPSC measures shall be maintained by the LDP to ensure that they are functioning as designed. Failure to maintain measures constitutes a violation of this ordinance.
- (10) Performance bonds.
- (a) The City of Belle Meade may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security or performance bond shall be the total estimated construction cost of the SCMs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment, or rejection by the City of Belle Meade. Alternatively, the City of Belle Meade shall have the right to calculate the estimated cost of construction.
  - (b) The performance security or performance bond shall be released in full only upon submission of as-built plans and written certification by a registered professional engineer or registered landscape architect licensed to practice in Tennessee that the SCM(s) have been installed in accordance with the city-approved plan(s) and other applicable provisions of this ordinance. The City of Belle Meade will make a final inspection of the SCM(s) to ensure that they are in accordance with the city-approved plan(s), as-built plans, and the provisions of this ordinance. Provisions for a partial pro-rata release of the performance security or performance bond based on the completion of various development stages can be made at the discretion of the City of Belle Meade.
- (11) Submittal of a copy of the Notice of Coverage (NOC) and Notice of Termination (NOT) to the City. Permittees that are required to obtain coverage under the CGP must provide TDEC NOC and at project completion, a copy of the signed TDEC NOT to the City of Belle Meade.
- Copies of additional applicable local, state, or federal permits (i.e.: ARAP, etc.) must also be provided to the City. The City has the authority to without the LDP prior to receiving copies of the aforementioned permits. Note: Any discharge of stormwater or other fluid to an improved sinkhole or other injection well, as defined, must be authorized by permit or rule as a Class V underground injection well under the provisions of Tennessee Department of Environment and Conservation (TDEC) Rules, Chapter 0400-45-06.
- (12) Stormwater Pollution Prevention Plan and EPSC Plan requirements. The erosion prevention and sediment control plan component of the SWPPP shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The purpose of this plan is to identify construction/contractor activities that could cause pollutants in the stormwater, and to describe measures or practices to control these pollutants during project construction. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential



for off-site damage. If necessary, the plan shall be staged so that changes to the site during construction that alter drainage patterns or characteristics will be addressed by an appropriate stage of the plan.

The plan shall be prepared by a registered professional engineer or registered landscape architect licensed in the State of Tennessee that possesses an active TDEC Level II certification. The plan shall also conform to the requirements found in the city-adopted manuals

(13) Landscaping and stabilization requirements.

- (a) Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall stabilize. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased (7 days for slopes of 35 percent or steeper). In the following situations, temporary stabilization measures are not required:
  - (i) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
  - (ii) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days.
- (b) Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles), or crusher runs will not be considered a non-eroding surface.
- (c) The following criteria shall apply to revegetation efforts:
  - (i) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.
  - (ii) Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
  - (iii) Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.
  - (iv) Prior to receiving Use and Occupancy, permanent stabilization must be established over the entire site.
  - (v) In addition, the remedies and sanctions provided herein, the enforcement of these provisions shall also be subject to the Property Maintenance Regulations, Title 13, Code of the City of Belle Meade.

**12-204. Permanent stormwater management: design requirements**

- (1) General design performance criteria for permanent stormwater management. Permanent stormwater management requirements for new development and redevelopment are summarized in Table 2 below:

<b>Table 2 – Permanent Stormwater Management for New Development and Redevelopment</b>			
<b>Total Disturbed area</b>	<b>Stormwater Runoff Quantity Requirements</b>	<b>Stormwater Runoff Quality Requirements</b>	<b>Comments</b>
< 10,000 ft <sup>2</sup>	None unless deemed necessary by the City	None unless deemed necessary by the Planning Director and /or Public Works Director due to an increase in impervious area	Allowing runoff from impervious surfaces to flow over pervious surfaces (e.g. driveway runoff allowed to sheet flow across yard) is encouraged.
< 10,000 ft <sup>2</sup> , with swimming pool construction	None unless deemed necessary by the City	One non-structural water quality improvement	Examples include disconnected roof drains, sheet flow of impervious surfaces runoff, or vegetated filter strips.
10,000 ft <sup>2</sup> – 0.99 acre	See Checklist 3 – Stormwater Management Plan and §12-204(4).	One non-structural water quality improvement	
1 acre or more	See Checklist 3 – Stormwater Management Plan and §12-204(4).	Water Quality Treatment Volume See §12-204(2).	

(2) Performance criteria.

- (a) The following performance criteria shall be addressed for permanent stormwater management at all new development or redevelopment sites that disturb one acre or greater, or are part of a larger common plan of development or sale:
  - (i) The design storm for water quality treatment design shall be the 1-year, 24-hour design storm event.
  - (ii) All roof runoff is presumed to be contaminated and, therefore, is to be included within the water quality treatment volume.
  - (iii) The water quality treatment volume (WQTV) is the portion of the runoff generated from impervious surfaces at a new development or redevelopment project from the design storm. SCMs must be designed, at a minimum to achieve an overall treatment efficiency of eighty percent (80%) TSS removal from the WQTV. The quality of the WQTV that must be provided from a new development or redevelopment depends on the type of treatment provided, as established in the following table:

<b>Table 3 – Water Quality Treatment Volume and the Corresponding SCM Treatment Type for the 1-year, 24-hour Design Storm</b>		
SCM Treatment Type	WQTV	Notes
Infiltration, evaporation, transpiration, and/or reuse	Runoff generated from the first 1 inch of the design storm	Examples include, but are not limited to, bioretention, stormwater wetlands, and infiltration systems.
Biologically active filtration, with an underdrain	Runoff generated from the first 1.25 inches of the design storm	To achieve biologically active filtration, SCMs must provide minimum of 12 inches of internal water storage.
Sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds	Runoff generated from the first 2.5 inches of the design storm or the first 75% of the design storm, whichever is less	Examples include, but are not limited to, sand filters, permeable pavers, and underground gravel detention systems. Ponds must provide forebays comprising a minimum of 10% of the total design volume. Existing regional detention ponds are not subject to the forebay requirement.
Hydrodynamic separation, baffle box settling, other flow-through manufactured treatment devices (MTDs), and treatment trains using MTDs	Maximum runoff generated from the entire design storm	Flow-through MTDs must provide an overall treatment efficiency of at least 80% TSS reduction.

(iv) Treatment trains using MTDs shall use the following calculation:

$$R = A + B - (A \times B) / 100$$

Where:

R = total TSS percent removal from application of both SCMs

A = the TSS percent removal rate applicable to the first SCM

B = the TSS percent removal rate applicable to the second SCM

TSS removal rates for MTDs must be evaluated using industry-wide standards.

TSS removal rates for other SCMs must be from published reference literature.

- (v) Treatment trains using infiltration, evaporation, transpiration, reuse, or biologically active filtration followed by sand or gravel filtration, settling ponds, extended detention ponds, or wet ponds may subtract the treated WQTV of the upstream SCMs from the WQTV of the downstream SCMs.
- (vi) Additional requirements for infiltration-based SCMs are as follows:
  - 1) Infiltration testing shall be required for all infiltration-based SCMs;
  - 2) The project engineer shall select the appropriate infiltration testing methodology, such as those provided within the Metro Nashville Stormwater Management Manual Volume 5; and



- 3) At a minimum, testing shall identify a minimum 2-foot separation from bedrock and the seasonal high-water table from the invert of the infiltration-based SCM(s).
- (vii) SCMs must be designed to provide full treatment capacity within 72-hours following the end of the preceding rain event for the life of the development or redevelopment.
- (viii) Incentive Standards: For any one of the following types of development or redevelopment shall receive a twenty percent (20%) reduction in the water quality treatment volume. Such credits are additive such that a maximum reduction of forty percent (40%) of the WQTV is possible:
  - 1) Redevelopment; and
  - 2) Vertical Density, (Floor to Area Ratio (FAR) of 2 or at least 18 units per acre).
- (3) Minimum volume control requirements. In accordance with §12-201(1)(c)(iii) the City of Belle Meade establishes the following standards to regulate the quantity of stormwater discharged, therefore:
  - (a) All site designs requiring a stormwater management plan or as otherwise required by the City of Belle Meade shall control the peak flow rates of stormwater discharge associated with design storms specified in Appendix A of this ordinance and reduce the generation of post construction (or permanent) stormwater runoff to pre-development levels. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
  - (b) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified in Appendix A of this ordinance.
  - (c) Stormwater designs shall consider the pre-developed flow conditions (i.e. sheet flow, concentrated flow) and attempt to mimic these flow conditions in the post-developed condition.
  - (d) The calculations methods required for determining peak flows as found in Appendix A of this ordinance shall be used for sizing all stormwater facilities. Other hydrological methods of determining peak runoff may be substituted; however, they will be subject to the City of Belle Meade's engineering consultant's review for appropriateness.
  - (e) The maximum distance that a roof downspout may extend perpendicular from a structure is ten (10) feet. Up to three separate roof downspouts may be collected into a single collector pipe to be discharged the maximum perpendicular distance of ten (10) feet from the structure. A maximum ten (10) feet of roof drainage piping may be buried before the pipe outlets. Alternatively, a plan prepared by a Tennessee registered professional engineer or landscape architect that does not meet the requirements of this section but otherwise complies with the requirements of a LDP may be accepted subject to the City of Belle Meade's engineering consultant's review for appropriateness.
  - (f) Exception to the minimum volume control requirements: If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Belle Meade may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
- (4) Permanent stormwater management plan requirements. The stormwater management plan shall include sufficient information to allow the City of Belle Meade to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the

effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. The permanent stormwater management plan must be prepared by a professional engineer registered in the State of Tennessee.

- (5) Long-Term Maintenance Plan requirements. The design and planning of all permanent stormwater management facilities shall include detailed inspection and maintenance procedures to ensure the performance standards of this Ordinance. These plans will identify the parts or components of a stormwater management facility and/or SCM(s) that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.

**12-205. Water Quality Riparian Buffers.**

Purpose. A water quality riparian buffer shall be established, protected, and maintained along all community waters in areas of new development and redevelopment for which a LDP is required, as defined in §12-203, is required in accordance with Table 4 or Table 5 below, as applicable. The goal of the water quality riparian buffer is to preserve undisturbed vegetation that is native to the streamside habitat in the area of the project. Vegetated, preferably native, water quality riparian buffers protect water bodies by providing structural integrity and canopy cover, as well as stormwater infiltration, filtration and evapotranspiration.

<b>Table 4 – Temporary and Permanent Water Quality Riparian Buffer Requirements for Sites That Disturb &lt; 1 acre (no CGP coverage required)</b>		
<b>Community water characteristics</b>	<b>Permanent buffer</b>	<b>During construction (temporary) buffer</b>
All community waters	20-feet (City-approved buffer enhancement plan required for temporary buffer encroachment)	20-feet (City-approved buffer enhancement plan required for temporary buffer encroachment)

<b>Table 5 – Temporary and Permanent Water Quality Riparian Buffer Requirements for Sites That Require CGP Coverage</b>			
<b>Community water characteristics</b>	<b>Average Buffer Width (feet)</b>	<b>Minimum Buffer Width (feet)</b>	<b>Notes</b>
Community water with available parameters for siltation/sedimentation or habitat alteration or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required location. If the new development or redevelopment site encompasses both sides of the stream, buffer averaging can be applied to both sides, but must be applied independently.
Community water with unavailable parameters for siltation/sedimentation or habitat alteration and/or an Exceptional Tennessee Water (ETW)	60	30	

- (a) The buffer width shall be measured perpendicular from the top of bank on each side of the community water channel; around the perimeter of a pond or lake identified as a community water measured as perpendicular to the contour at which normal pool is located around; and around the perimeter of a wetland identified as a community water.
- (b) The water quality riparian buffer is to remain undisturbed except for the following permissible land uses which are allowed subject to approval by the City:
- (i) Greenways, biking trails, and walking trails;

- (ii) Infiltration-based SCMs such as infiltration trenches and biofiltration basins may be allowed on a case-by-case basis if approved in writing by the City. This can only be approved if such SCMs improve the biodiversity or aesthetic appearance of the buffer areas. Economics or constructability of a development cannot be used as criteria for allowing an SCM to be placed in the buffer;
  - (iii) Road and utility crossings. Private drives and private utility crossings may also be approved by the City upon review of a complete submittal demonstrating that there is no feasible alternative route;
  - (iv) Selective landscaping and/or habitat improvement.
- (c) Subject to the requirements of this ordinance and the City, any approved disturbance of the water quality riparian buffer shall be revegetated in kind and/or enhanced. The vegetative target for the inner zone is mature, moderately dense forest (i.e., trees) with woody shrubs and understory vegetation. Where forest vegetation has the potential to impact traffic safety or limit access, areas immediately surrounding approved stream crossings and utility access areas may be vegetated with dense grasses.
- (d) For any proposed development and/or construction activity within or adjacent to a water quality riparian buffer, the following shall be required.
- (i) The parameters of the water quality riparian buffer shall be delineated by the applicant and boundaries shall be clearly indicated and labeled on all plats, plans, permits and official maps.
  - (ii) Include a note on plans to reference protective covenants governing all water quality riparian buffer areas, labeled as: "Any water quality riparian buffer is subject to protective covenants recorded in the Register of Deeds (Davidson County). Disturbance and use of these areas is restricted; severe penalties apply."
  - (iii) Water quality riparian buffers shall be protected during construction activities by a combination of fencing and flagging to prevent entry of construction equipment, storage and stockpiling. Buffer boundaries shall be marked during construction activities.

**12-205. Permanent stormwater management: operation, inspection, and maintenance.**

- (1) Requirements. Prior to project completion and use and occupancy, the following must be submitted and accepted by the city:
- (a) As-Built (Record) Drawings. All LDP permittees are required to submit as-built drawings for any SCMs or stormwater management facilities located on-site within 90 days after final construction of the SCMs has been completed. The drawing(s) must show the final design specifications for all stormwater management facilities and SCMs and must be sealed by a registered professional engineer licensed to practice in Tennessee. The drawing(s) shall include at the minimum the following:
    - (i) Location map of SCM(s) within project site;
    - (ii) An engineer's certification letter certifying that the as-built conditions conform to the approved design plans and specifications;
    - (iii) Description of any variations from the approved design plans and specifications, if any;
    - (iv) A brief description of the type of SCM(s) and basic design characteristics;

- (v) As-built design parameters including but not limited to invert elevations, outlet structure elevations, subbase layer depths, etc.;
  - (vi) The property owner contact information;
  - (vii) Inspection schedule(s);
  - (viii) A brief description of or reference to maintenance procedures and frequency; and
  - (ix) Photographs of the installed SCMs.
- (b) A final inspection by the City of Belle Meade is required before occupation permits will be granted. Occupation permits shall not be granted until corrections to all SCMs have been made and accepted by the City of Belle Meade.
- (2) SCM Inspection Requirements.
- (a) Routine inspection of all SCMs shall be performed by the property owner or other qualified professional on a minimum annual basis or as specified in the LTMP. These inspections shall be conducted by one of the following a registered professional engineer, registered landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements.
  - (b) Comprehensive inspections of all SCMs shall be performed once every five years by a registered professional engineer or registered landscape architect. Complete inspection reports for these five-year inspections shall include a minimum of the following:
    - (i) Location map of SCM(s) within project site;
    - (ii) A brief description of the type of SCM(s) and basic design characteristics;
    - (iii) Description of current SCM(s) conditions;
    - (iv) The property owner contact information
    - (v) Inspection date;
    - (vi) Specific maintenance items or violations that need to be corrected by the SCM owner along with timeline for maintenance;
    - (vii) Maintenance records, if any; and
    - (viii) Current photo of SCM(s).
  - (c) Inspections, whether routine or comprehensive, shall be submitted annually to the City by July 1.
- (3) Records of installation and maintenance activities. Property owners for the operation and maintenance of a stormwater management facility and/or SCM(s) shall make records of the installation of the stormwater facility, and of all maintenance and repairs to the facility, and shall retain the records for at least three (3) years. These records shall be made available to the City of Belle Meade during inspection of the facility and at other reasonable times upon request.
- (4) Failure to meet or maintain design or maintenance standards. If a LDP permittee or property owner fails or refuses to meet the design or maintenance standards required for stormwater facilities under this ordinance, the City of Belle Meade, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the City of Belle Meade shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the LDP permittee or property owner shall have thirty (30) days to effect maintenance and repair

of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the City of Belle Meade may take necessary corrective action. The cost of any action by the City of Belle Meade under this section shall be charged to the property owner.

**12-206. Existing problem locations – no maintenance agreement.**

(5) Requirements for all existing locations and developments. The requirements of this ordinance shall apply to all locations and development at which land disturbing activities have occurred previous to the enactment of this ordinance including:

- (a) Denuded areas must be vegetated or covered under the standards and guidelines specified §12-203(12)(c)(i), (ii), (iii) and on a schedule acceptable to the City.
- (b) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
- (c) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel linings, etc., to prevent erosion.
- (d) Trash, junk, rubbish, etc. shall be cleared from drainage ways.
- (e) Stormwater runoff shall, at the discretion of the City be treated to the maximum extent practicable to prevent pollution of waters. Such control measures may include but are not limited to, the following:
  - (i) Ponds
    - 1) Detention pond
    - 2) Extended detention pond
    - 3) Wet pond
    - 4) Alternative storage measures
  - (ii) Constructed wetlands
  - (iii) Infiltration systems
    - 1) Infiltration/percolation trench
    - 2) Infiltration basin
    - 3) Drainage/recharge well
    - 4) Porous pavement/pavers
  - (iv) Filtering systems
    - 1) Media filter
    - 2) Sand filter
    - 3) Filter/absorption bed
    - 4) Filter and buffer strips
  - (v) Open channel
    - 1) Swale

(6) Inspection of existing facilities. The City of Belle Meade may, to the extent authorized by state and federal law, enter and inspect private property for the purpose of determining if there are illicit non-stormwater discharges, and to establish inspection programs to verify



that all stormwater management facilities are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the City's NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other SCMs.

- (7) Maintenance of existing facilities. The City of Belle Meade shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problems affecting or caused by such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance.
- (8) Corrections of problems subject to appeal. Corrective measures imposed by the City under this section are subject to appeal under section §12-211 of this chapter.

#### **12-207. Illicit discharges.**

- (1) Scope. This section shall apply to all water generated on developed or undeveloped land entering the City's separate storm sewer system.
- (2) Prohibition of illicit discharges. No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater or any discharge that flows from stormwater management facility or SCM that is not inspected in accordance with section §12-205 shall be an illicit discharge. Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxics. The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as described as follows:
  - (a) Uncontaminated discharges from the following sources:
    - (i) Water line flushing or other potable water sources;
    - (ii) Landscape irrigation or lawn watering with potable water;
    - (iii) Diverted stream flows;
    - (iv) Rising ground water;
    - (v) Uncontaminated groundwater infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow);
    - (vi) Uncontaminated pumped groundwater;
    - (vii) Foundation drains;
    - (viii) Air conditioning condensate;
    - (ix) Irrigation water;
    - (x) Springs;

- (xi) Water from crawl space pumps;
  - (xii) Footing drains;
  - (xiii) Individual residential car washing (only if water is directed to flow across vegetated area);
  - (xiv) Flows from riparian habitat or wetlands;
  - (xv) Dechlorinated swimming pools (typically less than one PPM chlorine, or desalinated for saltwater pools);
  - (xvi) Street wash water; and
  - (xvii) Firefighting activities.
  - (xviii) Discharges specified in writing by the City of Belle Meade as being necessary to protect public health and safety.
- (b) Dye testing is an allowable discharge if the City of Belle Meade has so specified in writing.
- (c) Discharges authorized by the Construction General Permit (CGP), which comply with Section 1.2.3. of the same:
- (i) dewatering of collected stormwater and groundwater discharge in accordance with Section 4.1.3. of the CGP (filtering or chemical treatment may be necessary prior to discharge);
  - (ii) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt, or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves the site;
  - (iii) water used to control dust in accordance with CGP section 5.5.3.7.;
  - (iv) potable water sources, including waterline flushings, from which chlorine has been removed to the maximum extent practicable;
  - (v) routine external building washdown that does not use detergents or other chemicals;
  - (vi) uncontaminated, non-turbid groundwater or spring water;
  - (vii) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.);
  - (viii) fire hydrant flushings;
  - (ix) landscape irrigation;
  - (x) pavement wash waters, provided spills or leaks or other toxic or hazardous substances have not occurred (unless all spill material has been removed) and where soaps, solvents, and detergents are not used; and
  - (xi) uncontaminated air conditioning or compressor condensate.
- (3) Prohibition of illicit connections. The construction, use, maintenance or continued existence of illicit connections to the municipal separate storm sewer system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (4) Reduction of stormwater pollutants by the use of SCMs and/or BMPs. Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the SCMs and/or

BMPs necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. Discharges from existing SCMs that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit.

- (5) Notification of spills. Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into, the municipal separate storm sewer system, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the City of Belle Meade in person or by telephone or email, no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the City within seven (7) business days of the notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.
- (6) No illegal dumping allowed. No person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the City. Such illegal activity exposes runoff to contamination, generating an illicit discharge.

#### **12-209. Enforcement.**

- (1) Enforcement authority. The City shall have the authority to issue notices of violation and citations, to issue Cease and Desist orders, and to impose the civil penalties provided in this section. Each day of noncompliance is considered a separate offense; and nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation, including application for injunctive relief. If the person, property or facility has or is required to have a stormwater discharge permit from TDEC, the City shall alert the appropriate state authorities of the violation. The City's enforcement authority includes (as set forth in the City's Enforcement Response Plan (ERP):
  - (a) Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action. Verbal warnings will be documented by the City.
  - (b) Written Notices – Written notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.
  - (c) Citations with Administrative Penalties – The City has the authority to assess monetary penalties, which may include civil and administrative penalties.
  - (d) Stop Work Orders – Stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.
  - (e) Withholding of Plan Approvals or Other Authorizations – Where a facility is in noncompliance, the City's own approval process affecting the facility's ability to discharge to the City can be used to abate the violation.
  - (f) Additional Measures – The City may also use other escalated measures provided under local legal authorities. The City may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an



appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials.

(2) Notification of violation.

- (a) Verbal warning. Verbal warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.
- (b) Written notice. Whenever the City finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the City may serve upon such person written notice of the violation. All written notices will be documented and delivered by personal service or by registered or certified mail (return receipt requested) to the person that has violated or is violating this ordinance. Within ten (10) days of this notice or shorter period as may be prescribed in the notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Planning Director and/or Public Works Director. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.
- (c) Consent orders. The City is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.
- (d) Show cause hearing. The City may order any person who violates this ordinance or permit or order issued hereunder, to show why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.
- (e) Compliance order. When the City finds that any person has violated or continues to violate this ordinance or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures or devices be installed and/or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.
- (f) Cease and desist and stop work orders. When the City finds that any person has violated or continues to violate this ordinance or any permit or order issued hereunder, the Stormwater Program Manager or his designee may issue a stop work order or an order to cease and desist all such violations and direct those persons in noncompliance to:
  - (i) Comply forthwith; or
  - (ii) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation; including halting operations except for terminating the discharge and installing appropriate control measures.
- (g) Suspension, revocation or modification of permit. The City , may suspend, revoke or modify the permit authorizing the land development project or any other project of the applicant or other responsible person within the City. A suspended,

revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the City may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

- (h) Conflicting standards. Whenever there is a conflict between any standard contained in this ordinance and in the manuals adopted by the City under this Ordinance, the strictest standard shall prevail.

#### **12-210. Penalties.**

- (1) Violations. Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City of Belle Meade, shall be guilty of a civil offense.
- (2) Penalties. Under the authority provided in Tennessee Code Annotated §§68-221-1106, the City declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the City of Belle Meade of not less than fifty dollars (\$50.00) and not more than five thousand dollars (\$5,000.00) or such lesser amount as may be allowed by law per day for each day of violation. Each day of violation shall constitute a separate violation.
- (3) Measuring civil penalties. In assessing a civil penalty, the Board of Building Code Appeals may consider:
  - (a) The harm done to the public health or the environment;
  - (b) The duration and gravity of the violation(s);
  - (c) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
  - (d) The economic benefit gained by the violator;
  - (e) The amount of effort put forth by the violator to remedy this violation;
  - (f) Whether the violation(s) was committed intentionally;
  - (g) The prior record of the violator in complying or failing to comply with the stormwater management program;
  - (h) Any unusual or extraordinary enforcement costs incurred by the City;
  - (i) The amount of penalty established by ordinance or resolution for specific categories of violations; and
  - (j) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
- (4) Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the Board of Building Code Appeals may recover:
  - (a) All damages proximately caused by the violator to the City, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this ordinance, or any other actual damages caused by the violation.
  - (b) The costs of the City's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this ordinance.

- (5) Referral to TDEC. Where the City has used progressive enforcement to achieve compliance with this ordinance, and in the judgment of the City has not been successful, the City may refer the violation to TDEC. For the purposes of this provision, “progressive enforcement” shall mean two (2) follow-up inspections and two (2) warning letters. In addition, enforcement referrals to TDEC must include, at a minimum, the following information:
- (a) Construction project or industrial facility location;
  - (b) Name of owner or operator;
  - (c) Estimated construction project or size or type of industrial activity (including SIC code, if known);
  - (d) Records of communications with the owner or operator regarding the violation, including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator.
- (6) Other remedies. The City may bring legal action to enjoin the continuing violation of this ordinance, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.
- (7) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

#### **12-211. Appeals.**

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this ordinance may appeal said penalty or damage assessment to the Board of Commissioners.

- (1) Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.
- (2) Public hearing. Upon receipt of an appeal, the Commissioners shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation or within the City’s monthly newsletter or on the City’s website. Ten (10) days’ notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the Commissioners shall be final.
- (3) Appealing decisions of the Commissioners. Any alleged violator may appeal a decision of the Commissioners pursuant to the provisions of Tennessee Code Annotated, Title 27, Chapter 5.

## CHAPTER 3

**12-301. City of Belle Meade Stormwater Fee Ordinance.** The City of Belle Meade Stormwater Fee Ordinance, Ord. # 2004-6, September 15, 2004 has been added to this section of its municipal code as Chapter 3.

**12-302. Stormwater user fee adopted.** In order to facilitate compliance with the Water Quality Act of 1977, pursuant to authority granted by §§ 68-221-1101 through 68-221-1113 of the Tennessee Code Annotated and for the purpose of providing stormwater management operations and establishing a stormwater user fee within the City of Belle Meade, the “Stormwater User Fee Ordinance,” is hereby adopted.

(1) Findings. The Commissioners of the City of Belle Meade make the following additional findings:

- (a) The Water Quality Act of 1977 imposes upon municipalities certain obligations that require the expenditure of city funds.
- (b) An equitable approach to funding stormwater management services and facilities can be provided by adopting a schedule of service charges upon properties that is related to the burden of stormwater quantity and quality control service requirements and costs posed by properties throughout the city.
- (c) Such schedule of service charges can be complemented by other funding methods that address specific needs, including, but not limited to, allocations of local option sales taxes to stormwater drainage improvement projects, collection of fees for special services including, but not limited to, plans review and inspections, and establishment of a capital recovery fee or fees consistent with state law.
- (d) A service charge credit is an appropriate means of adjusting service charges in recognition that private stormwater systems and/or actions can effectively reduce or eliminate the burden of stormwater quantity and quality control service requirements and costs that a property or properties pose for the city.
- (e) Impervious area is the most important factor influencing stormwater service requirements and costs posed by properties throughout the city, and therefore is an appropriate parameter for calculating stormwater service charges and associated credits.
- (f) The Belle Meade Level of Service and Maintenance Policies for Stormwater Infrastructure will be the guide for prioritizing stormwater infrastructure maintenance and capital improvement projects.

(2) Definitions. As used in this chapter §12-302, unless the context clearly indicates otherwise, the following definitions apply:

- (a) “*Credit*” shall mean a conditional reduction in the stormwater service charge amount to an individual property based on the provision and continuing presence of an effectively maintained and operational on-site stormwater system or facility or the provision of a service or activity by the property owner, which system, facility, service, or activity reduces the stormwater utility’s cost of providing stormwater services and facilities. Credits for on-site stormwater systems shall be generally proportional to the affect that such systems have on the peak rate of runoff from the individual property. Credits shall be defined and implemented in the City of Belle Meade Stormwater Credit Policy Manual.
- (b) “*Customers of the stormwater utility*” shall include all persons, properties, and entities served by and/or benefiting from the City’s acquisition, management, maintenance, extension, and improvement of the stormwater management programs, systems, and facilities and regulation of public and private stormwater systems, facilities, and activities related thereto, and persons, properties, and

entities which will ultimately be served or benefited as a result of the stormwater management program.

- (c) *“Detached dwelling unit”* shall mean developed land containing one structure which is not attached to another dwelling and which contains one or more rooms with a bathroom and kitchen facilities designed for occupancy by one family. Detached dwelling units may include houses, manufactured homes, and mobile homes located on one or more individual lots or parcels of land. Developed land may be classified as a detached dwelling unit despite the presence of incidental structures associated with residential uses such as garages, carports, or small storage buildings. Detached dwelling unit can also include developed land that has a non-residential use of a dwelling unit designed for occupancy for one family so long as such use does not result in additional impervious areas, such as parking spaces, impervious surfaced playgrounds, or structures or additions to the building which are used as offices, storage facilities, meeting rooms, classrooms, houses of worship, or similar nonresidential uses. Detached dwelling unit shall not include developed land containing: manufactured homes and mobile homes located within manufactured home or mobile home parks where the land is owned by others than the owners of the manufactured homes or mobile homes: or multiple-unit residential properties.
- (d) *“Developed land”* shall mean property altered from a natural state by construction or installation of more than 200 square feet of impervious surfaces as defined in this chapter. Impervious area installed by a public utility within an easement on an undeveloped parcel does not count against the total impervious area on that parcel.
- (e) *“Duplexes and triplexes”* shall mean developed land containing two (duplex) or three (triplex) attached residential dwelling units located on one or more parcel(s) of land.
- (f) *“Equivalent residential unit (ERU)”* of impervious area shall mean the median impervious coverage of detached dwelling unit properties in the City of Belle Meade as determined by the city, and shall be used as the basis for determining stormwater service charges to detached dwelling unit properties or classes of detached dwelling unit properties and other properties. Twelve thousand two hundred (12,200) square feet of impervious area shall be one equivalent residential unit (ERU).
- (g) *“Flood control facilities”* shall mean all natural and manmade conveyances and structures for which the partial or full purpose or use is to convey surface flood runoff water within the jurisdictional boundaries of the City of Belle Meade. This includes all natural conveyances for which the city has assumed a level of maintenance responsibility, to which the city has made improvements, against the flooding of which the city must make provision to protect public and private property, or for which the city is accountable under federal or state regulations for protecting the water quality within its jurisdictional boundaries.
- (h) *“Impervious surfaces”* shall mean those areas which prevent or impede the infiltration of stormwater into the soil as it entered in natural conditions prior to development. Common impervious areas include, but are not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, compacted gravel and soil surfaces, awnings and other fabric or plastic coverings.
- (i) *“Multiple dwelling unit residential properties”* shall mean developed land whereon four or more attached residential dwelling units are located and shall include, but not be limited to, apartment houses, condominiums, townhomes, attached single-family homes, boarding houses, group homes, hotels and motels, retirement centers, and other structures in which four or more family groups commonly and normally reside or could reside. In the application of stormwater service charge rates, multiple dwelling unit properties shall be treated as other developed lands. However, multiple dwelling unit residential properties where individual residential dwelling units are owned independently, such as residential



condominiums, may be treated as detached dwelling unit properties in the application of stormwater service charge rates.

- (j) *“Other developed land”* shall mean, but shall not be limited to, multiple dwelling unit residential properties, manufactured home and mobile home parks, commercial and office buildings, public buildings and structures, churches, temples, industrial and manufacturing buildings, storage buildings and storage areas covered with impervious surfaces, parking lots, parks, recreation properties, public and private schools and universities, research stations, hospitals and convalescent centers, airports, agricultural uses covered by impervious surfaces, water reservoirs, and water and wastewater treatment plants.
  - (k) *“Stormwater”* shall mean stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration (other than infiltration contaminated by seepage from sanitary sewers or by other discharges) and drainage.
  - (l) *“Stormwater user fee”* shall mean the stormwater management service charge or charges applicable to a parcel of developed land, which charge shall be reflective of the City of Belle Meade’s cost of providing stormwater management services and facilities.
  - (m) *“Stormwater management facilities”* shall mean those natural and man-made drainage structures, conveyances, conduits, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.
- (3) Determination and modification of stormwater user fee. Stormwater user fees may be determined and modified from time to time by the Commissioners of the City of Belle Meade so that the total revenue generated by said fees and any other sources of revenue that may be made available to the stormwater utility will be sufficient to meet the cost of services and facilities, including, but not limited to, the payment of principal and interest on debt incurred for stormwater management purposes, the creation of reserves for the replacement of permanent improvements for stormwater management, and such other expenses reasonably necessary or convenient in the acquisition, construction, operation, maintenance, education, and regulation of the stormwater system and of properties affecting the stormwater system. These fees shall be reasonable in amount and used exclusively by the municipality for purposes set forth in this part. Such a graduated stormwater user’s fee shall be based on actual or estimated use of the stormwater and/or flood control facilities of the municipality, and each user or user class shall only be required to pay its proportionate share of the construction, administration, operation and maintenance, including replacement costs, of such facilities based on the user’s actual or estimated proportionate contribution to the total stormwater runoff from all users or user classes. To ensure a proportionate distribution of all costs to each user or user class, the user’s contribution shall be based on the amount of impervious area utilized by the user. Stormwater service charges may also include special charges to individual customers for services or facilities related to stormwater management, including, but not limited to, charges for development plan review, inspection of development projects and on-site stormwater control measures, and enhanced levels of stormwater services above those normally provided by the city.
- (4) Effective date of stormwater user fee. Stormwater user fees shall accrue beginning January 1, 2011 and shall be billed periodically thereafter to customers except as specific exemptions and adjustments may apply.
- (5) Stormwater user fee. In order to supplement the cost of providing stormwater services and facilities while fairly and reasonably apportioning the cost among developed properties throughout the city, the following stormwater rates shall apply.
- (a) Detached dwelling units. Detached dwelling units shall be charged according to the table below based upon the ERU as specified below in §12-302(5)(e) or as specified in or as amended by ordinance in the future.

Total area of parcel (square feet)	Factor x ERU
0-40,000	0.5 x ERU
40,001-70,000	1.0 x ERU
> 70,000	2.0 x ERU

- (b) Churches and schools, historic homes or sites, country clubs and other commercial properties. Churches and schools, historic homes or sites, country clubs and other commercial properties shall be charged according to the table below based upon the ERU as specified below in subsection (5)(e) or as specified in or as amended by ordinance in the future.

Total area of parcel (square feet)	Factor x ERU
Churches and schools	F x ERU
Historic home or site	F x ERU
Country Clubs	F x ERU
Commercial properties	F x ERU

- (c) Other developed lands. Other developed lands are subject to special regulation under the appendices of the zoning code.
  - (d) For the purpose of calculating the stormwater fee for churches and schools, a historic home or site, country clubs or commercial properties, the factor “F” shall be calculated as the total square footage of impermeable surfaces on the parcel divided by twelve thousand two hundred (12,200) square feet.
  - (e) The stormwater user fee rate per equivalent residential unit (ERU), as defined in this chapter, shall be (\$22.41) per month until and unless the user fee rate is changed by the Commissioners of the City of Belle Meade.
  - (f) The stormwater fee for independently owned multiple dwelling unit residential properties (hereinafter “condominiums”) shall be based upon the fee for detached dwelling units, using the lower tier factor in the Table in §12-305(5)(a), and shall be assessed on a per unit basis at \$11.20 per month.
- (6) Exemptions and credits applicable to stormwater user fee. Except as provided in this section, no public or private property shall be exempt from stormwater utility service charges or receive a credit or offset against such service charges. No exemption, credit, offset, or other reduction in stormwater service charges shall be granted based on the age, tax, or economic status, race, or religion of the customer, or other condition unrelated to the stormwater utility’s cost of providing stormwater services and facilities.
- (a) The following exemptions from stormwater service charges shall be allowed:
    - (i) Undeveloped land as defined by this chapter shall be exempt from stormwater charges.
    - (ii) Railroad tracks shall be exempt from stormwater service charges. However, railroad stations, maintenance buildings, or other developed land uses for railroad purposes shall not be exempt from stormwater charges.
    - (iii) Improved public road rights-of-way of federal, state, or local governments that are available for vehicular transportation by the general public are exempt from stormwater service charges. Platted private roads and platted private rights-of-way are further exempt from stormwater charges.
  - (b) Stormwater user fee credits shall be allowed for the following activities/occurrences and shall be effective when initiated at the discretion of the

City of Belle Meade and in accordance with a credit manual described subsequently:

- (i) Other developed lands that have, and maintain in proper working order, on-site stormwater detention and retention systems that reduce the peak rate of stormwater discharge.
    - (ii) Other developed lands that have, and maintain in proper working order, on-site stormwater best management practices that reduce the impact of stormwater runoff or water quality in accordance with water quality standards set forth by the City of Belle Meade.
  - (c) A stormwater user fee credit manual shall be prepared by the City of Belle Meade specifying the design and performance standards of on-site systems, facilities, activities, and services which qualify for application of a service charge credit, and how such credits shall be calculated.
  - (d) The stormwater user fee credit shall be determined based on the technical requirements and standards contained in the stormwater service charge credit manual. The stormwater service charge credit may be up to fifty percent (50%) of the service charge applicable to a property, and shall be proportional to the extent that on-site systems, facilities, services, and activities provided, operated, and maintained by the property owner reduce or mitigate the stormwater utility's cost of providing services and facilities.
  - (e) Groups of detached dwelling units represented by a homeowners' association providing on-site systems or facilities that reduce or mitigate the stormwater utility's cost of providing stormwater management services and facilities may receive a stormwater service charge credit.
  - (f) Any credit allowed against the stormwater service charge is conditioned on continuing compliance with the city's design and performance standards as stated in the stormwater service charge credit manual and/or upon continuing provision of the systems, facilities, services, and activities provided, operated, and maintained by the property owner or owners upon which the credit is based. A credit may be revoked by the city at any time for noncompliance. Thirty (30) days notice of a non-complying condition and intent to revoke a stormwater service charge credit shall be provided to the stormwater service charge customer receiving a credit before the credit is revoked thereby allowing the customer the opportunity to attain compliance.
- (7) Stormwater user fee billing, delinquencies, and collections. A stormwater user fee bill may be sent through the United States mail or by alternative means, notifying all customers of the amount of the bill, the date the payment is due, and the date when past due. Failure to receive a bill is not justification for non-payment. Regardless of the status of the party to whom the bill is initially directed, the owner of each parcel of developed land shall be ultimately obligated to pay the stormwater service fee. If a customer is under-billed or if no bill is sent for developed land, the city may backbill for a period of up to ten years, but shall not assess penalties for any delinquency. A late charge will be based upon the unpaid balance in accordance with the City of Belle Meade Customer Service Policy Manual.
- (8) Application of stormwater user fee billed in common. The City of Belle Meade shall bill the stormwater user fee when the annual property tax is billed.
- (9) Removal or cessation of utility services. The City of Belle Meade may remove or cease to provide any utility services as it determines necessary to enforce the payment of all city utility service charges.
- (10) Appeals. Any stormwater utility service customer who believes the provisions of this article have been applied in error may appeal in the following manner:
- (a) An appeal must be filed in writing with the City of Belle Meade City Manager. In the case of service charge appeals, the appeal shall include a survey prepared by a



registered land surveyor or professional engineer containing information on the total property area, the impervious surface area, and any other features or conditions which influence the hydrologic response of the property to rainfall events.

- (b) Using the information provided by the appellant, the City Manager and appropriate staff will conduct a technical review of the conditions on the property and respond to the appeal in writing within thirty (30) days.
  - (c) In response to an appeal, the City Manager may adjust the stormwater service charge applicable to a property in conformance with the general purpose and intent of this Ordinance.
  - (d) A decision of the City Manager which is adverse to an appellant may be further appealed to the Board of Commissioners within thirty (30) days of the adverse decision. Notice of the appeal shall be delivered to the Board of Commissioners by the appellant, stating the grounds for the further appeal. The Board of Commissioners shall issue a decision on the appeal within thirty (30) days. All decisions of the Board of Commissioners shall be served on the customer personally or by registered or certified mail. Service shall be based upon the service charge billing address of the customer.
  - (e) The appeal process contained in this section shall not prevent an appellant from seeking relief in the approved manner and form from a court of competent jurisdiction.
- (11) City of Belle Meade, Tennessee Stormwater User Fee Credit Manual for Stormwater Fees. The City of Belle Meade, Tennessee Stormwater Utility Credit Manual for Stormwater Fees will be prepared and attached hereto as Exhibit A once it is completed.

ATTACHMENT B to ORDINANCE 2015-8  
(City of Belle Meade Municipal Floodplain Zoning Ordinance, Title 12, Chapter 4)

**CHAPTER 4**

MUNICIPAL FLOODPLAIN ZONING ORDINANCE

**12-401. City of Belle Meade Municipal Floodplain Zoning Ordinance.** The City of Belle Meade Municipal Floodplain Zoning Ordinance, Ord. #2003-5 as amended by Ord #2004-7, has been added to this Municipal Code as Chapter 4 pursuant to Ordinance 2015-8.

**12-402. Municipal Floodplain Zoning Ordinance.** In order to minimize danger to life and property due to flooding within the City of Belle Meade, and to maintain eligibility for participation in the National Flood Insurance program (NFIP), the “Municipal Floodplain Zoning Ordinance,” is hereby adopted.

**12-403. Statutory authorization, findings of fact, purpose and objectives.**

(1) Statutory Authorization. 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 Belle Meade, Tennessee, mayor and City Commission, do ordain as follows:

(2) Findings of Fact.

(a) The City of Belle Meade, Tennessee, Mayor and its City Commission, wishes to meet the NFIP regulations found in Title 44 of the Code of Federal Regulations (CFR), Ch. 1, Section 60.3.

(b) Areas of the City of Belle Meade, 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.

(c) 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.

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

(a) Restrict or prohibit uses which are vulnerable to flooding or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities.

(b) Require that uses vulnerable to floods, including community facilities, be protected against flood damage at the time of initial construction.

(c) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters.

(d) Control filling, grading, dredging and other development which may increase flood damage or erosion.

(e) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

(4) Objectives. The objectives of this Ordinance are:

- (a) To protect human life, health, safety and property.
- (b) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- (c) To minimize prolonged business interruptions.
- (d) 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.
- (e) To help maintain a stable tax base by providing for the sound use and development of floodprone areas to minimize blight in flood areas.
- (f) To ensure that potential homebuyers are notified that property is in a floodprone area.
- (g) To maintain eligibility for participation in the NFIP.

**12-404. Definitions.**

Unless specifically defined below, words or phrases used in this Ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this Ordinance its most reasonable application.

- (a) *“Accessory Structure”* shall represent a subordinate structure to the principal structure and, for the purpose of this Title 12, Chapter 4, shall conform to the following:
  - (i) Accessory structures shall not be used for human habitation.
  - (ii) Accessory structures shall be designed to have low flood damage potential.
  - (iii) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
  - (iv) Accessory structures shall be firmly anchored to prevent flotation which may result in damage to other structures.
  - (v) Service facilities such as electrical and heating equipment shall be elevated or flood proofed.
  - (vi) *“Accessory Structure”* is a subset of the *“Accessory User”* and *Accessory Building”* defined at 14-202(b).
- (b) *“Act”* means the statutes authorizing the National Flood Insurance Program that are incorporated in 42 U.S.C. 4001-4128.
- (c) *“Addition (to an existing building)”* means any walled and roofed expansion to the perimeter of a structure in which the addition is connected by a common load bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls is new construction.
- (d) *“Appeal”* means a request for a review of the Floodplain Administrator’s interpretation of any provision of this Ordinance or a request for a variance.
- (e) *“Area of Shallow Flooding”* means a designated AO or AH Zone on a community’s Flood Insurance Rate Map (FIRM) with one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

- (f) “*Area of Special Flood-related Erosion Hazard*” is 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.
- (g) “*Area of Special Flood Hazard*” is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, AI-30, AE or A99.
- (h) “*Base Flood*” means the flood having a one percent chance of being equaled or exceeded in any given year.
- (i) “*Basement*” means that portion of a building having its floor subgrade (below ground level) on all sides.
- (j) “*Breakaway Wall*” means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- (k) “*Building*”, for purposes of this section, means any structure built for support, shelter, or enclosure for any occupancy or storage. (See “*Structure*”).
- (l) “*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, excavation or drilling operations, or storage of equipment or materials.
- (m) “*Elevated Building*” means a non-basement building (i) built to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), (ii) and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones AI-30, AE, A, A99, AO, AH, B, C, X, or D, “elevated building” also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters.
- (n) “*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.
- (o) “*Erosion*” means the process of the gradual wearing away of land masses. This peril is not per se covered under the Program.
- (p) “*Exception*” means 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.
- (q) “*Existing Construction*” means any structure for which the “start of construction” commenced before the effective date of this Ordinance.
- (r) “*Existing Manufactured Home Park or Subdivision*” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of this ordinance.
- (s) “*Existing Structures*” – See “Existing Construction”.

- (t) *“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).
- (u) *“Flood”* or *“Flooding”* means a general and temporary condition of partial or complete inundation of normally dry land areas from:
  - (i) The overflow of inland or tidal waters; or
  - (ii) The unusual and rapid accumulation or runoff of surface waters from any source.
- (v) *“Flood Elevation Determination”* means a determination by the Floodplain Administrator 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.
- (w) *“Flood Elevation Study”* means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- (x) *“Flood Hazard Boundary Map (FHBM)”* means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the flood related erosion areas having special hazards have been designated as Zone A, M, and/or E.
- (y) *“Flood Insurance Rate Map (FIRM)”* means an official map of a community on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.
- (z) *“Flood Insurance Study”* is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles as well as the Flood Boundary Map and the water surface elevation of the base flood.
- (aa) *“Floodplain”* or *“Flood-prone Area”* means any land area susceptible to being inundated by water from any source (see definition of “flooding”).
- (bb) *“Floodplain Management”* means the operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.
- (cc) *“Flood Protection System”* means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a “special flood hazard” and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.
- (dd) *“Flood Proofing”* 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, structures and their contents.
- (ee) *“Flood-related Erosion”* means the collapse or subsidence of land along the shore of a lake or other 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 an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.



- (ff) *“Flood-related Erosion Area”* or *“Flood-related Erosion Prone Area”* means a land area adjoining the shore of a lake or other 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.
- (gg) *“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.
- (hh) *“Floodway”* means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
- (ii) *“Floor”* means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.
- (jj) *“Freeboard”* means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. *“Floorboard”* 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, bridge openings and the hydrological effect of urbanization of the watershed.
- (kk) *“Functionally Dependent Use”* means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
- (ll) *“Highest Adjacent Grade”* means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.
- (mm) *“Historic Structure”* means any structure that is:
  - (i) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
  - (ii) 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;
  - (iii) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
  - (iv) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
    - 1) By an approved state program as determined by the Secretary of the Interior, or
    - 2) Directly by the Secretary of the Interior in states without approved programs.
- (nn) *“Levee”* means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

- (oo) “*Levee System*” means a flood protection system, which consists of a levee, or levees, and associated structures, such as closure, and drainage devices, which are constructed and operated in accordance with sound engineering practices.
- (pp) “*Lowest Floor*” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable 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 this Ordinance.
- (qq) “*Manufactured Home*” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.
- (rr) “*Manufactured Home Park or Subdivision*” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- (ss) “*Map*” means the Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by the Agency.
- (tt) “*Mean Sea Level*” means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this Ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Map are referenced.
- (uu) “*National Geodetic Vertical Datum (NGVD)*” as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.
- (vv) “*New Construction*” means any structure for which the “start of construction” commenced on or after the effective date of this Ordinance. The term also includes any subsequent improvements to such structure.
- (ww) “*New Manufactured Home Park or Subdivision*” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this Ordinance.
- (xx) “*100-year Flood*” – See “Base Flood”.
- (yy) “*Person*” includes any individual or group of individuals, corporation, partnership, association, or any other entity, including State and local governments and agencies.
- (zz) “*Reasonably Safe from Flooding*” means base flood waters will not inundate the land or damage structures to be removed from the Special Flood Hazard Area and that any subsurface waters related to the base flood will not damage existing or proposed structures.
- (aaa) “*Recreational Vehicle*” means a vehicle, which is:
  - (i) built on a single chassis;
  - (ii) 400 square feet or less when measured at the largest horizontal projections;
  - (iii) Designed to be self-propelled or permanently towable by a light duty truck; and

- (iv) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- (bbb) “*Regulatory Floodway*” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.
- (ccc) “*Riverine*” means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.
- (ddd) “*Special Hazard Area*” means an area having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AC, AI-30, AE, A99, or AH.
- (eee) “*Start of Construction*” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for 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.
- (fff) “*State Coordinating Agency*” (Tennessee Department of Economic and Community Development, Local Planning Assistance Office) means the agency of the state government, or other office designated by the Governor of the State or by state statute at the request of the Floodplain Administrator to assist in the implementation of the National Flood Insurance Program in that state.
- (ggg) “*Structure*”, for purposes of this section, means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.
- (hhh) “*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.
- (iii) “*Substantial Improvement*” means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the “start of construction” of the improvement. This term includes structures, which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) Any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.
- (jjj) “*Substantially Improved Existing Manufactured Home Parks or Subdivisions*” are 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.

(kkk) “*Variance*” is a grant of relief from the requirements of this Ordinance, which permits construction in a manner otherwise prohibited by this Ordinance where specific enforcement would result in unnecessary hardship.

(lll) “*Violation*” means the failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without the elevation certificate, other certification, or other evidence of compliance required in this Ordinance is presumed to be in violation until such time as that documentation is provided.

(mmm) “*Water Surface Elevation*” means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

#### **12-405. General Provisions.**

- (1) Application. This Ordinance shall apply to all areas within the incorporated area of the City of Belle Meade, Tennessee.
- (2) Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified on the Belle Meade, Tennessee, Federal Emergency Management Agency, Flood Insurance Rate Maps, Community - Panel Numbers 470408 0326F, 470408 0327F, and 470408 0328F; Effective Date: April 20, 2001 and any subsequent amendments or revisions, are adopted by reference and declared to be a part of this Ordinance.
- (3) Requirement for Development Permit. A development permit shall be required in conformity with this Ordinance prior to the commencement of any development activity.
- (4) Compliance. No land, structure or use shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this Ordinance and other applicable regulations.
- (5) Abrogation and Greater Restrictions. This Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions or other applicable provisions of the Code of the City of Belle Meade. However, where this Ordinance conflicts or overlaps with another regulatory instrument, whichever imposes the more stringent restrictions shall prevail.
- (6) Interpretation. In the interpretation and application of this Ordinance, all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under Tennessee statutes.
- (7) Warning and Disclaimer of Liability. The degree of flood protection required by this Ordinance 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.
  - (a) This Ordinance 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.
  - (b) This Ordinance shall not create liability on the part of the City of Belle Meade, Tennessee or by any officer or employee thereof for any flood damages that result from reliance on this Ordinance, or any administrative decision lawfully made hereunder.
- (8) Penalties for Violation. Violation of the provisions of this Ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance, shall constitute a misdemeanor punishable as other

misdemeanors as provided by law. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon adjudication therefore, be fined as prescribed by Tennessee statutes, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Belle Meade, Tennessee from taking such other lawful actions to prevent or remedy any violation.

**12-406. Administration.**

- (1) Designation of Ordinance Administrator. The Planning Director is hereby appointed as the Floodplain Administrator to implement the provisions of this Ordinance.
- (2) Permit Procedures. Application for a development permit shall be made to the Floodplain Administrator on forms furnished by the community prior to any development activities. The development permit may include, but is not limited to, the following: plans in duplicate drawn to scale and showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities. Specifically, the following information is required:
  - (a) Application stage.
    - (i) 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.
    - (ii) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed where Base Flood Elevations are available, or to certain height above the highest adjacent grade when applicable under this Ordinance.
    - (iii) A FEMA Floodproofing Certificate from a Tennessee registered professional engineer or architect that the proposed non-residential flood-proofed building will meet the floodproofing criteria in §12-407(1) and §12-407(2).
    - (iv) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
    - (v) 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:
      - 1) An itemized cost of materials, and labor, or estimates of materials and labor that are prepared by licensed contractors or professional construction cost estimators;
      - 2) Building valuation tables published by building code organizations and cost-estimating manuals and tools available from professional building cost-estimating services;
      - 3) A qualified estimate of costs that is prepared by the local official using professional judgement and knowledge of local and regional construction costs.
      - 4) 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.

(b) Construction Stage.

- (i) 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 Floodplain 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.
- (ii) 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 Floodplain 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.
- (iii) For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the lowest floor elevation or floodproofing level upon the completion of the lowest floor or floodproofing.
- (iv) Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Floodplain 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.

(c) Finished Construction Stage.

- (i) A final 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.

(3) Duties and Responsibilities of the Floodplain Administrator. Duties of the Floodplain Administrator shall include, but not be limited to, the following:

- (a) 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.
- (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 U. S. C. 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 FIRM's 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 highest adjacent grade, where applicable, of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with §12-406(2).
- (g) Record the actual elevation, in relation to mean sea level or highest adjacent grade, where applicable, to which the new or substantially improved buildings have been floodproofed, in accordance with §12-406(2).
- (h) When floodproofing is utilized for a non-residential structure, obtain certification of design criteria from a Tennessee registered professional engineer or architect, in accordance with §12-406(2).
- (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 this Ordinance.
- (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 on the City of Belle Meade, Tennessee FIRM meet the requirements of this Ordinance.
- (k) Maintain all records pertaining to the provisions of this Ordinance in the office of the Floodplain 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.
- (l) A final Finished Construction Elevation Certificate (FEMA Form 086-0-33) 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 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 of the form. 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 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.

**12-407. Provisions for Flood Hazard Reduction.**

- (1) General Standards. In all areas of special flood hazard, the following provisions are required:

- (a) New construction and substantial improvements shall be anchored to prevent flotation, collapse or 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, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State 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 this Ordinance, shall meet the requirements of "new construction" as contained in this Ordinance.
  - (j) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this Ordinance shall be undertaken only if said nonconformity 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 U.S.C. 1334.
  - (l) All subdivision proposals and other proposed new development proposals shall meet the standards of §12-407(2).
  - (m) 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.
  - (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) Specific Standards. In all Areas of Special Flood Hazard, the following provisions, in addition to those set forth in §12-407(1), are required:
- (a) 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 four (4) feet 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 this section: “Enclosures”.

- (b) 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 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”.
- (c) 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.
  - (i) Designs for complying with this requirement must either be certified by a Tennessee professional engineer or architect or meet or exceed the following minimum criteria.
    - 1) 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.
    - 2) The bottom of all openings shall be no higher than one (1) foot above the finished grade.
    - 3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
  - (ii) The enclosed area shall be the minimum necessary to allow for parking of vehicles, storage or building access.
  - (iii) 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 §12-407(2).
- (d) Standards for Manufactured Homes and Recreational Vehicles.
  - (i) The City of Belle Meade regulates elsewhere in this code certain improvements to real property including the prohibition of manufactured homes and the parking of recreational vehicles. Without modification of, and consistent with, the other provisions of this code, the City hereby adopts the following additional provisions:
  - (ii) All manufactured homes placed, or substantially improved, on: (1) individual lots or parcels, (2) in expansions to existing manufactured home parks or subdivisions, or (3) in new or substantially improved manufactured home parks or subdivisions, must meet all the requirements of new construction.
  - (iii) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
    - 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 four (4) feet above the level of the Base Flood Elevation.

- (iv) Any manufactured home, which has incurred “substantial damage” as the result of a flood, must meet the standards of §12-407(1) and §12-407(2).
- (v) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (vi) All recreational vehicles placed in an identified Special Flood Hazard Area must either:
  - 1) Be on the site for fewer than 180 consecutive days, unless a shorter period of time is proscribed elsewhere in this Code;
  - 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.
- (e) Standards for Subdivisions and Other Proposed New Development Proposals. Subdivisions and other proposed new developments, including manufactured home parks, shall be reviewed to determine whether such proposals will be reasonable safe from flooding.
  - (i) All subdivision and other proposed new development proposals shall be consistent with the need to minimize flood damage.
  - (ii) 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.
  - (iii) All subdivision and other proposed new development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (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 §12-405(2), 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 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 community. A Tennessee registered professional engineer must provide supporting technical data, using the same methodologies as in the effective Flood Insurance Study for the City of Belle Meade, Tennessee and certification thereof.
- (b) The city may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the applicant first applies for a Conditional Letter of Map Revision (CLOMR) and floodway revisions, fulfills the requirements for such revisions as established under the provisions of §65.12, and received the approval of FEMA.



- (c) New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of 12-407(1) and 12-407(2).
  - (d) All floodplain alterations that result in the filling or elimination of floodplain storage shall provide compensating storage capacity by excavating out at least an equal amount (1:1) of volume as occupied by fill. All excavated or cut materials shall be removed from the site before fill materials can be delivered, unless all fill material is generated onsite. Excavated or cut volumes below the lower of the top of bank or elevation of the 2-year storm event shall not be included in the compensating storage calculations. Every effort shall be made to preserve natural flow lines.
- (4) 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 established in 12-405(2), where streams exist with base flood data provided but where no floodways have been designated (Zones AE), the following provisions apply:
- (a) No encroachments, including fill material, new construction and substantial improvements shall be located within areas of special flood hazard, unless certification by a Tennessee registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when the water surface elevation of the base flood more than one-tenth (0.1) foot at any point within the community. 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 §12-406(1) and §12-406(2).
  - (c) All floodplain alterations that result in the filling or elimination of floodplain storage shall provide compensating storage capacity by excavating out at least an equal amount (1:1) of volume as occupied by fill. All excavated or cut materials shall be removed from the site before fill materials can be delivered, unless all fill material is generated onsite. Excavated or cut volumes below the lower of the top of bank or elevation of the 2-year storm event shall not be included in the compensating storage capacity calculation. Every effort shall be made to preserve natural flow lines.
- (5) Standard for Unmapped Streams. Located within the City of Belle Meade, 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-tenth (0.1) foot at any point within the Belle Meade.
  - (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 §12-406 and §12-407.
  - (c) All floodplain alterations that result in the filling or elimination of floodplain storage shall provide compensating storage capacity by excavating out at least an equal amount (1:1) of volume as occupied by fill. All excavated or cut materials shall be removed from the site before fill materials can be delivered, unless all fill material is generated onsite. Excavated or cut volumes below the lower of the top of bank or elevation of the 2-year storm event shall not be included in the

compensating storage capacity calculation. Every effort shall be made to preserve natural flow lines.

**12-408. Variance procedures.**

(1) Municipal Board of Building Code Appeals.

(a) Authority.

The City of Belle Meade, Board of Building Code Appeals, shall hear and decide appeals and requests for variances from the requirements of this Ordinance.

(b) Procedure.

Meetings of the Board of Building Code Appeals shall be held at such times as the Board shall determine. All meetings of the Board of Building Code Appeals shall be open to the public. The Board of Building Code Appeals shall adopt rules of procedure and shall keep records of applications and actions thereon, which shall be a public record. Compensation of the members of the Board of Building Code Appeals, if any, shall be set by the Commissioners.

(c) Appeals: How Taken.

An appeal to the Board of Building Code Appeals may be taken by any person, firm or corporation aggrieved or by any governmental officer, department, or bureau affected by any decision of the Floodplain Administrator based in whole or in part upon the provisions of this Ordinance. Such appeal shall be taken by filing with the Board of Building Code Appeals 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 \$100.00 (one-hundred dollars) for the cost of publishing a notice of such hearings shall be paid by the appellant. The Floodplain Administrator shall transmit to the Board of Building Code Appeals all papers constituting the record upon which the appeal action was taken. The Board of Building Code Appeals shall fix a reasonable time for the hearing of the appeal, give public notice thereof, as well as due notice to parties in interest, and decide the same within a reasonable time which shall not be more than fourteen (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.

(d) Powers.

The Board of Building Code Appeals 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 Floodplain Administrator or other administrative official in the carrying out or enforcement of any provisions of this Ordinance.

(ii) Variance Procedures. In the case of a request for a variance, the following shall apply:

- 1) The City of Belle Meade, Board of Building Code Appeals shall hear and decide appeals and requests for variances from the requirements of this Ordinance.
- 2) 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.

- 3) In passing upon such applications, the Board of Building Code Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this Ordinance, and:
    - a) The danger that materials may be swept onto other property to the injury of others;
    - b) The danger to life and property due to flooding or erosion;
    - c) The susceptibility of the proposed facility and its contents to flood damage;
    - d) The importance of the services provided by the proposed facility to the community;
    - e) The necessity of the facility to a waterfront location, in the case of a functionally dependent facility;
    - f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
    - g) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
    - h) The safety of access to the property in times of flood for ordinary and emergency vehicles;
    - i) 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,
    - j) 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, and water systems, and streets and bridges.
  - 4) Upon consideration of the factors listed above, and the purposes of this Title and Chapter, the Board of Building Code Appeals may attach such conditions to the granting of variances as it deems necessary to effectuate the purposes of this Ordinance.
  - 5) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (iii) Imposition of Penalties: The City declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the City of Belle Meade of not more than fifty dollars (\$50.00). Each day of violation shall constitute a separate violation.
- 1) Measuring civil penalties. In assessing a civil penalty, the Board of Building Code Appeals may consider:
    - a) The harm done to the public health or the environment;
    - b) The duration and gravity of the violation(s);
    - c) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
    - d) The economic benefit gained by the violator;
    - e) The amount of effort put forth by the violator to remedy this violation;

- f) Whether the violation(s) was committed intentionally;
- g) The prior record of the violator in complying or failing to comply with the floodwater management program;
- h) Any unusual or extraordinary enforcement costs incurred by the city;
- i) The amount of penalty established by ordinance or resolution for specific categories of violations; and
- j) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(iv) Recovery of damages and costs. In addition to the civil penalty in subsection (1) above, the Board of Building Code Appeals may recover:

- 1) All damages proximately caused by the violator to the city, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this ordinance, or any other actual damages caused by the violation.
- 2) The costs of the city's maintenance of floodwater facilities when the user of such facilities fails to maintain them as required by this ordinance.

(2) Conditions for Variances.

- (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 §12-408(1).
- (b) Variances shall only be issued upon (i) a showing of good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship; or (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or Ordinances.
- (c) Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates from flood insurance, and that such construction below the base flood level increases risks to life and property.
- (d) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to FEMA upon request.

**12-409. Legal Status Provisions.**

- (1) Conflict with Other Ordinances. In case of conflict between this Title and Chapter or any part thereof, and the whole or part of any existing or future Ordinance of the City of Belle Meade, Tennessee, the most restrictive shall in all cases apply.
- (2) Severability. If any section, clause, provision, or portion of this Title and Chapter 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 Title and Chapter which is not of itself invalid or unconstitutional.
- (3) Effective Date. This Ordinance shall become effective immediately after its passage on second reading in accordance with the Charter of the City of Belle Meade, Tennessee, and the public welfare demanding it.