



FARRAGUT BOARD OF MAYOR AND ALDERMEN
Farragut Community Center
239 Jamestowne Blvd

AGENDA
JULY 11, 2024

BMA MEETING
6:00 PM

- I. Roll Call**
- II. Approval of Agenda**
- III. Approval of Minutes**
 - A. June 27, 2024
- IV. Mayor's Report**
 - A. Parks & Recreation Month Proclamation
 - B. Public Relations Day Proclamation
 - C. Parks and Athletics Council update
 - D. Arts & Beautification Committee update
 - E. Visual Resources Review Board update
 - F. Museum Committee update
- V. Resolutions & Ordinances**
 - A. Ordinances
 - 1. Second Reading
 - a) **Ordinance 24-09**, Ordinance to amend the Farragut Municipal Code, Chapter 103, Aquatic Buffers and Chapter 111, Stormwater Management Control by deleting chapters in their entirety and substituting new language for Chapter 111, Stormwater Management Control

239 JAMESTOWNE BLVD | FARRAGUT, TN 37934 | 865.966.7057 |
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It is the policy of the Town of Farragut not to discriminate on the basis of race, color, natural origin, gender, gender identity, sexual orientation, age, religion, disability or veteran status pursuant to Title VI of the Civil Rights Act of 1964, Public Law 93-112 and 101-336 in its hiring, employment practices and programs. To request accommodations due to disabilities, please call 865-966-7057 in advance of the meeting

2. First Reading

- a) **Ordinance 24-11**, an ordinance on first reading to amend the Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, to Provide for Additional Considerations for Pedestrians and Bicyclists

VI. Business Items

- A. Approval of Contract 2024-17 for Synthetic Ice Rink Rental and Services

VII. Citizens Forum

VIII. Town Administrator's Report

IX. Town Attorney's Report

The Board of Mayor and Aldermen welcomes and invites Farragut residents to participate in public meetings.

Public Participation Guidelines for Farragut Board of Mayor and Aldermen meetings

At the end of each business meeting, there will be time reserved for public comment under the Citizen Forum agenda item. If you are interested in speaking, please fill out a blue comment card and turn it in to the Town Recorder or staff member. This time is set aside specifically for comments on items that are not on the Board of Mayor and Aldermen regular agenda for the meeting. Each speaker will be given three (3) minutes to speak on his/her topic.

The Board also seeks public comment on regular agenda items during the portion of the meeting devoted to discussion and consideration of the specific agenda item.

The Mayor may recognize individuals for public comment during both the regular agenda and Citizen Forum portions of the meeting based on the following guidelines.

1. The Mayor shall maintain and control the meeting to provide a professional and objective environment conducive to presentation and discussion of the agenda items;
2. Any Farragut resident interested in speaking should fill out a blue comment card stating which agenda item they would like to comment on and turn it in to the Town Recorder or a staff member;
3. Speakers shall come to the podium and identify themselves by name and street address;
4. Public comment shall be limited to three (3) minutes per individual. Time for public comment may be amended at the discretion of the Mayor; provided that when additional time is allowed, speakers with differing points of view are allowed the same amount of time if requested. Time is not transferable to other speakers;
5. Speakers should strive to avoid redundancy; different considerations than expressed by previous speakers on a subject are encouraged;
6. Comments that threaten violence or imminent physical harm toward any individual will not be tolerated.
7. Comments may support or oppose issues or measures;
8. Personal attacks on the character of individuals who hold different points of view that have no relationship to the merits of the matter or issue raised for discussion will not be tolerated.

9. An applicant, and/or their representative(s), for an item on the regular agenda shall be afforded the time necessary to present their request and respond to questions. The three (3) minute limitation shall not apply. However, the Mayor may ask an applicant to stay on point in order to facilitate the efficiency of the meeting.

Each speaker will be asked if they can agree to abide by the Comment Protocol. If so, please be prepared to speak when your name is called.

Tennessee Code Annotated 39-17-306. Disrupting meetings or processions.

- (a) A person commits an offense if, with the intent to prevent or disrupt a lawful meeting, procession, or gathering, the person substantially obstructs or interferes with the meeting, procession, or gathering by physical action or verbal utterance.
- (b) A violation of this section is a Class A misdemeanor.

June 27, 2024

BMA MEETING MINUTES

Roll Call

Mayor Williams called the meeting to order at 6:00 PM. Roll Call for attendance: Alderman Burnette, yes; Alderman Meyer, yes; Vice-Mayor Povlin, yes; Alderman White, yes; Mayor Williams, yes; In addition to staff and member of the press.

Approval of Agenda

Motion was made to approve the agenda as presented. Moved by Vice-Mayor Povlin, seconded by Alderman Meyer; voting yes, Mayor Williams, Vice-Mayor Povlin, Aldermen Burnette, Meyer, and White; no nays; motion passed.

Approval of Minutes

Motion was made to approve the minutes of June 13, 2024, as presented. Moved by Alderman Burnette, seconded by Alderman Meyer; voting yes, Mayor Williams, Vice-Mayor Povlin, Aldermen Burnette, Meyer, and White; no nays; motion passed.

Mayor's Report

Town of Farragut Planning Commission Appointments

Mayor Williams reappointed Ron Pinchok, Scott Russ and Ed St.Clair to the Farragut Municipal Planning Commission.

Vice-Mayor Povlin followed up with some answers to questions that were raised at the previous BMA meeting concerning trail width on multi-modal road projects.

Alderman White reminded candidates to keep the election signs out of the rights-of-way.

Resolutions & Ordinances

Ordinances

Public Hearing & Second Reading

Ordinance 24-06, an ordinance to amend the Farragut Municipal Code, Chapter 109-Signs, to provide for canopy signs and projecting signs in portions of the Town (JA Fielden, Applicant)

Motion was made to approve Ordinance 24-06 on second and final reading. Moved by Vice-Mayor Povlin, seconded by Alderman Meyer; roll call vote; Alderman Burnette, yes; Alderman Meyer, yes; Vice-Mayor Povlin, yes; Alderman White, no; Mayor Williams, yes; motion passed.

Ordinance 24-08, an ordinance to amend the Farragut Zoning Map for Parcels 070 and 072, Tax Map 142, between the Waverly Court Subdivision and Baldwin Park Subdivision, 341 Boring Road, from R-1 and R-2 to R-3, 12 Acres (Homestead Land Holdings, Applicant)

Motion was made to approve Ordinance 24-08 on second and final reading. Moved by Aldermen Meyer, seconded by Vice-Mayor Povlin; roll call vote; Alderman Burnette, yes; Alderman Meyer, yes; Vice-Mayor Povlin, yes; Alderman White, yes; Mayor Williams, yes; motion passed.

Ordinance 24-12, Ordinance to amend the General Fund & Capital Investment Program budget FY23-24, passed by Ordinance 23-07

Motion was made to approve Ordinance 24-12 on second and final reading. Moved by Vice-Mayor Povlin, seconded by Alderman Meyer; roll call vote; Alderman Burnette, yes; Alderman Meyer, yes; Vice-Mayor Povlin, yes; Alderman White, yes; Mayor Williams, yes; motion passed.

Citizens Forum

Alex Cain, 524 Wyndam Hall, asked for clarification on what the additional \$40,000 needed for legal services.

Randal Roberts, 11905 Butternut Circle, requested that the funds for Turkey Creek Road improvements be used in other areas of the town.

Town Administrator's Report

David Smoak, Town Administrator, reported that the 4th of July parade is Thursday and that Navy sailors will be participating in the parade.

Town Attorney's Report

Tom Hale, Town Attorney, reported that the federal lawsuit has been dismissed and appeals have been denied. Mr. Hale will have additional description and documentations out soon.

The meeting adjourned at 6:41 PM.

Ron Williams, Mayor

Allison Myers, Town Recorder



Town of Farragut

PROCLAMATION

Park and Recreation Month

WHEREAS parks and recreation programs are an integral part of communities throughout this country, including the Town of Farragut; and

WHEREAS parks and recreation promotes time spent in nature, which positively impacts mental health and wellness by increasing cognitive performance and well-being and alleviating illnesses such as depression, attention deficit disorders, and Alzheimer's; and

WHEREAS parks and recreation programs build healthy, active communities and encourage physical activities by providing space for popular sports, walking trails, and many other activities designed to promote active lifestyles; and

WHEREAS parks and recreation programs increase a community's economic prosperity through increased property values, expansion of the local tax base, increased tourism, the attraction and retention of businesses; and

WHEREAS parks and recreation areas are fundamental to the environmental well-being of our community; and

WHEREAS parks and natural recreation areas ensure the ecological beauty of our community and provide a place for children and adults to connect with nature and recreate outdoors; and

WHEREAS the U.S. House of Representatives has designated July as Parks and Recreation Month; and

WHEREAS the Town of Farragut recognizes the benefits derived from parks and recreation resources.

NOW THEREFORE, BE IT RESOLVED, The Board of Mayor & Aldermen of the Town of Farragut, Tennessee do here by designate July 2024 as

Park and Recreation Month

And urge citizens to explore and enjoy the parks and recreation programs of the Town of Farragut.

Signed this 11th Day of July 2024

Ron Williams, Mayor



Town of Farragut

PROCLAMATION

Public Relations Day

Whereas, Public Relations professionals play a crucial role in fostering communication, understanding, and transparency between organizations and the public they serve;

Whereas, Public Relations Recognition Day serves to honor and celebrate the dedication, creativity, and professionalism of those working in the field of Public Relations;

Whereas, on this day, we acknowledge the contributions of Public Relations professionals in shaping public perception, promoting goodwill, and advancing meaningful dialogue within our communities;

NOW THEREFORE, BE IT RESOLVED, The Board of Mayor & Aldermen of the Town of Farragut, Tennessee do here by proclaim July 16, 2024, as

Public Relations Recognition Day

And call upon all citizens to recognize and appreciate the vital contributions of Public Relations professionals in enhancing our understanding and engagement with the world around us.

Signed this 11th Day of July 2024

Ron Williams, Mayor

REPORT TO THE BOARD OF MAYOR AND ALDERMEN

PREPARED BY: Darryl Smith, Town Engineer and Tyler Ellison, Stormwater Coordinator

SUBJECT: Ordinance 24-09, an ordinance on second reading to delete Chapter 103 Aquatic Buffer Ordinance and Chapter 111 Stormwater Management Control Ordinance in their entirety and replace with new Chapter 111 Stormwater Management Ordinance.

INTRODUCTION AND BACKGROUND: The purpose of this item is to provide discussion and approval of a new Stormwater Management Control Ordinance, replacing the current Stormwater Management Control Ordinance and the Town's Aquatic Buffer Ordinance in their entirety.

DISCUSSION: As a Phase II Community, the Town of Farragut is required by The Tennessee Department of Environment and Conservation (TDEC) to revise and/or update its ordinances to reflect new requirements issued within the Small Municipal Separate Storm Sewer System Permit (MS4) and Construction General Permit (CGP) every permit cycle. The most significant update to the Town's Stormwater Management Control Ordinance is the inclusion of language to codify all requirements of the aquatic buffer (now referred to as water quality riparian buffer) adjacent to streams and tributaries contributing to those streams, and thereby eliminating the need for a separate chapter covering aquatic buffers. Due to the Turkey Creek, the Little Turkey Creek, and the North Fork of Turkey Creek currently being impaired due to siltation, the Town has updated its Stormwater Management Ordinance to include requirements that further prevent and reduce negative impacts to the MS4. The following requirements are listed below:

- A. For permanent stormwater management, increase the water quality riparian buffer (aquatic buffer) from 25-ft. to 30-ft.
- B. For developments draining to impaired waters, increase the average width from 30-ft. (15-ft. minimum) to 60-ft. (30-ft. minimum).
- C. For developments draining to impaired waters, increase the design storm on their Stormwater Pollution Prevention Plans (SWPPPs) from a 2-year, 24-hour storm event to a 5-year, 24-hour storm event.

The attached ordinance is based upon a model ordinance drafted by the University of Tennessee Municipal Technical Advisory Service (MTAS), with language from the Town's current Stormwater Management Control Ordinance (highlighted in yellow) inserted to address design parameters for detention basins, pipes, design storms, development draining to sinkholes, and low-impact development. Additional language is inserted (also highlighted) to include certain definitions Town staff wish to clarify with adoption of this ordinance. It must be noted that all language not highlighted is copied directly from the MTAS model ordinance and is modified only to match the Town's ordinance format. The model ordinance covers all TDEC's requirements in a shorter and more concise document and allows for the elimination of our current Stormwater Management Control Ordinance and Aquatic Buffer Ordinance.

RECOMMENDATION: At their meeting on May 16, 2024, the Planning Commission unanimously recommended approval of Ordinance 24-09. The Stormwater Advisory Committee reviewed and recommended approval of the ordinance at their meeting on March 14. Tom Hale, Town Attorney, has reviewed and concurs. Staff recommends approval of Ordinance 24-09 on first reading.

PROPOSED MOTION: Approval of Ordinance 24-09, Stormwater Management Ordinance, on first reading, eliminating the current Chapters 111 and 103 of the Municipal Code in their entirety.

BOARD ACTION:

MOTION BY:_____ **SECONDED BY:**_____

<u>VOTE/TOTAL</u>	<u>WILLIAMS</u>	<u>POVLIN</u>	<u>MEYER</u>	<u>BURNETTE</u>	<u>WHITE</u>
YES	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____
ABSTAIN	_____	_____	_____	_____	_____

CHAPTER 111 — STORMWATER MANAGEMENT CONTROL

111-1. **LEGAL AUTHORITY**

Under the authority of the Federal Water Pollution Control Act of 1977 (known as the Clean Water Act), the United States Environmental Protection Agency (EPA) is specifically required to develop and oversee the National Pollutant Discharge Elimination System (NPDES) permit program which requires all communities operating a small municipal separate storm sewer system (MS4) to regulate the discharge of pollutants to the waters of the state. Under the authority of the Tennessee Water Quality Control Act of 1977 the Tennessee Department of Environment and Conservation (TDEC) has interpreted that this mandate includes the regulation of aquatic buffers. The Legislature of the State of Tennessee has in *Tennessee Code Annotated*, § 6-2-201, delegated the authority to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

111-2. **SCOPE OF AUTHORITY**

Any person, firm, corporation, business or any other entity proposing to develop land or improve property within the Town of Farragut is subject to the provisions of this ordinance. This ordinance also applies to individual building structures, subdivisions, excavations and fill operations, and similar activities. The Scope of Authority extends to additional improvements on projects, developments, subdivisions, etc. which were previously permitted and/or constructed under the authority of prior ordinances or guidelines. This chapter shall apply to all water generated on developed or undeveloped land entering the town's separate storm sewer system.

111-3. **GENERAL PROVISIONS**

(1) Purpose

It is the purpose of this chapter to:

- a. Protect, maintain, and enhance the environment of the Town of Farragut and the public health, safety and the general welfare of the citizens of the Town of Farragut, by controlling discharges of pollutants to the Town of Farragut'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 Town of Farragut;
- b. Enable the Town of Farragut to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges;
- c. Allow the Town of Farragut 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 Town of Farragut, whether 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 contaminants as may be necessary to protect water quality;
- iv. Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;
- 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 Town of Farragut shall administer the provisions of this chapter.

(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 tool for permit compliance and to facilitate the necessary control of stormwater.

111-4. DEFINITIONS

For this chapter, 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 Town of Farragut declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Town 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. **Analytical monitoring** - Test Procedures for the Analysis of Pollutants - Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required. Pollutant parameters shall be determined using sufficiently sensitive methods in Title 40 C.F.R. § 136, as amended, and promulgated pursuant to Section 304 (h) of the Act. The chosen methods must be sufficiently sensitive as required in state rule 0400-40-03-.05(8).
3. **Aquatic Resource Alteration Permit (ARAP)** physical alterations to properties of the waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). ARAP means a permit issued pursuant to T.C.A. § 69-3-108 of the Act, which authorizes the alteration of properties of waters of the state that result from activities other than discharges of wastewater through a pipe, ditch, or other conveyance.
4. **As built plans (record drawings)** mean drawings depicting conditions as they were actually constructed.
5. **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.
 - Structural BMPs are facilities that help prevent pollutants in stormwater runoff from leaving the site.
 - Non-structural BMPs are techniques, activities and processes that reduce pollutants at the source.
6. **BMP Manual** provides technical guidance including additional policies, criteria, standards, specifications, constants, and information for the proper implementation of the requirements of the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges.
7. **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.

8. **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.
9. **Channel** means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.
10. **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 power lines 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.).
11. **Commencement of construction** means the initial disturbance of soils associated with clearing, grading, excavating or other construction activities.
12. **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.
13. **Construction Stormwater discharge-related activities** means activities that cause, contribute to, or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; activities to control stormwater including the siting, construction, and operation of best management practices (BMPs).
14. **Control measure** refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.
15. **Clean Water Act or CWA** means the Clean Water Act of 1977 or the Federal Water Pollution Control Act, 33 U.S.C. 1251, et seq. (1972), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.
16. **Design storm** is a storm event 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-yr, 2-yr, 5-yr, 25-yr, etc.) in terms of either 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.

The Design Storm Events for the Town are: 1-yr., 2-yr., 5-yr., 10-yr., 25-yr., and 100-yr.

17. **Discharge or discharge of a pollutant** refers to the addition of pollutants to waters from a source.
18. **Ecoregion** is a relatively homogeneous area defined by similarity of climate, landform, soil, potential natural vegetation, hydrology, or other ecologically relevant variables. Ecoregions can be determined for specific stream segments by using Tennessee's Online Water Quality Assessment Data viewer <http://tdeconline.tn.gov/dwr>.
19. **Environmental Protection Agency** is independent agency in the executive branch charged with controlling and abating environmental pollution. The EPA maintains separate programs dealing with air and radiation, water, solid waste, and pesticides and toxic substances. Among the agency's principal tasks are establishing pollution control standards, regulating the discharge of certain materials, issuing permits for the treatment or disposal of hazardous waste, monitoring air and water quality, administering the so-called "Superfund" for the cleanup of toxic waste sites, tracking the transport of hazardous compounds, registering insecticides and similar chemical treatments, and generally providing regulatory guidance to industry and other federal agencies. Although the EPA encourages voluntary compliance with federal environmental laws, it has authority to enforce regulations where violations occur. It maintains regional offices in 10 major U.S. cities in an effort to cooperate with state and local authorities in carrying out its mission.
20. **Exceptional Tennessee Waters** are surface waters designated by the Tennessee Department of Environment and Conservation 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 designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.
21. **Hot spot** means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants more than those typically found in stormwater. Examples might include operations producing concrete or asphalt, auto repair shops, auto supply shops, large commercial parking areas and restaurants.
22. **Improved sinkhole** is a natural surface depression that has been altered to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under the Underground Injection Control (UIC) program of the Tennessee Department of Environment and Conservation. 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. More information regarding an

Underground Injection Control Permit can be found on TDEC's DWR webpage at <https://www.tn.gov/content/tn/environment/permit-permits/water-permits1/underground-injection-control-permit.html>

23. **Land Disturbance** means any man-made changes to the land surface that potentially alters its runoff characteristics; includes but is not limited to: clearing, grading, or excavation.
24. **Level 1** - Fundamentals of Erosion Prevention and Sediment Control training and certification program administered by University of Tennessee Water Resources Research Center (<https://tnepsc.org/index.asp>).
25. **Level 2** - Design Principles for Erosion Prevention and Sediment Control for Construction Sites training and certification program administered by University of Tennessee Water Resources Research Center (<https://tnepsc.org/index.asp>).
26. **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 substance; 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.
27. **Low-Impact Development** refers to stormwater management measures that rely on infiltration, evapotranspiration, or capture/reuse of stormwater runoff. Such measures may include, but are not limited to, permeable pavers, rain gardens, bioswales, vegetated roofs, rainwater capture systems and/or a combination thereof.
28. **Monitoring** refers to tracking or measuring activities, progress, results, etc., and can refer to non-analytical monitoring for pollutants by means other than 40 C.F.R. § 136 (and other than state- or federally established protocols in the case of biological monitoring and assessments), such as visually or by qualitative tools that provide comparative values or rough estimates.
29. **Municipality** means any incorporated city or town, county, metropolitan or consolidated government, or special district of this state empowered to provide storm water facilities.
30. **Municipal Separate Storm Sewer System** means, according to 40 CFR 122.26(b)(8), a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.

- (i) Designed or used for collecting or conveying stormwater;
- (ii) Which is not a combined sewer; and
- (iii) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

31. NPDES or NPDES Permit refers to the National Pollutant Discharge Elimination System permit program that addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to state governments by EPA to perform many permitting, administrative, and enforcement aspects of the program.

32. Operator means any person who owns, leases, operates, controls, or supervises a source. Including, but not limited to, an owner or operator of any “facility or activity” subject to regulation under the NPDES program.

33. Permanent Stabilization means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- 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.
- 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.
- 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.

34. Point source (or Outfall) means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from 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.

35. Pollutant means any type of industrial, municipal, and agricultural waste discharged into water. Examples are, but not limited to, dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste.

36. Pollutants of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) and any other pollutant that has been identified as a cause of impairment of a receiving waterbody.

37. **Priority construction** means those construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.
38. **Rainfall event** is defined as any occurrence of rain preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.
39. **Registered Engineer and Registered Landscape Architect** refers to an engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.
40. **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.
41. **Sediment** means solid material, both inorganic (mineral) and organic, that: is in suspension; is being transported; has been moved from the site of origin by wind, water, gravity or ice as a product of erosion.
42. **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, 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 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 TN Waters, or waters with available parameters).
43. **Sedimentation** is the deposition of soil particles that have been transported by water and wind. The quantity and size of the material transported increases with the velocity of the runoff. Sedimentation occurs when the water in which the soil particles are carried is sufficiently slowed for a long period of time to allow particles to settle out. Heavier particles, such as gravel and sand, settle out sooner than finer particles, such as clay. The length of time a particle stays in suspension increases as the particle size decreases. The colloidal clays stay in suspension for very long periods and contribute significantly to water turbidity.
44. **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.
45. **Soil or Topsoil** means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.
46. **Steep Slope or Steep Grade** means a natural or created slope of 35% grade or greater.
47. **Stormwater** means rainfall runoff, snow melt runoff, and surface runoff and drainage.

48. **Stormwater control measure** or **SCM** means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.
49. **Stream**, as defined by TCA 69-3-103(38) “stream,” means a surface water that is not a wet weather conveyance.
50. **Stormwater associated with industrial activity** is defined in 40 C.F.R. 122.26(b)(14) and incorporated here by reference. Most relevant to the Town is 40 C.F.R. 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities, including borrow pits containing erodible material. Disturbance of soil for the purpose of crop production is exempt from NPDES permit requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial (construction) activity. Maintenance to the original line and grade, hydraulic capacity; or to the original purpose of the facility (e.g., re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair and repaving of an existing road) is not considered a construction activity.
51. **Stormwater Pollution Prevention Plan (SWPPP)** is a written site-specific plan required by the Tennessee Construction General Permit (CGP) 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. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook (latest edition).
52. **Take of an endangered species** means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.
53. **Tennessee Erosion and Sediment Control (TDESC) Handbook** is a 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 CGP.
54. **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.
55. **Treatment chemicals** are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are **polyacrylamide-chitosan (PAM-CS)**.
56. **Turbidity** is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, like smoke in air.

57. **Waste site** is an area where 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.
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 TDEC 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 (<https://tdeconline.tn.gov/dwr/>), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html>.
60. **One-week period** is a synonym of a calendar-week; typically, a period from Sunday through Saturday
61. **Water quality treatment volume (WQTV)** is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the 1-year 24-hour design storm. The WQTV is further determined by the type of treatment provided.
62. **Wet weather conveyances** are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:
- The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
 - The conveyance's channels are always above the groundwater table.
 - The flow carried by the conveyance is not suitable for drinking water supplies.
 - 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)).
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111-5. CONSTRUCTION STORMWATER MANAGEMENT

1. MS4 Stormwater Construction — Adoption of Material

- a. The Town adopts as its MS4 stormwater construction BMP manual(s) the following publication(s), which is incorporated by reference in this ordinance as if fully set out herein:
 - i. TDEC Guide to the Selection & Design of Stormwater Best Management Practices (BMPs) (most current edition)
 - ii. TDEC Erosion and Sediment Control Handbook (most current edition)
- b. The Town has adopted, for use in designing Stormwater Control Measures, construction design storm events. The construction design storm events adopted by the Town are as follows:
 - i. For discharges into waters with available parameters for siltation: 2-year, 24-hour storm
 - ii. For discharges into waters with unavailable parameters for siltation or exceptional Tennessee waters: 5-year, 24-hour storm
- c. Requirements for design storm for all waters as well as special conditions for unavailable parameters waters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000).

2. Design Storm Requirements from CGP.

The municipality has adopted, for use in designing EPSC measures, the design storm requirements from the current Tennessee Construction General Permit for all waters as well as special conditions for unavailable parameters or Exceptional Tennessee Waters.

3. Construction Waste Control.

Construction site operators are required to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.

4. Priority Construction

- a. Priority in construction shall be, at a minimum, those construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.
- b. Requirements for all priority construction activities must include preconstruction meetings with construction site operators for priority construction activities so as to limit pollutants of concern.

5. Land Development Permit

- a. This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, land disturbance applications, and grading applications. These standards apply to qualifying new development or redevelopment sites.

- b. Every person will be required to obtain a land disturbance permit from the Town in the following cases:
 - i. New development that involves land development activities of one (1) acre or more;
 - ii. Redevelopment that involves other land development activity of one (1) acre or more
- c. Projects of less than one acre of total land disturbance may also be required to obtain authorization under this ordinance if:
 - i. the Town 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; or is likely to be a significant contributor of pollutants to water of the state,
 - ii. 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 to obtain a stormwater permit;
 - iii. any new development or redevelopment, regardless of size, that is defined by the Town to be a hot spot land use; or
 - iv. the minimum applicability criteria set forth in item (a) above if such activities are part of a larger common plan of development, (see “common plan of development” definition).
 - v. The creation and use of borrow pits, that are not permitted under the Tennessee Multi Sector Permit (TMSP), where material is excavated and relocated offsite, and fill sites where materials or earth is deposited by mechanized methods resulting in an increased elevation or grade.
 - vi. As determined by the Town for single or duplex residential lots of any size, lots that have karst features, adjoining lakes or streams, slopes exceeding fifteen percent (15%), floodplains or streams to cross are required to submit an erosion control and stormwater management plan. Depending on site specific conditions the requirement that the plan be developed by a qualified licensed professional engineer or landscape architect may be waived by the Town.
 - vii. Land disturbance activities in the Town’s Flood Plain District (FPD) require a permit and shall provide evidence of obtaining appropriate licenses/permits that may be required by federal or state laws and regulations or written waiver from such permits and licenses prior to the issuance of a land disturbance permit by the Town.
 - viii. If unpermitted construction activity is on-going, the Town will issue an immediate stop-work order. If, in addition to the Town’s permit, a TDEC permit was required but was not obtained, the violator will also be reported to TDEC.

6. Land Disturbance/Grading/Stormwater Construction Permit.

Persons seeking the issuance of any land disturbance or grading permits must provide both proof of coverage under the Tennessee Construction General Permit (CGP) (if applicable) and a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the Town when requested.

- a. Copies of additional applicable local, state or federal permits (i.e.: ARAP, approved hydrologic determination, etc.) must also be provided to the Town.
- b. The Town has the authority to withhold local permits prior to receiving copies of the aforementioned permits.
- c. In circumstances where no such permits have been required, the Town may still require a SWPPP as part of the land disturbance permit application.

7. Building Permit.

No building permit shall be issued until the applicant has first obtained a land disturbance permit where required by this ordinance.

8. EPSC and BMP Implementation.

Construction site operators are required to implement appropriate erosion prevention and sediment control measures and best management practices to reduce stormwater discharges containing pollutants of concern. EPSC requirements shall meet the Tennessee's CGP design storm(s), be consistent with the TDEC ESC Handbook best management practices and with the requirements of this ordinance.

9. Site Assessment Requirements.

Where site assessments are required by the CGP, the operator shall provide a copy of the assessment to the Town.

10. Inspector Requirements.

Twice-Weekly inspections of the site and the BMP's/SCM's must be performed by an individual who has either received certification under the Level I Fundamentals of Erosion Prevention and Sediment Control course or has other credentials identified as equivalent within this ordinance.

11. 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 be stabilized to prevent pollutants of concern. 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 no later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. 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 has temporarily ceased, and earth disturbing activities will be resumed within 14 days.
- b. For steep slopes of 35% or more stabilization measures shall be initiated within 7 days.
- c. Construction buffer zones shall be those water quality buffers, and buffer zones as defined in 111-4 above and shall meet the requirements in this ordinance and, where appropriate in the TN CGP. The criteria for the width of the construction buffer zone can be established on an average width basis at a project, if the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the “ordinary high-water mark.” Construction buffers are not primary sediment control measures and shall not be relied on as such. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. The designer/operator must comply with the vegetation requirements and the permissible land uses set forth for buffers in the TN CGP. Where it is not practicable to maintain a construction water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used.
- d. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as properly anchored mulch, soil binders or matting must be employed.

12. Notice of Termination (NOT).

The operator shall provide the Town with a copy of the NOT when it is issued by TDEC.

13. As Built Plans (Record Drawings).

All applicants are required to submit actual as built plans certified by the design engineer for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A certification by the design engineer certifying that SCM's will function within original design parameters as constructed shall be included. A final inspection by the Town is required before any performance security or performance bond will be released. The Town shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMP's/SCM's have been made and accepted by the Town. No bonds or securities shall be released by the Town until the (stormwater manager) has accepted the as built

plans. The warranty period for any infrastructure to be accepted by the Town for maintenance shall not commence until the Town has accepted the as built plans.

14. Equipment Manufacturer Startups.

No bonds or securities shall be released until any equipment to be maintained by the Town passes any specified manufacturer startup procedure. The warranty period shall not commence prior to the equipment passing any specified manufacturer startup procedure.

111-6. PERMANENT STORMWATER MANAGEMENT: DESIGN AND CONSTRUCTION INSPECTION

- 1) To comply with the Town's permanent stormwater standards for new development and redevelopment projects, design and install SCMs as established by Tennessee Rule 0400-40-10-.04 and comply with other requirements of Tennessee Rule 0400-40-10-.04. Note that for design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.
- 2) 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 new development or redevelopment project. The designer may select from the most appropriate alternatives listed in the Town's BMP Manual.
- 3) Designs shall be based on the 24-hour design storm adopted by the Town:

The Town has adopted, for use in designing water quality SCMs, the design storm requirements as established in Tennessee Rule 0400-40-10-.04. The Post Construction/Permanent water quality design storm is a 1-year, 24-hour storm event for water quality SCMs. See definition of Design Storm Event for the municipality's rainfall amounts for each return period interval. The Design Storm Events for the Town are: 1-yr., 2-yr., 5-yr., 10-yr., 25-yr., and 100-yr.

The estimated design rainfall amounts, for any return period interval in terms of either 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.

111-7. DESIGN STANDARDS FOR DETENTION AND/OR RETENTION PONDS

- 1) The calculated peak flow rate of stormwater runoff resulting from a one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storm shall be no greater after development of the site than that which would result from a one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storm on the same site prior to development.
- 2) Adequate attention must be given to safety and sanitation in the design of any detention facility. This includes, but is not limited to, a minimum of two percent slope in the bottom of all detention ponds, a minimum of 2.5:1 (H:V) side slopes or with traversable access to the pond's vegetated bottom and side slopes for maintenance, proposed contours should reflect 15 percent additional area for each two-foot contour of the detention or retention pond based

on the appropriately sized pond for the one-, two-, five-, ten-, 25-, and 100-year storms, a minimum of 4,500 cubic feet of storage volume, and a minimum of one foot of freeboard from the highest water surface elevation for the largest required design storm to the top of the berm before the 15 percent additional volume is added. First-flush volume and treatment shall be provided as described in the BMP manual.

- 3) The plans shall include sufficient design information to show that the facility will operate as required. This shall include the existing (or before site development) peak flow discharges, the after-site development peak flow discharges, and/or volumes of stormwater runoff based on the proposed site development, as well as all necessary computations used to determine the reduced peak flow rates for the design storms. The capacity of the facility shall be sufficient to control the volume of stormwater runoff resulting from one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms within the peak rate of flow requirements stated in this subsection.
 - 4) Discharge from the stormwater detention pond shall be routed to a ditch, channel, or stormwater facility of adequate capacity. Calculations showing the capacity of the receiving stormwater facility and its capability to convey a ten-year frequency storm shall be provided. If the receiving stormwater facility is incapable of conveying a ten-year frequency storm, calculations showing the capacity of the receiving stormwater facility and its capability to convey a two-year frequency storm shall also be provided. The above calculations will be routed to the closer of the second existing street crossing or blue-line stream. If energy dissipation is required, calculations must be submitted to confirm that proposed energy dissipation is adequate for the design. Such dissipation structures must be located outside any buffer area and a sufficient distance from adjacent property to prevent any adverse impact, such as erosion and scouring, to those adjacent properties, buffers, or receiving drainage way.
 - 5) The town administrator has authority to condition the approval of a permit upon the compliance with additional requirements, including, but not limited to, correctly sizing and installing offsite conveyance facilities or other stormwater management solutions required to reduce the adverse impact of the proposed development on other properties or the development.
 - 6) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the town administrator may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
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111-8. REQUIREMENTS FOR LOW-IMPACT DEVELOPMENT

Stormwater management addresses the conveyance and treatment of rainfall and other water entering a site. Low Impact Development (LID) is a specific development strategy to address stormwater in a way that closely mimics the natural, pre-development hydrologic system. At least 25 percent of the development's total area shall be designed so that its runoff will be accommodated through Low Impact Development (LID) measures. Measures shall be demonstrated on the drainage plan and in the drainage calculations for the development and the applicable LID measures specified as part of the site and landscape plan submittals.

Refer to Town of Farragut Code of Ordinances - Appendix D – Architectural Design Standards, Sections 1.34-37 “Stormwater Management and Low-Impact Development” for Site Design Guidelines.

111-9. REQUIREMENTS FOR DEVELOPMENTS DRAINING TO A SINKHOLE

- 1) Development on property where the proposed work encroaches the highest closed contour elevation of a sinkhole will require copies of the appropriate permits from the state department of environment and conservation (TDEC) prior to site development approval. After reviewing the state permit, the town administrator may require additional information related to structural integrity and flood protection. If the proposed development does not require TDEC approval, a letter from TDEC obtained by the applicant shall be submitted to the town prior to the issuance of a permit, stating that a TDEC permit is not required.
 - 2) For development or redevelopment projects requiring attenuation or retention of the one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms with sinkholes entirely on site, calculations shall be provided showing that 100-year 24-hour design storm will not flood any structures assuming plugged conditions (zero cubic feet per second (0 cfs) outflow) for the sinkhole. These calculations must include the entire contributing watershed for the sinkhole. An easement is required around the sinkhole to include an area that is a minimum of five feet horizontally outside the highest closed contour elevation.
 - 3) For development or redevelopment projects requiring attenuation or retention of the one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms with sinkholes partially on site, calculations must be provided showing that there will not be a rise in water surface elevations between the 100-year pre-developed and the 100-year post-developed 24-hour design storm assuming plugged conditions (zero cubic feet per second (0 cfs) outflow) for the sinkhole. An easement is required at a minimum of five feet horizontally outside the highest closed contour elevation on the section of the sinkhole located on the developed property. A rise in the 100-year water surface elevation is allowable when no structures will be flooded and all parties with ownership of the sinkhole agree in writing to allow the rise. In this case, an easement is required around the sinkhole to include an area that is a minimum of five feet horizontally outside the highest closed contour elevation.
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111-10. DRAINPIPES

Material for pipes used for conveyance of stormwater within the town shall be in accordance with the following:

- 1) Cross drains and any other pipe under the pavement surfaces shall be reinforced concrete pipe (RCP). Storm drains within the roadway prism, but not under the pavement, shall also be RCP.
- 2) Any pipe, culvert, or drainage system dedicated to the town, whether inside or outside the right-of-way, shall be constructed of RCP.

- 3) RCP is required if the failure of the pipe would cause flooding or potential property damage on adjacent properties. RCP is required for all storm pipes and culverts that carry through water from adjacent properties ("off-site water").
 - 4) RCP is required for all detention basin outlet structures.
 - 5) Material for driveway pipes may be RCP, corrugated metal pipe (CMP), or double-walled high-density-polyethylene-pipe (HDPE) as desired by the responsible agency, corporation, or individual. RCP is required underneath any driveways or entrances that are heavily traveled or which would have the potential to flood areas within the public right-of-way or any structure.
 - 6) Double-walled HDPE pipe and CMP may be used to convey stormwater generated on the particular property (on-site drainage), such as parking lots, buildings, etc. Both pipe materials (HDPE and CMP) may be used to convey water under driveways in locations where a pipe is outside the roadway prism, has adequate cover, and would not cause flooding of adjacent properties or rights-of-way in the event of pipe failure.
 - 7) Installation of all pipes must be done with adequate pipe bedding, backfill material, and coupling bands as recommended by the pipe manufacturer.
 - 8) All pipes, regardless of their material, shall be a minimum of 18 inches in diameter, with the exception of those pipes under greenways or trails, which shall be a minimum of 12 inches in diameter.
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111-11. WATER QUALITY RIPARIAN BUFFERS

1) Post Construction/Permanent Water Quality Riparian Buffers.

Post Construction/Permanent Water Quality Riparian Buffers shall be those buffers defined in 111-4 above and shall meet the requirements described in this ordinance. The criteria for the width of the post construction/permanent buffer zone can be established on an average width basis at a project, if the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark." Stormwater discharges should enter the post construction/permanent water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow.

All final plats and site plans shall:

- a) Show the extent of any water quality riparian buffer on the subject property and be labeled as "water quality riparian buffer";
- b) Provide a note to reference any water quality riparian buffer stating, "There shall be no clearing, grading, construction, or disturbance of soil and/or native vegetation except as permitted by the Town";

- c) Provide a note to reference any protective covenants governing all water quality riparian buffers.

2) Available Parameters.

Post Construction/Permanent buffers for waters with available parameters for siltation or habitat alteration or unassessed waters:

- a. Average buffer width: 30 feet.
- b. Minimum buffer width: 15 feet

3) Unavailable Parameters.

Post Construction/Permanent buffers for Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration:

- a. Average buffer width: 60 feet.
- b. Minimum buffer width: 30 feet

4) Vegetative Requirements

- a) The vegetative target is a mature strip of undisturbed native vegetation (either original or re-established) that can provide erosion control to the stream, leaf litter, and wood debris. This area shall be measured perpendicular from the edge, adjacent to streams, delineated wetlands, and springs. If streams, wetlands, or springs do not have an established water quality riparian buffer, then a planting plan shall be required. Such a planting plan shall be submitted to town staff for approval and comply with the following:
- b) All planting plans shall be drawn at a scale of not less than one-inch equals 20 feet for small tracts and one-inch equals 50 feet for large tracts when the plans are printed on 24-inch by 36-inch sheets;
- c) All plans must be submitted electronically in portable document format (PDF).
- d) The planting plan shall include a "plant schedule", which lists the number and common and botanical name of all existing and proposed plantings. The "plant schedule" shall also list the height, spread, and where applicable, the caliper of all new plantings at the time of planting.
- e) Establishment of a water quality riparian buffer must adhere to the following conditions and shown on the planting plan:
 - i) Stream banks must be planted with native vegetation that represent both woody (trees and shrubs) and herbaceous species as determined by a landscape architect. Density shall depend on the re-vegetation technique to be used and existing site conditions;
 - ii) No trees shall be planted in a utility district easement;
 - iii) No species may comprise more than one-third of the total planted trees or shrubs;
 - iv) Seedling/trees must be guaranteed at a 75 percent survivorship; and
 - v) Invasive species must be removed and managed.

5) Management and Maintenance of Water Quality Riparian Buffers

- a) Management of water quality riparian buffers include specific limitation on alteration of the natural conditions. The following practices and activities are restricted within the water quality riparian buffer, except with prior approval from the Town:
 - i) Clearing or grubbing of existing vegetation; and
 - ii) Use, storage, and application of pesticides, herbicides, and fertilizers.
- b) The following structures, practices, and activities are permitted in the aquatic buffer subject to prior approval by the town and the following specific design or maintenance features:
 - i) Crossings, provided the following criteria are followed:
 - a. The width should be the minimum width needed to allow for maintenance access and installation;
 - b. The crossing shall be at an angle that minimizes clearing requirements; and
 - c. The minimum number of crossings should be used within each development.
 - ii) Paths, provided the design and location are approved by the town.
 - iii) Utilities, provided the following criteria are followed:
 - a. The width should be the minimum width needed to allow for maintenance access and installation; and
 - b. The crossing should be at an angle that minimizes clearing requirements.
- c) Individual trees within the water quality riparian buffer may be removed if in danger of falling, causing damage to dwellings or other structures, causing blockage of the stream, standing in the path of a proposed water or sewer main, or the roots of the tree are penetrating or in danger of penetrating a sewer line at a joint or pipe connection. The root wad or stump should be left in place, where feasible, to maintain soil stability.
- d) All water quality riparian buffers must be protected during development activities. Prior to the initiation of development activities, ensure adequate visibility of the water quality riparian buffer by staking, flagging, or fencing. Permanent boundary markers, in the form of signage approved by the Town, may be required to be installed prior to the recording of the final plat, the issuance of a certificate of occupancy, or the issuance of a certificate of completion.
- e) Water quality riparian buffers shall be left in a stabilized condition upon completion of the development. The vegetative condition of the entire aquatic buffer must be monitored, and landscaping or stabilization performed to repair erosion, damaged vegetation, or other problems identified. Invasive species must be removed and managed. Only native vegetation may be used in conjunction with stabilization activities. Property owners shall remain responsible for maintaining the water quality riparian buffer. Where any tree or shrub, which was required as part of an approved planting plan, is removed, such tree or shrub shall be replaced with an equivalent tree or shrub approved by town staff.

- f) All landscaping or stabilization activities within the water quality riparian buffer must have prior approval by the Town. In addition, performing work in and around waters of the state may require coverage under a state and possibly a federal permit.
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111-12. PERMANENT SCM MAINTENANCE AND INSPECTION

(1) As Built Plans.

All applicants are required to submit actual as built plans for any structures located on-site within 90 days after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by either a registered professional engineer or landscape architect licensed to practice in Tennessee. A sealed certification by the design engineer that all SCM's will function within design parameters as constructed shall accompany the as built plans. A final inspection by the Town is required before any performance security or performance bond will be released.

The Town shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all stormwater management facilities have been made and accepted by the Town.

(2) Permanent Stormwater Management Plan.

In addition to the certified as built drawings, the Town shall be provided with a permanent stormwater management plan for the site and all stormwater management facilities (e.g., SCM's). Occupation permits shall not be granted until the permanent stormwater management plan has been approved and accepted by the Town.

(3) Inspection of Stormwater Management Facilities.

Periodic inspections of facilities shall be performed, documented, and reported in accordance with this chapter, as detailed in 111-13(1)b.ii.

(4) Records of Installation and Maintenance Activities.

Parties responsible for the operation and maintenance of a stormwater management facility 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 Town during inspection of the facility and at other reasonable times upon request.

(5) Failure to Meet or Maintain Design or Maintenance Standards.

If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this chapter, the Town, after notice as specified in the Enforcement Response Plan, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. If the stormwater management facility becomes a danger to public safety or public health, the Town shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have thirty (30) days to effect maintenance and repair of the facility in an approved manner. If corrective action is not

undertaken within that time, the Town may take the necessary corrective action. The cost of any action by the Town under this section shall be charged to the responsible party.

(6) Danger to Public Health/Public Safety.

If the stormwater management facility becomes a danger to public safety or public health, the Town may take such immediate corrective action as deemed necessary.

111-13. PERMANENT SCMs: NEW DEVELOPMENT, EXISTING LOCATIONS, AND ONGOING DEVELOPMENTS

(1) On-Site Stormwater Management Facilities Inspection and Maintenance Agreement

- a. Where the stormwater facility is located on property that is subject to a development agreement and the development agreement provides for a permanent stormwater maintenance agreement that runs with the land, the owner of property must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owners, all subsequent property owners, and their lessees and assigns, including but not limited to, homeowner associations or other groups or entities.

The required maintenance agreement form is available through the Town's Engineering Department.

- b. The maintenance agreement shall:
 - i. Assign responsibility for the maintenance and repair of the stormwater facility to the owners of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.
 - ii. Provide for a periodic inspection by the property owners in accordance with the requirements of subsection (3) below for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this ordinance. The property owners will arrange for this inspection to be conducted by individual(s) approved by the Town who will submit a signed written report of the inspection to the Town. It shall also grant permission to the Town to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.
 - iii. Provide that the minimum maintenance and repair needs to include, but are not limited to:
 - 1) the removal of silt, litter and other debris, the cutting of grass, cutting and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities. It shall also provide that the property owners shall be responsible for additional maintenance and repair needed to meet the intended design specification of the stormwater facility.

- iv. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the Town.
- v. Provide that if the property is not maintained or repaired within the prescribed schedule, the Town shall perform the maintenance and repair at its expense and bill the same to the property owner. The maintenance agreement shall also provide that the Town's cost of performing the maintenance shall be a lien against the property.

(2) Existing Problem Locations – No Maintenance Agreement

- a. The Town 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. Discharges from existing SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as non-compliant discharges.
- b. Inspection of existing facilities. The Town 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 other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the Town's NPDES MS4 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 SCM's.

(3) Owner/Operator Inspections.

The owners and/or operators of the SCMs shall:

- a. Perform routine inspections to ensure that all SCM's are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. Owners or operators shall maintain documentation of these inspections. The Town may require submittal of this documentation.

- b. Perform comprehensive inspection of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by individual(s) approved by the Town. Complete inspection reports for these five-year inspections shall include:
 - i. Facility type,
 - ii. Inspection date,
 - iii. Latitude and longitude and nearest street address,
 - iv. BMP owner information (e.g. name, address, phone number, fax, and email),
 - v. A description of BMP condition including:
 - vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,
 - vi. Photographic documentation of BMP's, and
 - vii. Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and reinspection dates.
- c. Owners or operators shall maintain documentation of these inspections. The Town may require submittal of this documentation.

(4) Requirements for All Existing Locations and Ongoing Developments.

The following requirements shall apply to all locations and developments at which land disturbing activities have occurred previous to the enactment of this ordinance:

- a. Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP Manual and on a schedule acceptable to the Town.
- b. Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
- c. Drainage ways shall be appropriately stabilized.
- d. Trash, junk, rubbish, etc. shall be cleared from drainage ways.
- e. Stormwater runoff shall, at the discretion of the Town, be treated to the maximum extent practicable to prevent its pollution. 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
- iv. Filtering systems
 - 1. Media Filter
 - 2. Sand filter
 - 3. Filter/absorption bed
 - 4. Filter and buffer strips
- v. Open channel
 - 1. Swale

(5) Corrections of Problems Subject to Appeal.

Corrective measures imposed by the Town under this section are subject to appeal under section 111-16 of this chapter.

111-14. ILLICIT DISCHARGES

This section shall apply to all water generated on developed or undeveloped land entering the Town's separate storm sewer system.

(1) 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. No person shall allow discharges that flow from a stormwater facility that is not inspected in accordance with section 111-13(1)b.ii.. 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. Water line flushing
- b. Landscape irrigation

- c. Diverted stream flows
- d. Rising ground waters
- e. Uncontaminated ground water 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.)
- f. Uncontaminated pumped ground water
- g. Discharges from potable water sources
- h. Air conditioning condensation
- i. Irrigation water
- j. Springs
- k. Water from crawl space pumps
- l. Footing (foundation) drains
- m. Lawn watering
- n. Individual residential car washing
- o. Flows from riparian habitats and wetlands
- p. Dechlorinated swimming pool discharges
- q. Street wash water with no soaps or solvents
- r. Discharges or flows from firefighting activities

Unless the Town determines they are significant contributors of pollutants to the MS4.

(2) 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. This prohibition expressly includes SCM's connected to the system not properly inspected and maintained in accordance with this ordinance.

- a. 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 BMP's 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 SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be prohibited.

(3) 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 Town in person or by telephone, fax, 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 Town within three (3) business days of the telephone 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.

(4) 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 Town; such illegal activity exposes runoff to contamination, generating an illicit discharge. Therefore, any individual or corporation guilty of illegal dumping may have committed a violation of this ordinance.

111-15. ENFORCEMENT

(1) Enforcement Authority.

The Town shall have the authority to issue notices of violation and citations, and to impose civil penalties to anyone that violates this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Town. The Town's enforcement authority includes (as set forth in the Town's Enforcement Response Plan (ERP)):

- (a) Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action(s).
- (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 & Civil Penalties – The Town 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 Plans, Permits, and Authorizations – Where a facility is in noncompliance, the Town own approval process affecting the facility's ability to discharge to the MS4 can be used to abate the violation.
- (f) Additional Measures — The Town may also use other escalated measures provided by local legal authorities. The Town 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 Town 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 Town may serve upon such person written notice of the violation. Within ten (10) days of this 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 Town. 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 Town 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 Town may order any person who violates this chapter or permit, or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served to 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 Town finds that any person has violated or continues to violate this chapter 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 Town finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the Town 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 Town 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 Town. 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 Town 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 chapter and in the BMP manual(s) adopted by the Town under this ordinance, the strictest standard shall prevail.
-

111-16. PENALTIES

Violations.

Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Town, shall be guilty of a civil offense.

(1) Penalties

Under the authority provided in Tennessee Code Annotated § 68-221-1106, the Town declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Town 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) Measuring Civil Penalties

In assessing a civil penalty, the Town shall consider:

- (a) The harm done to the public health or the environment;
- (b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
- (c) The economic benefit gained by the violator;
- (d) The amount of effort put forth by the violator to remedy this violation;
- (e) Any unusual or extraordinary enforcement costs incurred by the City; The amount of penalty established by ordinance or resolution for specific categories of violations; and
- (f) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(3) Recovery of Damages and Costs

In addition to the civil penalty in the subsection above [111-16. (1)], the Town may recover:

- (a) All damages proximately caused by the violator to the Town may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.
- (b) The costs of the Town's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

(4) Referral to TDEC

In accordance with the Town's Enforcement Response Plan and the NPDES Permit requirements, the Town may also notify TDEC of violations.

(5) Other Remedies

The Town may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(6) 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.

111-17. 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 chapter may appeal said penalty or damage assessment to the Town's governing body.

(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 Town's governing body, or other appeals board established by the Town's governing body 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. 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 governing body of the Town shall be final.

(3) Appealing Decisions of the Town's Governing Body

Any alleged violator may appeal against a decision of the Town's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

ORDINANCE:	24-09
PREPARED BY:	Smith
REQUESTED BY:	Staff, Town of Farragut
CERTIFIED BY FMPC:	May 16, 2024
PUBLIC HEARING:	_____
PUBLISHED IN:	_____
DATE:	_____
1ST READING:	_____
2ND READING:	_____
PUBLISHED IN:	_____
DATE:	_____

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE TOWN OF FARRAGUT TENNESSEE, PURSUANT TO AUTHORITY GRANTED BY SECTION 6-2-201, TENNESSEE CODE ANNOTATED, BY DELETING CHAPTER 103-AQUATIC BUFFERS, AND REPLACING CHAPTER 111-STORMWATER MANAGEMENT CONTROL, IN ITS ENTIRETY WITH A NEW ORDINANCE THAT WILL ALSO INCLUDE AQUATIC BUFFER PROVISIONS FROM THE DELETED CHAPTER 103

WHEREAS, the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, wishes to amend the Code of Ordinances of the Town of Farragut, by deleting Chapter 103-Aquatic Buffers, and replacing Chapter 111-Stormwater Management Control, in its entirety with a new Stormwater Management Control Ordinance.

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, that Chapter 103-Aquatic Buffers of the Code of Ordinances of the Town of Farragut, is deleted and Chapter 111-Stormwater Management Control, is hereby amended as follows:

SECTION 1.

The existing Code of Ordinances of the Town of Farragut, Chapter 111-Stormwater Management Control, is amended by deleting it in its entirety and substituting in lieu thereof the following:

111-1. LEGAL AUTHORITY

Under the authority of the Federal Water Pollution Control Act of 1977 (known as the Clean Water Act), the United States Environmental Protection Agency (EPA) is specifically required to develop and oversee the National Pollutant Discharge Elimination System (NPDES) permit program which requires all communities operating a small municipal separate storm sewer system (MS4) to regulate the discharge of pollutants to the waters of the state. Under the authority of the Tennessee Water Quality Control Act of 1977 the Tennessee Department of Environment and Conservation (TDEC) has interpreted that this mandate includes the regulation

of aquatic buffers. The Legislature of the State of Tennessee has in *Tennessee Code Annotated*, § 6-2-201, delegated the authority to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

111-2. SCOPE OF AUTHORITY

Any person, firm, corporation, business or any other entity proposing to develop land or improve property within the Town of Farragut is subject to the provisions of this ordinance. This ordinance also applies to individual building structures, subdivisions, excavations and fill operations, and similar activities. The Scope of Authority extends to additional improvements on projects, developments, subdivisions, etc. which were previously permitted and/or constructed under the authority of prior ordinances or guidelines. This chapter shall apply to all water generated on developed or undeveloped land entering the town's separate storm sewer system.

111-3. GENERAL PROVISIONS

(1) Purpose

It is the purpose of this chapter to:

- a. Protect, maintain, and enhance the environment of the Town of Farragut and the public health, safety and the general welfare of the citizens of the Town of Farragut, by controlling discharges of pollutants to the Town of Farragut'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 Town of Farragut;
- b. Enable the Town of Farragut to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges;
- c. Allow the Town of Farragut 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 Town of Farragut, whether 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 contaminants as may be necessary to protect water quality;
 - iv. Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;

- 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 Town of Farragut shall administer the provisions of this chapter.

(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 tool for permit compliance and to facilitate the necessary control of stormwater.

111-4. DEFINITIONS

For this chapter, 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 Town of Farragut declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Town 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. **Analytical monitoring** - Test Procedures for the Analysis of Pollutants - Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required. Pollutant parameters shall be determined using sufficiently sensitive methods in Title 40 C.F.R. § 136, as amended, and promulgated pursuant to Section 304

(h) of the Act. The chosen methods must be sufficiently sensitive as required in state rule 0400-40-03-.05(8).

3. **Aquatic Resource Alteration Permit (ARAP)** physical alterations to properties of the waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). ARAP means a permit issued pursuant to T.C.A. § 69-3-108 of the Act, which authorizes the alteration of properties of waters of the state that result from activities other than discharges of wastewater through a pipe, ditch, or other conveyance.
4. **As built plans (record drawings)** mean drawings depicting conditions as they were actually constructed.
5. **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.
 - Structural BMPs are facilities that help prevent pollutants in stormwater runoff from leaving the site.
 - Non-structural BMPs are techniques, activities and processes that reduce pollutants at the source.
6. **BMP Manual** provides technical guidance including additional policies, criteria, standards, specifications, constants, and information for the proper implementation of the requirements of the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR § 122 as applicable for stormwater discharges.
7. **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.
8. **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.
9. **Channel** means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.
10. **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 power lines 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.).

11. **Commencement of construction** means the initial disturbance of soils associated with clearing, grading, excavating or other construction activities.
12. **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.
13. **Construction Stormwater discharge-related activities** means activities that cause, contribute to, or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; activities to control stormwater including the siting, construction, and operation of best management practices (BMPs).
14. **Control measure** refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.
15. **Clean Water Act or CWA** means the Clean Water Act of 1977 or the Federal Water Pollution Control Act, 33 U.S.C. 1251, et seq. (1972), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.
16. **Design storm** is a storm event 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-yr, 2-yr, 5-yr, 25-yr, etc.) in terms of either 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.

The Design Storm Events for the Town are: 1-yr., 2-yr., 5-yr., 10-yr., 25-yr., and 100-yr.
17. **Discharge or discharge of a pollutant** refers to the addition of pollutants to waters from a source.
18. **Ecoregion** is a relatively homogeneous area defined by similarity of climate, landform, soil, potential natural vegetation, hydrology, or other ecologically relevant variables. Ecoregions can be determined for specific stream segments by using Tennessee's Online Water Quality Assessment Data viewer <http://tdeconline.tn.gov/dwr>.

19. **Environmental Protection Agency** is independent agency in the executive branch charged with controlling and abating environmental pollution. The EPA maintains separate programs dealing with air and radiation, water, solid waste, and pesticides and toxic substances. Among the agency's principal tasks are establishing pollution control standards, regulating the discharge of certain materials, issuing permits for the treatment or disposal of hazardous waste, monitoring air and water quality, administering the so-called "Superfund" for the cleanup of toxic waste sites, tracking the transport of hazardous compounds, registering insecticides and similar chemical treatments, and generally providing regulatory guidance to industry and other federal agencies. Although the EPA encourages voluntary compliance with federal environmental laws, it has authority to enforce regulations where violations occur. It maintains regional offices in 10 major U.S. cities in an effort to cooperate with state and local authorities in carrying out its mission.
20. **Exceptional Tennessee Waters** are surface waters designated by the Tennessee Department of Environment and Conservation 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 designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.
21. **Hot spot** means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants more than those typically found in stormwater. Examples might include operations producing concrete or asphalt, auto repair shops, auto supply shops, large commercial parking areas and restaurants.
22. **Improved sinkhole** is a natural surface depression that has been altered to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under the Underground Injection Control (UIC) program of the Tennessee Department of Environment and Conservation. 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. More information regarding an Underground Injection Control Permit can be found on TDEC's DWR webpage at <https://www.tn.gov/content/tn/environment/permit-permits/water-permits1/underground-injection-control-permit.html>
23. **Land Disturbance** means any man-made changes to the land surface that potentially alters its runoff characteristics; includes but is not limited to: clearing, grading, or excavation.
24. **Level 1** - Fundamentals of Erosion Prevention and Sediment Control training and certification program administered by University of Tennessee Water Resources Research Center (<https://tnepsc.org/index.asp>).
25. **Level 2** - Design Principles for Erosion Prevention and Sediment Control for Construction Sites training and certification program administered by University of Tennessee Water Resources Research Center (<https://tnepsc.org/index.asp>).

26. **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 substance; 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.
27. **Low-Impact Development** refers to stormwater management measures that rely on infiltration, evapotranspiration, or capture/reuse of stormwater runoff. Such measures may include, but are not limited to, permeable pavers, rain gardens, bioswales, vegetated roofs, rainwater capture systems and/or a combination thereof.
28. **Monitoring** refers to tracking or measuring activities, progress, results, etc., and can refer to non-analytical monitoring for pollutants by means other than 40 C.F.R. § 136 (and other than state- or federally established protocols in the case of biological monitoring and assessments), such as visually or by qualitative tools that provide comparative values or rough estimates.
29. **Municipality** means any incorporated city or town, county, metropolitan or consolidated government, or special district of this state empowered to provide storm water facilities.
30. **Municipal Separate Storm Sewer System** means, according to 40 CFR 122.26(b)(8), a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.
- (i) Designed or used for collecting or conveying stormwater;
 - (ii) Which is not a combined sewer; and
 - (iii) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
31. **NPDES or NPDES Permit** refers to the National Pollutant Discharge Elimination System permit program that addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to state governments by EPA to perform many permitting, administrative, and enforcement aspects of the program.
32. **Operator** means any person who owns, leases, operates, controls, or supervises a source. Including, but not limited to, an owner or operator of any “facility or activity” subject to regulation under the NPDES program.

33. **Permanent Stabilization** means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- 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.
- 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.
- 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.

34. **Point source (or Outfall)** means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from 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.

35. **Pollutant** means any type of industrial, municipal, and agricultural waste discharged into water. Examples are, but not limited to, dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste.

36. **Pollutants of concern** include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) and any other pollutant that has been identified as a cause of impairment of a receiving waterbody.

37. **Priority construction** means those construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.

38. **Rainfall event** is defined as any occurrence of rain preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.

39. **Registered Engineer and Registered Landscape Architect** refers to an engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.

40. **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.
41. **Sediment** means solid material, both inorganic (mineral) and organic, that: is in suspension; is being transported; has been moved from the site of origin by wind, water, gravity or ice as a product of erosion.
42. **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, 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 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 TN Waters, or waters with available parameters).
43. **Sedimentation** is the deposition of soil particles that have been transported by water and wind. The quantity and size of the material transported increases with the velocity of the runoff. Sedimentation occurs when the water in which the soil particles are carried is sufficiently slowed for a long period of time to allow particles to settle out. Heavier particles, such as gravel and sand, settle out sooner than finer particles, such as clay. The length of time a particle stays in suspension increases as the particle size decreases. The colloidal clays stay in suspension for very long periods and contribute significantly to water turbidity.
44. **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.
45. **Soil** or **Topsoil** means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.
46. **Steep Slope** or **Steep Grade** means a natural or created slope of 35% grade or greater.
47. **Stormwater** means rainfall runoff, snow melt runoff, and surface runoff and drainage.
48. **Stormwater control measure** or **SCM** means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.
49. **Stream**, as defined by TCA 69-3-103(38) “stream,” means a surface water that is not a wet weather conveyance.
50. **Stormwater associated with industrial activity** is defined in 40 C.F.R. 122.26(b)(14) and incorporated here by reference. Most relevant to the Town is 40 C.F.R. 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities, including borrow pits containing erodible material. Disturbance of soil for the purpose of crop production is exempt from NPDES permit

requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial (construction) activity. Maintenance to the original line and grade, hydraulic capacity; or to the original purpose of the facility (e.g., re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair and repaving of an existing road) is not considered a construction activity.

51. **Stormwater Pollution Prevention Plan (SWPPP)** is a written site-specific plan required by the Tennessee Construction General Permit (CGP) 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. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook (latest edition).
52. **Take of an endangered species** means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.
53. **Tennessee Erosion and Sediment Control (TDESC) Handbook** is a 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 CGP.
54. **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.
55. **Treatment chemicals** are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are **polyacrylamide-chitosan (PAM-CS)**.
56. **Turbidity** is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, like smoke in air.
57. **Waste site** is an area where 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.
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 TDEC 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 (<https://tdeconline.tn.gov/dwr/>), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html>.

60. **Water quality riparian buffer** means 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 the 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.
61. **One-week period** is a synonym of a calendar-week; typically, a period from Sunday through Saturday
62. **Water quality treatment volume (WQTV)** is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the 1-year 24-hour design storm. The WQTV is further determined by the type of treatment provided.
63. **Wet weather conveyances** are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:
- The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
 - The conveyance's channels are always above the groundwater table.
 - The flow carried by the conveyance is not suitable for drinking water supplies.
 - 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)).
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111-5. CONSTRUCTION STORMWATER MANAGEMENT

1. MS4 Stormwater Construction — Adoption of Material

- a. The Town adopts as its MS4 stormwater construction BMP manual(s) the following publication(s), which is incorporated by reference in this ordinance as if fully set out herein:

- i. TDEC Guide to the Selection & Design of Stormwater Best Management Practices (BMPs) (most current edition)
 - ii. TDEC Erosion and Sediment Control Handbook (most current edition)
- b. The Town has adopted, for use in designing Stormwater Control Measures, construction design storm events. The construction design storm events adopted by the Town are as follows:
 - i. For discharges into waters with available parameters for siltation: 2-year, 24-hour storm
 - ii. For discharges into waters with unavailable parameters for siltation or exceptional Tennessee waters: 5-year, 24-hour storm
- c. Requirements for design storm for all waters as well as special conditions for unavailable parameters waters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000).

2. Design Storm Requirements from CGP.

The municipality has adopted, for use in designing EPSC measures, the design storm requirements from the current Tennessee Construction General Permit for all waters as well as special conditions for unavailable parameters or Exceptional Tennessee Waters.

3. Construction Waste Control.

Construction site operators are required to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.

4. Priority Construction

- a. Priority in construction shall be, at a minimum, those construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.
- b. Requirements for all priority construction activities must include preconstruction meetings with construction site operators for priority construction activities so as to limit pollutants of concern.

5. Land Development Permit

- a. This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, land disturbance applications, and grading applications. These standards apply to qualifying new development or redevelopment sites.
- b. Every person will be required to obtain a land disturbance permit from the Town in the following cases:

- i. New development that involves land development activities of one (1) acre or more;
 - ii. Redevelopment that involves other land development activity of one (1) acre or more
- c. Projects of less than one acre of total land disturbance may also be required to obtain authorization under this ordinance if:
 - i. the Town 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; or is likely to be a significant contributor of pollutants to water of the state,
 - ii. 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 to obtain a stormwater permit;
 - iii. any new development or redevelopment, regardless of size, that is defined by the Town to be a hot spot land use; or
 - iv. the minimum applicability criteria set forth in item (a) above if such activities are part of a larger common plan of development, (see “common plan of development” definition).
 - v. The creation and use of borrow pits, that are not permitted under the Tennessee Multi Sector Permit (TMSP), where material is excavated and relocated offsite, and fill sites where materials or earth is deposited by mechanized methods resulting in an increased elevation or grade.
 - vi. As determined by the Town for single or duplex residential lots of any size, lots that have karst features, adjoining lakes or streams, slopes exceeding fifteen percent (15%), floodplains or streams to cross are required to submit an erosion control and stormwater management plan. Depending on site specific conditions the requirement that the plan be developed by a qualified licensed professional engineer or landscape architect may be waived by the Town.
 - vii. Land disturbance activities in the Town’s Flood Plain District (FPD) require a permit and shall provide evidence of obtaining appropriate licenses/permits that may be required by federal or state laws and regulations or written waiver from such permits and licenses prior to the issuance of a land disturbance permit by the Town.
 - viii. If unpermitted construction activity is on-going, the Town will issue an immediate stop-work order. If, in addition to the Town’s permit, a TDEC permit was required but was not obtained, the violator will also be reported to TDEC.

6. Land Disturbance/Grading/Stormwater Construction Permit.

Persons seeking the issuance of any land disturbance or grading permits must provide both proof of coverage under the Tennessee Construction General Permit (CGP) (if applicable) and a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the Town when requested.

- a. Copies of additional applicable local, state or federal permits (i.e.: ARAP, approved hydrologic determination, etc.) must also be provided to the Town.
- b. The Town has the authority to withhold local permits prior to receiving copies of the aforementioned permits.
- c. In circumstances where no such permits have been required, the Town may still require a SWPPP as part of the land disturbance permit application.

7. Building Permit.

No building permit shall be issued until the applicant has first obtained a land disturbance permit where required by this ordinance.

8. EPSC and BMP Implementation.

Construction site operators are required to implement appropriate erosion prevention and sediment control measures and best management practices to reduce stormwater discharges containing pollutants of concern. EPSC requirements shall meet the Tennessee's CGP design storm(s), be consistent with the TDEC ESC Handbook best management practices and with the requirements of this ordinance.

9. Site Assessment Requirements.

Where site assessments are required by the CGP, the operator shall provide a copy of the assessment to the Town.

10. Inspector Requirements.

Twice-Weekly inspections of the site and the BMP's/SCM's must be performed by an individual who has either received certification under the Level I Fundamentals of Erosion Prevention and Sediment Control course or has other credentials identified as equivalent within this ordinance.

11. 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 be stabilized to prevent pollutants of concern. 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 no later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. 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 has temporarily ceased, and earth disturbing activities will be resumed within 14 days.
- b. For steep slopes of 35% or more stabilization measures shall be initiated within 7 days.
- c. Construction buffer zones shall be those water quality buffers, and buffer zones as defined in 111-4 above and shall meet the requirements in this ordinance and, where appropriate in the TN CGP. The criteria for the width of the construction buffer zone can be established on an average width basis at a project, if the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the “ordinary high-water mark.” Construction buffers are not primary sediment control measures and shall not be relied on as such. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. The designer/operator must comply with the vegetation requirements and the permissible land uses set forth for buffers in the TN CGP. Where it is not practicable to maintain a construction water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used.
- d. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as properly anchored mulch, soil binders or matting must be employed.

12. Notice of Termination (NOT).

The operator shall provide the Town with a copy of the NOT when it is issued by TDEC.

13. As Built Plans (Record Drawings).

All applicants are required to submit actual as built plans certified by the design engineer for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A certification by the design engineer certifying that SCM's will function within original design parameters as constructed shall be included. A final inspection by the Town is required before any performance security or performance bond will be released. The Town shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMP's/SCM's have been made and accepted by the Town. No bonds or securities shall be released by the Town until the (stormwater manager) has accepted the as built

plans. The warranty period for any infrastructure to be accepted by the Town for maintenance shall not commence until the Town has accepted the as built plans.

14. Equipment Manufacturer Startups.

No bonds or securities shall be released until any equipment to be maintained by the Town passes any specified manufacturer startup procedure. The warranty period shall not commence prior to the equipment passing any specified manufacturer startup procedure.

111-6. PERMANENT STORMWATER MANAGEMENT: DESIGN AND CONSTRUCTION INSPECTION

- 1) To comply with the Town's permanent stormwater standards for new development and redevelopment projects, design and install SCMs as established by Tennessee Rule 0400-40-10-.04 and comply with other requirements of Tennessee Rule 0400-40-10-.04. Note that for design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.
- 2) 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 new development or redevelopment project. The designer may select from the most appropriate alternatives listed in the Town's BMP Manual.
- 3) Designs shall be based on the 24-hour design storm adopted by the Town:

The Town has adopted, for use in designing water quality SCMs, the design storm requirements as established in Tennessee Rule 0400-40-10-.04. The Post Construction/Permanent water quality design storm is a 1-year, 24-hour storm event for water quality SCMs. See definition of Design Storm Event for the municipality's rainfall amounts for each return period interval. The Design Storm Events for the Town are: 1-yr., 2-yr., 5-yr., 10-yr., 25-yr., and 100-yr.

The estimated design rainfall amounts, for any return period interval in terms of either 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.

111-7. DESIGN STANDARDS FOR DETENTION AND/OR RETENTION PONDS

- 1) The calculated peak flow rate of stormwater runoff resulting from a one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storm shall be no greater after development of the site than that which would result from a one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storm on the same site prior to development.
- 2) Adequate attention must be given to safety and sanitation in the design of any detention facility. This includes, but is not limited to, a minimum of two percent slope in the bottom of all detention ponds, a minimum of 2.5:1 (H:V) side slopes or with traversable access to the pond's vegetated bottom and side slopes for maintenance, proposed contours should reflect 15 percent additional area for each two-foot contour of the detention or retention pond based

on the appropriately sized pond for the one-, two-, five-, ten-, 25-, and 100-year storms, a minimum of 4,500 cubic feet of storage volume, and a minimum of one foot of freeboard from the highest water surface elevation for the largest required design storm to the top of the berm before the 15 percent additional volume is added. First-flush volume and treatment shall be provided as described in the BMP manual.

- 3) The plans shall include sufficient design information to show that the facility will operate as required. This shall include the existing (or before site development) peak flow discharges, the after-site development peak flow discharges, and/or volumes of stormwater runoff based on the proposed site development, as well as all necessary computations used to determine the reduced peak flow rates for the design storms. The capacity of the facility shall be sufficient to control the volume of stormwater runoff resulting from one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms within the peak rate of flow requirements stated in this subsection.
 - 4) Discharge from the stormwater detention pond shall be routed to a ditch, channel, or stormwater facility of adequate capacity. Calculations showing the capacity of the receiving stormwater facility and its capability to convey a ten-year frequency storm shall be provided. If the receiving stormwater facility is incapable of conveying a ten-year frequency storm, calculations showing the capacity of the receiving stormwater facility and its capability to convey a two-year frequency storm shall also be provided. The above calculations will be routed to the closer of the second existing street crossing or blue-line stream. If energy dissipation is required, calculations must be submitted to confirm that proposed energy dissipation is adequate for the design. Such dissipation structures must be located outside any buffer area and a sufficient distance from adjacent property to prevent any adverse impact, such as erosion and scouring, to those adjacent properties, buffers, or receiving drainage way.
 - 5) The town administrator has authority to condition the approval of a permit upon the compliance with additional requirements, including, but not limited to, correctly sizing and installing offsite conveyance facilities or other stormwater management solutions required to reduce the adverse impact of the proposed development on other properties or the development.
 - 6) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the town administrator may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
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111-8. REQUIREMENTS FOR LOW-IMPACT DEVELOPMENT

Stormwater management addresses the conveyance and treatment of rainfall and other water entering a site. Low Impact Development (LID) is a specific development strategy to address stormwater in a way that closely mimics the natural, pre-development hydrologic system. At least 25 percent of the development's total area shall be designed so that its runoff will be accommodated through Low Impact Development (LID) measures. Measures shall be demonstrated on the drainage plan and in the drainage calculations for the development and the applicable LID measures specified as part of the site and landscape plan submittals.

Refer to Town of Farragut Code of Ordinances - Appendix D – Architectural Design Standards, Sections 1.34-37 “Stormwater Management and Low-Impact Development” for Site Design Guidelines.

111-9. REQUIREMENTS FOR DEVELOPMENTS DRAINING TO A SINKHOLE

- 1) Development on property where the proposed work encroaches the highest closed contour elevation of a sinkhole will require copies of the appropriate permits from the state department of environment and conservation (TDEC) prior to site development approval. After reviewing the state permit, the town administrator may require additional information related to structural integrity and flood protection. If the proposed development does not require TDEC approval, a letter from TDEC obtained by the applicant shall be submitted to the town prior to the issuance of a permit, stating that a TDEC permit is not required.
 - 2) For development or redevelopment projects requiring attenuation or retention of the one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms with sinkholes entirely on site, calculations shall be provided showing that 100-year 24-hour design storm will not flood any structures assuming plugged conditions (zero cubic feet per second (0 cfs) outflow) for the sinkhole. These calculations must include the entire contributing watershed for the sinkhole. An easement is required around the sinkhole to include an area that is a minimum of five feet horizontally outside the highest closed contour elevation.
 - 3) For development or redevelopment projects requiring attenuation or retention of the one-year, two-year, five-year, ten-year, 25-year and 100-year return frequency 24-hour duration storms with sinkholes partially on site, calculations must be provided showing that there will not be a rise in water surface elevations between the 100-year pre-developed and the 100-year post-developed 24-hour design storm assuming plugged conditions (zero cubic feet per second (0 cfs) outflow) for the sinkhole. An easement is required at a minimum of five feet horizontally outside the highest closed contour elevation on the section of the sinkhole located on the developed property. A rise in the 100-year water surface elevation is allowable when no structures will be flooded and all parties with ownership of the sinkhole agree in writing to allow the rise. In this case, an easement is required around the sinkhole to include an area that is a minimum of five feet horizontally outside the highest closed contour elevation.
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111-10. DRAINPIPES

Material for pipes used for conveyance of stormwater within the town shall be in accordance with the following:

- 1) Cross drains and any other pipe under the pavement surfaces shall be reinforced concrete pipe (RCP). Storm drains within the roadway prism, but not under the pavement, shall also be RCP.
- 2) Any pipe, culvert, or drainage system dedicated to the town, whether inside or outside the right-of-way, shall be constructed of RCP.

- 3) RCP is required if the failure of the pipe would cause flooding or potential property damage on adjacent properties. RCP is required for all storm pipes and culverts that carry through water from adjacent properties ("off-site water").
 - 4) RCP is required for all detention basin outlet structures.
 - 5) Material for driveway pipes may be RCP, corrugated metal pipe (CMP), or double-walled high-density-polyethylene-pipe (HDPE) as desired by the responsible agency, corporation, or individual. RCP is required underneath any driveways or entrances that are heavily traveled or which would have the potential to flood areas within the public right-of-way or any structure.
 - 6) Double-walled HDPE pipe and CMP may be used to convey stormwater generated on the particular property (on-site drainage), such as parking lots, buildings, etc. Both pipe materials (HDPE and CMP) may be used to convey water under driveways in locations where a pipe is outside the roadway prism, has adequate cover, and would not cause flooding of adjacent properties or rights-of-way in the event of pipe failure.
 - 7) Installation of all pipes must be done with adequate pipe bedding, backfill material, and coupling bands as recommended by the pipe manufacturer.
 - 8) All pipes, regardless of their material, shall be a minimum of 18 inches in diameter, with the exception of those pipes under greenways or trails, which shall be a minimum of 12 inches in diameter.
-

111-11. WATER QUALITY RIPARIAN BUFFERS

1) Post Construction/Permanent Water Quality Riparian Buffers.

Post Construction/Permanent Water Quality Riparian Buffers shall be those buffers defined in 111-4 above and shall meet the requirements described in this ordinance. The criteria for the width of the post construction/permanent buffer zone can be established on an average width basis at a project, if the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently. Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark." Stormwater discharges should enter the post construction/permanent water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow.

All final plats and site plans shall:

- a) Show the extent of any water quality riparian buffer on the subject property and be labeled as "water quality riparian buffer";
- b) Provide a note to reference any water quality riparian buffer stating, "There shall be no clearing, grading, construction, or disturbance of soil and/or native vegetation except as permitted by the Town";

- c) Provide a note to reference any protective covenants governing all water quality riparian buffers.

2) Available Parameters.

Post Construction/Permanent buffers for waters with available parameters for siltation or habitat alteration or unassessed waters:

- a. Average buffer width: 30 feet.
- b. Minimum buffer width: 15 feet

3) Unavailable Parameters.

Post Construction/Permanent buffers for Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration:

- a. Average buffer width: 60 feet.
- b. Minimum buffer width: 30 feet

4) Vegetative Requirements

- a) The vegetative target is a mature strip of undisturbed native vegetation (either original or re-established) that can provide erosion control to the stream, leaf litter, and wood debris. This area shall be measured perpendicular from the edge, adjacent to streams, delineated wetlands, and springs. If streams, wetlands, or springs do not have an established aquatic buffer, then a planting plan shall be required. Such a planting plan shall be submitted to town staff for approval and comply with the following:
- b) All planting plans shall be drawn at a scale of not less than one-inch equals 20 feet for small tracts and one-inch equals 50 feet for large tracts when the plans are printed on 24-inch by 36-inch sheets;
- c) All plans must be submitted electronically in portable document format (PDF).
- d) The planting plan shall include a "plant schedule", which lists the number and common and botanical name of all existing and proposed plantings. The "plant schedule" shall also list the height, spread, and where applicable, the caliper of all new plantings at the time of planting.
- e) Establishment of a vegetated aquatic buffer must adhere to the following conditions and shown on the planting plan:
 - i) Stream banks must be planted with native vegetation that represent both woody (trees and shrubs) and herbaceous species as determined by a landscape architect. Density shall depend on the re-vegetation technique to be used and existing site conditions;
 - ii) No trees shall be planted in a utility district easement;
 - iii) No species may comprise more than one-third of the total planted trees or shrubs;
 - iv) Seedling/trees must be guaranteed at a 75 percent survivorship; and
 - v) Invasive species must be removed and managed.

5) Management and Maintenance of Water Quality Riparian Buffers

- a) Management of water quality riparian buffers include specific limitation on alteration of the natural conditions. The following practices and activities are restricted within the water quality riparian buffer, except with prior approval from the Town:
 - i) Clearing or grubbing of existing vegetation; and
 - ii) Use, storage, and application of pesticides, herbicides, and fertilizers.
- b) The following structures, practices, and activities are permitted in the aquatic buffer subject to prior approval by the town and the following specific design or maintenance features:
 - i) Crossings, provided the following criteria are followed:
 - a. The width should be the minimum width needed to allow for maintenance access and installation;
 - b. The crossing shall be at an angle that minimizes clearing requirements; and
 - c. The minimum number of crossings should be used within each development.
 - ii) Paths, provided the design and location are approved by the town.
 - iii) Utilities, provided the following criteria are followed:
 - a. The width should be the minimum width needed to allow for maintenance access and installation; and
 - b. The crossing should be at an angle that minimizes clearing requirements.
- c) Individual trees within the water quality riparian buffer may be removed if in danger of falling, causing damage to dwellings or other structures, causing blockage of the stream, standing in the path of a proposed water or sewer main, or the roots of the tree are penetrating or in danger of penetrating a sewer line at a joint or pipe connection. The root wad or stump should be left in place, where feasible, to maintain soil stability.
- d) All water quality riparian buffers must be protected during development activities. Prior to the initiation of development activities, ensure adequate visibility of the water quality riparian buffer by staking, flagging, or fencing. Permanent boundary markers, in the form of signage approved by the Town, may be required to be installed prior to the recording of the final plat, the issuance of a certificate of occupancy, or the issuance of a certificate of completion.
- e) Water quality riparian buffers shall be left in a stabilized condition upon completion of the development. The vegetative condition of the entire aquatic buffer must be monitored, and landscaping or stabilization performed to repair erosion, damaged vegetation, or other problems identified. Invasive species must be removed and managed. Only native vegetation may be used in conjunction with stabilization activities. Property owners shall remain responsible for maintaining the water quality riparian buffer. Where any tree or shrub, which was required as part of an approved planting plan, is removed, such tree or shrub shall be replaced with an equivalent tree or shrub approved by town staff.

- f) All landscaping or stabilization activities within the water quality riparian buffer must have prior approval by the Town. In addition, performing work in and around waters of the state may require coverage under a state and possibly a federal permit.
-

111-12. PERMANENT SCM MAINTENANCE AND INSPECTION

(1) As Built Plans.

All applicants are required to submit actual as built plans for any structures located on-site within 90 days after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by either a registered professional engineer or landscape architect licensed to practice in Tennessee. A sealed certification by the design engineer that all SCM's will function within design parameters as constructed shall accompany the as built plans. A final inspection by the Town is required before any performance security or performance bond will be released.

The Town shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all stormwater management facilities have been made and accepted by the Town.

(2) Permanent Stormwater Management Plan.

In addition to the certified as built drawings, the Town shall be provided with a permanent stormwater management plan for the site and all stormwater management facilities (e.g., SCM's). Occupation permits shall not be granted until the permanent stormwater management plan has been approved and accepted by the Town.

(3) Inspection of Stormwater Management Facilities.

Periodic inspections of facilities shall be performed, documented, and reported in accordance with this chapter, as detailed in 111-13(1)b.ii.

(4) Records of Installation and Maintenance Activities.

Parties responsible for the operation and maintenance of a stormwater management facility 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 Town during inspection of the facility and at other reasonable times upon request.

(5) Failure to Meet or Maintain Design or Maintenance Standards.

If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this chapter, the Town, after notice as specified in the Enforcement Response Plan, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. If the stormwater management facility becomes a danger to public safety or public health, the Town shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have thirty (30) days to effect maintenance and repair of the facility in an approved manner. If corrective action is not

undertaken within that time, the Town may take the necessary corrective action. The cost of any action by the Town under this section shall be charged to the responsible party.

(6) Danger to Public Health/Public Safety.

If the stormwater management facility becomes a danger to public safety or public health, the Town may take such immediate corrective action as deemed necessary.

111-13. PERMANENT SCMs: NEW DEVELOPMENT, EXISTING LOCATIONS, AND ONGOING DEVELOPMENTS

(1) On-Site Stormwater Management Facilities Inspection and Maintenance Agreement

- a. Where the stormwater facility is located on property that is subject to a development agreement and the development agreement provides for a permanent stormwater maintenance agreement that runs with the land, the owner of property must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owners, all subsequent property owners, and their lessees and assigns, including but not limited to, homeowner associations or other groups or entities.

The required maintenance agreement form is available through the Town's Engineering Department.

- b. The maintenance agreement shall:
 - i. Assign responsibility for the maintenance and repair of the stormwater facility to the owners of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.
 - ii. Provide for a periodic inspection by the property owners in accordance with the requirements of subsection (3) below for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this ordinance. The property owners will arrange for this inspection to be conducted by individual(s) approved by the Town who will submit a signed written report of the inspection to the Town. It shall also grant permission to the Town to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.
 - iii. Provide that the minimum maintenance and repair needs to include, but are not limited to:
 - 1) the removal of silt, litter and other debris, the cutting of grass, cutting and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities. It shall also provide that the property owners shall be responsible for additional maintenance and repair needed to meet the intended design specification of the stormwater facility.

- iv. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the Town.
- v. Provide that if the property is not maintained or repaired within the prescribed schedule, the Town shall perform the maintenance and repair at its expense and bill the same to the property owner. The maintenance agreement shall also provide that the Town's cost of performing the maintenance shall be a lien against the property.

(2) Existing Problem Locations – No Maintenance Agreement

- a. The Town 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. Discharges from existing SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as non-compliant discharges.
- b. Inspection of existing facilities. The Town 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 other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the Town's NPDES MS4 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 SCM's.

(3) Owner/Operator Inspections.

The owners and/or operators of the SCMs shall:

- a. Perform routine inspections to ensure that all SCM's are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. Owners or operators shall maintain documentation of these inspections. The Town may require submittal of this documentation.
- b. Perform comprehensive inspection of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a

minimum. Such inspections must be conducted by individual(s) approved by the Town. Complete inspection reports for these five-year inspections shall include:

- i. Facility type,
 - ii. Inspection date,
 - iii. Latitude and longitude and nearest street address,
 - iv. BMP owner information (e.g. name, address, phone number, fax, and email),
 - v. A description of BMP condition including:
 - vegetation and soils; inlet and outlet channels and structures;
 - embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,
 - vi. Photographic documentation of BMP's, and
 - vii. Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and reinspection dates.
- c. Owners or operators shall maintain documentation of these inspections. The Town may require submittal of this documentation.

(4) Requirements for All Existing Locations and Ongoing Developments.

The following requirements shall apply to all locations and developments at which land disturbing activities have occurred previous to the enactment of this ordinance:

- a. Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP Manual and on a schedule acceptable to the Town.
- b. Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
- c. Drainage ways shall be appropriately stabilized.
- d. Trash, junk, rubbish, etc. shall be cleared from drainage ways.
- e. Stormwater runoff shall, at the discretion of the Town, be treated to the maximum extent practicable to prevent its pollution. 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
- iv. Filtering systems
 - 1. Media Filter
 - 2. Sand filter
 - 3. Filter/absorption bed
 - 4. Filter and buffer strips
- v. Open channel
 - 1. Swale

(5) Corrections of Problems Subject to Appeal.

Corrective measures imposed by the Town under this section are subject to appeal under section 111-16 of this chapter.

111-14. ILLICIT DISCHARGES

This section shall apply to all water generated on developed or undeveloped land entering the Town's separate storm sewer system.

(1) 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. No person shall allow discharges that flow from a stormwater facility that is not inspected in accordance with section 111-13(1)b.ii.. 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. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Rising ground waters

- e. Uncontaminated ground water 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.)
- f. Uncontaminated pumped ground water
- g. Discharges from potable water sources
- h. Air conditioning condensation
- i. Irrigation water
- j. Springs
- k. Water from crawl space pumps
- l. Footing (foundation) drains
- m. Lawn watering
- n. Individual residential car washing
- o. Flows from riparian habitats and wetlands
- p. Dechlorinated swimming pool discharges
- q. Street wash water with no soaps or solvents
- r. Discharges or flows from firefighting activities

Unless the Town determines they are significant contributors of pollutants to the MS4.

(2) 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. This prohibition expressly includes SCM's connected to the system not properly inspected and maintained in accordance with this ordinance.

- a. 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 BMP's 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 SCM's that have not been maintained and/or inspected in accordance with this ordinance shall be prohibited.

(3) 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 Town in person or by telephone, fax, 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 Town within three (3) business days of the telephone 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.

(4) 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 Town; such illegal activity exposes runoff to contamination, generating an illicit discharge. Therefore, any individual or corporation guilty of illegal dumping may have committed a violation of this ordinance.

111-15. ENFORCEMENT

(1) Enforcement Authority.

The Town shall have the authority to issue notices of violation and citations, and to impose civil penalties to anyone that violates this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Town. The Town's enforcement authority includes (as set forth in the Town's Enforcement Response Plan (ERP)):

- (a) Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action(s).
- (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 Town 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 Town own approval process affecting the facility’s ability to discharge to the MS4 can be used to abate the violation.
- (f) Additional Measures — The Town may also use other escalated measures provided by local legal authorities. The Town 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 Town 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 Town may serve upon such person written notice of the violation. Within ten (10) days of this 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 Town. 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 Town 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 Town may order any person who violates this chapter or permit, or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served to 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 Town finds that any person has violated or continues to violate this chapter 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 Town finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the Town 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 Town 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 Town. 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 Town 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 chapter and in the BMP manual(s) adopted by the Town under this ordinance, the strictest standard shall prevail.
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111-16. PENALTIES

Violations.

Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Town, shall be guilty of a civil offense.

(1) Penalties

Under the authority provided in Tennessee Code Annotated § 68-221-1106, the Town declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Town 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) Measuring Civil Penalties

In assessing a civil penalty, the Town shall consider:

- (a) The harm done to the public health or the environment;
- (b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
- (c) The economic benefit gained by the violator;
- (d) The amount of effort put forth by the violator to remedy this violation;
- (e) Any unusual or extraordinary enforcement costs incurred by the City; The amount of penalty established by ordinance or resolution for specific categories of violations; and
- (f) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(3) Recovery of Damages and Costs

In addition to the civil penalty in the subsection above [111-16. (1)], the Town may recover:

- (a) All damages proximately caused by the violator to the Town may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.
- (b) The costs of the Town's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

(4) Referral to TDEC

In accordance with the Town's Enforcement Response Plan and the NPDES Permit requirements, the Town may also notify TDEC of violations.

(5) Other Remedies

The Town may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(6) 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.

111-17. 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 chapter may appeal said penalty or damage assessment to the Town's governing body.

(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 Town's governing body, or other appeals board established by the Town's governing body 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. 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 governing body of the Town shall be final.

(3) Appealing Decisions of the Town's Governing Body

Any alleged violator may appeal against a decision of the Town's governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

SECTION 2.

This ordinance shall take effect from and after its final passage and publication, the public welfare requiring it.

Ron Williams, Mayor

Allison Myers, Town Recorder

Certified to the Farragut Board of Mayor and Aldermen this ____ day of _____, 2024, with approval recommended by the Farragut Municipal Planning Commission (FMPC).

Scott Russ, Chairman

Shannon Preston, Secretary

REPORT TO THE BOARD OF MAYOR AND ALDERMEN

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Ordinance 24-11, an ordinance on first reading to amend the Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, to Provide for Additional Considerations for Pedestrians and Bicyclists

INTRODUCTION AND BACKGROUND: At the Board of Mayor and Aldermen Strategic Planning Retreat earlier this year, one of the top priorities under the “Advancing a High-Quality and Well-Maintained Community” critical success factor in the Town’s Strategic Plan was to amend the Traffic Impact Study Requirements in the Driveways and Other Access Ways Ordinance to include pedestrian safety.

DISCUSSION: During discussion with the Planning Commission, the staff reviewed proposed amendments to the existing Traffic Impact Study requirements. The main objective was to ensure that, where traffic impact studies are required, consideration is given to pedestrians and bicyclists. This would include evaluating existing facilities and addressing any impacts that may result from the action (rezoning, site development, subdivision development, etc.) that required the traffic impact study.

In developing the text amendments that were ultimately included in Ordinance 24-11, the staff reviewed similar provisions in other communities. The staff also sent the proposed amendments to local traffic engineers for their input. The feedback that was received is incorporated into Ordinance 24-11.

RECOMMENDATION: At their meeting on June 20, 2024, the Planning Commission unanimously recommended approval of Ordinance 24-11. Community Development Director, Mark Shipley, also recommends approval of Ordinance 24-11 on first reading.

BOARD ACTION:

MOTION BY:_____ **SECONDED BY:**_____

<u>VOTE/TOTAL</u>	<u>WILLIAMS</u>	<u>MEYER</u>	<u>WHITE</u>	<u>POVLIN</u>	<u>BURNETTE</u>
YES	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____
ABSTAIN	_____	_____	_____	_____	_____

(NOTE: changes are shown in red and strikethroughs)

Sec. 22-147. Traffic impact study requirements

(a) *Generally.*

- (1) The submission of a traffic impact study shall be required with rezoning, site plan and preliminary plat requests in accordance with the following table:

24-Hour Trip Generation	Traffic Study Scope
0—750 ADT	Level I
750—6,000 ADT	Level II
> 6,000 ADT	Level III

- (2) Trip generation rates for proposed uses shall be calculated using the ITE Trip Generation Manual, ~~5th (or latest) edition.~~ **latest edition.**
- (3) Upon being provided proof by the developer's traffic engineer that a lower level traffic impact study would be adequate for a proposed development, or that a traffic study is not warranted, the town engineering staff may reduce the level of study required or waive the requirement.

(b) *Traffic impact study guidelines and procedures.*

- (1) These traffic impact study guidelines and procedures define when proposed rezoning, site plans and preliminary plat requests warrant a detailed traffic study and what information should be included in it. All applicants will be required to follow the town guidelines.
- (2) The purpose of performing a traffic impact study, as defined by the institute of traffic engineers (ITE), is to:
- Provide guidance for short term and long term planning of site access;
 - Provide guidance for on-site circulation and the interface between on-site circulation and off-site traffic;
 - Provide guidance for off-site improvements needed to permit the roadway system to function satisfactorily so as to accommodate site and non-site traffic;
 - Provide guidance on measures to improve the safety and efficiency of pedestrian and bicycle facilities impacted by the proposed action for which the traffic impact study is being prepared.**
 - Assist developers and land owners in making land use site planning decisions regarding traffic;
 - Identify the contribution a particular development makes to roadway system traffic volumes;
 - Provide a basis for estimating roadway improvement requirements attributable to a particular project;
 - Assess the compatibility with local transportation plans;
 - Enable staff to better evaluate zoning changes and development plans; and
 - Allow appointed and elected officials to know implications of their voting decisions.
- (c) *Scope of required traffic impact studies.* Three levels of study have been identified based on the number of trips that a development is projected to generate in a 24-hour period:

-
- (1) Level I studies require analysis of each access, per engineering staff, that the development has to an existing roadway. Access points to be analyzed include public and private roads, joint permanent easements, and private drives.
 - (2) Level II studies require analysis of each access that the development has to an existing roadway, and to the first control point beyond those access points. A control point is an intersection controlled by a traffic signal or stop sign on the existing roadway onto which the development has access. For cases where a traffic control device does not exist, engineering staff will determine the extent of the study. If a freeway interchange is near the property to be developed and is not signalized, engineering staff will determine if the ramps need to be included in the study. This level of study is commonly required for larger residential subdivisions, commercial developments, and office complexes.
 - (3) Level III studies require a complete traffic impact study. This study must address each access point, the first control point beyond each access point, and the nearest collector intersection or street of higher classification or as determined by the engineering staff. The exact area to be studied will be determined by the engineering staff with input from the study preparer. Level III studies are uncommon, as they are usually warranted only with very large mixed-use and commercial developments.
- (d) *Submission and review procedures for traffic impact studies.*
- (1) Applicants should conduct a preliminary trip generation assessment of any proposed rezoning, site plan or preliminary plat request to determine if a traffic impact study will be required. This preliminary assessment should be conducted well in advance of the actual submission of plans.
 - (2) If the preliminary assessment indicates that a traffic impact study will be required, the applicant should consult as early as possible in the plan-development process with the town's engineering staff to verify a development's projected trip generation, and to confirm whether or not a study will be required. If a study is required, the required level can be determined at that time.
 - (3) The applicant shall then select a licensed traffic or transportation engineer to prepare the study, who may need to consult with the engineering staff periodically to review the collected data and any assumptions made in the draft report.
 - (4) ~~Four copies~~ An electronic copy of the completed draft traffic impact study shall be submitted along with the development application and all other materials required for submission.
 - (5) The engineering staff shall review the draft traffic impact study in conjunction with the other elements of the development application. If the draft traffic impact study is not of the proper scope or is executed improperly, the applicant shall be notified of the deficiencies and be required to submit corrections on the same schedule that applies to the other elements of the development application. Failure to submit corrections in a timely manner may lead to a postponement of the application until the next regularly scheduled planning commission meeting.

Since a completed traffic impact study must be submitted at the same time as the application for a development, it is critical that the applicant conduct steps one through three early in their planning of a proposed development. Failure to submit a traffic impact study, or submission of an inadequate study, is likely to slow the review process and may lead to postponements.

- (e) *Required qualifications for preparers of traffic impact studies.* Traffic impact studies shall be prepared under the supervision of a qualified engineer who has specific training in traffic and transportation engineering and experience related to preparing traffic studies for existing or proposed developments. The study shall be signed and sealed by the supervising engineer. The ability to forecast and analyze traffic needs for both developments and roadway systems is essential. All design work implementing the recommendations of the traffic impact study shall be completed under the supervision of a registered professional engineer.

(f) *Required specifications for traffic impact studies.*

(1) *Report requirements: Level I studies.*

a. *Intersection.*

1. Description of site including a location map.
2. Type of project.
 - (i) If residential, number and type of units.
 - (ii) If commercial or office, include square footage and occupancy.
3. Site plan with access points shown to scale.

b. *Existing conditions.*

1. Distance from nearest intersection in both directions.
2. Distance to nearest drive or access points in both directions.
3. Location shown relative to opposing street, driveways, or access points.

4. Existing pedestrian and bicycle facilities in the study area.

c. *Proposed conditions.*

1. Width, radius, and markings of proposed street, driveway, or access point.
2. Proposed improvements adjacent to access point, including, but not limited to, acceleration, deceleration lanes, and pavement marking adjustments.
3. Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
4. Improvements to pedestrian crossings to lessen potential conflicts with motorists.

(2) *Report requirements: Level II studies.*

a. *Introduction.*

1. Description of site including a location map.
2. Type of project.
 - (i) If residential, number and type of dwelling units.
 - (ii) If commercial or office, square footage and type of occupancy.
3. Map of project with proposed access points shown.

b. *Existing conditions.*

1. Directional traffic counts on roads adjacent to property with access to development: Traffic counts should be no more than one year old.
2. Level of service of intersections (if applicable):
 - (i) Highway capacity software is recommended.
 - (ii) Other nationally recognized software can be used.

3. Existing pedestrian and bicycle facilities in the study area.

c. *Trip generation rates.*

1. Listing of trip generation rates.
2. Listing of sources for rates used.
 - (i) ~~ITE 5th Edition of Trip Generation Manual~~, latest edition.
 - (ii) If the type of proposed development is not addressed in the ITE manual, then other rates may be used as long as they are documented and have been approved by engineering staff.
3. Calculation of trip ends by type of generator.
 - (i) Traffic generated by phase.
 - (ii) 100 percent occupancy and development.
4. An assessment of whether site-generated traffic will have any adverse impacts to pedestrians and/or bicyclists.

d. *Trip distribution.*

1. Assumptions as to the directional distribution of traffic to and from the development.
2. Assumptions as to the peak hour percentages.
3. Assumptions as to the peak hour directional splits.
4. Assumptions as to the pass-by trips, if applicable, must be approved by engineering staff.
5. An assessment of whether modifications to site generated trip distribution will have any adverse impacts to pedestrians and/or bicyclists.

e. *Analysis.*

1. Level of service (LOS) and capacity analysis for peak periods.
 - (i) Compute the projected LOS and capacity analysis for each access point and control point to the adjacent road system based on the development by phase.
 - A. Highway capacity software is recommended.
 - B. Other nationally recognized software can be used.
 - (ii) Compare LOS before development to LOS after development if applicable.
 - (iii) Link analysis if applicable.
2. Intersection and roadway geometry; existing and proposed.
 - (i) Distances from existing streets, driveways, and/or median cuts.
 - (ii) Alignment with existing streets, driveways, and/or median cuts.
 - (iii) Intersection layouts.
 - (iv) Sight distance.
 - (v) Right-of-way width.
 - (vi) Lane width.
3. Site circulation.
4. Pedestrian facilities.

-
- (i) Sidewalks, walking trails.
 - (ii) Crosswalks, crossing distance, pedestrian signals and associated timing.
 - (iii) Transit stops.
 - (iv) School bus stops.

5. Bicycle facilities.

f. Recommendations.

- 1. Site access.
- 2. Intersection improvements.
 - (i) Traffic control devices: modify existing or need for new.
 - (ii) Left and/or right turn lanes.
 - (iii) Acceleration and/or deceleration lanes.
 - (iv) Length of storage bays.
 - (v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
 - (vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.
- 3. Off-site improvements.
 - (i) Modification to existing traffic control devices.
 - (ii) Additional traffic control devices.
 - (iii) Additional lanes at major intersections.
 - (iv) Additional roads.
 - (v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
 - (vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.
- 4. Improvements by phasing (if applicable).

g. Appendix.

- 1. Raw traffic count data.
- 2. Documentation of analysis.

- (3) *Report requirements: Level III studies.* In addition to the preceding information for Level I and II, the following information on trip assignment shall be provided in the report prior to the analysis and recommendation section:

Trip assignment.

-
1. Show existing ADTs, proposed development traffic, and total traffic for all affected links on map which identifies the project and surrounding roads.
 2. Show a.m. and p.m. peak hour turning movements for the existing traffic, the proposed development traffic, and the combined traffic at all project entrance intersections, and effected intersections within the study area.
 3. Discuss the effects of phasing of the proposed project.
- (g) *Additional information.* Additional information on traffic impact studies can be obtained from the Institute of Transportation Engineers (ITE), among other reputable sources. ~~Traffic Access and Impact Studies for Site Development: A Recommended Practice by the Institute of Transportation Engineers.~~
- (Code 2007, § 16-403; Ord. No. 96-30, 1-1997; Ord. No. 14-18, § 3, 12-11-2014)

ORDINANCE: 24-11
PREPARED BY: Shipley
REQUESTED BY: Staff
CERTIFIED BY FMPC: June 20, 2024
PUBLIC HEARING: _____
PUBLISHED IN: _____
DATE: _____
1ST READING: _____
2ND READING: _____
PUBLISHED IN: _____
DATE: _____

AN ORDINANCE AMENDING THE FARRAGUT MUNICIPAL CODE, CHAPTER 22 – ARTICLE 5. DRIVEWAYS AND OTHER ACCESS WAYS, SECTION 22-147., TRAFFIC IMPACT STUDY REQUIREMENTS, TO PROVIDE FOR ADDITIONAL CONSIDERATIONS FOR PEDESTRIANS AND BICYCLISTS

BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, wishes to amend the Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, to provide additional considerations for pedestrians and bicyclists.

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, that the Farragut Municipal Code is hereby amended as follows:

SECTION 1.

The Farragut Municipal Code, Chapter 22 – Article 5. Driveways and Other Access Ways, Section 22-147., Traffic Impact Study Requirements, is replaced in its entirety as follows:

Sec. 22-147. Traffic impact study requirements

(a) *Generally.*

- (1) The submission of a traffic impact study shall be required with rezoning, site plan and preliminary plat requests in accordance with the following table:

24-Hour Trip Generation	Traffic Study Scope
0—750 ADT	Level I
750—6,000 ADT	Level II
> 6,000 ADT	Level III

- (2) Trip generation rates for proposed uses shall be calculated using the ITE Trip Generation Manual, latest edition.
- (3) Upon being provided proof by the developer's traffic engineer that a lower level traffic impact study would be adequate for a proposed development, or that a traffic study is

not warranted, the town engineering staff may reduce the level of study required or waive the requirement.

(b) *Traffic impact study guidelines and procedures.*

- (1) These traffic impact study guidelines and procedures define when proposed rezoning, site plans and preliminary plat requests warrant a detailed traffic study and what information should be included in it. All applicants will be required to follow the town guidelines.
- (2) The purpose of performing a traffic impact study, as defined by the institute of traffic engineers (ITE), is to:
 - a. Provide guidance for short term and long term planning of site access;
 - b. Provide guidance for on-site circulation and the interface between on-site circulation and off-site traffic;
 - c. Provide guidance for off-site improvements needed to permit the roadway system to function satisfactorily so as to accommodate site and non-site traffic;
 - d. Provide guidance on measures to improve the safety and efficiency of pedestrian and bicycle facilities impacted by the proposed action for which the traffic impact study is being prepared.
 - e. Assist developers and land owners in making land use site planning decisions regarding traffic;
 - f. Identify the contribution a particular development makes to roadway system traffic volumes;
 - g. Provide a basis for estimating roadway improvement requirements attributable to a particular project;
 - h. Assess the compatibility with local transportation plans;
 - i. Enable staff to better evaluate zoning changes and development plans; and
 - j. Allow appointed and elected officials to know implications of their voting decisions.

(c) *Scope of required traffic impact studies.* Three levels of study have been identified based on the number of trips that a development is projected to generate in a 24-hour period:

- (1) Level I studies require analysis of each access, per engineering staff, that the development has to an existing roadway. Access points to be analyzed include public and private roads, joint permanent easements, and private drives.
- (2) Level II studies require analysis of each access that the development has to an existing roadway, and to the first control point beyond those access points. A control point is an intersection controlled by a traffic signal or stop sign on the existing roadway onto which the development has access. For cases where a traffic control device does not exist, engineering staff will determine the extent of the study. If a freeway interchange is near the property to be developed and is not signalized, engineering staff will determine if the ramps need to be included in the study. This level of study is

commonly required for larger residential subdivisions, commercial developments, and office complexes.

- (3) Level III studies require a complete traffic impact study. This study must address each access point, the first control point beyond each access point, and the nearest collector intersection or street of higher classification or as determined by the engineering staff. The exact area to be studied will be determined by the engineering staff with input from the study preparer. Level III studies are uncommon, as they are usually warranted only with very large mixed-use and commercial developments.

(d) *Submission and review procedures for traffic impact studies.*

- (1) Applicants should conduct a preliminary trip generation assessment of any proposed rezoning, site plan or preliminary plat request to determine if a traffic impact study will be required. This preliminary assessment should be conducted well in advance of the actual submission of plans.
- (2) If the preliminary assessment indicates that a traffic impact study will be required, the applicant should consult as early as possible in the plan-development process with the town's engineering staff to verify a development's projected trip generation, and to confirm whether or not a study will be required. If a study is required, the required level can be determined at that time.
- (3) The applicant shall then select a licensed traffic or transportation engineer to prepare the study, who may need to consult with the engineering staff periodically to review the collected data and any assumptions made in the draft report.
- (4) An electronic copy of the completed draft traffic impact study shall be submitted along with the development application and all other materials required for submission.
- (5) The engineering staff shall review the draft traffic impact study in conjunction with the other elements of the development application. If the draft traffic impact study is not of the proper scope or is executed improperly, the applicant shall be notified of the deficiencies and be required to submit corrections on the same schedule that applies to the other elements of the development application. Failure to submit corrections in a timely manner may lead to a postponement of the application until the next regularly scheduled planning commission meeting.

Since a completed traffic impact study must be submitted at the same time as the application for a development, it is critical that the applicant conduct steps one through three early in their planning of a proposed development. Failure to submit a traffic impact study, or submission of an inadequate study, is likely to slow the review process and may lead to postponements.

- (e) *Required qualifications for preparers of traffic impact studies.* Traffic impact studies shall be prepared under the supervision of a qualified engineer who has specific training in traffic and transportation engineering and experience related to preparing traffic studies for existing or proposed developments. The study shall be signed and sealed by the supervising engineer. The ability to forecast and analyze traffic needs for both developments and roadway systems is essential. All design work implementing the recommendations of the traffic impact study shall be completed under the supervision of a registered professional engineer.

(f) *Required specifications for traffic impact studies.*

(1) *Report requirements: Level I studies.*

a. *Intersection.*

1. Description of site including a location map.
2. Type of project.
 - (i) If residential, number and type of units.
 - (ii) If commercial or office, include square footage and occupancy.
3. Site plan with access points shown to scale.

b. *Existing conditions.*

1. Distance from nearest intersection in both directions.
2. Distance to nearest drive or access points in both directions.
3. Location shown relative to opposing street, driveways, or access points.
4. Existing pedestrian and bicycle facilities in the study area.

c. *Proposed conditions.*

1. Width, radius, and markings of proposed street, driveway, or access point.
2. Proposed improvements adjacent to access point, including, but not limited to, acceleration, deceleration lanes, and pavement marking adjustments.
3. Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
4. Improvements to pedestrian crossings to lessen potential conflicts with motorists.

(2) *Report requirements: Level II studies.*

a. *Introduction.*

1. Description of site including a location map.
2. Type of project.
 - (i) If residential, number and type of dwelling units.
 - (ii) If commercial or office, square footage and type of occupancy.
3. Map of project with proposed access points shown.

b. *Existing conditions.*

1. Directional traffic counts on roads adjacent to property with access to development: Traffic counts should be no more than one year old.
2. Level of service of intersections (if applicable):
 - (i) Highway capacity software is recommended.

- (ii) Other nationally recognized software can be used.
 - 3. Existing pedestrian and bicycle facilities in the study area.
- c. *Trip generation rates.*
 - 1. Listing of trip generation rates.
 - 2. Listing of sources for rates used.
 - (i) ITE Trip Generation Manual, latest edition.
 - (ii) If the type of proposed development is not addressed in the ITE manual, then other rates may be used as long as they are documented and have been approved by engineering staff.
 - 3. Calculation of trip ends by type of generator.
 - (i) Traffic generated by phase.
 - (ii) 100 percent occupancy and development.
 - 4. An assessment of whether site-generated traffic will have any adverse impacts to pedestrians and/or bicyclists.
- d. *Trip distribution.*
 - 1. Assumptions as to the directional distribution of traffic to and from the development.
 - 2. Assumptions as to the peak hour percentages.
 - 3. Assumptions as to the peak hour directional splits.
 - 4. Assumptions as to the pass-by trips, if applicable, must be approved by engineering staff.
 - 5. An assessment of whether modifications to site generated trip distribution will have any adverse impacts to pedestrians and/or bicyclists.
- e. *Analysis.*
 - 1. Level of service (LOS) and capacity analysis for peak periods.
 - (i) Compute the projected LOS and capacity analysis for each access point and control point to the adjacent road system based on the development by phase.
 - A. Highway capacity software is recommended.
 - B. Other nationally recognized software can be used.
 - (ii) Compare LOS before development to LOS after development if applicable.
 - (iii) Link analysis if applicable.
 - 2. Intersection and roadway geometry; existing and proposed.
 - (i) Distances from existing streets, driveways, and/or median cuts.

- (ii) Alignment with existing streets, driveways, and/or median cuts.
 - (iii) Intersection layouts.
 - (iv) Sight distance.
 - (v) Right-of-way width.
 - (vi) Lane width.
- 3. Site circulation.
- 4. Pedestrian facilities.
 - (i) Sidewalks, walking trails.
 - (ii) Crosswalks, crossing distance, pedestrian signals and associated timing.
 - (iii) Transit stops.
 - (iv) School bus stops.
- 5. Bicycle facilities.
- f. *Recommendations.*
 - 1. Site access.
 - 2. Intersection improvements.
 - (i) Traffic control devices: modify existing or need for new.
 - (ii) Left and/or right turn lanes.
 - (iii) Acceleration and/or deceleration lanes.
 - (iv) Length of storage bays.
 - (v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
 - (vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.
 - 3. Off-site improvements.
 - (i) Modification to existing traffic control devices.
 - (ii) Additional traffic control devices.
 - (iii) Additional lanes at major intersections.
 - (iv) Additional roads.
 - (v) Additional pedestrian and bicycle facilities or modifications to existing facilities to improve safety and/or user experience.
 - (vi) Improvements to pedestrian crossings to lessen potential conflicts with motorists.
 - 4. Improvements by phasing (if applicable).

g. *Appendix.*

1. Raw traffic count data.
2. Documentation of analysis.

(3) *Report requirements: Level III studies.* In addition to the preceding information for Level I and II, the following information on trip assignment shall be provided in the report prior to the analysis and recommendation section:

Trip assignment.

1. Show existing ADTs, proposed development traffic, and total traffic for all affected links on map which identifies the project and surrounding roads.
2. Show a.m. and p.m. peak hour turning movements for the existing traffic, the proposed development traffic, and the combined traffic at all project entrance intersections, and effected intersections within the study area.
3. Discuss the effects of phasing of the proposed project.

(g) *Additional information.* Additional information on traffic impact studies can be obtained from the Institute of Transportation Engineers (ITE), among other reputable sources.

SECTION 2.

This ordinance shall take effect from and after its final passage and publication, the public welfare requiring it.

Ron Williams, Mayor

Allison Myers, Town Recorder

Certified to the Farragut Board of Mayor and Aldermen this ____ day of _____, 2024, with approval recommended by the Farragut Municipal Planning Commission (FMPC).

Scott Russ, Chairman

Shannon Preston, Secretary

RESOLUTION PC-24-07

FARRAGUT MUNICIPAL PLANNING COMMISSION

A RESOLUTION TO APPROVE AN AMENDMENT TO THE FARRAGUT CODE OF ORDINANCES, CHAPTER 22 – ARTICLE 5., DRIVEWAYS AND OTHER ACCESS WAYS, PURSUANT TO AUTHORITY GRANTED BY SECTION 6-2-201, TENNESSEE CODE ANNOTATED

WHEREAS, the Tennessee Code Annotated, Section 13-4-201et seq, provides that the Municipal Planning Commission shall make and adopt a general plan for the physical development of the municipality; and

WHEREAS, the Farragut Municipal Planning Commission and/or the Farragut Board of Mayor and Aldermen has adopted various regulatory measures to more fully implement said general plan; and

WHEREAS, the Town of Farragut values the safety of all users of its transportation system as part of its planning and supporting regulatory program; and

WHEREAS, a public hearing was held on this request on June 20, 2024;

NOW, THEREFORE, BE IT RESOLVED that the Farragut Municipal Planning Commission hereby recommends approval to the Farragut Board of Mayor and Aldermen of Ordinance 24-11, an ordinance to amend the Farragut Municipal Code, Chapter 22 – Article 5., Driveways and Other Access Ways, Section 22-147, to provide for additional considerations for pedestrians and bicyclists in the preparation and review of traffic impact studies.

ADOPTED this 20th day of June 2024.

Scott Russ, Chairman

Shannon Preston, Secretary

REPORT TO THE BOARD OF MAYOR AND ALDERMEN

PREPARED BY: Ron Oestreich, Parks and Recreation Director

SUBJECT: Approval of Bid for Contract 2024-17 Synthetic Ice Rink Rental and Services

INTRODUCTION: The purpose of this item is consideration of bids and award of Contract 2024-17, Synthetic Ice Rink Rental and Services

BACKGROUND: Staff and Board have received requests and feedback from the community to provide an ice rink for recreational use during the holiday season. After much research, it was determined that a synthetic ice surface rental would be the most beneficial for the town regarding upkeep, operations and overall cost. The operational time period will be from November 22, 2024, to January 4, 2025, at McGill Plaza. The contract includes installation and breakdown of the 33’ x 53’ surface, rental skates, and an operational manager to oversee the rink.

DISCUSSION: We received 2 bids on this project on June 26, 2024.

Chill Entertainment Inc.	\$59,999.00
Rinks – R – Us LLC.	\$54,999.99

Once approved by the Board of Mayor and Aldermen, the awarded company will begin development of the ice rink surface as well as work with staff on an operations plan.

FINANCIAL SECTION:

Project: Contract 2024-17 Synthetic Ice Rink Rental and Services			
Project Budget	Requested Amount	Expenditures to Date	Remaining Amount
80,000	\$54,999.99	\$0	\$25,000.01
Approved By: Allison Myers			

RECOMMENDATION BY: Ron Oestreich, Parks & Recreation Director

PROPOSED MOTION: Approval of bid and award of Contract 2024-17 to Rinks-R-Us LLC of Oak Ridge, Tn for Synthetic Ice Rink Rental and Services in the amount of \$54,999.99.

MOTION BY: SECONDED BY:

VOTE/TOTAL	WILLIAMS	MEYER	WHITE	POVLIN	BURNETTE
YES					
NO					
ABSTAIN					

TOWN OF FARRAGUT

PROFESSIONAL SERVICES AGREEMENT

This Agreement is made by and between **Town of Farragut ("Client")** and **Rinks-R-Us LLC ("Contractor")** for professional services for the assignment described as follows:

Project: **CONTRACT NO. 2024-17: SYNTHETIC ICE RINK RENTAL AND SERVICES**

Location: **McGill Plaza, 11409 Kingston Pike, Farragut, TN 37934**

Description of Project: **Supply, installation, operation, and strike of 30'x50' synthetic ice surface with boards at McGill Plaza, Farragut, Tennessee from November 22, 2024 to January 4, 2025**

1. **Professional Services.** Contractor agrees to perform the following Basic Services under this Agreement:

See **Attachment A** to this Agreement for a description of Basic Services.

2. **Compensation.** Client shall compensate Contractor for the Basic Services as follows: A lump sum fee of **\$54,999.99**, including reimbursable expenses. In addition, Client shall pay Contractor for additional services that may be requested by the Client beyond the Basic Services in accordance with the hourly rate schedule attached as **Attachment B** to this Agreement.

3. **Schedule.** Contractor shall begin work upon notification of approval of this Agreement by the Board of Mayor and Aldermen and shall complete the work by submitting the final deliverables on or before **November 22, 2024**. The schedule for the various meetings and presentations as outlined in the Basic Services shall be agreed upon by the Client and Contractor before beginning work.

4. **Invoicing and Payments.** Invoices or payment requests shall be submitted to the Client no more than monthly and shall include such information, documentation or data as the Town Administrator may require including, but not limited to, the amount and breakdown of the payment requested, the period covered by the request, and the work performed during the period covered by the payment request. After review, the Town Administrator will indicate his approval of the payment request, or shall explain to Contractor, in writing, his reasons for not approving any portion or all of the request, and authorize payment of the amount approved. In the event the Town Administrator does not approve any portion of a payment request, and has communicated the reasons to

Contractor, Contractor will then take the necessary action to satisfy the reasons for non-approval and resubmit the payment request. Client shall endeavor to remit payment of payment requests or portions thereof which are approved by the Town Administrator within thirty (30) days of receipt by Client. From time to time approval of a payment request may require action by the Board of Mayor and Aldermen which meets on the second and fourth Thursday of most months.

5. **Time**. Contractor will perform its services in a timely manner commensurate with the exercise of due professional care which it acknowledges can be done consistent with the schedule provided for in Paragraph 3. Time for performance shall be extended as necessary for delays or suspensions due to circumstances beyond Contractor's control. If such delay or suspension extends more than six (6) months (cumulatively), Contractor's compensation shall be equitably adjusted; provided, however, such adjustment and amendment to this Agreement must be approved by the Board of Mayor and Aldermen before Client is bound.

6. **Suspension of Services**. If Client fails to pay any invoice when due or otherwise is in material breach of this Agreement, Contractor may, at its sole discretion, suspend performance of services upon five (5) days' written notice to Client. Contractor shall have no liability to Client and Client agrees to make no claim for any delay or damage as a result of such suspension, unless (i) the Town Administrator has refused to approve payment, (ii) his reasons are justified pursuant to this Agreement, and (iii) Contractor has failed to satisfy the reasons as required by Paragraph 4 hereof. Upon cure of the cause of a justified suspension, Contractor shall resume services within a reasonable time, and there shall be equitable adjustments of the project schedule and fees to reflect the effects of such suspension, if such adjustments are deemed reasonable and appropriate by the parties.

7. **Standard of Care**. Notwithstanding any other provision of this Agreement or any other document describing the services produced by Client, Contractor shall perform its services in accordance with the standard of professional care ordinarily exercised under similar circumstances by reputable members of its profession in the same locality at the time the services are provided. Beyond the foregoing and unless otherwise provided herein or in other documents produced, generated or provided by Contractor, no warranty, expressed or implied, is made or intended by Contractor. The parties further agree that Contractor is not a fiduciary of Client.

8. **Termination**. The obligation to provide further services under this Agreement may be terminated with or without cause by either party upon ten (10) days' written notice to the other party. On termination by either Client or Contractor, Client shall pay Contractor all amounts due for any services performed to the date of termination (plus all reimbursable expenses incurred) as Contractor's sole and exclusive remedy, subject to any setoffs to which the Client is entitled as a result of Contractor's failure to perform as required by this Agreement.

9. **Reuse of Documents.** All documents, including drawings, specifications, and reports, prepared by Contractor pursuant to this Agreement are instruments of professional service and shall become the property of the Client. They are not intended or represented to be suitable for reuse by Client or others for additions or modifications of the Project or on any other project. Any reuse without written consent, verification or adaption by Contractor for the specific purposes intended shall be at Client's sole risk and without liability or legal exposure to Contractor. Any such verification and adaption will entitle Contractor to further compensation at rates to be agreed upon by Client and Contractor.

10. **Access to the Site/Jobsite Safety.** Unless otherwise stated, Contractor will have access to the site for activities necessary for the performance of its services. Client agrees that Contractor shall have no responsibility for the means, methods, sequences, procedures, techniques, and scheduling of construction, as these decisions are solely the responsibility of the contractors. Contractor further shall have no authority or duty to supervise the construction workforce and shall not be responsible for jobsite safety or for any losses or injuries that occur at the Project site.

11. **Insurance.** Prior to any access to the Project site, Contractor shall deliver to Client a certificate of insurance evidencing general liability coverage with a limit of not less than \$1,000,000 each occurrence for bodily injury, personal injury and property damage. If such insurance contains a general aggregate limit, it shall apply separately to the work/location of the Project in this Agreement or be no less than \$2,000,000. In addition, Contractor shall endeavor to secure and maintain insurance in such amounts as it deems necessary to protect itself from claims of professional negligence arising from the performance of services under this Agreement. Such insurance shall:

- a. Contain or be endorsed to contain a provision that includes Client, its officials, officers, employees, and volunteers as additional insureds with respect to liability arising out of work performed by or on behalf of the Contractor. The coverage shall contain no special limitations on the scope of its protection afforded to the above-listed insureds.
- b. For any claims related to this Project, the Contractor's insurance coverage shall be primary insurance as respects the Client, its officers, officials, employees, and volunteers. Any insurance or self-insurance programs covering the Client, its officials, officers, employees, and volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

12. **Risk Allocation.** In recognition of the relative risks, rewards, and benefits of the Project to both Client and Contractor, to the fullest extent permitted by law, the parties agree to allocate the risks such that Contractor's total liability to Client for any and all injuries, claims, losses, expenses, damages, and/or claim expenses arising out of Contractor's services under this Agreement from any cause or causes shall not exceed the amount of Contractor's fee, or One Hundred Thousand Dollars (\$100,000), or the amount

of insurance coverage Contractor has, or is required to have, covering the risk or claim that is the basis for the injury, claim, loss, expense or damages, recovery for which is sought, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

13. **Dispute Resolution.** It is agreed that all claims, disputes, or other matters in question arising out of or related to this Agreement shall be submitted to nonbinding mediation before any legal proceedings is commenced. The parties shall equally bear the fees and expenses charged by the mediator.

14. **Opinions of Construction Cost.** Any opinion of probable construction cost prepared by Contractor represents the judgment of one or more Contractor design professionals and is supplied for general guidance of Client. Since Contractor has no control over the construction marketplace and does not use the same pricing methods used by contractors, Contractor does not guarantee the accuracy of such opinions.

15. **Indemnification.**

a. The Contractor shall defend, indemnify and hold harmless the Client, its officers, employees and agents from any and all liabilities which may arise or be claimed against the Client, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of the Contractors, its employers, agents or contractors in performance of this Agreement or from the Contractor's failure to perform this Agreement using ordinary care and skill, except where such injury, damage, or loss was caused by the sole negligence of the Client, its agents or employees.

b. The Contractor shall save, indemnify and hold the Client harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the Client alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the Client; and the Contractor shall assume and take over the defense of the Client in any such claim, demand, suit, or cause of action upon written notice and demand for same by the Client. The Contractor will have the right to defend the Client with notice and demand for same by the Client. The Contractor will have the right to defend the Client with counsel of its choice that is satisfactory to the Client and the Client will provide reasonable cooperation in the defense as the Contractor may request. The Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the Client, such consent not to be unreasonably withheld or delayed. The Client shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

- c. The Contractor shall save, indemnify and hold Client harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against Client alleging liability referenced above.
- d. The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.

16. Miscellaneous.

- a. The Contractor will not assign or transfer any interest in this Agreement without obtaining the prior written approval of the Client.
- b. The Contractor will not enter into a subcontract for any of the services performed under this Agreement without obtaining the prior written approval of the Client.
- c. The contract between the parties consists of this Agreement, its attachments, any written request for services issued by Client and any response thereto made by Contractor, including any addenda thereto. To the extent there is a conflict between the terms of any of the documents that constitute the contract between the parties, the terms that are most specific to the matter in dispute shall govern over the more general. In the event the conflicting terms cannot be characterized as specific vs. general, then the terms that provide the greater benefit to the Client and/or impose the greater obligation on the Contractor shall control.
- d. This Agreement may be modified only by a written amendment or addendum that has been executed and approved by the appropriate officials shown on the signature page of this Agreement.
- e. If any provision of this Agreement is determined to be unenforceable or invalid, such determination will not affect the validity of the other provisions contained in this Agreement. Failure to enforce any provision of this Agreement does not affect the rights of the parties to enforce such provision in another circumstance, nor does it affect the rights of the parties to enforce any other provision of this Agreement at any time.
- f. In the event legal action is necessary to enforce the terms of the contract between the parties, the prevailing party shall be entitled to recovery of its attorney's fees, court costs, and other expenses of the legal action.
- g. In the performance of this contract, Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of local, state and federal governments, including, but not limited to, the President's Executive Order No. 11246 and 11375, which prohibit discrimination in employment regarding race, color, religion, sex or national origin, Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standards Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974, Section 503 of the Rehabilitation Act of 1973, and the

Scope of Work

- The work to be provided under this proposal shall consist of everything needed to install, operate, and remove a 30 foot x 50 foot synthetic ice rink for rental, complete with dasher boards and lights (full specification below), delivered and installed at McGill Plaza, 11409 Kingston Pike, Farragut, TN 37934.
- The ice rink will be located in the west parking lot, adjacent to the Village Green Shopping Center
- The proposal will include all pricing broken down for installation, operation, and removal for the operational time period of November 22, 2024 to January 4, 2025.

Public Safety

- The Contractor shall always exercise proper precautions for the protection of persons and property and shall be responsible for all damage to persons or property, either on or off the site, which occur because of its prosecution of the Work.
- The safety provisions of applicable laws and building and construction codes shall be observed. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

Inspections

- Construction inspections will be made periodically by the Town of Farragut or its designee to review compliance with the solicitation requirements and the final working drawings.
- The Town of Farragut reserves the right to inspect the site at any time without notification.

Specifications for Synthetic Ice Rink Services and Operations**Delivery, Setup, and Strike**

- Delivery of ice rink and equipment for an operational period of November 22, 2024 to January 4, 2025.
- Labor services for installation and strike
- Must include proof of liability insurance naming Town of Farragut equally insured for \$1 million.

Ice Rink Equipment

- A synthetic ice surface floor (30'x50') with rink boards/fencing.
- LED rink lighting and string lighting for rink area.
- Supply of rental skates, a changing area, and skate sharpener.

Ice Rink Operations

- On-site event staff (1) from Contractor to help supervise and guide activities, sharpen skates, and greet customers. (Town will provide additional support staff if needed)
- Daily operational hours 3:00pm to 9:00pm.
- Rink will be closed on Christmas Eve (12/24) and Christmas Day (12/25)

h. This Agreement will be governed and construed in accordance with the laws of the state of Tennessee.

CLIENT:

Town of Farragut

By: _____

Printed

Name: _____

Title: _____

Date: _____

CONTRACTOR:

By: _____

Printed

Name: **Marshall Myer**

Title: **Owner**

Date: **July 1, 2024**

