

INTRODUCTION

1.1 Background and Purpose

The Knox County Stormwater Management Ordinance was adopted by the Knox County Commission. The ordinance established the legal framework for reviewing building permits for stormwater management and floodplain management provisions and for requiring grading permits to control erosion and sedimentation problems. The Knox County Flood Damage Protection Ordinance provides further regulation on floodplain management and development in floodplains. These regulations, policies and technical guidelines provided in this Stormwater Management Manual have been developed to assist in the implementation of the regulatory program established by the ordinances. Both ordinances are provided in Volume 1, Appendix A of this manual.

In addition to dealing with the potential for personal injury or property damage associated with the improper management of stormwater and floodplains, these ordinances secure the eligibility of Knox County to participate in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS), which are administered by the Federal Emergency Management Agency (FEMA). The benefits of participation in these federal flood management programs are threefold. First, participation in the NFIP provides local property owners with the opportunity to purchase federal flood insurance. Second, participation in the CRS program may result in decreased costs of federal flood insurance for those property owners. Finally, inclusion in both programs allows Knox County to have a higher degree of eligibility for federal disaster funds beyond emergency relief, along with Federal Housing Administration and Veterans Housing Administration funds than communities that do not participate.

1.2 Authorization and Title

As authorized by Knox County Stormwater Management Ordinance, this Stormwater Management Manual establishes the rules, regulations and technical guidelines that have been developed by the Knox County Department of Engineering and Public Works, consistent with the ordinance, and for the purpose of enforcing the provisions of the ordinance. This manual shall be enforceable, consistent with the authorities and enforcement provisions of the ordinance. This manual shall be cited as the “Knox County Stormwater Management Manual” and is comprised of the following volumes:

Volume 1 – Administration and Procedures

Volume 2 – Technical Guidance

1.3 How to Use This Manual

The following chapter listing provides a guide to the various chapters of Volume 1 of this manual.

- ❑ **Chapter 1 – Introduction.** Chapter 1 provides an overview of the purpose, authorization, scope, language, and legal considerations of this manual.
- ❑ **Chapter 2 – Administration.** Chapter 2 presents the administrative framework for stormwater management in Knox County, including the duties of various departments and agencies, applicable permits, and how variances and enforcement may be handled during the site development process.

- ❑ **Chapter 3 – Regulations.** Chapter 3 provides a description of applicable local ordinances and other State and Federal regulations that may be encountered when grading, development, and/or redevelopment activities are performed in Knox County.
- ❑ **Chapter 4 – Site Planning and Permitting Procedures.** Chapter 4 presents the site development process in Knox County, including a flow chart and descriptions of the various components of the process and applicable requirements such as: the pre-construction conference, stormwater management plan requirements, permit requirements, permit application instructions and plan submittal checklists, review and submittal requirements, bonds, and general inspection and maintenance responsibilities.
- ❑ **Chapter 5 – Drainage System Maintenance and Inspections.** Chapter 5 provides information on Knox County's approach to drainage system maintenance including a discussion of the level of service offered by Knox County and policies regarding private and public inspection and maintenance responsibilities.
- ❑ **Appendices.** The appendices of Volume 1 provide copies of applicable regulations, plans submittal checklists and other forms and materials necessary for planning and permitting stormwater management for property developments in Knox County.

The chapter listing below provides a guide to the various chapters of Volume 2 of this manual.

- ❑ **Chapter 1 – Stormwater Management Standards and Planning.** Chapter 1 provides a brief discussion of the need for comprehensive stormwater management and an overview of Knox County's minimum stormwater management standards.
- ❑ **Chapter 2 – Stormwater Hydrology.** Chapter 2 provides an overview of hydrologic methods and procedures that must be used for the design of stormwater management systems in Knox County. The information presented is intended to provide the design engineer with guidance to the methods and procedures, their data requirements, and their applicability and limitations.
- ❑ **Chapter 3 – Criteria for Stormwater Design.** Chapter 3 focuses on design criteria and associated policies for stormwater management systems in Knox County.
- ❑ **Chapter 4 – Design and Maintenance of Stormwater Structural BMPs.** Chapter 4 provides an overview of structural stormwater BMPs that are deemed acceptable for use in Knox County.
- ❑ **Chapter 5 – Stormwater Credits and Better Site Design Practices.** Chapter 5 provides information and design criteria for the water quality volume credits that are available to developers, and gives detailed information on the use of better site design practices that can be implemented to reduce stormwater runoff volumes and design requirements.
- ❑ **Chapter 6 – Water Quality Buffers.** Chapter 6 discusses the regulations, policies and other guidance for water quality buffers on streams, lakes, ponds, and wetlands.
- ❑ **Chapter 7 – Stormwater Drainage System.** Chapter 7 provides design criteria and general guidance on stormwater system components, including street and roadway gutters, inlets and storm drain pipe systems; culverts; vegetated and lined open channels; and energy dissipation devices for outlet protection.
- ❑ **Chapter 8 – Floodplain Management.** Chapter 8 provides regulations, policies and other guidance for development in or near floodplains in Knox County.
- ❑ **Chapter 9 – Construction Site Stormwater Management.** Chapter 9 provides regulations, policies and other guidance for erosion prevention and sediment control and control of other construction related wastes during construction activities.

- **Chapter 10 – Pollution Prevention After Construction.** Chapter 10 provides an overview of Knox County’s regulatory requirements for general pollution prevention in developed areas, and presents detailed information regarding the Special Pollution Abatement Permit.
- **Appendices.** The appendices of Volume 2 provide standard plans and specifications for stormwater construction, as well as rainfall, soils, and other information and data pertinent to local stormwater design.

1.4 Scope

If any provision of this manual and any other stormwater management guidance provided by Knox County impose overlapping or contradictory regulations, or contain any restrictions covering any of the same subject matter, that provision which is more restrictive or imposes higher standards or requirements shall govern for all surface alteration and construction within the boundary of Knox County, excluding the City of Knoxville and the Town of Farragut.

1.5 Language Rules

The following rules shall apply to the text of these volumes:

1. The particular shall control the general.
2. In the case of any difference in meaning or implication between the text of these regulations and the text of the Knox County Stormwater Management Ordinance or the Knox County Flood Damage Prevention Ordinance, the text of the ordinance shall control.
3. The words “shall” and “should” are always mandatory and not discretionary. The word “may” is permissive.
4. The word “permitted” or words “permitted as of right” mean permitted without meeting the requirements of these regulations.
5. Words used in the present tense include the future tense. The singular includes the plural, unless the context clearly indicates the contrary.
6. All public officials, bodies, and agencies to which reference is made are those of Knox County, Tennessee, unless otherwise indicated.
7. The term “County” or “Knox County” shall mean the area of jurisdiction of Knox County, Tennessee.
8. The term “Director” shall mean the Director of the Knox County Department of Engineering and Public Works.
9. Reference to “the ordinance” is to the current Knox County Stormwater Management Ordinance unless otherwise specified. This ordinance is included as a part of these regulations in Appendix A.
10. Unless specifically or otherwise noted the term “development” shall include “redevelopment” as defined in Appendix B. In general, redevelopment shall be required to follow the same stormwater management requirements as new developments.

In general, all words used in these regulations shall have their common dictionary definitions. Definitions for certain specific terms as applied to these regulations may be found in Appendix B of this volume.

1.6 Legal Considerations

1.6.1 Caveat

This manual neither replaces the need for professional engineering judgment nor precludes the use of information not presented in the manual. The user assumes full responsibility for determining the appropriateness of applying the information presented herein. Careful consideration should be given to site-specific conditions, project requirements, and engineering experience to ensure that criteria and procedures are properly applied and adapted.

1.6.2 Responsibility

Conformance with this ordinance is a minimum requirement and does not relieve the property owner, utility, facility operator, Lessee, tenant, contractor, permittee, the equipment operator and/or any other person or entity doing work from applying sound judgment and taking measures which go beyond the scope of the requirements of this ordinance where necessary. Nor does this ordinance imply a warranty or the assumption of responsibility on the part of Knox County for the suitability, fitness or safety of any structure with respect to flooding, water quality, or structural integrity. These regulations are a regulatory instrument only, and are not to be interpreted as an undertaking by Knox County to design any structure or facility.

1.6.3 Severability

Each separate provision of these regulations is deemed independent of all other provisions herein so that if any provision or provisions of this ordinance shall be declared invalid, all other provisions thereof shall remain enforceable.

1.6.4 Compatibility

If any provisions of these regulations and any other provisions of law impose overlapping or contradictory regulations, or contain any restrictions covering any of the same subject matter the provision that is more restrictive or imposes higher standards or requirements shall govern. These regulations do not relieve the applicant from provisions of any other applicable codes, ordinances, or regulations that are not explicitly repealed by these regulations.

1.6.5 Saving Provision

These regulations do not abate any action now pending under prior existing regulations unless as expressly provided herein.