City of Maryville Grading & Construction Site Pollution Management Policies & Procedures Manual



RESIDENTIAL COMMERCIAL BUSINESS INDUSTRIAL



elcome to the City of Maryville, a progressive city located in the foothills of the Great Smoky Mountains. Maryville strives to be the best location for your business interest by placing the right amount of emphasis on development requirements which set high standards to ensure quality development and planning growth. Careful attention is given to erosion and pollutant control during construction which results in a distinctively pleasing community to live, work and play.

This policy statement is designed to give developers, architects, engineers and contractors general guidance, policies and procedures pertaining to Maryville's Grading Permit program. This statement defines the policies, processes and tools (e.g., checklists, flowcharts) that support Maryville's Grading and Construction Site Pollution Management ordinance.

This document provides general procedural guidance for Maryville's Grading Permit Program. Therefore, it comprises Maryville's Standard Operating Procedure for the program's compliance with the State of Tennessee Municipal Separate Storm Sewer (MS4) permit. The objectives of Maryville's construction site stormwater management program are:

- To protect streams within Maryville from sedimentation and other pollutants that may result from construction activities;
- To rely first on erosion controls and phasing to reduce the potential for off-site sedimentation;
- To mirror, to the extent practical, the requirements of the State of Tennessee Construction General Permit (TN-CGP); and
- To comply with the requirements of the State of Tennessee Municipal Separate Storm Sewer System (MS4) permit.

Contact the City of Maryville Engineering and Public Works Department (865-273-3302) if you have questions prior to preparing erosion prevention and sediment control plans and applying for a Grading Permit.



Table of Contents

1.0 - General Information	.7
2.0 - Grading Permit Approval Process	13
3.0 - Construction Site Inspection and Enforcement Process	15
Appendix A – EPSC Plan Checklist	
Appendix B – Sketch Plan Checklist	
Appendix C – Construction Inspection Report	



Acronyms

BMP – Best Management Practice for purpose of Erosion Prevention and Sediment Control

EPSC – Erosion Prevention and Sediment Control

EPW – City of Maryville Engineering and Public Works

MS4 – Municipal Separate Storm Sewer System

NOC – Notice of Coverage

NOI – Notice of Intent

NPDES - National Pollutant Discharge Elimination System

TDEC – Tennessee Department of Environment and Conservation

TN-CGP – Tennessee Construction General Permit



Definitions

Applicant - Person submitting the application for a grading permit. Typically, this is the owner or operator of the land-disturbing activity.

Construction related waste - Waste that is generated through construction, land development and land-disturbing activities that may cause adverse impacts to water quality. Construction related waste includes, but is not limited to, discarded building materials, concrete truck washout, chemicals, litter, hazardous materials, oil and sanitary waste at the construction site.

Development - The process of grading, clearing, filling, quarrying, construction, or reconstruction to improved or unimproved real estate or other similar activities when not excluded by exemptions from this chapter.

Erosion - The wearing away of land by action of wind, water, ice, or gravity.

Erosion prevention and sediment control plan or EPSC plan - A formal plan for the control of soil erosion and sediment resulting from land-disturbing activity. The plan shall be reviewed and approved before a grading permit may be issued. The plan may be included as part of a site plan required under another city ordinance or a separate plan following the specifications set out in this chapter.

Grading - Any operation or occurrence by which the existing site elevations are changed by cutting, filling, borrowing, stock piling, or where any ground cover, natural or man-made, is removed, or any building or other structures are removed or any water course or body of water, either natural or man-made, is relocated on any site, thereby creating an unprotected area. "Grading" shall be synonymous with "land-disturbing activity."

Grading permit - A permit issued to authorize excavation and/or fill to be performed under the guidelines of this chapter.

Land-disturbing activity - Any activity on private or public land that may result in soil erosion and the movement of sediments. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, logging and/or tree chipping operations, haul roads associated with the development, and excavation.

NPDES - National Pollutant Discharge Elimination System



Operator - In the context of stormwater associated with construction activity, operator means any person associated with a construction project that meets either of the following two criteria:

- (a) This person has operational control over construction plans and specifications, including the ability to authorize modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project; or
- (b) This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a Stormwater Pollution Prevention Plan, EPSC plan or sketch plan or other permit conditions. This person is typically a contractor or commercial builder and is often authorized to direct workers at a site to carry out activities required by approved plans or comply with other permit conditions.

Owner - The legal owner of the property as recorded in the Blount County Register of Deeds office at the time of application of the grading permit.

Priority construction activity - Any land-disturbing activity that is one (1) acre or greater that discharges into, or upstream of, waters the State of Tennessee recognizes as impaired for siltation or Exceptional Tennessee Waters. Also, priority construction activities can include land-disturbing activities of any size that, in the judgment of the Director of Engineering and Public Works or his/her designee, require coordination with adjacent construction activities or have conditions that indicate a higher than normal risk for discharge of sediment or other construction related wastes.

Project - The entire proposed development regardless of the size of the area of land to be disturbed.

Sketch plan - An erosion prevention and sediment control plan required for land-disturbing activities that are greater than one-tenth (0.1) acre and less than one (1) acre.

Stormwater Pollution Prevention Plan (SWPPP) – A written plan required by and prepared in conformance with the State of Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities.

Tennessee Construction General Permit (TN-CGP) – The construction permit formally titled as the State of Tennessee General NPDES Permit for Discharges of Storm Water Associated with Construction Activities.



Buffer zone – A strip of dense undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps.



1.0 General Information

The City of Maryville's requirements for erosion prevention and sediment control (EPSC) on construction sites largely mirror the *State of Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities.* The State regulation is henceforth referred to as the Tennessee Construction General Permit (TN-CGP). The TN-CGP is administered by the Tennessee Department of Environment and Conservation (TDEC).

The TN-CGP requires that the owner or operator for each construction site that disturbs one or more acres, or sites that disturb less than one acre but are part of a larger plan of development or sale, obtain coverage under the TN-CGP. A Notice of Intent (NOI) to obtain coverage under the TN-CGP and a copy of the Stormwater Pollution Prevention Plan (SWPPP) must be submitted to, and approved by, TDEC. Once approved, TDEC will issue a Notice of Coverage (NOC) to the applicant. A copy of the SWPPP and the NOI must also be submitted to the City of Maryville prior to commencing land disturbing activities.

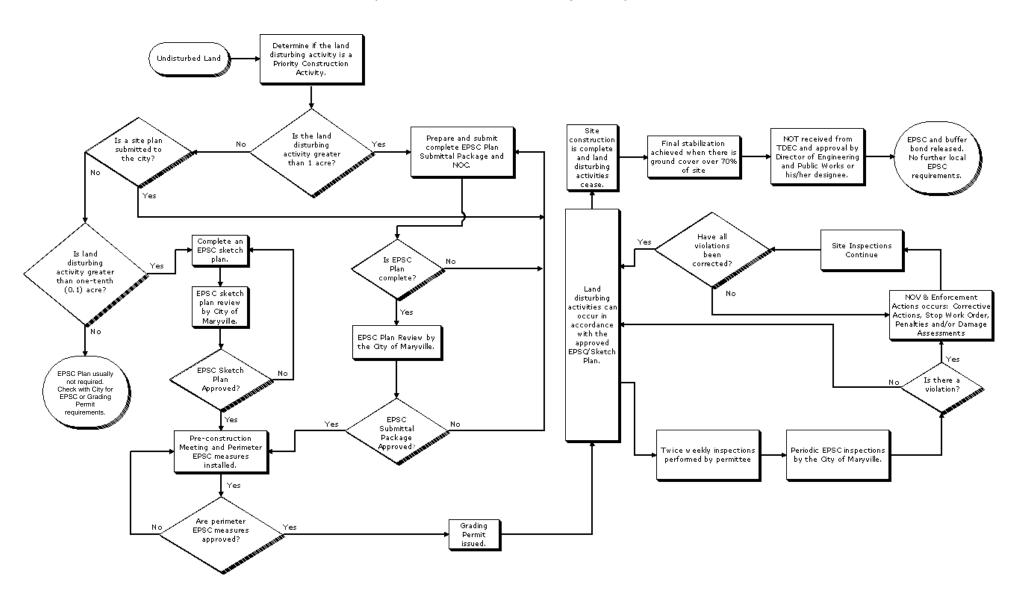
The Grading Permit process in Maryville is regulated via the Maryville Grading and Construction Site Pollution Management ordinance. The requirements stated in the ordinance are strongly aligned with, and often refer to, the design, inspection and maintenance requirements stated in the TN-CGP and the Tennessee Erosion and Sediment Control Handbook. Grading permits are issued by the Director of Engineering and Public Works or his/her designee prior to grading or other land-disturbing activities on a site. An approved grading permit will allow the developer to begin such activities, but only in accordance with the specifications and details presented in the EPSC Plan or the Sketch Plan that has been approved for the site. The purpose of the grading permit is to require and document proper planning before beginning the land disturbing activity and to reduce or eliminate the potential for erosion or the discharge of sediment or other construction-related waste off-site. A flowchart that depicts the City of Maryville's grading permit approval, enforcement and construction inspection process is presented in Figure 1.

The Maryville Grading and Construction Site Pollution Management Ordinance requires that the design, installation, maintenance and inspection of best management practices (BMPs) used for erosion prevention and the control of construction site sediments and other construction-related wastes be done in accordance with the TN-CGP, the *Tennessee Erosion and Sediment Control Handbook*, and this policy statement.



For construction sites that disturb an acre or more of land, or are part of a larger common plan of development or sale that disturbs an acre or more, the City of Maryville and State of Tennessee requirements are similar. The SWPPP required for the TN-CGP provides a strong basis for the Erosion Prevention and Sediment Control Plan required by the City of Maryville grading permit. SWPPPs prepared for the TN-CGP may be adapted as necessary and submitted to the City of Maryville to meet the requirements of the EPSC Plan. Sites that are between 0.1 acre and 1 acre are required to submit the sketch plan in accordance with the Maryville Grading and Construction Site Pollution Management ordinance and this policy manual.

Figure 1. Maryville Grading Permit Approval and Enforcement Process (includes Construction Site Inspections)





Responsibilities

- Director of Engineering and Public Works The Director of Engineering and Public Works, (or his/her designee) is responsible for enforcement of the Maryville Grading and Construction Site Management Ordinance and implementation of the policies and standard procedures that are presented in this document. The Director of Engineering and Public Works will enforce the ordinance through:
 - ✓ review of EPSC Plan or Sketch Plans that are submitted by the applicant for compliance with the ordinance, policies and processes. performance of the pre-construction inspection;
 - ✓ inspection of permitted land-disturbing activities for compliance with the approved EPSC or Sketch Plans;
 - ✓ completion of the City of Maryville Construction Inspection Report (discussed later in this document);
 - ✓ the initiation of corrective actions, enforcement actions and penalties defined in the terms of the Maryville Grading and Construction Site Management Ordinance;
 - ✓ oversight, and participation as necessary, in enforcement actions during the land-disturbing activity.

The Director of Engineering and Public Works is also responsible for maintaining or modifying the ordinance and policies and procedures in this document as required to maintain an efficient and effective erosion prevention and sediment control program that is compliant and/or consistent with relevant State or local permits and regulations.

- City Construction Site Inspector After receiving an approved set of plans from the Director of Engineering and Public Works or his/her designee, the Construction Site Inspector (typically, this will be an employee of the City of Maryville) is responsible for enforcement of the Maryville Grading and Construction Site Pollution Management Ordinance at the site of the land-disturbing activity. Enforcement will include implementing the policies and procedures that are discussed in this document. The City Construction Site Inspector will enforce the ordinance through:
 - ✓ performance of the pre-construction inspection;
 - ✓ inspection of permitted land-disturbing activities for compliance with the approved EPSC or sketch plans;
 - ✓ completion of the City of Maryville Construction Inspection Report (discussed later in this document):



- ✓ the initiation of corrective actions, enforcement actions and penalties, as defined in and per the terms of the Maryville Grading and Construction Site Management Ordinance.
- Owner/Operator The owner/operator is responsible for compliance with the Maryville Grading and Construction Site Management Ordinance and the policies and processes discussed in this document. Prior to approval of a grading permit, the owner/operator may also be called the "applicant". After approval of a grading permit, the owner/operator may also be called the "permittee". Owners or operators, or their designee are responsible for,:
 - ✓ preparation and submittal of an EPSC Plan or Sketch Plan;
 - ✓ contacting the Director of Engineering and Public Works to schedule the pre-construction inspection;
 - ✓ inspection and maintenance of permitted land-disturbing activities compliant with the approved EPSC Plan or Sketch Plan;
 - ✓ maintaining documentation of such inspections;
 - ✓ cooperating fully with City staff, and being truthful in answering questions,;
 - ✓ notifying the Director of Engineering and Public Works of modifications or amendments to the approved EPSC Plan or Sketch Plan;
 - ✓ timely compliance of any and all corrective actions that are required by the City, and/or enforcement actions or penalties as defined in the Grading and Construction Site Management ordinance.

EPSC Guiding Principles

In the City of Maryville, owners and operators of land disturbing activities must adhere to the requirements of the Maryville Grading and Construction Site Management Ordinance, which is strongly aligned with the requirements and criteria stated in the TN-CGP and the *Tennessee Erosion and Sediment Control Handbook*. The following paragraphs clarify some guiding principles for the management of land disturbing activities of any size, which support the objectives for Maryville's construction site management program stated on the first page. In general, these guiding principles are implemented through the use of appropriate best management practices.

• Erosion prevention is the first line of defense to prevent off-site sedimentation. Prior to 2003, erosion within a construction site was often considered acceptable and part of the overall construction process, and emphasis was placed on the control of eroded sediments. However, erosion increases the potential for off-site sedimentation and increases site grading costs. Relying on erosion prevention measures reduces the potential for enforcement actions resulting from off-site discharges of sediment.



Reduction of off-site discharges of sediment could reduce the cost of enforcement, clean-up, and overall construction costs.

- Minimize the area that is disturbed. Developers and contractors should disturb only building envelopes, leaving the surrounding areas undisturbed thereby maintaining pre-development infiltration rates and runoff coefficients. If water quality buffers and natural areas will be used as post-construction water quality controls, limiting the disturbed area, at a minimum, will be required in those areas.
- Sequence land disturbing activities to minimize the amount of time that disturbed areas are exposed to storm events. For example, if a development will ultimately disturb 50 acres, the land disturbing activities should be phased or sequenced into smaller, more manageable sections with EPSC measures prescribed for each section. It is important to note that the amount of land disturbed at any one time cannot exceed that which is allowed in the TN-CGP.
- Construction pollution must be retained on-site. Construction and land-disturbing activities inherently cause sediment migration. Sediment and pollution controls must be designed to retain sediment and other pollutants on the development site and prevent them from discharging onto adjacent property, into a stream, into the storm drain system, or into the street.
- All disturbed areas must be permanently stabilized after construction has temporarily or permanently ceased. To prevent the potential for ongoing erosion and sedimentation, permanent ground cover must be provided on all areas that were disturbed during construction within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. The temporary or permanent stabilization measures can consist of any of the following: permanent grasses or other permanent vegetative cover; asphalt or concrete pavement; riprap or other hard armor for channels and slopes; or buildings. Steep slopes must be stabilized within 7 days after construction activity on the slope has temporarily or permanently ceased.

General Policies

1. The policies provided herein are intended to compliment and support the City of Maryville Grading and Construction Site Pollution Management ordinance. These policies will be implemented by the Director of Engineering and Public Works as necessary to enforce the terms of the ordinance.



- 2. This policy document can be modified by the Director of Engineering and Public Works as necessary to ensure that the City of Maryville Grading and Construction Site Pollution Management program is compliant and/or consistent with relevant State or local permits, regulations and Total Maximum Daily Loads (TMDLs).
- 3. All references to the TN-CGP and *Tennessee Erosion and Sediment Control Handbook* shall pertain to the permit and handbook that are valid and in-use at the time that the grading permit application is submitted. The Director of Engineering and Public Works has the authority to invoke more stringent requirements for grading and construction site pollution management where necessary.
- 4. When the provisions of the ordinance, this policy statement, and/or another local or State regulation conflict or overlap, that provision which is more restrictive or imposes higher standards or requirements must be followed.



2.0 Grading Permit Approval Process

In the City of Maryville, the grading permit process generally follows four-steps: 1) EPSC/sketch plan preparation and submittal in accordance with Section 6 of the Maryville Grading and Construction Site Pollution Management ordinance; 2) EPSC/sketch plan review and approval; 3) Pre-construction inspection (in some cases) and grading permit issuance; and 4) Land disturbing activities, site inspection, and plan enforcement. Key points in this process are shown in the grading permit flowchart (Figure 1).

City of Maryville policies relevant to the grading permit approval process are listed below. Note: These policies are intended to compliment and support the Maryville Grading and Construction Site Pollution Management ordinance. It is assumed that the reader has a solid understanding of the requirements contained in that ordinance; and the TN-CGP.

Policies

- A grading permit will <u>NOT</u> be issued for a land-disturbing activity that requires coverage under the TN-CGP until a copy of the NOC for that land-disturbing activity is provided to the City of Maryville. The NOC shall be provided with the EPSC Plan or Sketch Plan.
- A grading permit will <u>NOT</u> be issued for a land disturbing activity until the grading permit applicant has met relevant permit application requirements of the City of Maryville Grading and Construction Site Pollutant Management ordinance and this policy statement.
- 3. A grading permit will **NOT** be issued for a land disturbing activity that requires submittal of an EPSC Plan or a Sketch Plan until such plan has been approved **IN ITS ENTIRETY**.
- 4. A grading permit will **NOT** be issued for a new residential subdivision until road and drainage plans have been approved.
- 5. EPSC Plans/Sketch plans shall be submitted to the City of Maryville Engineering and Public Works Department (EPW). Plan review fees shall also be submitted at that time. The Director of Engineering and Public Works will review the plans for compliance with the Maryville Grading and Construction Site Pollution Management ordinance and other applicable local regulations.
- 6. The Maryville EPSC Plan Checklist provides a listing of the required components of an EPSC Plan. The checklist is presented in Appendix A of



this policy statement. The EPSC Plan Checklist, accurately completed, shall be included with the grading permit application and EPSC plan that is submitted to the EPW Department.

- 7. The Maryville Sketch Plan Checklist provides a listing of the required components of a Sketch Plan. The checklist is presented in Appendix B of this policy statement. The Sketch Plan Checklist, accurately completed, shall be included with the grading permit application and Sketch plan that is submitted to the Maryville EPW Department.
- 8. All required components of an EPSC Plan or Sketch Plan, as provided for in the appropriate "Checklist", must be included with the submitted plan. Components that are not applicable to the land-disturbing activity (and therefore not included on the plan) must be identified as "N/A" on the checklist. All listed elements that are not applicable must be justified for non-applicability. For example, stream buffers are not applicable on plans for land-disturbing activities that have no streams located on-site.
- 9. Only complete plans will be accepted for review. Omission of any required components renders the plans incomplete and they will be returned to the applicant prior to review by the Director of Engineering and Public Works for re-submittal of a complete plan.
- 10. If a plan is determined insufficient, the Director of Engineering and Public Works shall inform the applicant of deficiencies with the plan in the form of a site plan review sheet or written notification. The applicant shall then revise the plan to comply with the Grading and Construction Site Management ordinance and submit a revised plan to the City or may submit documentation to substantiate the validity of the design.
- 11. The Director of Engineering and Public Works shall review complete EPSC Plans/Sketch Plans and determine whether the plan is compliant with the Maryville Grading and Construction Site Pollution Management Ordinance within ten (10) working days from submittal of the complete plan.



3.0 Construction Site Inspection and Enforcement Process

The grading permit flowchart (Figure 1) indicates inspections of the construction site will be performed throughout the life of the land-disturbing activity. The Maryville Grading and Construction Site Pollution Management ordinance requires the site owner/operator to perform regular inspections. In addition, the State of Tennessee and the City of Maryville perform inspections of land-disturbing activities to ensure compliance and/or enforce the TN-CGP or the Grading and Construction Site Management ordinance, respectively.

The purposes of construction site inspections are to evaluate compliance with the approved EPSC/sketch plan, to evaluate whether the approved BMPs are adequate for the minimization of erosion and the control of sediment and construction-related pollutants, and to enforce the requirement that all BMPs are installed, maintained and functioning properly.

City of Maryville policies relevant to the construction site inspection process are listed below. Note: These policies are intended to compliment and support the Maryville Grading and Construction Site Pollution Management ordinance. It is assumed that the reader has a solid understanding of the requirements contained in that ordinance; requirements stated in the ordinance are generally not repeated in this document.

Policies

1. Pre-construction inspection: Prior to issuance of a grading permit, the City performs a pre-construction inspection of the permitted site to determine whether perimeter erosion control measures have been installed according to the approved EPSC Plan or Sketch Plan, and whether measures are adequate to minimize erosion and control sediment and/or other construction-related pollutants and are otherwise in compliance with the Maryville Grading and Construction Site Pollution Management ordinance and this policy statement. If the pre-construction inspection indicates compliance, the City issues a grading permit and allows construction work to commence. The pre-construction inspection is scheduled when the developer is ready to obtain a grading permit. It is the responsibility of the developer to schedule and attend the inspection, and to ensure the attendance of the contractor for the site. The City of Maryville EPW Department may be contacted at 865-273-3302.



- 2. Inspections performed by the permittee: The permittee or his/her designee shall perform documented routine inspections and conduct maintenance of BMPs to ensure compliance with the approved EPSC Plan/Sketch Plan and to ensure that BMPs are maintained and functioning properly, and that no off-site discharges of sediment or other construction-related pollution are occurring. Inspections shall be performed on all areas of active construction, including areas that have not been stabilized, areas used for storage of materials or stockpiles, exits and entrances for construction traffic, outfall points from the project, and structural controls. These areas should be inspected for signs of erosion, sedimentation, or the discharges of other pollutants from the site.
- 3. <u>Inspection frequency:</u> If permitted under the TN-CGP, inspections by the permittee shall be performed in accordance with the TN-CGP. For other permits, inspections by the permittee or his/her designee shall be performed at the following frequency:
 - a. At least twice every calendar week; and,
 - b. These inspections must be performed at least 72 hours apart.
- 4. <u>Inspector qualifications:</u> If permitted under the TN-CGP, inspectors shall meet the qualifications specified in the TN-CGP. For other permits, inspectors must have successfully completed the TDEC-sponsored "Fundamentals of Erosion Prevention and Sediment Control" course, or an equivalent course, for individuals involved in land-disturbing activities which provides a working knowledge of erosion prevention and sediment controls.
- 5. <u>Inspection documentation:</u> If permitted under the TN-CGP, documentation of inspections shall be recorded and maintained in accordance with requirements of the TN-CGP. At the time of this manual, the TN-CGP includes a Construction Stormwater Inspection Certification (Twice-Weekly Inspections) form in an appendix. For other permits, inspections performed by the permittee or his/her designee shall be documented using the Construction Inspection Report, presented in Appendix C of this manual, to document twice weekly inspections. Documentation should include a measure of the functionality of each BMP as well as any maintenance needs.
- 6. <u>Inspections performed by the City:</u> The City is required by the State of Tennessee NPDES Phase II MS4 Permit to perform inspections of erosion prevention and sediment control measures for construction activities that disturb an acre or more of land or are part of a larger common plan of development or sale that disturbs more than one acre. Additionally, the Director of Engineering and Public Works is authorized to ensure compliance with and enforce the Maryville Grading and Construction Site Pollution



Management ordinance. The ordinance gives the Director of Engineering and Public Works the authority and right to enter private property to inspect for compliance. Failure of a property owner to allow entry by the Director of Engineering and Public Works for purposes of an inspection is cause for the issuance of a stop work order, withholding of a certificate of occupancy, and/or civil penalties and/or damage assessments.

City Inspectors will document activities at the site using the Sketch Plan Checklist and the Construction Inspection Report presented in Appendices B and C and will note any corrective actions that are needed at the site and the required time for completion of the corrective action.

7. Permitee responsibilities during and after City inspections: The permittee and his/her on-site designee, the permittee's inspector(s), developer(s), and/or contractor(s) are responsible for cooperating with City staff during inspections, and for being truthful and answering questions. The permittee shall also comply with corrective actions required to be addressed within the time frame specified by the City.

During or after an inspection by the City, the permittee may be required to provide the City with copies of the approved plan(s), inspection report(s) and permit documentation. In the event that a maintenance need or concern is identified during an inspection by the City of Maryville, the City will require the permittee to perform the maintenance activity and will establish a completion date in writing. Failure to perform the maintenance by the completion date could result in further enforcement action.

8. <u>Violations and Penalties</u>: If it is determined that the grading permit holder has failed to properly install, maintain or use proper structural erosion and sedimentation control measures or other erosion control measures violations and penalties will be assessed to the permittee in accordance with Section 22 of the City of Maryville Grading and Construction Site Management ordinance.

Appendix A EPSC Plan Checklist



CITY OF MARYVILLE, TENNESSEE EROSION PREVENTION AND SEDIMENT CONTROL PLAN CHECKLIST

Date:			Project name:
Project A	Address:_		
Owner N	ame:		Owner Phone Number:
Owner A	ddress:		
Owner E	mail Add		
	aitted to		the required elements of an erosion prevention and sediment control (EPSC) plan. This checklist shall of Maryville Engineering and Public Works Department along with the EPSC plan. Each element
Yes	No	□ N/A	Date of EPSC plan and date of any revision(s) on plan sheets
Yes	□ No	N/A	2. Seal/signature of responsible plan preparer
103			3. Vicinity map including:
Yes	No	□ N/A	a. North arrow
Yes	No	□ N/A	b. Scale
Yes	No	□ N/A	c. Adjacent roadways
Yes	No	□ N/A	d. Boundary lines of site
Yes	No	□ N/A	e. Onsite and nearby watercourses
Yes	No	□ N/A	f. Other necessary information to locate the development site
			4. Owner Contact Information
Yes	☐ No	☐ N/A	a. Name
Yes	☐ No	☐ N/A	b. Address
Yes	☐ No	☐ N/A	c. Email address
Yes	☐ No	□ N/A	d. Phone number
			5. Operator contact information, if different from owner
Yes	No	N/A	a. Name
Yes	☐ No	∐ N/A	b. Address
Yes	No	∐ N/A	c. Email address
Yes	No	∐ N/A	d. Phone number
			6. Land use and drainage
Yes	☐ No	∐ N/A	a. Description of the existing and proposed land use/project or the reason for grading
Yes	∐ No	∐ N/A	b. Drainage patterns
Yes	∐ No	∐ N/A	c. Drainage problems
Yes	No	∐ N/A	d. Floodplain status within the development
			7. Maps (to scale) which clearly show the following items:
Yes	No	∐ N/A	a. A priority construction activity notation, if applicable. If the site is considered a priority construction activity, the following statement must be included on <u>all</u> map pages: "This site is a Priority
			Construction Activity." See page 5 for definition.
			b. The following lines with accurate bearings and distances:
Yes	No	□ N/A	- Property boundaries
Yes	No	□ N/A	- Lot lines
Yes	No	□ N/A	- Right-of-way lines of streets
Yes	□ No	□ N/A	- Utility access or other easements
		IN/A	c. Topographic contours
Yes	No	□ N/A	- Existing topographic contours presented at a 2-foot interval
Yes	No	□ N/A	Proposed topographic contours presented at a 2-foot interval
Yes	No	□ N/A	- Spot elevations or 1-foot contour intervals where 2-foot contours do not adequately depict the
			grading
Yes	No	□ N/A	d. Soil types and drainage classes
Yes	No	∏ N/A	e. Wetlands
Yes	No	☐ N/A	f. Watercourses
Yes	No	☐ N/A	g. Water bodies
Yes	No	☐ N/A	h. Sinkholes
Yes	☐ No	☐ N/A	i. Springs
Yes	☐ No	N/A	j. Intermittent conveyances
Yes	☐ No	☐ N/A	k. Wet-weather conveyances



			4. Owner Contact Information
Yes	No	N/A	a. Name
Yes	☐ No	N/A	b. Address
Yes	No	N/A	c. Email address
Yes	No	N/A	d. Phone number
			5. Operator contact information, if different from owner
Yes	☐ No	N/A	a. Name
Yes	☐ No	N/A	b. Address
Yes	☐ No	N/A	c. Email address
Yes	☐ No	N/A	d. Phone number
			6. Land use and drainage
Yes	☐ No	N/A	 a. Description of the existing and proposed land use/project or the reason for grading
Yes	☐ No	N/A	b. Drainage patterns
Yes	☐ No	N/A	c. Drainage problems
Yes	☐ No	N/A	d. Floodplain status within the development
			7. Maps (to scale) which clearly show the following items:
Yes	☐ No	N/A	 a. A priority construction activity notation, if applicable. If the site is considered a priority construction
			activity, the following statement must be included on <u>all</u> map pages: " <i>This site is a Priority</i>
			Construction Activity." See page 5 for definition.
			 b. The following lines with accurate bearings and distances:
Yes	☐ No	N/A	- Property boundaries
Yes	☐ No	N/A	- Lot lines
Yes	☐ No	N/A	- Right-of-way lines of streets
Yes	☐ No	N/A	- Utility access or other easements
			c. Topographic contours
Yes	☐ No	N/A	 Existing topographic contours presented at a 2-foot interval
Yes	☐ No	N/A	 Proposed topographic contours presented at a 2-foot interval
Yes	No	N/A	 Spot elevations or 1-foot contour intervals where 2-foot contours do not adequately depict the
			grading
Yes	No	N/A	d. Soil types and drainage classes
Yes	No	N/A	e. Wetlands
Yes	☐ No	N/A	f. Watercourses
Yes	No	N/A	g. Water bodies
Yes	No No	N/A	h. Sinkholes
Yes	No No	N/A	i. Springs
Yes	No No	N/A	j. Intermittent conveyances
Yes	No	N/A	k. Wet-weather conveyances



Yes	∐ No	∐ N/A	15. A description of controls to be implemented on-site to manage construction related wastes. Such details should include, but are not limited to: the construction/location of vehicle wash pads; litter and waste materials control; sanitary and chemical wast
Yes	No	□ N/A	16. A general description of the method(s) used to ensure that natural areas and buffers that will be preserved after construction will remain undisturbed during grading and construction
Yes	No	□ N/A	,
Yes	☐ No	□ N/A	 17. A copy of the Tennessee Construction General Permit Notice of Coverage and Stormwate Pollution Prevention Plan (if not the same as the EPSC Plan) submitted to TDEC for the land disturbing activities detailed in the EPSC plan. 18. A listing of any legally protected State or Federally listed threatened or endangered fauna and/o critical habitat that may be impacted by the development, and the BMPs that will be utilized to eliminate impacts. Note: the potential for endangered speci
Yes	No	□ N/A	19. Any other information deemed necessary and appropriate by the permit applicant, owner or operator or as requested by the Director of Engineering and Public Works or his/her designee.
Yes	No	□ N/A	20. The following statement is required on all EPSC plans:
			"Adequate drainage, erosion and sediment control measures, best management practices, and/or other stormwater management facilities shall be provided and maintained at all times during construction. Damages to adjacent property and/or the construction si
Yes	No	□ N/A	21. Stamp of professional engineer licensed to practice in the State of Tennessee.

Appendix B Sketch Plan and Sketch Plan Inspection Checklist



CITY OF MARYVILLE SKETCH PLAN (For land disturbance between 0.10 and 1 acre)

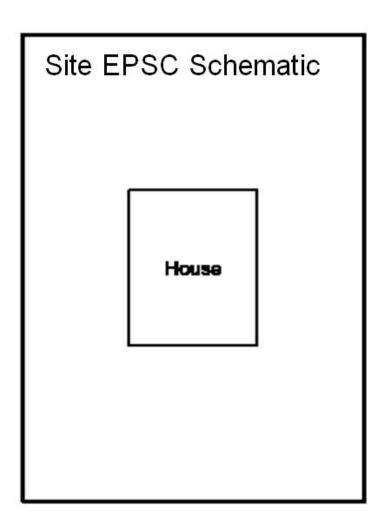
	Gradir	ng Permit No
Date:Project	Name:	
Applicant Address:	Applicant Phone	
A grading permit \	WILL NOT BE ISSUED until this form is filled of	out <u>completely</u> .
	etween 0.10 and 1 acre, please enter informs application. EPSC measures must be imple	
The City of Maryville requires w bodies within the City's jurisdiction	rater quality buffers along all streams, wetla	nds, ponds and other water
Are vegetative buffers required of lf yes, locate the water for schematic on the back side	eature and approximate boundary of the as	ssociated buffer on the
conducting land-disturbing actice conducting any land-disturbing and land-disturbing activities. This includes proposed addition to the building site. It change in the existing soil and/on not limited to, development, refilling, logging and/or tree chine excavation. In addition, the Direct development of a complete EPS Construction Site Pollution Management and land the conduction of the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services and land the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services and land the proposed services are land to the proposed services are land to the proposed services and land the proposed services are land to the proposed services are land to the proposed services and land the proposed services are land to t	d Construction Site Pollution Management Orivities must prevent sediment from leaving activity of one acre or more requintrol Plan (EPSC) Submittal Package before pject-related fill material and borrow, was Land disturbing activity means any activity on or the existing soil topography. Land disturbed evelopment, demolition, construction, recomping operations, haul roads associated rector of Engineering and Public Works or have C Plan Submittal Package, as set forth in the agement Ordinance. This document will be us andicated on the back side of this document.	g the site. Furthermore, res an approved Erosion re initiating land-disturbing aste or stockpile areas in a property which results in a ing activities include, but are instruction, clearing, grading, with the development, and his/her designee may require City of Maryville Grading and
Failure to install and maintain EF	PSC measures may result in violations and/or	fines.
requirements of the City of Mary the City of Maryville Grading a	s that he/she has read this form in its entirety ville Grading and Construction Site Pollution I and Construction Site Pollution Management of the provided site of the provided	Management Ordinance and nt Policies and Procedures
Applicant's Signature	Applicant's Printed Name	 Date

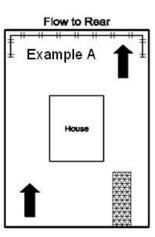
EROSION PREVENTION & SEDIMENTATION CONTROL (EPSC) PLAN SCHEMATIC FOR GRADING PERMITS

INSTRUCTIONS: Using the EPSC schematic, enter the information that best describes the measures that will be used on this property during construction. Be sure to indicate the direction of flow.



Sediment barrier, such as silt fence or straw wattles Stabilized construction entrance Direction of Flow (points downhill)





Show runoff direction lines and EPSC measures, as appropriate.

Additional Requirements:

If catch basins, wetlands, sinkholes, streams, or other stormwater conveyance systems are located on or within 100 feet of the property, the applicant must locate the area on the schematic and describe how these areas will be protected from sediment deposition.



SKETCH PLAN INSPECTION CHECKLIST CITY OF MARYVILLE, TENNESSEE

Date/Time of Inspection:				n:	Grading Permit No.:		
Project Na	me:						
ocation:							
Site Condi	Site Conditions:						
basic eros and distu be checke marked a	sion Irbir ed "' s "I orre	n prong a Yes N/A'	ever ctiv ", if '. (e ac	ntion a ities b it is a Check	ion checklist is to be completed by the City of Maryville and covers the and sediment control and other stormwater construction requirements for between 0.10 and 1 acre. Ideally, each element presented in this list should pplicable to the site. Questions that are not applicable for the site must be a placed under the "No" column require a written explanation and/or a land required completion date in the "Comments and Corrective Actions"		
	<u>l. E</u>			asures			
	1.		s No □	N/A □	Does the approved sketch plan need to be modified to reflect major changes that have		
	2.				been made on-site? Are EPSC measures retaining sediment on site? Are EPSC measures adequately preventing visible erosion on-site? Does the approved plan describe and identify the EPSC measures for the site? If 4 above is yes, has the approved sketch plan been updated to reflect current EPSC		
	6. 7. 8. 9.				measures for the site? Are discharge points correctly indicated in the approved plan? Are sediment deposits present at any of the site discharge points? Are adjacent or downstream properties protected from sediment? Are all surface waters leaving the site at the stabilized outlet points noted on the		
	10.				approved plan? Are sediment controls (e.g. sediment traps, silt fences, sedimentation ponds, etc) filled		
	11.				to greater than 50% of the height of the control measure? Are EPSC controls installed around material storage areas (e.g. masonry materials,		
	12.				waste material stockpiles, topsoil stockpiles, etc) and concrete truck washout areas? Is the site free of litter, construction, debris, or construction chemicals that could be carried offsite by wind or anticipated storm events?		
	13. 14. 15. 16. 17.				Are stermored storm versions and stormwater conveyances adequately protected? Is construction equipment in working order and free of leaks? Are storm drain inlets properly protected? Are temporary construction entrances installed at each access point to the site? Has offsite sediment tracking been minimized?		
COMMENT	S AI	ND C	ORI	RECTI	VE ACTIONS		
Please prov	vide st inc	an e	expla	anation	and/or corrective action for all "No" responses in Sections II through VIII. Corrective on of the problem or action, a statement of the action needed/required, and a deadline for		
Inchactor	Ci~	ın o tı	uro:		Date		

Appendix C Construction Inspection Report



CONSTRUCTION INSPECTION REPORT CITY OF MARYVILLE, TENNESSEE

Date	e/Tiı	me (of Insp	pection:TN-CGP Permit No.: _	Grading Permit No.:
Proj	ect	Nar	ne:	Lc	ocation:
Curr	rent	Apı	oroxim	nate Disturbed Acreage:	Current Weather Conditions:
Site	Co	nditi	ons: _		
this mus write this	struist bit bit bit bit bit bit bit bit bit bi	ctions should be considered to the considered to	on recould the could be could	quirements for developments in the cit be checked "Yes", if it is applicable to to d as "N/A". Checks placed under the re action and required completion date	prevention and sediment control and other stormwater y of Maryville, TN. Ideally, each element presented in the site. Questions which are not applicable for the site "No" column require a written explanation and/or a in the "Comments and Corrective Actions" section of Sediment Control [EPSC] Plan that has been approved for Works Department.
	Yes	<u>8</u>	N/A	Have operators and subcontractors been obs Is an up-to-date copy of the signed SWPPP re Is any stormwater or other fluid discharging to If 4 above is yes, is a Class V injection well properties work occurring in or does the project discharge if 6 above is yes, is an approved permit onsite Are the dates of major grading activities documented the dates when construction activities ten Are the dates when stabilization practices we Are inspections being performed and documented in the discharge locations correctly indicated in the plan been kept current to reflect major Does the approved plan describe and identify thas the approved plan been updated to reflect	o an improved sinkhole? ermit on-site? arge to a body of water or wetland? e authorizing this work? mented? nporarily or permanently cease documented? re initiated documented? ented twice a week and at least 72 hours apart? d person? the approved plan? or changes that have been made on-site? et the EPSC measures for the site? et site conditions? itation amounts recorded daily? Note: It is acceptable to record
	Yes	No	asures N/A	Does the approved plan need to be modified Are EPSC measures installed and maintained Are EPSC measures installed before beginning Are EPSC measures retaining sediment on signate EPSC measures adequately preventing to Does the approved plan describe and identify If 23 above is yes, has the approved plan been Does the approved plan contain an adequate Are discharge points correctly indicated in the	ng land-disturbing activities on each phase of construction? te? risible erosion on-site? the EPSC measures for the site? en updated to reflect current EPSC measures for the site? construction schedule for EPSC BMPs?
28.					cavation or work area filtered or held in a settling basin prior to its



29. ⊔ ⊔ ⊔	Are adjacent or downstream properties protected from sediment?
Yes No N/	ures (continued)
30.	Are all surface waters leaving the site at the stabilized outlet points noted on the approved plan? Are sediment controls (e.g. sediment traps, silt fences, sedimentation ponds, etc) filled to greater than 50% of the height of the control measure?
32. 🗆 🗆 🗆	Are EPSC controls installed around material storage areas (e.g. masonry materials, waste material stockpiles, topsoil stockpiles, etc) and concrete truck washout areas?
33. 🗆 🗆 🗆	Is the site free of litter, construction, debris, or construction chemicals that could be carried offsite by wind or anticipated storm events?
34.	Are perimeter EPSC measures installed around the individual lots prior to groundbreaking? Are streams, ditches, and stormwater conveyances adequately protected? Is construction equipment in working order and free of leaks? Are storm drain inlets properly protected? Are temporary construction entrances installed at each access point to the site? Has offsite sediment tracking been minimized?
40.	Are finalized slopes ready for stabilization free from rill or gully erosion? Has temporary stabilization been applied to areas that have been inactive for greater than 14 days? Has permanent stabilization been applied to any areas of the site?
43.	If 40 above is yes, has permanent vegetative cover been established over at least 70% of the site? Does the approved plan contain an adequate construction schedule for EPSC and stormwater BMPs?
III. Post-constr Yes No N/	uction Buffer Information
	Are streams, wetlands, ponds or lakes located partially or completely within the site boundaries? If 45 above is yes, are vegetative buffers being maintained per the approved EPSC plan.
48. 🗆 🗆 🗆	
Please provide	an explanation and/or corrective action for all "No" responses in Sections II through VIII. Corrective actions must tion of the problem or action, a statement of the action needed/required, and a deadline for completion.
Site operator co	ntacted during inspection:
Inspector Name	:Inspector's TNEPSC Certification Number:
complete. I am	enalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate and aware that there are significant penalties for submitting false information, including the possibility of fine and r knowing violations.
Inspector Signat	ture:Date:



COMMENTS AND CORRECTIVE ACTIONS (DEVELOPER/CONTRACTOR COPY)

Date/Time of Inspection:	NPDES Permit No.:Grading Permit No.:
Project Name:	Location:
Site Conditions:	
A Construction Inspection Report that are required for this site. Eac	as been completed for your development site. This sheet provides a list of all corrective action corrective action must be performed prior to the deadline for completion stated below,
Site operator contacted during ins	ection:
Inspector Name:	
Corrective Actions Deadline:	