

11 - Plan Submittal and Approvals

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Module Content

- Local Plans Impacted by Runoff Reduction
- Required Plan Elements
- Approval Policies



Permanent Stormwater Requirements

Hamilton County Water Quality Program Resolution

Section #	Requirement or Topic
3	<ul style="list-style-type: none">• Permanent Stormwater Applicability & Exemptions• Requirement for a Post Construction Stormwater System Design & Maint. Plan• Requirement for approval of a Land Disturbance Permit
4	<ul style="list-style-type: none">• Requirement to use the Hamilton County Stormwater Management Manual• Required elements of a Permanent Stormwater System Design & Mgmt. Plan• Performance Criteria for Permanent Stormwater Controls
5	<ul style="list-style-type: none">• Requirement for As-Built Plans• Requirement for a Landscaping Plan for post construction practices• Inspection and Maintenance Plans, Easements, Agreements
6	<ul style="list-style-type: none">• Riparian Buffer Requirements



Meetings

- Pre-Submittal and Pre-Construction meetings shall be held for all Development activities receiving Land Disturbance permits



Final Plans & Activities

➤ As-Built Plan

- Must show **as-constructed** condition of water quality BMPs
 - Intrinsic and Structural GIPS
 - TSS removal BMPs
 - Soil amendments
 - Buffers

I hereby certify that I have surveyed the land boundaries and easements shown hereon in accordance with the accuracy requirements for a Category I survey and that the ratio for precision of the unadjusted survey is not less than 1:10,000.

I further certify that I have located all natural and manmade features shown hereon in accordance with the current Standards of Practice as adopted by the Tennessee State Board of Examiners for Land Surveyors. I certify the location, elevation and description of these features.

Printed name _____

Date _____

RLS Number _____

RLS Certification

Designer's Certification

Based upon site observations and/or information provided by a registered land surveyor, I hereby certify that all grading, drainage, structures and/or systems, erosion and sediment control practices including facilities and vegetative measures, have been completed in substantial conformance with the approved plans and specifications.

Printed name _____

Date _____

PE Number _____



Final Plans & Activities

➤ As-Built Plan

- Must show **as-constructed** condition of water quality BMPs
 - Intrinsic and Structural GIPS
 - TSS removal BMPs
 - Soil amendments
 - Buffers
- Sealed by Tennessee Professional Engineer

➤ Landscape Plan

- Included with Inspection & Maintenance Agreement (next slide)
- Describes the required post-construction vegetative stabilization and management activities

➤ Final Inspection is required



BMP Inspection & Maintenance Documentation

- Maintenance easements recommended for **structural** (only) GIPs and TSS Removal Practices
- Inspection & Maintenance Agreement
 - Required for all **intrinsic and structural** GIPs and TSS Removal Practices
 - Binding agreement between the **Property Owner** and Hamilton Co Water Quality Program
 - Assigns inspection and maintenance responsibility to **Property Owner**
 - Acknowledges and accepts Water Quality Program inspections (and corrective actions, if necessary)
 - Owner will be invoiced at 3X the cost of corrective actions
 - Non-payment will result in lien placed on property
 - Landscape Plan must be included
 - Must be executed before C.O. is issued – typically done with the property's SW System Design Plan



BMP Inspection Activities

- Annual routine inspections required to ensure that BMPs are properly functioning. Must be documented
- Comprehensive inspections shall be conducted at least once every 5 years
 - Applies only to sites approved after Resolution Adoption
 - Conducted by a Professional Engineer or Landscape Architect
 - Inspection Report Required
 - Facility type, longitude, latitude and nearest street address
 - Inspection date
 - BMP Owner information
 - BMP description and as inspected condition
 - Photographic documentation
 - Maintenance items that need correction, along with corrective action and re-inspection dates
- Inspection documentation must kept for 5 years





Hamilton County Water Quality Program
 Buffers Inspections and Maintenance Checklist

Buffers Inspections and Maintenance Checklist

Site Name: _____ Owner Change since last inspection? Y N

Location: _____

Owner Name: _____

Address: _____ Phone Number: _____

Site Status: _____

Date: _____ Time: _____ Site conditions: _____

Inspection Frequency Key: A=annual (required); M=monthly (recommended); S=after major storm (recommended)

Inspection Item	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Vegetation				
Surrounding area fully stabilized? (no evidence of eroding material into buffer)	A/M			
Grass mowed (if applicable--Zone 2 only)?	A/M			
Vegetation healthy?	A/M			
Zone 1 is undisturbed	A/M			
Level Spreader				
Vegetation is healthy	A/M			
Lip of spreader shows no signs of erosion	A/M			
Sediment noted in spreader?	A/M			

Inspector Comments: _____

Overall Condition of Buffer: Acceptable Unacceptable

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion dates below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____ (date)

Inspected by: (signature) _____

Inspected by: (printed) _____

BMP Maintenance Activities

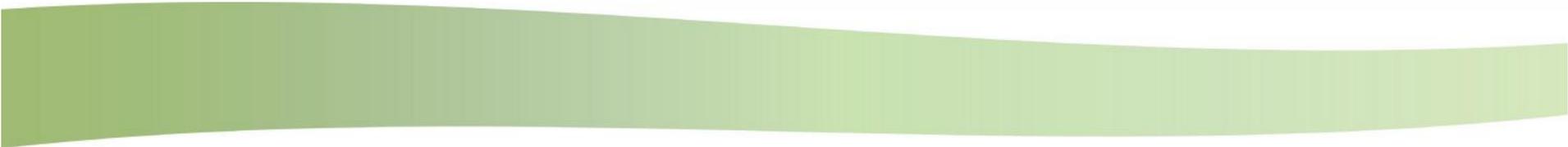
- Maintenance needs identified during inspections must be addressed in a timely manner
- Maintenance and repair must be consistent with the needs and performance standards outlined in the Manual
 - E.g., Bioretention requires healthy vegetation and un-compacted soil
- Maintenance and repair can include, but is not limited to:
 - Vegetation management (mowing, seeding, weeding, vegetation installation, replacement and removal, invasive species control, etc.)
 - Tree installation or removal
 - Removal of silt, litter or debris
 - Replacement of inlets, pipes or other appurtenances
- Hamilton County WQ Program will inspect water quality BMPs and will enforce inspection and maintenance violations



Module Topic Summary

- Local Plans Impacted by Runoff Reduction
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Questions?

