

## MEMORANDUM

**TO:** Peter Boria, Superintendent, Utilities and Facilities, Town of Spencer

**FROM:** William Guenther, MS, Project Manager, Fuss & O'Neill  
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**DATE:** March 3, 2023 (Revised April 30, 2024)

**RE:** Regulatory Review for Minimum Control Measure 5

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### 1.0 INTRODUCTION

This memorandum summarizes an evaluation of the Town of Spencer's existing regulations relative to the requirements of the 2016 *General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts* (2016 MS4 Permit). The review focuses on the regulatory requirements of Minimum Control Measure Minimum Control Measure five (MCM 5; Stormwater Management in New Development and Redevelopment) under the 2016 MS4 Permit.

The Town has several policies and regulations in place that address construction and post-construction stormwater management. Fuss & O'Neill reviewed the following regulations and application forms available on the Town website:

- General By-laws of Town of Spencer (Adopted May 7, 1992)
  - Stormwater Management Bylaw (Added 5/7/2009, Art. 5, Amended 5/7/2015 Art. 28)
- Town of Spencer Stormwater Regulations (Adopted by the Spencer Planning Board 12/20/2011, Revised 11/17/15, Revised 12/15/15, Revised 5/17/16)
- Town of Spencer Subdivision Regulations (Adopted April 3, 2007)
- Town of Spencer Zoning Bylaw (Adopted Nov. 16, 2006)
- Residential and Commercial Building Permit Applications
- Demolition Permit Application
- Forestry Driveway Permit Application

This memorandum describes aspects of the Town's existing bylaws, regulations, and procedures that address the 2016 MS4 Permit requirements, and recommends changes to the Town's existing bylaws, regulations, and procedures, and potential options for the implementation of new regulations and/or bylaws to fully meet the 2016 MS4 Permit requirements. This memo also identifies any existing regulatory barriers to implementing Low Impact Development (LID) and runoff reduction practices and provides suggestions for reducing or eliminating those barriers.

### 2.0 SUMMARY OF RECOMMENDATIONS

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Based on our review of the Town's existing bylaws, regulations, and related procedures, it is evident that the Town's existing land use policies satisfy some of the construction and post-construction regulatory mechanisms and associated procedures required under the 2016 MS4 Permit. Summarized findings and major recommendations from the evaluation are summarized in *Sections 2.1* through *2.5*. Detailed evaluation findings and recommendations are included in *Tables 1* through *4*.

### 2.1. General Recommendations

Stormwater regulation language should be revised so that regulations not only apply to sites equal to or greater than one acre, but sites which are less than one acre if the site is part of a larger common plan of development or redevelopment that disturbs more than one acre, and the Stormwater Permit Application Checklist should be revised to reflect this requirement. The stormwater regulations should be revised so that stormwater management practices must meet the requirements of the latest version of the Massachusetts Stormwater Handbook Standards, unless the Town has specified standards which exceed those in the Handbook. Referenced materials, such as the Massachusetts Stormwater Handbook, should be made available on the Town's website where Stormwater Regulation information is located.

### 2.2. Stormwater Management in New Development and Redevelopment

Stormwater regulation language related to stormwater management in new development and redevelopment should incorporate LID site planning and design strategies to the maximum extent possible. For terms which are not defined in the regulation, adding an explanation to the term can be beneficial. For example, defining Hotspots and Sensitive Areas in Section 7.I. of the Stormwater Regulations can help clarify the land use or zone the Town is referring to. Language should be added to regulations specifying the design of stormwater management systems should retain the volume of runoff and/or remove Total Suspended Solids (TSS) and Total Phosphorus (TP) generated from the total post-construction impervious area on the site. Operation and maintenance plans should be in accordance with the most recent version of the Massachusetts Stormwater Handbook Standards, and as-built plans should be submitted no later than two years after completion of construction projects.

### 2.3. Prioritization of Regulatory Updates/Amendments

#### **Primary Priority**

#### **1. Section 2.3.6.a.ii (Stormwater systems must be designed to protect Zone II or Interim Wellhead Protection Areas of public water supplies in accordance with the Massachusetts Stormwater Handbook (MSH))**

Add language to Stormwater Regulations (Section 7) stating that construction in Zone II or Interim Wellhead Protection Areas of public water suppliers must meet the requirements of the MSH, including specific source control and pollution prevention measures and structural BMPs outlined in Standard 6. Current regulations do not address Zone II or Interim Wellhead Protection Areas.

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**2. Section 2.3.6.a.i (Applicability of Stormwater Regulations)**

Add language to Stormwater Regulations (Section 2) that expands the applicability of the regulations to sites that are less than one acre but part of a larger plan of development/redevelopment that disturb  $\geq$  one acre. Current regulations require all projects with disturbance  $\geq$  one acre to obtain a Stormwater Permit.

**3. Section 2.3.6.a.ii (Stormwater management system design criteria relating to water retention, TSS removal, and TP removal)**

Amend Stormwater Regulations (Section 7) to add language that stormwater treatment systems must comply with the BMP design criteria as outlined in the latest version of the MS4 General Permit or the latest version of the MSH, whichever is stricter. Current regulations require that treatment systems must be based on design criteria in the MSH and remove at least 80% of TSS.

“For all development or redevelopment sites that disturb one acre or more, or are part of a common plan of development or redevelopment which disturbs one or more acres, post construction stormwater treatment shall meet all requirements of the latest General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts. All BMP designs shall meet, at a minimum, design guidance consistent with EPA Region 1’s BMP Accounting and Tracking Tool (2016), other BMP performance evaluation tool provided by EPA Region 1, or other pollutant removal calculation tool consistent with these tools or the latest edition of the Massachusetts Department of Environmental Protection Stormwater Management Handbook (Massachusetts Stormwater Handbook), whichever is stricter.”

**Secondary Priority**

**1. Section 2.3.6.a.ii (Incorporating LID in site planning and design to the maximum extent possible)**

Amend language in Stormwater Regulations (Section 7.J) to require LID use to the maximum extent possible. Current regulations “encourage” the use of LID.

Amend language in Section 7.J of the Stormwater Regulations and replace the first sentence with:

“Low Impact Development (LID) shall be incorporated into site planning and design to the maximum extent practicable.”

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**2. Section 2.3.6.a.ii (Prohibiting stormwater conveyances from discharging untreated stormwater to or causing erosion in wetlands or waters of the Commonwealth)**

Amend language in Stormwater Regulations (Section 7.A) to expressly prohibit discharging untreated stormwater to or causing erosion in wetlands or waters of the Commonwealth. Current regulations require that inadequately treated stormwater must not be discharged to a wetland, local waterbody, municipal drainage system, or abutting property.

**3. Section 2.3.6.a.ii (Requires stormwater management systems on new development sites to implement long term maintenance practices in accordance with MSH Standard 9)**

Amend language in introductory paragraph of Stormwater Regulations 4.B. to state that O&M plans to adhere to Massachusetts Stormwater Handbook Standard 9. Current regulations require O&M plan submission.

**4. Section 2.3.6.a.iii. (Requires as-built submission by two-years after completion of construction projects and long-term O&M procedures after project completion)**

Amend Stormwater Regulations (Section 3.F) to require as-built submission no later than two years after completion of construction projects. Current regulations require plan submission (no submission deadline) and long-term O&M plans.

**5. Section 2.3.6.a.ii (Eliminating or reducing the discharge or pollutants from land uses with higher pollutant loads as defined in the Massachusetts Stormwater Handbook)**

Amend language in Stormwater Regulations (Section 7.I) to provide examples of hotspots. Current regulations require stormwater discharges from land uses with higher pollutant loadings (hotspots) require treatment practices specified in the Massachusetts Stormwater Handbook.

**Table 1. MCM 5: Stormwater Management in New Development and Redevelopment**

Permit Requirements	Comment	Priority
<p>1. <b>Section 2.3.6.a.i.:</b> Permittees shall develop, implement and enforce a program to address post-construction stormwater runoff from all new development and redevelopment sites that disturb one or more acres and discharge into the permittees MS4 at a minimum. Sites less than one acre shall be included if the site is part of a larger common plan of development or redevelopment that disturbs more than one acre.</p>	<p><b>Existing Regulations – Meets Some of the Requirements</b></p> <ul style="list-style-type: none"> <li>Section 2 of the Stormwater Regulations (Applicability) establishes that the regulations apply to “new development and redevelopment that is not exempt under the Stormwater Bylaw.” The Stormwater Permit threshold for a major project is defined as “land conversion activity equal to or greater than 1 acre.”</li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Add language in Section 4.B of the Stormwater Management Bylaw (Article 14) and Section 2 of the Stormwater Regulations (Applicability) that states that sites less than one acre shall be included if the site is part of a larger common plan of development or redevelopment that disturbs more than one acre. The Stormwater Permit Application Checklist should be revised to reflect this requirement.</li> </ul>	<p><b>Primary</b></p> <p>Also affects applicability of stormwater bylaw</p>
<p>2. <b>Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <ol style="list-style-type: none"> <li>1. Low Impact Design (LID) site planning and design strategies must be used to the maximum extent possible.</li> </ol>	<p><b>Existing Regulations – Meets Requirements but Could Be Improved</b></p> <ul style="list-style-type: none"> <li>Section 7.J. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Low Impact Design) states that “improved site design and nonstructural controls are encouraged to minimize use of structural stormwater controls” and “the Planning Board may adopt criteria for practices that qualify as low impact designs.”</li> <li>Article 3.2. of the Subdivision Regulations (Design Standards; Relation to Natural Features) requires that “due regard shall be shown for all natural features, such as large trees, water courses, wetlands, scenic points, historic spots, and similar community assets” and “existing topography shall be preserved insofar as is practical.”</li> <li>Article 3.5.C. of the Subdivision Regulations (Design Standards; Infrastructure; Stormwater Drainage) requires that “Low Impact Development techniques” be considered “as an alternative to the common catch basin/retention basin design, and are encouraged in all subdivisions to the extent practicable.”</li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Change Section 7.J. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Low Impact Design) to state that all regulated construction projects are required to incorporate LID site planning and design strategies to the maximum extent possible.</li> </ul>	<p><b>Secondary</b></p> <p>Current regulation encourages, but does not require, the use of LID</p>

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Permit Requirements	Comment	Priority
<p><b>3. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. The design of treatment and infiltration practices should follow the guidance in Volume 2 of the Massachusetts Stormwater Handbook, as amended, or other federally or State approved BMP design guidance.</p>	<p><b>Existing Regulations – Meets Requirements</b></p> <ul style="list-style-type: none"> <li>Section 6.A. of the Stormwater Regulations (Design Standards; Best Management Practices) states that “All measures in the plan shall meet, at a minimum, the Best Management Practices as set forth in the latest addition of the Massachusetts Department of Environmental Protection Stormwater Management Handbook (Massachusetts Stormwater Handbook).”</li> <li>Section 7.G. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Water Quality Volume) requires the volume for “sizing a structural stormwater facility” to be “designed according to criteria specified by the Massachusetts DEP Stormwater Management Standards.”</li> <li>Article 2.3.D. of the Subdivision Regulations (Definitive Plans; Contents of Definitive Plan) states that definitive plans must include drainage calculations which shall include “design criteria, drainage area, and other information sufficient for the Board to verify the adequacy of any proposed drain, drain field, culvert, catch basin, detentions or retention basin, other stormwater management facility, or bridge, and to verify compliance with applicable local, state, and federal regulations, including but not limited to MA DEP Stormwater Policy.”</li> </ul>	<p>N/A</p>
<p><b>3. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p> <ul style="list-style-type: none"> <li>Not allow new stormwater conveyances to discharge untreated stormwater in accordance with Massachusetts Stormwater Handbook Standard I (no new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth)</li> </ul>	<p><b>Existing Regulations – Meets Requirements but Could Be Improved</b></p> <ul style="list-style-type: none"> <li>Section 7.A. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; No Untreated Discharges) requires that “stormwater shall not be discharged directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.”</li> <li>Article 3.5.C. of the Subdivision Regulations (Design Standards; Infrastructure; Stormwater Drainage) requires that “no untreated stormwater shall be discharged to any drainage system owned by the Town of Spencer or to any resource area subject to protection under the Wetlands Protection Act.”</li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Add language to Section 7.B. of the Stormwater Regulations (Channel Protection) so it includes “new stormwater conveyances shall not cause erosion to wetlands or waters of the Commonwealth”</li> </ul>	<p><b>Secondary</b></p> <p>Currently prohibits inadequately treated stormwater from entering wetlands and local waterbodies, but does not explicitly include language prohibiting</p>

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Permit Requirements	Comment	Priority
		erosion to wetlands or waters of the commonwealth
<p>4. <b>Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p> <ul style="list-style-type: none"> <li>• Control peak runoff rates in accordance with Massachusetts Stormwater Handbook Standard 2 (post-development peak discharge rates should not exceed pre-development peak discharge rates)</li> </ul>	<p><b>Existing Regulations – Meets Requirements</b></p> <ul style="list-style-type: none"> <li>• Section 6.E. of the Stormwater Regulations (Design Standards; Post-Development Runoff) requires measures to be taken to “control the post-development peak rate of runoff and volume of runoff so that it does not exceed predevelopment runoff for the two-year, ten-year and one-hundred-year twenty-four-hour storm event as specified in the design criteria of the Massachusetts Stormwater Handbook.”</li> <li>• Article 3.5.C. of the Subdivision Regulations (Design Standards; Infrastructure; Stormwater Drainage) requires that “stormwater drainage systems shall be designed and constructed such that there is no increase in the volume or the peak rate of stormwater runoff from the subdivision.”</li> </ul>	N/A
<p>5. <b>Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p> <ul style="list-style-type: none"> <li>• Recharge groundwater in accordance with Massachusetts Stormwater Handbook Standard 3 (loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures)</li> </ul>	<p><b>Existing Regulations – Meets Requirements</b></p> <ul style="list-style-type: none"> <li>• Section 6.D. of the Stormwater Regulations (Design Standards; Annual Recharge) states that “loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable” and “the annual recharge from the post-development site should approximate the annual recharge rate from the pre-development or existing site conditions, based on soil types.”</li> <li>• Section 7.E. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Groundwater Recharge) states that “post-development recharge shall mimic pre-development conditions. Annual recharge rates shall be maintained by use of structural and non structural management practices. The stormwater runoff volume to be recharged shall be determined by methods in the latest version of the Massachusetts Stormwater Handbook.”</li> </ul>	N/A

Permit Requirements	Comment	Priority
<p><b>6. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p> <ul style="list-style-type: none"> <li>Eliminate or reduce the discharge of pollutants from land uses with higher pollutant loads as defined in the Massachusetts Stormwater Handbook in accordance with Massachusetts Stormwater Handbook Standard 5 (eliminate or reduce the discharge of stormwater runoff from these sites to the maximum extent possible-industrial areas; auto junkyards; marinas; boatyards; disposal sites, etc.)</li> </ul>	<p><b>Existing Regulations – Meets Requirements but Could Be Improved</b></p> <ul style="list-style-type: none"> <li>Section 7.I. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Hotspots) states that “stormwater discharges from land uses with higher pollutant loadings, known as ‘hotspots’, require treatment practices specified in the Massachusetts Stormwater Handbook.”</li> </ul> <hr/> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Add a statement to Section 7.I. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Hotspots) that “hotspots” include but are not limited to industrial sites, fueling stations, vehicle maintenance and repair areas, fleet storage areas, and high-intensity-use parking lots and that in addition to treatment practices, a long-term pollution prevention plan is also required.</li> </ul>	<p><b>Secondary</b></p> <p>Regulations currently prohibit discharges from hotspots but does not provide examples of hotspots</p>
<p><b>7. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p>2. Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p> <ul style="list-style-type: none"> <li>Protect Zone II or Interim Wellhead Protection Areas of public water supplies in accordance with Massachusetts Stormwater Handbook Standard 6 (requires specific source control and pollution prevention measures and specific structural stormwater best management practices)</li> </ul>	<p><b>Existing Regulations – Does Not Meet Requirements</b></p> <ul style="list-style-type: none"> <li>Section 7.H. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Sensitive Areas) states that “stormwater discharges to swimming beaches, water supplies and other sensitive water resources may be subject to special criteria established by the Planning Board after conducting a public hearing in accordance with the Stormwater Bylaw.”</li> </ul> <hr/> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Add language to Section 7.H. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Sensitive Areas) stating that construction in Zone II or Interim Wellhead Protection Areas of public water supplies must meet the requirements of Massachusetts Stormwater Handbook Standard 6, including the specific source control and pollution prevention measures and structural stormwater best management practices outlined in Standard 6.</li> </ul>	<p><b>Primary</b></p> <p>Currently no requirement for stormwater management systems to protect Zone II or Interim Wellhead Protection Areas</p>



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	<p>“All BMP design guidance shall meet, at a minimum, the Best Management Practices as set forth in the latest edition of the Massachusetts Department of Environmental Protection Stormwater Management Handbook (Massachusetts Stormwater Handbook). Zone II or Interim Wellhead Protection Areas of public water supplies shall be protected according to Section 6 of the Massachusetts Stormwater Handbook.”</p>	
<p><b>8. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p style="padding-left: 20px;"><b>2.</b> Stormwater Management Systems on new development sites shall be designed to:</p> <ul style="list-style-type: none"> <li>• Implement long term maintenance practices in accordance with Massachusetts Stormwater Handbook Standard 9</li> </ul>	<p><b>Existing Regulations – Meets Requirements but Could Be Improved</b></p> <ul style="list-style-type: none"> <li>• Stormwater Regulations Section 4.B. (Major Projects Application Submittal Requirements; Operation and Maintenance Plan) requires the submission of an Operation and Maintenance Plan including names of system component owners, maintenance agreements, and stormwater management easements.</li> <li>• Section 12 of the Stormwater Regulations (Post-Construction Inspection and Maintenance) requires that “the owner of the property, or other person in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, structures, vegetation, erosion controls, and other protective measures” in compliance with the approved O&amp;M Plan.</li> <li>• Article 2.3.D. of the Subdivision Regulations (Definitive Plans; Contents of Definitive Plan) requires that a definitive plan include “an operation and maintenance plan for the stormwater drainage system which includes a schedule of maintenance tasks and identifies entities responsible and mechanism for funding.”</li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>• Add language to Section 4.B. of the Stormwater Regulations (Major Projects Application Submittal Requirements; Operation and Maintenance Plan) that requires the operation and maintenance plan to be in accordance with Massachusetts Stormwater Handbook Standard 9.</li> </ul>	<p><b>Secondary</b></p> <p>O&amp;M Plan currently required but not in accordance with MSH</p>
<p><b>9. Section 2.3.6.a.ii.:</b> The Town will develop or modify an ordinance or other regulatory mechanism within 2 years of the effective date of the permit to contain the following provisions:</p> <p style="padding-left: 20px;"><b>3.</b> Stormwater Management Systems on new development and redevelopment sites shall be designed to:</p>	<p><b>Existing Regulations – Meets Some of the Requirements</b></p> <ul style="list-style-type: none"> <li>• Section 7.F. of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Water Quality) requires that “stormwater treatment shall be based on design criteria in the Massachusetts Stormwater Handbook, and shall remove at least 80% of total suspended solids.”</li> </ul>	<p><b>Primary</b></p> <p>Current regulations don't reference the most recent version of the</p>

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Permit Requirements	Comment	Priority
<ul style="list-style-type: none"> <li>Require that all stormwater management systems be designed to: 1) retain the volume of runoff equivalent to, or greater than, one (1.0) inch (new development) or 0.8 inch (redevelopment) multiplied by the total post-construction impervious surface area on the site AND/OR, 2) Remove 90% (new development) or 80% (redevelopment) of the average annual load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 60% (new development) or 50% (redevelopment) of the average annual load of Total Phosphorus (TP) generated from the post-construction impervious area on the site, calculated using EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool.</li> <li>Redevelopment sites may utilize offsite mitigation within the same USGS HUC10 as the redevelopment site to meet the above retention or pollutant removal requirements.</li> </ul>	<p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Amend the language in Section 7.F of the Stormwater Regulations (Post-Development Stormwater Management Criteria; Water Quality) to:</li> </ul> <p>“For all development or redevelopment sites that disturb one acre or more, or are part of a common plan of development or redevelopment which disturbs one or more acres, post construction stormwater treatment shall meet all requirements of the latest General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts. All BMP designs shall meet, at a minimum, design guidance consistent with EPA Region 1’s BMP Accounting and Tracking Tool (2016), other BMP performance evaluation tools provided by EPA Region 1, or other pollutant removal calculation tools consistent with these tools or the latest edition of the Massachusetts DEP Stormwater Management Handbook (Massachusetts Stormwater Handbook), whichever is stricter.”</p>	<p>MSH and TSS removal requirements may vary</p>
<p><b>10. Section 2.3.6.a.iii.:</b></p> <ul style="list-style-type: none"> <li>Require the submission of as-built drawings no later than two years after completion of construction projects. As-built drawings must include all structural and non-structural on site stormwater controls.</li> <li>Require procedures to ensure adequate long-term operation and maintenance of stormwater management practices after project completion.</li> </ul>	<p><b>Existing Regulations – Meets Requirements but Could Be Improved</b></p> <ul style="list-style-type: none"> <li>Stormwater Regulations Section 3.F. (Permit Procedures; Project Completion) requires that “the permittee shall submit as-built drawings of all stormwater controls, which shall show any deviations from the approved plans and be certified by a Registered Professional Engineer, including but not limited to all pipes; structures; controls; inlet, outlet and rim invert elevations; and any other as-built requirements specified in the Stormwater Permit.”</li> <li>Stormwater Regulations Section 4.B. (Major Projects Application Submittal Requirements; Operation and Maintenance Plan) requires the submission of an</li> </ul>	<p><b>Secondary</b></p> <p>Regulations currently require as-built submissions but there is no submission deadline</p>

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	<p>Operation and Maintenance Plan including names of system component owners, maintenance agreements, and stormwater management easements.</p> <ul style="list-style-type: none"> <li>Section 12 (Post-Construction Inspection and Maintenance) of the Stormwater Regulations requires that “structures and practices used to manage stormwater shall be inspected to ensure compliance with Operation and Maintenance Plan” at a minimum “during the first year of operation and every three years thereafter.” For privately-owned stormwater systems, the responsible party for conducting long-term inspections and maintenance will be specified in an “agreement between the property owner and the Stormwater Authority” that includes a “mechanism for cost of inspection and maintenance.”</li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Add a requirement to Stormwater Regulations Section 3.F. (Permit Procedures; Project Completion) that as-built plans must be submitted no later than 2 years after completion of construction projects.</li> </ul>	