

Date Submitted:_	
Reviewed By:	
Approved:	
Date:	
Denied:	
Date:	
Permit #	

# APPLICATION FOR COVERAGE UNDER THE TOWN OF SUDBURY GENERAL STORMWATER MANAGEMENT PERMIT (RESIDENTIAL)

Project Street / Location:				
Assessor's Map:	Parcel(s):			
Plan Prepared by:			Da	ate of Plan:
Applicant	(if	Owner different from app	licant)	Contractor
Name:				
Address:				
	·····			
Fax:				
<ul> <li>Single family New Construct</li> <li>Single family redevelopment</li> <li>Septic System Replacement</li> <li>Commercial, Industrial, Inst</li> <li>Utility Work</li> <li>Repaving only</li> <li>Other</li> </ul>	t/enlargement /Repair itutional, Exempt S			
Total Lot Area:				
Estimated Area to be Disturbe Total Area of Impervious Surfa (paved, parking, roofs, decks,	ces: <u>Exist</u>		Propos	<u>ed</u> 
Project includes the following fea	tures:			
Roof drains discharging over				
<ul> <li>Perimeter drain</li> </ul>				
<ul> <li>Illicit stormwater connectio</li> </ul>	n			
<ul> <li>Disturbance of slopes great</li> </ul>	er than 10%	Square Feet Dis	sturbed:	
<ul> <li>Disturbance of slopes great</li> </ul>	er than 15%	Square Feet Dis	sturbed:	
<ul> <li>Disturbance of s lopes great</li> </ul>	er than 20%	Square Feet Dis	sturbed:	

#### Other Jurisdictions:

- Wetlands Protection Act / Conservation Commission Jurisdiction
- Rivers Act / Conservation Commission Jurisdiction
- Board of Health permit
- Site Plan Review
- Planning Board WRPD permit
- o Earth Removal Board
- Driveway Permit
- o Trench Permit

#### **Permit Conditions**

By submitting an application for coverage under the GSMP for residential development or associated activity and accessory structures that will disturb or alter from 5,000 square feet to 40,000 square feet of land or which is part of a common plan for development that will disturb or alter from 5,000 square feet to 40,000 square feet of land, the Applicant agrees to the following conditions:

1. The activity shall not increase either the rate or volume of stormwater runoff leaving the site, nor shall it alter the stormwater flow to any adjoining properties, public ways, or any wetland resource areas, unless otherwise permitted based on improvement over existing conditions.

Please check all that apply to this project:

Roof drains emptying into dry wells

Grassed swales constructed

Porous pavement installed; \_\_\_\_\_\_ square feet

Water quality swale

Green roof

Rain barrels/cisterns for irrigation

Other methods (please list/describe):

2. The activity shall, to the maximum extent feasible, treat all stormwater runoff on site using recommended Best Management Practices (BMPs) in accordance with the latest edition of the Massachusetts DEP Stormwater Handbook.

Please check all that apply to this project:

Rain gardens

Constructed wetlands

**Detention basin** 

Retention basin

Sediment forebay

Vegetated filter strip

Deep sump catch basins

3.	The activity shall to the maximum extent feasible minimize impervious surfaces and provide on-site infiltration of stormwater in accordance with the latest edition of the Massachusetts DEP Stormwater Handbook.
	Please check all that apply to this project:
	Roof drains emptying into dry wells
	Grassed swales constructed
	Porous pavement installed; square feet
	Water quality swale
	Green roof
	Rain gardens
	Single load driveway
	Common driveway
	Other methods (please list/describe):
	Other methods (predsense).
4.	The Applicant shall provide and maintain Erosion and Sedimentation controls, in accordance with the latest edition of the Massachusetts DEP Stormwater Handbook, as necessary until the site is permanently stabilized. BMPs selected for erosion control shall be chosen to minimize site disturbance from erosion control installation. As soon as the site is stabilized, such measures shall be removed.
	Please check all that apply to this project:
	Hay bales
	Silt fencing
	Construction entrance
	Temporary vegetative cover – mulch, netting
	Permanent vegetative cover – hydroseeding, seeding, sodding
	Slope stabilization
	Retaining walls
	Slope drains
	Other methods (please list/describe):
5.	The applicant shall ensure that the site and stormwater management systems are perpetually inspected and maintained to function as designed.
	Please check all that apply to this project:
	Visual inspections by contractor
	Visual inspections by homeowner
	Operation and Maintenance Plan
	Maintenance contract for stormwater components
	Other methods (please list/describe):

Other methods (please list/describe):\_\_\_\_\_

- 6. The following source control and pollution prevention measures shall be employed on the site to prevent contamination of stormwater runoff:
  - Store lawn and deicing chemicals under cover
  - Apply fertilizers and pesticides sparingly to prevent washoff
  - Use of slow release nitrogen and low phosphorus fertilizers is encouraged
  - No fertilization or pesticide application in or near any wetland resource area
  - Pick up pet waste, dispose of in the toilet or trash
  - Store, use and dispose of household hazardous wastes properly
  - Limit exterior washing of vehicles to locations that drain to pervious surfaces and away from storm drains
  - Maintain vehicles and clean up fluid spills/drips from pavement areas
  - Pump and maintain septic systems
  - Use alternative deicers such as calcium chloride and magnesium chloride in lieu of sodium based deicers

<ul> <li>No coal tar-based pavement sealants are to be used on any site subject to the GSMP.</li> </ul>
Additional Conditions:

#### Certification

I hereby certify that I have reviewed the permit conditions listed above, and the information contained herein
including all attachments, is true, accurate and complete to the best of my knowledge. Further, I grant the
Town of Sudbury Planning Board and its authorized agents permission to enter the property to review this
application and make inspections during and after construction.

Applicant	Date
Owner	 Date

#### **Additional Requirements**

1. Applicants must submit a total of three (3) hard copies of the completed application, including all required attachments with three (3) reduced sized 11 x 17 plans plus, one (1) additional full-size plans, and a PDF electronic submission sent via email to PCD@sudbury.ma.us.

The full application package, including all required attachments, should be provided in three (3) separate sets and delivered to:

Planning & Community Development Department Flynn Building 278 Old Sudbury Road Sudbury, MA 01776 (978)639-3387

#### 2. Submission Materials

A completed Application Form for coverage under GSMP with original signatures of all owners Plans, drawings or specifications for the project

Soil conditions where infiltration of stormwater is proposed

Pre and Post development topography at 2 foot contour intervals

Calculations demonstrating compliance with the thresholds for and conditions of the GSMP. Calculations will be dependent on the disturbance activity contemplated in the application. For example, amount of impervious surface, amount of vegetation removal, amount of slope disturbed, etc.

Other materials as the Planning Board may require to determine the eligibility of the proposed work for coverage under the GSMP

- 3. There is no fee for a General Stormwater Permit.
- 4. The Planning Board shall render a decision to approve, approve with conditions, or disapprove the permit within 30 days of receipt of a complete application package.



### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

#### A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals. This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8<sup>2</sup>
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

<sup>&</sup>lt;sup>1</sup> The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

<sup>&</sup>lt;sup>2</sup> For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



#### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

#### **B. Stormwater Checklist and Certification**

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

### **Registered Professional Engineer's Certification**

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature	
Signature and Date	
Checklist	_
<b>Project Type:</b> Is the application for new development, redevelopment, or a mix of new and redevelopment?	
☐ New development	
Redevelopment	
Mix of New Development and Redevelopment	



### **Checklist for Stormwater Report**

### Checklist (continued)

env	rironmentally sensitive design and LID Techniques were considered during the planning and design of project:
	No disturbance to any Wetland Resource Areas
	Site Design Practices (e.g. clustered development, reduced frontage setbacks)
	Reduced Impervious Area (Redevelopment Only)
	Minimizing disturbance to existing trees and shrubs
	LID Site Design Credit Requested:
	☐ Credit 1
	☐ Credit 2
	☐ Credit 3
	Use of "country drainage" versus curb and gutter conveyance and pipe
	Bioretention Cells (includes Rain Gardens)
	Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
	Treebox Filter
	Water Quality Swale
	Grass Channel
	Green Roof
	Other (describe):
Sta	ndard 1: No New Untreated Discharges
	No new untreated discharges
	Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
	$\label{thm:continuous} \textbf{Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.}$



### **Checklist for Stormwater Report**

Cł	necklist (continued)
Sta	ndard 2: Peak Rate Attenuation
	Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.  Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
	Calculations provided to show that post-development peak discharge rates do not exceed pre- development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24- hour storm.
Sta	indard 3: Recharge
	Soil Analysis provided.
	Required Recharge Volume calculation provided.
	Required Recharge volume reduced through use of the LID site Design Credits.
	Sizing the infiltration, BMPs is based on the following method: Check the method used.
	☐ Static ☐ Simple Dynamic ☐ Dynamic Field <sup>1</sup>
	Runoff from all impervious areas at the site discharging to the infiltration BMP.
	Runoff from all impervious areas at the site is <i>not</i> discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
	Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
	Recharge BMPs have been sized to infiltrate the Required Recharge Volume <i>only</i> to the maximum extent practicable for the following reason:
	☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
	M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
	☐ Solid Waste Landfill pursuant to 310 CMR 19.000
	Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
	Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
	Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

<sup>&</sup>lt;sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



### **Checklist for Stormwater Report**

Cł	necklist (continued)
Sta	ndard 3: Recharge (continued)
	The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
	Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.
Sta	ndard 4: Water Quality
The • • • • • • • • • • • • • • • • • • •	E Long-Term Pollution Prevention Plan typically includes the following: Good housekeeping practices; Provisions for storing materials and waste products inside or under cover; Vehicle washing controls; Requirements for routine inspections and maintenance of stormwater BMPs; Spill prevention and response plans; Provisions for maintenance of lawns, gardens, and other landscaped areas; Requirements for storage and use of fertilizers, herbicides, and pesticides; Pet waste management provisions; Provisions for operation and management of septic systems; Provisions for solid waste management; Snow disposal and plowing plans relative to Wetland Resource Areas; Winter Road Salt and/or Sand Use and Storage restrictions; Street sweeping schedules; Provisions for prevention of illicit discharges to the stormwater management system; Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL; Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan; List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
	A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.  Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
	is within the Zone II or Interim Wellhead Protection Area
	is near or to other critical areas
	is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
	involves runoff from land uses with higher potential pollutant loads.
	The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if

applicable, the 44% TSS removal pretreatment requirement, are provided.



### **Checklist for Stormwater Report**

Che	ecklist (continued)
Stan	dard 4: Water Quality (continued)
T	The BMP is sized (and calculations provided) based on:
	☐ The ½" or 1" Water Quality Volume or
	The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
E p a	The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
	A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing hat the BMPs selected are consistent with the TMDL is provided.
Stan	dard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)
_ F	The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.  The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted <b>prior</b> the displaces of stormwater to the past construction stormwater PMPs.
	to the discharge of stormwater to the post-construction stormwater BMPs.  The NPDES Multi-Sector General Permit does <i>not</i> cover the land use.
_ L	LUHPPLs are located at the site and industry specific source control and pollution prevention neasures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow nelt and runoff, and been included in the long term Pollution Prevention Plan.
A	All exposure has been eliminated.
A	All exposure has <i>not</i> been eliminated and all BMPs selected are on MassDEP LUHPPL list.
g	The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.
Stan	dard 6: Critical Areas
	The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
	Critical areas and BMPs are identified in the Stormwater Report.



### **Checklist for Stormwater Report**

### Checklist (continued)

	andard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum tent practicable
	The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
	☐ Limited Project
	<ul> <li>Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.</li> <li>Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area</li> <li>Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff</li> </ul>
	☐ Bike Path and/or Foot Path
	Redevelopment Project
	Redevelopment portion of mix of new and redevelopment.
	Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.  The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.
Sta	andard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control
	Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the owing information:
	<ul> <li>Narrative;</li> <li>Construction Period Operation and Maintenance Plan;</li> <li>Names of Persons or Entity Responsible for Plan Compliance;</li> <li>Construction Period Pollution Prevention Measures;</li> <li>Erosion and Sedimentation Control Plan Drawings;</li> <li>Detail drawings and specifications for erosion control BMPs, including sizing calculations;</li> <li>Vegetation Planning;</li> <li>Site Development Plan;</li> <li>Construction Sequencing Plan;</li> <li>Sequencing of Erosion and Sedimentation Controls;</li> </ul>

Operation and Maintenance of Erosion and Sedimentation Controls;

the information set forth above has been included in the Stormwater Report.

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing

Inspection Schedule; Maintenance Schedule;

Inspection and Maintenance Log Form.



### **Checklist for Stormwater Report**

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)	
	The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has <i>not</i> been included in the Stormwater Report but will be submitted <i>before</i> land disturbance begins.
	The project is <i>not</i> covered by a NPDES Construction General Permit.
	The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
	The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.
Standard 9: Operation and Maintenance Plan	
	The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
	☐ Name of the stormwater management system owners;
	☐ Party responsible for operation and maintenance;
	☐ Schedule for implementation of routine and non-routine maintenance tasks;
	☐ Plan showing the location of all stormwater BMPs maintenance access areas;
	☐ Description and delineation of public safety features;
	Estimated operation and maintenance budget; and
	Operation and Maintenance Log Form.
	The responsible party is <i>not</i> the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
	A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
	A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.
Sta	andard 10: Prohibition of Illicit Discharges
	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
	An Illicit Discharge Compliance Statement is attached;
	NO Illicit Discharge Compliance Statement is attached but will be submitted <i>prior to</i> the discharge of any stormwater to post-construction BMPs.