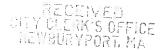


#### CITY OF NEWBURYPORT

#### STORMWATER ADVISORY COMMITTEE

CITY HALL 60 PLEASANT STREET NEWBURYPORT, MA 01950



April 28, 2014

2014 APR 28 A 10: 41

Mr. Richard Jones City Clerk 60 Pleasant Street Newburyport, MA 01950

Subject:

Adoption of Stormwater Rules and Regulations

Dear Mr. Jones:

In accordance with Section 17-6 of the City's Code of Ordinances, the City's Stormwater Advisory Committee has hereby adopted the attached Stormwater Rules and Regulations. Please file said document at your earliest convenience.

Thank you.

Sincerely,

Mayor

NEWBURYPORT STORMWATER ADVISORY COMMITTEE

Jon-Eric White, P.E. City Engineer/Chair

Donna D. Holaday

Anthony Furnari DPS Director

Andrew Lafferty / DPS Deputy Director

Nicholas Pepe
Assistant Engineer

Varil 1

Peter Lombardi
Director of Policy and Administration

Gary Calderwood Building Inspector Molly Ettenborough
Recycling Coordinator

Andrew Port Planning Director

Vota Nawkall Smith

Kate Newhall-Smith

Planner

Valia Godtfredsen Conservation Agent

Rebert Blaces

Robert F. Bracey Health Director

#### CITY OF NEWBURYPORT, MASSACHUSETTS

# STORMWATER MANAGEMENT RULES AND REGULATIONS



Prepared by:

City of Newburyport Engineering Department

Malcolm Pirnie, Inc. 601 Edgewater Drive Wakefield, MA 01880

Adopted: April 28, 2014

#### STORMWATER MANAGEMENT RULES AND REGULATIONS

#### **Table of Contents**

SECTIC	ON 1. PURPOSE	3
SECTIO	ON 2. DEFINITIONS	3
SECTIO	ON 3. AUTHORITY	4
SECTIO	ON 4. ADMINISTRATION	5
SECTIC	ON 5. PERMITS AND PROCEDURES	5
SECTIO	DN 6. FEES	7
SECTIC	DN 7. STANDARDS	8
SECTIO	ON 8. DESIGN PLANS	9
1.	Stormwater Management Plan (SMP) and Supporting Documentation	9
2.	Erosion and Sediment Control Plan (ESCP)	11
3.	Operation and Maintenance Plan (O&M Plan)	12
SECTIO	ON 9. CONSTRUCTION	14
SECTIO	ON 10. CERTIFICATE OF COMPLETION	16
SECTIO	ON 11. OPERATION AND MAINTENANCE	16
SECTIO	ON 12. SEVERABILITY	17
APPEN	IDIX A. CITY OF NEWBURYPORT STORMWATER MANAGEMENT STANDARD	S
APPEN	IDIX B. MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION	
	CHECKLIST FOR STORMWATER REPORT	

#### STORMWATER MANAGEMENT RULES AND REGULATIONS

#### **SECTION 1. PURPOSE**

These Stormwater Management Rules and Regulations ("Regulations") are promulgated to create uniformity of process and to help clarify the provisions of Chapter 17, Stormwater Management Ordinance of the City's Code of Ordinances ("Stormwater Ordinance"). These Regulations apply to all activities in accordance with the applicability sections of the Stormwater Ordinance and further described herein.

These Regulations are intended to minimize delay in the permitting process by providing Applicants and their consultants with information which will help them comply with the Stormwater Ordinance.

These Regulations establish requirements and procedures for the submission and consideration of an application for a Stormwater Management Permit and related documents, application and review fees, inspection requirements, definitions, and design standards to address discharges to the municipal separate storm sewer system (MS4) that is necessary for the protection of the City's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater. In addition, land disturbances can cause harmful impacts due to soil erosion and sedimentation as more specifically addressed in the Stormwater Ordinance.

Projects and/or activities not within the jurisdiction of any of the City of Newburyport Boards, Commissions, or Departments but still within the jurisdiction of the Stormwater Ordinance must comply with these Regulations and, if applicable, must obtain a Stormwater Management Permit in accordance with the permit procedures outlined herein.

#### SECTION 2. DEFINITIONS

The definitions of terms in Section 17-3 of the Stormwater Ordinance, as well as the following definitions, shall apply to terms used in these Regulations:

APPLICANT'S TECHNICAL REPRESENTATIVE — A Massachusetts Registered Professional Engineer (P.E.) hired by the Applicant and/or Permittee to certify that design and construction are completed in accordance with the applicable local, state, and federal stormwater requirements.

CITY — City of Newburyport, Massachusetts.

CITY OF NEWBURYPORT STORMWATER MANAGEMENT STANDARDS — City of Newburyport Stormwater Management Standards, as amended. These Standards are *in addition to* the latest edition of the Massachusetts DEP Stormwater Management Standards (formerly Stormwater Policy). Where conflicting requirements exist between the state and local Standards, the more stringent requirement shall govern.

CONSTRUCTION AND WASTE MATERIALS — Excess or discarded building or site materials, including but not limited to concrete truck washout, chemicals, litter, concrete, asphalt, sanitary waste that may adversely impact water quality, and clearing/grubbing wastes such as stumps and asphalt.

GRUBBING — The act of clearing land surface by digging up roots and stumps.

PERMITTEE — The person or party to whom a permit is granted and is held responsible for compliance with the Permit. For the Stormwater Management Permit, the permittee must be the owner of the property.

SINGLE-FAMILY — A residential building consisting of one dwelling unit.

SLOPE — The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

STABILIZATION — The use, singly or in combination, of vegetative and non-vegetative methods to prevent erosion. Final stabilization shall be defined as stated in the NPDES General Permit for Discharges from Construction Activities (CGP).

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) — Plan required for permit coverage under the NPDES General Permit for Discharges from Construction Activities (CGP). The SWPPP is a detailed plan describing how erosion and sediment controls and other BMPs will be implemented on a construction site.

STRIP — Any activity which removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

TSS — Total Suspended Solids.

#### **SECTION 3. AUTHORITY**

- A. The Regulations are promulgated by the Newburyport Department of Public Services in accordance with Section 17-6 of the Stormwater Ordinance.
- B. The Regulations are intended to clarify but not expand, extend, modify or replace any provision of the Stormwater Ordinance.

#### **SECTION 4. ADMINISTRATION**

- A. The Enforcement Officer shall administer, implement, and enforce the Regulations.
- B. Waiver. Strict compliance with any requirement of the Stormwater Ordinance or the Regulations may be waived for the reasons given, and in accordance with the procedures set forth in Section 17-14 of the Stormwater Ordinance.

#### SECTION 5. PERMITS AND PROCEDURES

A. Filing Application. The site owner or his/her technical representative shall file a completed Stormwater Management Permit Application Package with the Enforcement Officer. Permit issuance is required prior to any site altering activity that results in the land disturbance of 10,000 square feet or more. While the Applicant can be a representative, the Permittee must be the owner of the site.

1.	The Stormwater Management Permit Application Package shall infollowing:	clude	the
	$\ \square$ A completed Application Form with signatures of all owners;		
	☐ Stormwater Management Plan and supporting documentation as sp Section 8-A, if applicable;	pecified	ni b
	☐ Erosion and Sediment Control Plan as specified in Section 8-B;		
	☐ Operation and Maintenance Plan as specified in Section 8-C, if appli	cable;	
	□ NPDES General Permit for Discharges from Construction Activities application including the Notice of Intent and Stormwater Pollution Prever (SWPPP), if applicable;	•	
	☐ Decisions or Approvals of other permitting agencies, including but n to the Zoning Board of Appeals, Planning Board, Conservation Coas applicable; and,		
	☐ Application Fee.*		
	* The application will not be accepted without the Application Fee in Section 6. The Application Fee for the Permit shall be in additi	-	

Page 5 of 17

fee requirements for other applications for permits for the same project

before any other City Board or Commission which may review the project. The Application Fee is non-refundable

- 2. Submission Format. Three (3) hardcopies and one (1) digital copy (CAD & PDF) of the Stormwater Management Permit Application Package must be filed with the Enforcement Officer for his/her review as well as review by other City Departments, Boards or Commissions, as necessary.
- B. Right of Entry to Property. Filing an application for a Stormwater Management Permit grants the Enforcement Officer, or its agent, permission to enter upon privately-owned property for the purpose of performing their duties under these Regulations and to make or cause to be made such examinations, surveys, or sampling as the Enforcement Officer deems reasonably necessary to verify the information in the application and to inspect for compliance with the Stormwater Management Permit.
- C. Information Requests. The Applicant shall submit all additional information requested by the Enforcement Officer to issue a decision on the application.
- D. Actions. The Enforcement Officer's action, rendered in writing, shall consist of either:
  - 1. <u>Approved as Submitted</u>: Approval of the Stormwater Management Permit Application, based upon a determination that the proposed stormwater management systems and measures, as set forth in the design plans submitted in accordance with Section 8, will meet the Standards specified in Section 7, will adequately protect the water resources of the City, and are in compliance with the requirements set forth in the Regulations.
  - 2. <u>Approved with Conditions</u>: Approval of the Stormwater Management Permit Application, based upon a determination that the proposed stormwater management systems and measures, as set forth in the design plans submitted in accordance with Section 8, subject to any conditions, modifications, or restrictions required by the Enforcement Officer to ensure that the project will meet the Standards specified in Section 7, will adequately protect the water resources of the City and are in compliance with the requirements set forth in the Regulations.
  - 3. <u>Not Approved</u>: Disapproval of the Stormwater Management Permit Application, based upon a determination that the proposed stormwater management systems and measures, as set forth in the design plans submitted in accordance with Section 8, will not meet the Standards specified in Section 7, will not adequately protect the water resources of the City, or are not in compliance with the requirements set forth in the Regulations.
- E. Changes and Alterations to the Permit. No change or alteration of the plans approved by the Stormwater Management Permit shall be made unless the

Page 6 of 17

Applicant or Applicant's Technical Representative first notifies the Enforcement Officer in writing of the requested change or alteration, and the Enforcement Officer issues his written approval, before any change or alteration is physically made. If the Enforcement Officer determines that the change or alteration is significant, the Enforcement Officer may require that an amended application be filed. If any change or alteration from the plans approved by the Stormwater Management Permit occurs without the prior approval of the Enforcement Officer, the City may impose conditions or orders in accordance with the enforcement procedures set forth in Section 17-7 of the Stormwater Ordinance.

F. Permit Expiration. A Permit shall expire three (3) years from the date of issuance. All work permitted or required by the Permit (other than continuing requirements set forth in the Operation and Maintenance Plan) shall be completed within this timeframe. Any Permit may be renewed at the Enforcement Officer's discretion for an additional one (1) year period, provided that a request for renewal is submitted in writing to the Enforcement Officer at least thirty (30) days prior to expiration

#### G. Recording.

- Prior to commencement of construction, the approved Stormwater Management Permit shall be recorded at the Southern Essex District Registry of Deeds, in the chain of title for the property that is the subject of the Stormwater Management Permit.
- 2. A copy of the signed Stormwater Management Permit, as recorded at the Registry, shall be provided to the Enforcement Officer.

#### SECTION 6. FEES

The following fees shall be charged for a Stormwater Management Permit:

#### A. Application Fee

- 1. The purpose of the Application Fee is to offset the City's costs, including processing the application and conducting inspections, by the Enforcement Officer and other City officials and boards.
- 2. The Application Fee is in addition to any other local or state fees that may be charged under any other law or bylaw.

#### 3. The Application Fee is as follows:

Proposed Land Disturbance	Application Fee
Less than 10,000 square feet of land disturbance	Permit Not Required – No Fee
10,000 square feet or more of land disturbance	\$200.00 base fee plus \$1.00 for every 1,000 square feet of land disturbance

For example, if the proposed land disturbance is 5 acres (217,800 sf.), the application fee will be:

Base Fee: \$200.00

Plus Area Fee:

217,800 s.f. x \$1.00/1000 s.f. = + \$217.80

Total application fee: \$417.80

4. The Application Fee is payable at the time of application. It is nonrefundable.

#### **SECTION 7. STANDARDS**

- A. Projects shall meet the following standards and where conflicting requirements exist, the more stringent requirement shall govern.
  - 1. Massachusetts DEP Stormwater Management Standards ("DEP Standards") (formerly DEP Stormwater Management Policy), as currently in effect.
  - 2. City of Newburyport Stormwater Management Standards ("City Standards"), as currently in effect (see Appendix A).
  - 3. NPDES General Permit for Discharges from Construction Activities, as applicable.
  - 4. Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas A Guide for Planners, Designers, and Municipal Officials, latest edition.
- B. When one or more of the Standards cannot be met, an Applicant may demonstrate that an equivalent level of environmental protection will be provided.

#### **SECTION 8. DESIGN PLANS**

The following shall be prepared and submitted, as applicable, as follows:

- A. Stormwater Management Plan (SMP) and Supporting Documentation
  - 1. Applicability.
    - a. Single-Family Applicants. Applicants for single-family properties shall submit the Stormwater Management Plan and be exempt from submitting the Supporting Documentation as outlined in this section.
    - b. Commercial and Other Non-Single-Family Applicants. Commercial and all other Non-Single-Family Applicants shall submit as part of the application package a Stormwater Management Plan and Supporting Documentation as outlined in this section.
  - 2. Stormwater Management Plan. This Stormwater Management Plan shall contain sufficient information for the Enforcement Officer and relevant City departments to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the Applicant for reducing adverse impacts from stormwater. The SMP shall be designed to meet the Standards set forth in Section 7.

The Stormwater Management Plan shall fully depict the proposed project in drawings and shall include the following:

- a. Contact Information. Name, address, and telephone numbers of the property owner, Applicant, and Applicant's Technical Representative(s) or firm(s) preparing the SMP;
- b. Title, date, north arrow, scale, legend, and locus map;
- c. The existing zoning and proposed land use at the site;
- d. The existing conditions of the site and fifty feet (50') into all abutting properties, including property line information, property owners, planimetric detail and topographic features including 1-foot contours, buildings, structures, paved areas, trees, watercourses, etc.;
- e. Proposed improvements, such as buildings and other structures, parking areas, roadways, walkways, grading, landscaping, stormwater management system(s) and BMPs, etc. Grading shall be shown in 1-foot contours with spot grades as necessary to identify high/low points or critical elevations;
- f. The delineation and number of square feet of the land area to be disturbed;

Page 9 of 17

- g. The location of existing and proposed utilities and stormwater conveyances;
- h. The location of existing and proposed easements;
- Location and description of natural features including:
  - Watercourses and water bodies, wetland resource areas, and buffer zones as defined in the Massachusetts Wetlands Protection Act and in the City's General Wetlands Protection Ordinance;
  - ii. Floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a Registered Professional Engineer (P.E.) for areas not assessed on these maps, if applicable;
  - iii. Existing vegetation including tree lines, canopy layer, shrub layer, and ground cover, and trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities; and,
  - iv. Habitats mapped by the Massachusetts Natural Heritage and Endangered Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species within five hundred feet (500') of any construction activity.
- j. Soil-evaluation deep-hole (test pit) locations and estimated seasonal high groundwater elevation in areas to be used for stormwater retention, detention, or infiltration;
- k. The structural details for all components of the proposed drainage system(s) and stormwater management system(s);
- 1. Notes on drawings specifying materials to be used, construction specifications, and Typical Details; and,
- m. Such other information as is required by the Enforcement Officer.
- Supporting Documentation. A Stormwater Report with drainage calculations and other supporting documentation, as outlined below, shall accompany the submission of a SMP. The stormwater management system design and drainage calculations shall be in strict compliance with DEP and City Standards.
  - a. A description of all components of the proposed drainage system including:
    - Pre- and post-construction watershed boundaries and drainage catchment areas;

- ii. The existing and proposed vegetation and ground surfaces with runoff coefficient for each;
- iii. Locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization, as applicable;
- iv. All measures for the detention, retention, or infiltration of water;
- v. All measures for the protection of water quality;
- vi. Existing and proposed hydrology and hydraulics calculations, including pipe sizing and outlet control, with comparison tables for the required design storm events; and,
- vii. Total Suspended Solids (TSS) calculations.
- b. A drainage system maintenance schedule for the period of construction;
- c. A completed DEP Checklist for Stormwater Report (see Appendix B); and,
- d. Any other information requested by the Enforcement Officer.
- B. Erosion and Sediment Control Plan (ESCP)
  - 1. Applicability.
    - a. Single-Family Applicants. Single-Family Applicants shall submit the Erosion and Sediment Control Plan as outlined in this section. However, the requirement in Section 8 for stamped and certified plans shall not apply to Single-Family Applicants.
    - b. Commercial and Other Non-Single-Family Applicants. Commercial and other Non-Single-Family Applicants shall submit the Erosion and Sediment Control Plan as outlined in this section.
  - 2. Erosion and Sediment Control Plan. The application for a Stormwater Management Permit shall include an Erosion and Sediment Control Plan to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sediment controls. The Applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements as specified herein and in accordance with the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas A Guide for Planners, Designers, and Municipal Officials, latest edition. The Applicant may submit the SWPPP in place of the ESCP, if the NPDES General Permit for Discharges from Construction Activities applies.

The Erosion and Sediment Control Plan shall include the following:

a. All applicable items required in the Stormwater Management Plan and Supporting Documentation section;

Page 11 of 17

- b. Contact Information. Names, addresses, and telephone numbers of the property owner, Applicant, and Applicant's Technical Representative(s) or firm(s) preparing the ESCP, if different from the SMP;
- c. Drainage patterns of surface runoff and approximate slopes anticipated after major grading activities (Construction Phase Grading Plans);
- d. Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading, and construction and waste material stockpiling areas;
- e. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
- f. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
- g. A description of construction and waste materials expected to be stored on-site and intended disposal methods. The ESCP shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
- h. Plans must be stamped and certified by a Registered Professional Engineer (P.E.) registered in Massachusetts or a Certified Professional in Erosion and Sediment Control (CPESC); and,
- i. Such other information as is required by the Enforcement Officer.

#### C. Operation and Maintenance Plan (O&M Plan)

- 1. General. The application for a Stormwater Management Permit shall include an Operation and Maintenance Plan to ensure compliance with the Stormwater Management Permit and these Regulations throughout the life of the constructed stormwater management system(s). The requirements stated herein are supplemental to DEP Standard 9 and shall be included in the O&M Plan. The Enforcement Officer shall make the final decision of what maintenance option is appropriate in a given situation. The Enforcement Officer will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision.
- 2. Applicability.

Page 12 of 17

- a. Single-Family Applicants. Single-Family Applicants shall be exempt from submitting the Operation and Maintenance Plan, as outlined in this section.
- b. Commercial and Other Non-Single-Family Applicants. Commercial and other Non-Single-Family Applicants shall submit the Operation and Maintenance Plan as outlined in this section.
- 3. Contents of the Operation and Maintenance Plan. The Operation and Maintenance Plan shall include the following:
  - a. A Long-Term O&M Plan, which shall meet the requirements of DEP Standard 9, as well as the additional requirements of this section;
  - b. Spill Prevention.
    - i. Description of facility, activities involving hazardous material storage and delivery, and hazardous materials expected to be stored on-site;
    - ii. Location of potential spill areas or operations prone to spills/leaks and of areas that should be or already are "containment" areas;
    - iii. Spill reporting procedures and a plan to protect the environment in the event of a spill; and,
  - iv. Procedures for notifying the Enforcement Officer of all spills that can impact the environment;
  - c. Such other information as is required by the Enforcement Officer.
- 4. Maintenance Responsibilities.
  - a. Operation and maintenance of private stormwater management systems are the responsibility of the property owner.
  - b. The Operation and Maintenance Plan shall identify the person, such as the property owner, homeowners' association, condominium trust, or other legal entity, with the legal obligation and authority for operation and maintenance of the stormwater management system. The Operation and Maintenance Plan shall include the proposed deeds, covenants, easements, or other legal documents that will be necessary to establish such person's obligation and authority to assume this responsibility.
  - c. Responsibility for operation and maintenance shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project, or otherwise has been granted legal rights sufficient to permit such person to perform the operation and maintenance.

Page 13 of 17

d. The City reserves the right to enter upon said property for periodic inspections providing advanced notice is given to the property owner.

#### **SECTION 9. CONSTRUCTION**

- A. General. This section covers the requirements during construction of the stormwater management system(s).
- B. Pre-Construction Meeting. Prior to starting clearing, excavation, construction, or land disturbance, the Applicant, the Applicant's Technical Representative, the general contractor or any other person with authority to make changes to the project, shall meet with the Enforcement Officer to review the permitted plans and their implementation.
- C. Required Inspections. The Applicant's Technical Representative shall make inspections as hereinafter required and shall either approve that portion of the work completed by providing written documentation to the City of completeness or shall notify the Applicant wherein the work fails to comply with the Stormwater Management Permit as approved. The Stormwater Management Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Enforcement Officer, shall be maintained at the site during the progress of the work. The Applicant or Applicant's Technical Representative shall notify the Enforcement Officer at least two (2) working days before each of the following events; the Applicant's Technical Representative shall be responsible to observe and assure the project progresses appropriately at the following events:
  - 1. Initial Site Inspection prior to approval of any plan;
  - 2. Erosion and Sediment Control measures are in place and stabilized;
  - 3. Site Clearing has been substantially completed;
  - 4. Rough Grading has been substantially completed;
  - 5. Construction of the stormwater management system(s) and associated BMPs;
  - 6. Final Grading has been substantially completed;
  - 7. Close of the Construction Season(s); and,
  - 8. Final Landscaping and Stabilization.
- D. Erosion and Sediment Control Measures Inspections. The Applicant's Technical Representative shall conduct and document inspections of all erosion and sediment control measures no less than weekly or as otherwise specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the required Erosion and Sediment

Page 14 of 17

- Control Plan and the need for maintenance or additional control measures. The Applicant or Applicant's Technical Representative shall submit monthly reports to the Enforcement Officer in a format approved by the Enforcement Officer.
- E. Stormwater Management System(s) Inspections. Periodic inspections shall be performed during the construction of the stormwater management system(s) and associated BMPs as determined by the Enforcement Officer. Prior to backfilling of any underground drainage pipe or stormwater conveyance structure, an inspection shall be conducted by the Enforcement Officer. No underground component shall be backfilled without the inspection of the Enforcement Officer.
- F. Final Inspection and Submittals. The final inspection and submittals shall be approved by the Enforcement Officer prior to the issuance of the Certificate of Completion (as provided in Section 10) and the release of the surety bond.
  - After the stormwater management system(s) has been constructed, the Applicant or Applicant's Technical Representative must request a final inspection site meeting with the Enforcement Officer. The Enforcement Officer shall visit the site with the Applicant's Technical Representative to confirm that its "asbuilt" features, permanent BMPs, and approved changes and modifications have been completed in accordance with the approved Stormwater Management Permit.
  - 2. If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the owner before the final submittals are accepted and the surety bond is released. A follow-up final inspection shall be conducted by the Enforcement Officer. If the owner fails to act, the City may require the issuer of the surety bond to complete the work. Examples of inadequacy shall include, but not be limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins.
  - 3. The final submittals shall be submitted within thirty (30) days after the approved Final Inspection and include:
    - a. As-Built Plans. The Applicant shall submit a stamped record plan signed by a Registered Professional Engineer (P.E.) detailing the actual stormwater management system as installed. The record plan shall include a statement box on the plan certifying that the site review was conducted in accordance with the Regulations and that all items were constructed according to the approved Stormwater Management Permit.
    - b. Operation and Maintenance Plan and related documents.
    - c. Such other information as is required by the Enforcement Officer.

#### SECTION 10. CERTIFICATE OF COMPLETION

The Enforcement Officer shall issue a letter certifying completion of the constructed stormwater management system(s) upon receipt and approval of the final inspection and submittals and/or upon otherwise determining that all construction work permitted by the Stormwater Management Permit has been satisfactorily completed in conformance with the Regulations. The Certificate of Completion shall specify that compliance with the Operation and Maintenance Plan is a continuing requirement. The Applicant shall record the Certificate of Completion at the Southern Essex District Registry of Deeds in the chain of title for the property.

#### SECTION 11. OPERATION AND MAINTENANCE

- A. General. The purpose of this section is to provide requirements relative to the operation and maintenance of the constructed (and approved) stormwater management system(s), including after the Certificate of Completion has been issued. The requirements in this section are in addition to those imposed by DEP Standard 9.
- B. Maintenance Person's Responsibilities. The person responsible for operation and maintenance, as identified in the Operation and Maintenance Plan, shall:
  - 1. Maintain an operation and maintenance log<sup>1</sup> for the last three years, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and the disposal location);
  - 2. Make this log available to the Enforcement Officer upon request; and,
  - 3. Allow the Enforcement Officer to enter and inspect the premises to evaluate and ensure that the responsible person complies with the Operation and Maintenance Plan requirements for each BMP.
- C. Annual Report Submittal. The person responsible for operation and maintenance must submit annual reports to the Enforcement Officer regarding the inspection and maintenance of the stormwater management system(s). The reports must include:
  - 1. Descriptions of the condition of the stormwater management system(s); and,
  - 2. The Operation and Maintenance log for the past year.
- D. Inspections Conducted by City Personnel. The Enforcement Officer or its agents may conduct periodic inspections of the stormwater management system(s) to assure compliance with these Regulations. The Enforcement Officer shall notify the property owner at least two (2) working days before the inspection is conducted.
- E. Defective System(s).

<sup>&</sup>lt;sup>1</sup> This is a rolling log in which the responsible party records all operation and maintenance activities for the past three years.

- a. In the event that the stormwater management system(s) is not operating as designed, approved, or required, or is in need of maintenance or repair, the Enforcement Officer shall notify the property owner in writing. Upon receipt of that notice, the property owner shall have fourteen (14) days to perform maintenance and repair of the system(s) in a manner that is approved by the Enforcement Officer or its designee. The Enforcement Officer, in its discretion, may extend the time allowed for effecting maintenance and repair for good cause. If the property owner fails or refuses to perform such maintenance and repair, the City may exercise any of the enforcement options set forth in Section 17-7 of the Stormwater Ordinance.
- b. If the stormwater management system(s) becomes an imminent danger to public safety or public heath, immediate action and enforcement shall be taken by the City, in accordance with Section 17-7 of the Stormwater Ordinance.
- F. Amendments to the Operation and Maintenance Plan. Amendments to the Operation and Maintenance Plan may be proposed, in writing, by the person(s) responsible for operation and maintenance, to the Enforcement Officer for its approval. To the extent that such amendments involve modifications to the deeds, covenants, easements, or other legal documents that established the obligation and authority to operate and maintain the stormwater management system, the person(s) proposing the amendments shall demonstrate agreement among all necessary parties to implement such modifications. Such amendments shall not take effect unless approved, in writing, by the Enforcement Officer.

#### **SECTION 12. SEVERABILITY**

A. If any provision, paragraph, sentence, or clause of the Regulations shall be held invalid for any reason, all other provisions shall continue in full force and effect.

#### **APPENDIX A.**

# CITY OF NEWBURYPORT STORMWATER MANAGEMENT STANDARDS

#### City of Newburyport, Massachusetts Stormwater Management Standards

#### **April 28, 2014**

#### A. General.

- 1. Implementation of stormwater management measures to control the rate, volume, and characteristics of stormwater discharges shall be required in accordance with the latest edition of the Massachusetts DEP Stormwater Management Standards ("DEP Standards"), these City of Newburyport Stormwater Management Standards ("City Standards"), and whenever appropriate as determined by the Department of Public Service (DPS). The design, installation, and maintenance of such facilities shall be subject to the approval by DPS in accordance with the City of Newburyport's Stormwater Management Ordinance and associated Rules and Regulations.
- 2. Design of stormwater management systems shall comply with DEP and City Standards and where conflicting requirements exist, the more stringent requirement shall govern.
- 3. These City Standards are necessary for the protection of the City's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of flooding and impairment of water quality in lakes, ponds, streams, rivers, wetlands and groundwater.

#### B. Design Calculations.

- 1. A Stormwater Report must be performed and submitted in accordance with DEP Standards and the following:
  - a. Rainfall quantities from TP-40 *Rainfall Frequency Atlas of the United States* dated May 1961, shall <u>not</u> be used in the drainage calculations. Drainage calculations shall be based on rainfall data in Table 1 below *or* the most current data from the Northeast Regional Climate Center (NRCC) at Cornell University (also known as the *Cornell Study*) whichever provides the greatest rainfall amounts. In addition, NRCS data shall be used to create the Intensity-Duration-Frequency (IDF) curves for the given storm events.

Table 1. Rainfall Data\*

Storm Event	Inches
(in years)	(per 24-hours)
2	3.1
10	4.7
25	5.8
50	7.1
100	8.3

<sup>\*</sup>Table from Daniel S. Wilks and Richard P. Cember, September, 1993, "Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada", Cornell University, Ithaca, NY, Pub. No. RR 93-5.

- b. Drainage pipe systems shall be designed to provide self-cleaning flow velocities. Pipes shall be sized to convey the 10-year frequency, 24-hour duration storm event. Calculations shall be provided.
- c. Maximum total depth of detention/retention area shall be four feet (4') as measured from the lowest outlet point to the lowest point of the emergency overflow.
- d. Each stormwater detention/retention area shall be provided with a method of emergency overflow in the event of a storm in excess of the 100-year frequency type.
- e. Drainage system may discharge to an existing City drainage system if the Applicant can show that the City drainage system provides sufficient excess capacity to accommodate both the existing runoff and the proposed additional runoff from the project during a 10-year frequency, 24-hour duration storm event.
- f. Total suspended solid (TSS) removal rate calculations.
- g. Infiltration calculations.
- h. Culvert analysis and calculations.

#### C. Construction.

- 1. Outlet control structures shall be designed to minimize required maintenance for proper operation.
- 2. A continuous design element (i.e. fencing or hedge) shall border any detention/retention basin area with interior side slopes greater than 3:1. Drainage basins shall be designed to facilitate access for maintenance vehicles and personnel.
- 3. If it is necessary to carry drainage across lots within the development or if a proposed drainage system will carry water across land outside the development boundaries to an approved outfall, storm drainage easements shall be secured by the Applicant at the Applicant's expense (refer to City Stormwater Rules and Regulations).
- 4. Intermittent surface water courses, such as, swales, forebays, and detention/retention basins, shall be vegetated and appropriately reinforced along the low flow channel.
- 5. Neighboring properties shall not be negatively impacted by flooding due to excessive runoff caused by the development.
- 6. Reverse salt water intrusion shall be prevented.

#### D. Nonstructural Stormwater Management Strategies.

1. General. To the maximum extent practicable, nonstructural stormwater management strategies (i.e. low impact development (LID) and numerous related BMPs) set forth in this section shall be incorporated into the design. The Applicant shall identify the nonstructural measures incorporated into the design of the project. If the Applicant contends that it is not feasible for engineering, environmental, or safety reasons to incorporate any nonstructural stormwater management measures identified below into the design of a particular project, the Applicant shall identify the strategy considered and provide a basis for the contention.

- 2. Nonstructural stormwater management strategies incorporated into site design shall:
  - a) Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss;
  - b) Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces;
  - c) Maximize the protection of natural drainage features and vegetation;
  - d) Maximize the "time of concentration" from pre-construction to post-construction;
  - e) Minimize land disturbance including clearing and grading;
  - f) Minimize soil compaction;
  - g) Provide low-maintenance landscaping that encourages retention, infiltration, and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides;
  - h) Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas; and,
  - i) Provide other source controls to prevent or minimize the use or exposure of pollutants at the site, in order to prevent or minimize the release of those pollutants into stormwater runoff. Such source controls include, but are not limited to:
    - i. Site design features that help to prevent accumulation and discharge of trash and debris in drainage systems;
    - ii. Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments; and,
    - iii. When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under DEP Standards.
- 3. A list of nonstructural stormwater BMPs can be found in the DEP Standards manual.
- E. Checklist for Stormwater Report. The Applicant shall submit a completed Checklist for Stormwater Report to confirm that all Standards have been properly addressed.
- F. When one or more of these City Standards cannot be met, an Applicant may demonstrate that an equivalent level of environmental protection will be provided.

#### **APPENDIX B.**

# MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION CHECKLIST FOR STORMWATER REPORT



#### **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
	Ol salika
	Checklist
<b>Project Type:</b> Is the application fredevelopment?	for new development, redevelopment, or a mix of new and
Redevelopment	
☐ Mix of New Development and	d Redevelopment
Redevelopment	d Redevelopment



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands Program

### **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
	$Supporting\ calculations\ specified\ in\ Volume\ 3\ of\ the\ Massachusetts\ Stormwater\ Handbook\ included.$



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

Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

Checklist (continued) Standard 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 predevelopment 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 24hour storm. Standard 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 *not* 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.

M.G.L. c. 21E sites pursuant to 310 CMR 40.0000

extent practicable for the following reason:

Solid Waste Landfill pursuant to 310 CMR 19.000

Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.

Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum

Calculations showing that the infiltration BMPs will drain in 72 hours are provided.

Recharge BMPs have been sized to infiltrate the Required Recharge Volume.

Site is comprised solely of C and D soils and/or bedrock at the land surface

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.



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

Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

Cr	necklist (continued)
Sta	indard 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.

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

☐ 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



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

Cł	Checklist (continued)		
Sta	ndard 4: Water Quality (continued)		
	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.		
	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 that the BMPs selected are consistent with the TMDL is provided.		
Sta	ndard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)		
	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 <i>prior to</i> the discharge of stormwater to the post-construction stormwater BMPs.		
	The NPDES Multi-Sector General Permit does <i>not</i> cover the land use.		
	LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.		
	All exposure has been eliminated.		
	All exposure has <i>not</i> been eliminated and all BMPs selected are on MassDEP LUHPPL list.		
	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.		
Sta	ndard 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.		



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

Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

#### Checklist (continued)

Inspection Schedule; Maintenance Schedule;

Inspection and Maintenance Log Form.

	ndard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum ent 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	ndard 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> <li>Operation and Maintenance of Erosion and Sedimentation Controls;</li> </ul>

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

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



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands Program

### **Checklist for Stormwater Report**

Checklist (continued)

	Indard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control ntinued)
	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.
Sta	ndard 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	ndard 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.