

DRAFT LEXINGTON STORMWATER AND EROSION CONTROL BYLAW REGULATIONS
Version 2.0 June 19, 2007

1.0 PURPOSE

The purpose of these Regulations is to protect the water resources of the Town of Lexington, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff, decreased groundwater recharge, and nonpoint source pollution associated with new development and redevelopment, as more specifically addressed in the Stormwater Management and Erosion Control Bylaw of the Town of Lexington.

2.0 DEFINITIONS

The definitions contained herein apply to issuance of a Stormwater Management and Erosion Control Permit established by the Town of Lexington Stormwater Management and Erosion Control Bylaw and implemented through these Stormwater & Erosion Control Regulations. Terms not defined in this section shall be construed according to their customary and usual meaning unless the context indicates a special or technical meaning.

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water or which will change existing surface drainage patterns. Alter may be similarly represented as “alteration of drainage characteristics,” and “conducting land disturbance activities.”

APPROVAL NOT REQUIRED (ANR): A plan of land that does not require approval under the Subdivision Control Law of Massachusetts (M.G.L. - Chapter 41, Sections 81K through 81GG).

APPLICANT: A property owner or agent of a property owner who has filed an application for a Stormwater Permit or a Minor Impact Permit.

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural, and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. “Structural” BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater runoff. “Nonstructural” BMPs use natural measures to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site’s impact on the watershed through the use of nonstructural Stormwater Management practices. Better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover, and using natural features for stormwater management.

CERTIFICATE OF COMPLETION (COC): A document issued by the Stormwater Authority after all construction activities have been completed which states that all conditions of an issued Stormwater Permit have been met and that a project has been completed in compliance with the conditions set forth in the Stormwater Management and Erosion Control Bylaw.

CONVEYANCE: Any structure or device, including pipes, drains, culverts, curb breaks, paved swales or man-made swales of all types designed or utilized to move or direct stormwater runoff or existing water flow.

DEVELOPER: A person who undertakes or proposes to undertake land disturbance activities.

DEVELOPMENT: Any alteration, construction, improvement, or modification of land to accommodate a use, expansion of use, or redevelopment on a site.

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DRAINAGE EASEMENT: A legal right granted by a landowner to a grantee allowing the use of private land for Stormwater Management purposes.

GRADING: Changing the level or shape of the ground surface.

EROSION CONTROL: The prevention or reduction of the movement of soil particles or rock fragments due to stormwater runoff.

EROSION CONTROL PLAN: A plan that shows the location and construction detail(s) of the erosion and sediment reduction controls to be utilized for a construction site during and after construction.

FLOOD CONTROL: The prevention or reduction of flooding and flood damage.

FLOODING: A local and temporary inundation or a rise in the surface of a body of water, such that it covers land not usually under water.

GROUNDWATER: All water beneath any land surface including water in the soil and bedrock beneath water bodies.

HOTSPOT: Land uses or activities with higher potential pollutant loadings, such as vehicle salvage yards, vehicle fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas. Refer to Massachusetts Stormwater Management Standard 5 for higher potential pollutant loads, or the most current Massachusetts *Stormwater Management Handbooks*.

ILLICIT DISCHARGE – The discharge of any pollutant or non-stormwater discharge into the Municipal Separate Storm Drain System, into a watercourse, or into the Water Resources of the Commonwealth

IMPERVIOUS SURFACE: Any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved surfaces (parking lots, sidewalks, and driveways), roof tops, swimming pools, patios, and paved, gravel and compacted dirt surfaced roads.

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LAND DISTURBANCE: Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel, or similar earth material.

MASSACHUSETTS STORMWATER MANAGEMENT POLICY: The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state Bylaws promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 § 40 and Massachusetts Clean Waters Act G.L. c. 21, §. 23-56. The Policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

MINOR IMPACT PERMIT: A permit issued for an application that meets a set of pre-determined standards to be adopted by the Stormwater Authority under Section 3 of these Regulations. By meeting these pre-determined standards, the proposed project will be presumed to meet the requirements and intent of the Stormwater Management and Erosion Control Bylaw and these Regulations.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM: A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) designed or used for collecting or conveying storm water, which is not a combined sewer, that is owned or operated by a city or town having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, that discharges to waters of the United States.

NONPOINT SOURCE POLLUTION: Pollution from many diffuse sources caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water resource areas.

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OPERATION AND MAINTENANCE PLAN: A plan that defines the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a Stormwater Management system to insure that it continues to function as designed.

OWNER: A person with a legal or equitable interest in a property.

PERSON: Any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth or political subdivision thereof to the extent subject to City ordinances, codes, administrative agency, public or quasi-public corporation or body, the Town of Lexington, and any other legal entity, its legal representatives, agents, or assigns.

PRE-DEVELOPMENT: The conditions that exist at the time that plans for the land development of a tract of land are submitted to the Stormwater Authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

POINT SOURCE: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

POST-DEVELOPMENT: The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land. Post-development refers to the phase of a new development or redevelopment project after completion, and does not refer to the construction phase of a project.

RECHARGE: The replenishment of underground water reserves.

RESOURCE AREA: Any area protected under, including without limitation: the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act, or Town of Lexington Wetlands Protection Bylaw.

RUNOFF: Rainfall or snowmelt flowing over the ground surface.

SEDIMENTATION: A process of depositing material that has been suspended and transported in water.

SITE: The parcel of land being developed, or a designated planning area in which the land development project is located.

STORMWATER AUTHORITY: The Board of Selectmen is the Stormwater Authority. The Stormwater Authority shall administer, implement, and enforce this Bylaw. Any powers granted to, or duties imposed upon, the Stormwater Authority may be delegated to a Stormwater Agent.

STORMWATER MANAGEMENT The use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes and/or peak flow discharge rates.

STORMWATER PERMIT: A permit issued by the Stormwater Authority, after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the Town from the deleterious affects of uncontrolled and untreated stormwater runoff.

STOP WORK ORDER: An order issued by the Stormwater Authority or an authorized Agent of the Stormwater Authority which requires that all construction activity on a site be stopped.

STORMWATER UTILITY: A special assessment district created by the Town of Lexington to generate funding specifically for stormwater management. Users within the district pay a stormwater fee, and the revenue thus generated directly supports maintenance and upgrade of the existing municipal separate storm sewer system (MS4); development of drainage plans, flood control measures, and water-quality programs; administrative costs; and sometimes construction of major capital improvements, including design and construction of regional stormwater best management practices.

SUBDIVISION: Defined in the Subdivision Control Law of Massachusetts (M.G.L. Chapter 41, Section 81L Definitions).

TSS: Total Suspended Solids.

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WATER QUALITY VOLUME (WQv): The storage volume needed to capture a specified average annual stormwater runoff volume. Numerically (WQv) will vary as a function of drainage area or impervious area.

3.0 AUTHORITY

- A) The Rules and Regulations contained herein have been adopted by the Board of Selectmen, acting as the Stormwater Authority, and its Agents in accordance with the Town of Lexington Stormwater and Erosion Control Bylaw.
- B) Nothing in these Rules and Regulations is intended to replace or be in derogation of the requirements of the Town of Lexington Wetlands Protection Ordinance, Zoning Ordinance, Subdivision Control Law or any Rules and Regulations adopted there under.
- C) These Stormwater and Erosion Control Regulations may be periodically amended by the Stormwater Authority in accordance with the procedures outlined in Section 5 of the Town of Lexington Stormwater Management and Erosion Control Bylaw.

4.0 ADMINISTRATION

The Board of Selectmen is designated as the Stormwater Authority under the Stormwater Management and Erosion Control Bylaw. The Stormwater Authority may designate a Stormwater Agent or Agents. The Stormwater Authority and its Agents shall administer, implement and enforce these Regulations.

5.0 APPLICABILITY

- A. These Stormwater and Erosion Control Regulations apply to all activities in accordance with the Scope and Applicability section of the Stormwater Management and Erosion Control Bylaw and further described in this section.
- B. Projects and/or activities not specifically under the currently regulated jurisdiction of any of the Town of Lexington boards, commissions or departments but still within the jurisdiction of the Town of Lexington Stormwater Management and Erosion Control Bylaw must obtain a Stormwater Permit from the Stormwater Authority in accordance with the permit procedures and requirements defined in Section 6 of these Regulations.
- C. The Conservation Commission and its designated agent serves as the Stormwater Authority, with all attendant powers, for all projects or activities within the Town's wetlands resource areas as defined by the Town of Lexington's Conservation Bylaw. The specific application submission requirements, public notices, and fee requirements of the Conservation Commission shall govern. The Stormwater Permit shall be incorporated into the Conservation Commission's Order of Conditions for any applicable project or activity. If a portion of a project or activity meets the Scope and Applicability of Section 3 of the Stormwater Management and Erosion Control Bylaw and it is within the specific jurisdiction of the Conservation Commission, then the entire project and all related projects required as a result of the activity proposed by the applicant shall be within the specific jurisdiction of that entity.

Notwithstanding these requirements, such projects or activities are subject to the provisions of these Regulations. The Stormwater Management Plan Contents, Erosion & Sediment Control Plan Contents, Operation and Maintenance Plan Contents, and Stormwater Review Fee, under Section 6 of these Regulations must also be met.

- D. By the authority granted in the Stormwater and Erosion Control Bylaw, the Stormwater Authority has developed a Minor Impact Permit (MIP). Any applicant seeking a MIP shall submit the following to the Stormwater Authority: contact information; a brief description of the project, explaining how the project meets eligibility requirements; any plans, drawings or specifications for the project; a brief description of plans to prevent erosion and control sediments during construction; or other materials as the Stormwater Authority may require to determine the eligibility of the proposed work for a MIP.

Projects eligible for a MIP in lieu of a Stormwater Permit are as follows:

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1. MIPs shall cover certain types of projects associated with existing residential properties of less than four (4) dwelling units and commercial properties of residential character. If a project cannot meet the requirements of set forth in this Section 5.C. then the Applicant shall file a Stormwater Permit Application.

Description of Projects Eligible for a Minor Impact Permit

- A. Deck:** Construction of a raised deck should be designed as follows:
1. The ground area beneath the proposed deck shall not be paved or otherwise made impervious if it is presently bare ground or landscaped, including lawn.
 2. If the ground area is presently paved or impervious, it may remain so after construction of the deck and will still qualify for this MIP.
 3. There shall be no roof constructed over the proposed deck. Should a roof be constructed over the deck in the future, a Stormwater Management Permit (SMP) will be required.
 4. The proposed deck shall be constructed in such a manner to allow rainfall to pass through to the ground below. An example of this is the typical wooden deck with expansion spaces between the boards that form the deck surface.
- B. Patio:** Construction of a patio should be designed as follows:
1. The patio shall be constructed of brick, stone, or other materials in such a fashion to permit infiltration of rainfall to the soil below.
 2. The patio surface shall not create a concentrated runoff discharge point for stormwater that is not infiltrated through the surface. Stormwater runoff must flow evenly off the edge(s) of the patio.
 3. The patio shall not have a total surface area greater than 250 square feet.
- C. Shed:** A shed shall be constructed on a raised footing foundation. Area under the shed shall remain a soil surface. A shed shall not be constructed on a concrete slab foundation. If a slab foundation is to be used, a Stormwater Permit will be required for construction of a shed.
- D. Impervious Surfaces:** Construction of impervious surfaces (e.g., driveway, basketball court, paved/concrete walkway) shall qualify under this MIP provided that:
1. There is no net increase of impervious area on the property, or the volume of stormwater runoff produced by the new impervious area ("recharge volume" or "recharge area") is infiltrated onsite
 2. Expansion of the driveway surface shall not result in additional stormwater runoff flowing to a public street or onto other publicly owned properties.
- E. Swimming Pool:** Construction of a swimming pool should be designed as follows:
1. Pool water will not be discharged to a public street or into any Resource Area.
 2. A detailed plan shall be filed with the Stormwater Authority showing the location of the proposed pool, accessory structures, including decks and sidewalks. The plan should also show or address discharge of water from the pool.
- F. Grade Change:** Any grade change of 2 feet or less, provided that:
1. The grade change shall not alter the flow direction of stormwater runoff leaving the site, nor shall it alter the stormwater flow to any wetland resource areas on the project site or adjoining properties.
 2. The Applicant will provide and maintain erosion and sedimentation controls until the site is permanently stabilized.

6.0 PERMIT PROCEDURES AND REQUIREMENTS

- A) Projects requiring a Stormwater Permit shall be required to submit the materials as specified in this Section, and are required to meet the Performance Standards: Stormwater & LID Criteria as specified in Section 7.
- B) Permit Required
1. Should a land-disturbing activity permitted in accordance with these Regulations not begin during a 180-day period following permit issuance, the Stormwater Authority may reevaluate the originally approved Stormwater Management Plan to determine whether the plan still satisfies local program requirements. If the Stormwater Authority finds the previously filed Plan to be

inadequate, a modified plan shall be submitted and approved prior to the commencement of land-disturbing activities.

C) Filing Application

1. The applicant shall file with the Stormwater Authority, three (3) copies of a completed application package for a Stormwater Permit. Permit issuance is required prior to any site altering activity. While the applicant can be a representative, the permittee must be the owner of the site or holder of an easement. The Stormwater Application package shall include:
 - a) A completed Application Form with original signatures of all owners;
 - b) A list of abutters, certified by the Assessors Office; (abutters at their mailing addresses shown on the most recent applicable tax list of the assessors, including owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line of the applicant, including any in another municipality or across a body of water);
 - c) Stormwater Management Plan and project description;
 - d) Operation and Maintenance Plan;
 - e) Payment of the application and review fees;
 - f) Inspection and Maintenance agreement;
 - g) Erosion and Sediment Control Plan;
 - h) Surety bond.

D) Entry

Filing an application for a permit grants the Stormwater Authority, or its Agent (s), permission to enter the site to verify the information in the application and to inspect for compliance after issuance of the Stormwater Permit.

E) Fees

1. General.

The Stormwater Authority shall obtain with each submission an Application Fee established by the Stormwater Authority to cover expenses connected with the review of the Stormwater Permit and a Technical Review Fee sufficient to cover professional review services for the project. The Stormwater Authority is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Stormwater Authority and Review Board on any or all aspects of these plans. Applicants must pay review fees before the review process may begin.
2. Rules
 - a) Application Fees are payable at the time of application and are non-refundable.
 - b) All fees shall be calculated by the Stormwater Authority or its Agent(s) in accordance with the fee schedule below.
 - c) These fees are in addition to any other local or state fees that may be charged under any other law, regulation, or local ordinance.
3. Application Fees
 - a) A non-refundable Application Fee of the larger of \$30.00 or \$0.0030 per square foot of land area that will be disturbed by activities authorized by the Stormwater Permit shall be due and payable to the Town of Lexington at the time an application is filed.
4. Technical Review Fees
 - a) The Stormwater Authority is authorized to require an applicant to pay a fee for the reasonable costs and expenses for specific expert engineering and other consultant services deemed necessary by the Stormwater Authority to come to a final decision on the application. This fee is called the "Technical Review Fee" and may include the following:
 - i. The Stormwater Authority may require an applicant to pay a fee for services by an expert engineer or other consultant that include, but are not limited to, wetland survey and delineation, hydrologic and drainage analysis, wildlife evaluation, stormwater quality analysis, site inspections, as-built plan review, and analysis of legal issues.
 - ii. The Stormwater Authority may require an applicant to pay reasonable costs and expenses for certain activities which utilize the services of Town Staff. This includes such

activities as inquiries concerning potential projects as well as site inspections not associated with a pending permit application.

iii. The Stormwater Authority may require any applicant to pay an additional fee of \$30.00 per hour for review, inspection, and monitoring services for any project filing that requires an excess of two (2) hours of review, inspection, and monitoring time by a Town Staff member.

- b) Payment may be required at any point in the deliberations prior to a final decision.
- c) Any application filed with the Stormwater Authority must be accompanied by a completed Technical Review Fee Acknowledgement form.
- d) Technical Review Fees shall be determined at the time of project review based on a specific scope of work. The Stormwater Authority shall determine a rate (\$/hour) using normal fees associated with its selected consultant, agent, and/or engineer.
- e) Subject to applicable laws, any unused portion of any fees collected shall be returned by the Stormwater Authority to the applicant within forty-five calendar days of a written request by the applicant, unless the Stormwater Authority decides in a public meeting that other action is necessary.
- f) The Technical Review Fees collected under this section shall be deposited in a revolving account. The Stormwater Authority or its Agent(s) shall include a full accounting of the revolving account as part of its annual report to the Town.

5. Revision Of Fee Schedules And Regulations Governing Fees

- a) The Stormwater Authority may review and revise its Regulations and fee schedules periodically as it sees fit.
- b) Amendments shall be preceded by a posted public hearing of the Stormwater Authority not less than 15 days prior to the date upon which the change is to be effective.
- c) A copy of the written decision will be filed with the Town Clerk within 10 business days after final action is taken.

F) Public Hearings

The Stormwater Authority shall hold a public hearing for all applicable projects or activities outside the currently regulated jurisdiction of the Lexington Conservation Commission. The public hearing shall be held in accordance with the Board of Selectmen's Rules and Regulations and Procedures.

G) Actions

The Stormwater Authority's action, rendered in writing, shall consist of either:

- 1. Approval of the Stormwater Permit Application based upon determination that the proposed plan meets the Standards in Section 7 and will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- 2. Approval of the Stormwater Permit Application subject to any conditions, modifications or restrictions required by the Stormwater Authority which will ensure that the project meets the Standards in Section 7 and adequately protects water resources, set forth in these Regulations;
- 3. Disapproval of the Stormwater Permit Application based upon a determination that the proposed plan, as submitted, does not meet the Standards in Section 7 or adequately protects water resources, as set forth in these Regulations; or
- 4. Disapproval of an application "without prejudice" where an applicant fails to provide requested additional information that in the Stormwater Authority's opinion is needed to adequately describe the proposed project.

H) Failure of the Stormwater Authority to take final action upon an Application within 30 business days of receipt of a complete application shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without Stormwater Authority action, the Stormwater Authority must issue a Stormwater Permit.

I) Plan Changes

The permittee must notify the Stormwater Authority or its Agent(s) in writing of any drainage change or alteration in the system authorized in a Stormwater Permit before any change or alteration is made. If the Stormwater Authority or its Agent(s) determines that the change or alteration is significant, based on the Stormwater Management Standards in Section 7 and accepted construction practices, the Stormwater Authority or its Agent(s) may require that an amended application be filed.

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J) Appeals of Actions of the Stormwater Authority

A decision of the Stormwater Authority shall be final. Further relief of a decision by the Stormwater Authority made under these Regulations shall be reviewable in the Superior Court in an action filed within 60 days thereof, in accordance with M.G.L. Ch 249. § 4. An appeal of an action by a board, commission or department that has current regulatory authority for a project and/or activity shall be conducted under the applicable appeal provisions of said board, commission and/or department of the Town of Lexington. Such an appeal shall result in revocation of the written approval as described under Section 6.G of these Regulations, until such time as the appeal process of the applicable board, commission and/or department has been resolved.

K) Project Completion

At completion of the project the permittee shall submit as-built record drawings of all structural stormwater controls and treatment best management practices required in Section 7. As-built Plans shall be full size plans at a scale approved by the Stormwater Authority or its Agent(s) that reflect the "as built" conditions, including all final grades, developed by a Registered Professional Engineer. All changes to project design shall be recorded in red ink on plans to define changes made or otherwise noted as changes. All work deleted, corrections in elevations, and changes in materials, shall be shown on the as-built drawings. Deviations from the approved plans, if any, shall be certified by a Registered Professional Engineer.

L) Stormwater Management Plan Contents

1. The application for a Stormwater Permit shall include the submittal of a Stormwater Management Plan to the Stormwater Authority. This Stormwater Management Plan shall contain sufficient information for the Stormwater Authority to evaluate the environmental impact, effectiveness, and acceptability of the site planning process and the measures proposed by the applicant for reducing adverse impacts from stormwater runoff. This plan shall be in accordance with the criteria established in these Regulations.
2. The Stormwater Management Plan shall fully describe the project in drawings, narrative, and calculations. It shall include, at a minimum:
 - a) Contact Information. The name, address, and telephone number of all persons having a legal interest in the property and the tax reference number and parcel number of the property or properties affected;
 - b) Stormwater Impact Statement. Brief narrative description of the project and description of how and where stormwater will be controlled;
 - c) Locus Map;
 - d) Existing Site Plan;
 - e) The existing zoning, and land use at the site and abutting properties;
 - f) The proposed land use;
 - g) The location(s) of existing and proposed easements; and
 - h) The location of existing and proposed utilities.
3. In addition to the requirements listed in Section 6.L.2, new lot construction, Subdivisions, redevelopment projects, and ANR lots that meet the permit applicability thresholds given in Section 5, are also required to include the following:
 - a) The site's existing & proposed topography with contours at 2-foot intervals,
 - b) The existing site hydrology (both groundwater recharge and surface runoff);
 - c) A description and delineation of existing stormwater conveyances, impoundments, wetlands, drinking water resource areas, swimming beaches or other critical environmental resource areas, on or adjacent to the site or into which stormwater flows;
 - d) A delineation of 100-year flood plains, if applicable;
 - e) The site planning process shall be documented and shall include the following steps:
 - i. Identify and map critical environmental resources;
 - ii. Delineate potential building envelopes avoiding environmental resource areas and appropriate buffers; and
 - iii. Develop methods to minimize impervious surfaces, and to protect and preserve open space.

- f) The existing and proposed vegetation and ground surfaces with runoff coefficients for each; (including all impervious cover – parking, driveways, etc.)
- g) A drainage area map showing pre- and post-construction watershed boundaries, drainage areas, time of concentration (tc), and stormwater flow paths, including municipal drainage system flows;
- h) A recharge area analysis that calculates pre- and post-construction annual groundwater recharge rates on the parcel;
- i) A description and drawings of all components of the proposed Stormwater Management system including:
 - i. All measures for the detention, retention or infiltration of water;
 - ii. Description of non-structural BMPs;
 - iii. All measures for the protection of water quality;
 - iv. The structural details for all components of the proposed drainage systems and Stormwater Management facilities;
 - v. Notes on drawings specifying materials to be used, construction specifications, and expected hydrology with supporting calculations;
 - vi. Proposed site plan including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
 - vii. Any other information requested by the Stormwater Authority.
- j) Hydrologic and hydraulic design calculations for the pre-development and post development conditions for the design storms specified in these Regulations. Such calculations shall include:
 - i. Description of the design storm frequency, intensity and duration;
 - ii. Time of concentration;
 - iii. Soil Runoff Curve Number (RCN) based on land use and soil hydrologic group;
 - iv. Peak runoff rates and total runoff volumes for each watershed area;
 - v. Provisions for maintaining during construction the infiltration capacity of the soil where infiltration is proposed;
 - vi. Infiltration rates, where applicable;
 - vii. Culvert capacities;
 - viii. Flow velocities;
 - ix. Data on the increase in rate and volume of runoff for the specified design storms, and
 - x. Documentation of sources for all computation methods and field test results.
- k) Soils information from test pits performed at the location of proposed stormwater retention, detention, or infiltration systems, including but not limited to soil descriptions, depth to estimated seasonal high groundwater, depth to bedrock, and percolation rates. Soils information will be based on site test pits logged by a Massachusetts Certified Soil Evaluator;
- l) Landscaping plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practice.
- m) Stamp and signature of a Professional Engineer (PE) licensed in the Commonwealth of Massachusetts to certify that the Stormwater Management Plan is in accordance with the criteria established in the Stormwater Management and Erosion Control Bylaw and these Regulations.

M) Operation and Maintenance Plan Contents

An Operation and Maintenance Plan (O&M Plan) is required at the time of application for all projects with constructed stormwater BMPs and stormwater management practices. The maintenance plan shall be designed to ensure compliance with the Permit and these Regulations and ensure that the Massachusetts Surface Water Quality Standards (314 CMR 4.00) are met in all seasons and throughout the life of the system. The Operation and Maintenance Plan shall remain on file with the Stormwater Authority and shall be an ongoing requirement. The O&M Plan shall include:

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1. The name(s) of the owner(s) for all components of the system;
 2. A map showing the location of the systems and facilities including all stormwater and LID best management practices (BMPs), catch basins, manholes/access lids, pipes, and other stormwater devices;
 3. Maintenance Agreement that specifies:
 - a) The names and addresses of the person(s) responsible for operation and maintenance;
 - b) The person(s) responsible for financing maintenance and emergency repairs;
 - c) An Inspection and Maintenance Schedule for all stormwater management facilities including routine and non-routine maintenance tasks to be performed;
 - d) A list of easements with the purpose and location of each; and
 - e) The signature(s) of the owner(s) and Responsible Parties, as defined in Section 6.M.5.b, if maintenance is to be performed by an entity other than the owner.
 4. Stormwater Management Easement(s)
 - a) Stormwater Management easements shall be provided by the property owner(s) as necessary for:
 - i. Access for facility inspections and maintenance;
 - ii. Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event;
 - iii. Direct maintenance access by heavy equipment to structures requiring regular maintenance.
 - b) The purpose of each easement shall be specified in the Maintenance Agreement signed by the property owner.
 - c) Stormwater Management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Stormwater Authority.
 - d) Easements shall be recorded with the Middlesex County Registry of Deeds prior to issuance of a Certificate of Completion by the Stormwater Authority.
 5. Changes to Operation and Maintenance Plans
 - a) The owner(s) of the Stormwater Management system must notify the Stormwater Authority of changes in ownership or assignment of financial responsibility within 30 days.
 - b) The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of these Regulations by mutual agreement of the Stormwater Authority and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational and/or maintenance responsibility.
- N) Erosion and Sediment Control Plan Contents
1. An Erosion and Sediment Control Plan is required at the time of application for all projects. Plan Approval by the Stormwater Authority is required prior to any site altering activity. The plan shall be designed to ensure compliance with the Permit, these Regulations, and if applicable, the NPDES General Permit for Storm Water Discharges From Construction Activities. In addition, the plan shall ensure that the Massachusetts Surface Water Quality Standards (314 CMR 4.00) are met in all seasons. The Erosion and Sediment Control Plan shall remain on file with the Stormwater Authority. Refer to the latest version of the *Massachusetts Erosion & Sediment Control Guidelines for Urban & Suburban Areas*, for detailed guidance.
 2. If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Storm Water Discharges from Construction Activities, then the permittee is required to submit a complete copy of the SWPPP (including the signed Notice of Intent and approval letter). If the SWPPP meets the requirements of Section 3 of the General Permit, it will be considered equivalent to the Erosion and Sediment Control Plan described in this section.
 3. The Erosion and Sediment Control Plan will include, at a minimum:
 - a) Legible site map, showing the entire site, identifying:
 - i. Location of the construction site and waters of the United States within one mile of the site (general locus map with enough detail should suffice, e.g., USGS quadrangle map, a portion of a city or county map, or other map).
 - ii. Locations of all bodies of waters (including wetlands);

- iii. Direction(s) of stormwater flow and approximate slopes anticipated after major grading activities;
 - iv. Areas of soil disturbance and areas that will not be disturbed;
 - v. Locations where stabilization practices are expected to occur;
 - vi. Locations of off-site material, waste, borrow or equipment storage areas, if applicable;
 - vii. Locations where stormwater discharges to a surface water (include all roads, drains and other structures that could carry stormwater to a wetland or other water body, on or offsite); and areas where final stabilization has been accomplished.
 - viii. Include onsite locations for storage of materials, wastes, vehicles, equipment, soil, snow and other potential pollutants.
- b) Estimation of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas.
 - c) Description of appropriate erosion control measures, the general sequence during the construction process in which the measures will be implemented, and which operator is responsible for the control measure's implementation.
 - d) Description of structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Placement of structural practices in floodplains must be avoided to the degree practicable.
 - e) Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls, including storage practices, to minimize exposure of the materials to stormwater, and spill prevention and response practices.
4. New lot construction, subdivisions, redevelopment projects, and ANR lots that meet the permit applicability thresholds given in Section 5, are required to include the following in the Erosion and Sediment Control Plan:
- a) Description of interim and permanent bank stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible and that disturbed portions of the site are stabilized. Use of impervious surfaces for stabilization should be avoided.
 - b) The following records must be maintained:
 - i. Dates when major grading activities occur;
 - ii. Dates when construction activities temporarily or permanently cease on a portion of the site; and
 - iii. Dates when stabilization measures are initiated.
 - c) Description of measures to prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under Section 404 of the Clean Water Act.
 - d) Description of measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust.
 - e) Description of pollutant sources from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

7.0 PERFORMANCE STANDARDS: STORMWATER AND LID CRITERIA

A) At a minimum all projects shall comply with the performance standards of the most recent version of Massachusetts Department of Environmental Protection (DEP) Stormwater Management Policy and the accompanying *Stormwater Management Handbooks*, as well as the following:

B) General Criteria

All projects and activities that meet the Scope and Applicability of Section 5 of the Stormwater Management and Erosion Control Bylaw must meet the following general performance criteria unless otherwise provided for in these Regulations:

1. Landscape Design

Site plans and landscape plans for all proposed projects must take appropriate steps to minimize water use for irrigation and to allow for natural recharge of groundwater. Native species and habitat creating species shall be used in all landscape plans to the maximum extent possible.

Invasive species shall not be planted in the Town of Lexington under any circumstances.

2. Hydrologic Basis for Design of Structural Management Facilities

For stormwater facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development and redevelopment sites are as follows:

- a) Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel and compacted dirt surfaced roads with the exception of Pervious Paving Surfaces.
- b) Off-site areas shall be assessed based on their “pre-developed condition” for computing the water quality volume (i.e., treatment of only onsite areas is required). However, if an offsite area drains to a proposed BMP, flow from that area must be accounted for in the sizing of a specific practice.
- c) Off-site areas draining to a proposed facility should be modeled as “present condition” for peak-flow attenuation requirements.
- d) The length of sheet flow used in time of concentration calculations is limited to no more than 100 feet for pre-development conditions and 100 feet for post development conditions.
- e) Detention time for the 1-year, 24-hour return frequency storm is defined as the time between the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
- f) Peak discharge rates will be determined by using the procedures presented in USDA Natural Resources Conservation Service (NRCS) Technical Release 55 (TR-55) and Technical Release 20 (TR-20) (or an approved equivalent).
- g) The standard for selecting a pre-development Cover Type for undeveloped onsite areas shall be “Woods.”
- h) For purposes of choosing a runoff Curve Number, all pervious lands in the site shall be assumed prior to development to be in “good” hydrologic condition regardless of conditions existing at the time of computation.
- i) If an off-site area drains to a stormwater facility, off-site areas should be modeled, assuming an “ultimate buildout condition” upstream for assessment of 100-year flows for sizing of spillways.
- j) Flooding and channel erosion impacts to receiving streams due to land development projects shall be determined at each point of discharge from the development project and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge.
- k) The specified design storms shall be defined as a 24-hour duration storm using a Type III rainfall distribution as recommended by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). Precipitation amounts shall be defined by the Northeast Regional Climate Center “Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada.”
- l) Proposed residential, commercial, or industrial subdivisions shall apply these Stormwater Management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.

3. Peak Discharge Rates and Design Storms

- a) Localized flood mitigation and protection of channels from bank and bed erosion and degradation shall be accomplished by providing 24-hour extended detention of runoff from the post-development **1-year, 24-hour return frequency storm**. In addition, post-development peak discharge rates may not exceed pre-development peak discharge rates for the **2-year 24-hour return frequency storm** as required by the current MA DEP Stormwater Management Policy.

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- b) Downstream overbank flood and property protection shall be provided by attenuating the post-development peak discharge rate to the pre-development rate for the **10- year, 24-hour return frequency storm** as required by the current MA DEP Stormwater Management Policy.
 - c) Extreme flooding and public safety protection shall be provided by attenuating the peak discharge rate from the **100-yr, 24-hour return frequency storm** to the predevelopment rates and demonstrating that there will be no increased flooding impacts off-site, as required by the current MA DEP Stormwater Management Policy.
4. Water Quality Criteria
- a) All land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without treatment as stipulated in these Regulations.
 - b) The prescribed **water quality volume** required in the sizing of a structural stormwater practice shall be in accordance with current MA DEP Stormwater Policy:
 - i) 0.50 inches x the total impervious area of the drainage area and/or
 - ii) 1.0 inches x the total impervious area of the drainage area for stormwater discharges to Sensitive Areas. Sensitive Areas are defined in Section 7.C.7.
 - c) Presumed Compliance with Massachusetts Water Quality Standards
All structural Stormwater Management facilities shall be selected and designed using the appropriate criteria from the most recent version of the Massachusetts DEP *Stormwater Management Guidebook*.

For other structural stormwater controls not included in the Massachusetts *Stormwater Management Handbooks*, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the Stormwater Authority before being included in the design of a Stormwater Management system.

Structural best management practices (BMPs) must be designed to remove 80% of the average annual post-development total suspended solids (TSS) and 40% of total phosphorus (TP), and 30% of total nitrogen (TN). It is presumed that a BMP complies with this performance goal if it is:
 - i) Sized to capture the prescribed Water Quality Volume;
 - ii) Designed according to the specific design and performance criteria outlined in the Massachusetts *Stormwater Management Handbooks*;
 - iii) Constructed properly, as approved by the Stormwater Authority; and
 - iv) Maintained in accordance with the O&M Plan approved by the Stormwater Authority.
 - d) Pollutant Loading Calculation Assessment
 - i) For any Subdivision (per MGL, Chapter 41, Section 81L), any project with a building 10,000 square feet or more, or any project in an area designated by the Stormwater Authority as a Sensitive Area, a pollutant loading calculation shall be conducted to document compliance with water quality standards by calculating pre-development loads, calculating uncontrolled post-development loads and then applying a prescribed pollutant removal efficiency to selected practices to arrive at a net pollutant load delivery. The post-developed load must be equal to or less than the pre-developed load.
 - ii) The methodology for this calculation shall be in accordance with Appendix A: Method of Pollutant Load Calculation for Compliance with Water Quality Standards.
5. Recharge Criteria
- a) Annual groundwater recharge rates shall be maintained, by promoting infiltration and recharge through the use of structural and non-structural methods to the maximum extent practicable. At a minimum, annual recharge from the post-development site shall equal the annual recharge from pre-development site conditions.
 - b) The stormwater runoff volume to be recharged to groundwater shall be determined using the methods prescribed in the latest version of the Massachusetts DEP *Stormwater Management Handbooks*. The recharge requirements shall apply to all activities within the jurisdiction of this Bylaw except as noted, and unless specifically waived by the Stormwater Authority. The recharge criterion is not required for any portion of a site designated as a stormwater Hotspot (see Section

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07.doc8/18/2010

7.C.7 of these Regulations). In addition, the Stormwater Authority may relax or eliminate the recharge requirement at its discretion, if the site is situated on unsuitable soils or is in a redevelopment area with documentation of prior contaminated soils.

6. Sensitive Areas

Stormwater discharges to Critical Areas with sensitive resources as defined in the current Massachusetts Stormwater Policy (i.e., Outstanding Resource Waters (ORWs), swimming beaches, and recharge areas for public water supplies) are subject to additional criteria, and may need to utilize or restrict certain Stormwater Management practices at the discretion of the Stormwater Authority. The Stormwater Authority may designate additional Sensitive Areas and specific criteria for these areas by amending these Regulations in accordance with the provisions of Section 5.0 of the Town of Lexington Stormwater Management and Erosion Control Bylaw.

7. Hotspots

Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as “hotspots”, require the use of specific Stormwater Management BMPs as specified in the most recent version of the MA DEP *Stormwater Management Handbooks*. The use of infiltration practices without pretreatment is prohibited.

8. Low Impact Development (LID) Credits

The use of Better Site Design and non-structural LID Management practices are encouraged to minimize reliance on structural management measures and meet recharge requirements in Section 7.C.5 of these Regulations. The use of one or more Better Site Design practices and/or LID Management Practices by the applicant may, if approved by the Stormwater Authority, also allow for a reduction in the water quality treatment volume, as specified in Section 7 of these Regulations.

8.0 WAIVERS

- A) The Stormwater Authority may waive strict compliance with any requirement of the Town of Lexington Stormwater Management and Erosion Control Bylaw or these Regulations promulgated hereunder, where such action is:
1. Allowed by federal, state and local statutes and/or regulations;
 2. In the public interest; and
 3. Consistent with the purpose and intent of the Town of Lexington Stormwater and Erosion Control Bylaw and these Regulations.
- B) Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the Bylaw does not further the purposes or objectives of the Bylaw.
- C) All waiver requests shall be acted on within 30 calendar days and the written finding will be provided by the Stormwater Authority.
- D) If in the Stormwater Authority’s opinion, additional time or information is required for review of a waiver request, the Stormwater Authority may request an extension of the review period. In the event the applicant objects to an extension, or fails to provide requested information, the waiver request may be denied, “without prejudice” by the Stormwater Authority.

9.0 ENFORCEMENT

- A) Enforcement powers of the Stormwater Authority or an authorized agent of the Stormwater Authority are granted in the Stormwater and Erosion Control Bylaw, Section 6.
- B) Notices and Orders
1. The Stormwater Authority or an authorized agent of the Stormwater Authority may issue a written notice of violation or enforcement order to enforce the provisions of the Stormwater Management and Erosion Control Bylaw and the Regulations there under, which may include requirements to:

- a) Cease and desist from construction or land disturbing activity until there is compliance with the Ordinance and the Stormwater Permit or Minor Impact Permit;
 - b) Repair, maintain, or replace the Stormwater Management system or portions thereof in accordance with the O&M Plan;
 - c) Perform monitoring, analyses, and reporting; and/or
 - d) Fix adverse impact resulting directly or indirectly from malfunction of the Stormwater Management system.
2. If the Stormwater Authority or its Agents(s) determines that abatement or remediation of adverse impacts is required, the order may set forth a deadline by which such abatement or remediation must be completed. Said order may further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town of Lexington may, at its option, undertake such work, and the property owner shall reimburse the Town of Lexington for expenses incurred.
 3. Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town of Lexington, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Stormwater Authority within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Stormwater Authority affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in G.L. Ch. 59, § 57, after the thirty-first day at which the costs first become due.
- C) Any person who violates any provision of the Town of Lexington Stormwater and Erosion Control Bylaw, or order or permit issued there under, may be ordered to correct the violation and/or shall be punished by a fine of not more than \$200.00, excluding the cost of damages. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.
 - D) Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the City of Lexington may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and *[the citation town enabling vote (if applicable)]* of the Town of Lexington in which case *[title or other authorized agent]* of the Town of Lexington shall be the enforcing person. The penalty for the 1st violation shall be \$200.00. The penalty for the 2nd violation shall be \$500.00. The penalty for the 3rd and subsequent violations shall be \$1,000.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.
 - E) Appeals. The decisions or orders of the Stormwater Authority shall be final. Further relief shall be to a court of competent jurisdiction.
 - F) Remedies Not Exclusive. The remedies listed in this Ordinance are not exclusive of any other remedies available under any applicable federal, state or local law.

10.0 SURETY

The Stormwater Authority may require the permittee to post before the start of land disturbance or construction activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security.

The form of the bond shall be approved by Town Counsel, and be in an amount deemed sufficient by the Stormwater Authority to ensure that the work will be completed in accordance with the permit. If the project is phased, the Stormwater Authority may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the Stormwater Authority has received the final inspection report as required by Section 11 of these Regulations and issued a Certificate of Completion.

11.0 CONSTRUCTION INSPECTIONS

- A) Notice of Construction Commencement. The applicant must notify the Stormwater Authority 14 days prior to the commencement of construction. In addition, the applicant must notify the Stormwater Authority 14 days in advance of construction of critical components of any stormwater management facility.
- B) At the discretion of the Stormwater Authority, periodic inspections of the stormwater management system construction shall be conducted by its Agents(s). All inspections shall be documented and written reports prepared that contain the following information:
 - 1. The date and location of the inspection;
 - 2. Names, titles, and qualifications of personnel making the inspection;
 - 3. Whether construction is in compliance with the approved Stormwater Management Plan;
 - 4. Variations from the approved construction specifications; and
 - 5. Any other variations or violations of the conditions of the approved Stormwater Management Plan.
- C) The Stormwater Authority or its Agents(s) shall inspect the project site at the following stages, at a minimum:
 - 1. Initial Site Inspection: prior to approval of any plan;
 - 2. Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground drainage or stormwater conveyance structures.
 - 3. Final Inspection
 - a) After the stormwater management system has been constructed and before the surety has been released, all applicants are required to submit actual "as built" plans for any stormwater management facilities or practices after final construction is completed and must be certified by a Professional Engineer.
 - b) The Stormwater Authority or an authorized agent shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the Stormwater Authority which will issue a Certificate of Completion.
- D) Erosion Control Inspection
 - 1. To ensure erosion control practices are in accord with the filed Erosion and Sediment Control Plan, Erosion Control Inspections will be conducted by the site owner or an authorized representative at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater from the start of construction until the site is permanently stabilized. Inspection frequency may be reduced to at least once a month if the site is temporarily stabilized, runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen), or if construction is occurring during seasonal dry periods. The permittee is required to notify the Stormwater Authority of any change in inspection frequency, including termination of inspections due to site stabilization.
 - 2. The inspection form will include:
 - a) Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
 - b) Location(s) of discharges of sediment or other pollutants from the site;
 - c) Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location, and/or location(s) where additional BMPs are needed that did not exist at prior inspection; and
 - d) Corrective action required including any changes to the Erosion and Sediment Control Plan necessary and implementation dates.

If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Storm Water Discharges From Construction Activities (Construction

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General Permit), then the permittee is required to submit all Inspection Reports to the Stormwater Authority. If the Inspection Reports meet the requirements of Section 3.10 of the Construction General Permit, it will be considered equivalent to the Erosion Control Inspection as described above.

E) Inadequacy of System

1. If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built in accordance with the Stormwater Management Plan, it shall be corrected by the applicant before the Certificate of Completion is released. If the applicant fails to act the Stormwater Authority may use the surety bond to complete the work.
2. If the Stormwater Authority determines that there is a failure to comply with the plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order shall be issued until any violations are corrected and all work previously completed has received approval by the Stormwater Authority.

12.0 CERTIFICATE OF COMPLETION

A) Upon completion, the Applicant is responsible for certifying that the completed project is in accordance with the approved plans and specifications by submitting As-built Plans to the Stormwater Authority as described in Section 6.K and shall provide regular inspections sufficient to adequately document compliance.

B) The Stormwater Authority will issue a letter certifying completion upon receipt and approval of the final inspection and reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this Ordinance.

13.0 PERPETUAL INSPECTION AND MAINTENANCE

A) Maintenance Responsibility

1. The owner of the property on which work has been done pursuant to these Regulations for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.

B) Maintenance Inspections

1. Stormwater management facilities and practices included in an O&M Plan with a Maintenance Agreement in accordance with Section 6.M of these Regulations must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the Plan, and these Regulations.
2. At a minimum, inspections shall occur once during the first year of operation and at least once every three years thereafter. A Maintenance Agreement as specified under Section 6.M of these Regulations between the owner and the Stormwater Authority shall be executed for privately-owned stormwater management systems that specify the Responsible Party for conducting long term inspections.
3. Inspection reports shall be submitted to the Stormwater Authority for all stormwater management systems. Inspection reports for stormwater management systems shall include:
 - a) The date of inspection;
 - b) Name of inspector;
 - c) The condition of:
 - i. Pretreatment devices
 - ii. Vegetation or filter media
 - iii. Fences or other safety devices
 - iv. Spillways, valves, or other control structures
 - v. Embankments, slopes, and safety benches
 - vi. Reservoir or treatment areas

- vii. Inlet and outlet channels and structures
- viii .Underground drainage
- ix. Sediment and debris accumulation in storage and forebay areas (including catch basins)
- x. Any nonstructural practices
- xi. Any other item that could affect the proper function of the stormwater management system

d) Description of the need for maintenance.

C) Right-of-Entry for Inspection

The terms of the Maintenance Agreement as specified in Section 6.M of these Regulations shall provide for the Stormwater Authority or its Agent(s) to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. The Stormwater Authority, its agents, officers, and employees shall have authority to enter upon privately owned land for the purpose of performing their duties under these Regulations and may make or cause to be made such examinations, surveys, or sampling as the Stormwater Authority deems necessary, subject to the constitutions and laws of the United States and the Commonwealth.

D) Records of Maintenance and Repair Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall provide records of all maintenance and repairs to the Stormwater Authority upon request. Parties responsible for the operation and maintenance of a stormwater management facility shall prepare records of the installation and of all maintenance and repairs, and shall retain the records for at least five years. These records shall be made available to the Stormwater Authority or its Agent(s) during inspection of the facility and at other reasonable times upon request.

E) Failure to Maintain

1. If a Responsible Party fails or refuses to meet the requirements of the Maintenance Agreement, the Stormwater Authority, after 30 days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the facility or practice in proper working condition. The Stormwater Authority may assess the owner(s) of the facility for the cost of repair work, which shall be a lien on the property.
2. After notification is provided to the person responsible for carrying out the maintenance plan of any deficiencies discovered from an inspection of a stormwater management system, the person responsible for carrying out the maintenance plan shall have 30 days or other time frame mutually agreed to between the Stormwater Authority and the person responsible for carrying out the maintenance plan to correct the deficiencies. The Stormwater Authority shall then conduct a subsequent inspection to ensure completion of repairs.

14.0 SEVERABILITY

The invalidity of any section, provision, paragraph, sentence, or clause of these Regulations shall not invalidate any section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.