As Approved by the Select Board 11/25/2024

Manchester-by-the-Sea
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Stormwater Management Rules and Regulations

SECTION 1 PURPOSE AND INTENT

A. Regulation of discharges to the municipal separate storm sewer system (MS4) is necessary for the protection of the Town of Manchester-by-the-Sea'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 and contamination of drinking water supplies, erosion of stream channels, alteration or destruction of aquatic and wildlife habitat, and flooding.

B. These Stormwater Management Rules and Regulations (Regulations) establish stormwater management standards for the final conditions that result from development and redevelopment projects, as well as construction activities, to minimize adverse impacts offsite and downstream which would be borne by abutters to development projects and the general public, pursuant to the Manchester-by-the-Sea Stormwater Management By-Law.

C. The goals and objectives of the By-Law and accompanying Regulations are:

1. To require practices to control the flow of stormwater from new and redeveloped sites into the Town's municipal separate storm sewer system (MS4) to prevent flooding and erosion;

2. To protect groundwater and surface water from degradation;

3. To promote groundwater recharge;

4. To prevent pollutants from entering the Town's municipal separate storm sewer system (MS4) and to minimize discharge of pollutants from the MS4;

5. To ensure adequate long-term operation and maintenance of structural stormwater best management practices (BMPs) so that they work as designed;

6. To require stormwater management systems properly designed utilizing low impact design (LID) and green infrastructure (GI) techniques and appropriate BMPs to the maximum extent possible to better simulate the natural hydrologic condition and reduce adverse impacts.

7. To comply with state and federal statutes and regulations relating to stormwater discharges; and

8. To establish the Town's legal authority to ensure compliance with the provisions of the By-law through inspection, monitoring, and enforcement.

SECTION 2 DEFINITIONS

ALTERATION OF DRAINAGE CHARACTERISTICS: Any activity on an area of land that changes the water quality, force, direction, timing or location of runoff flowing from the area. Such changes include: change from distributed runoff to confined, discrete discharge; change in the volume of runoff from the area; change in the peak rate of runoff from the area; and change in the recharge to groundwater on the area.

AS-BUILT DRAWING: Drawings that completely record and document applicable aspects and features of conditions of a project following construction using Stormwater Management Plans derived from a Stormwater Management Permit.

BEST MANAGEMENT PRACTICE (BMP): schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to downstream and down-gradient environmental receptors (including but not limited to locally regulated wetlands, federally protected wetlands, etc.) BMPs also include treatment requirements, operating procedures, and practices to control planned site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

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 Management Permit have been met and that a project has been completed in compliance with the conditions set forth in the permit.

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC): A certified specialist in soil erosion and sediment control. This certification program, sponsored by the Soil and Water Conservation Society in cooperation with the American Society of Agronomy, provides the public with evidence of professional qualifications.

CLEAN WATER ACT: The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) as hereafter amended.

CLEARING: Any activity that removes the vegetative surface cover.

CONSTRUCTION AND WASTE MATERIALS: Excess, deleterious materials, or

discarded building or site materials, including but not limited to concrete truck washout, chemicals, litter and sanitary waste at a construction site that may adversely impact water quality.

DEVELOPMENT: The modification of land to accommodate a new use or expansion of use, usually involving construction.

DISCHARGE OF POLLUTANTS: The addition from any source of any pollutant or combination of pollutants into the MS4 Area and environmentally sensitive receptors from any source.

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

EROSION: The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

EROSION AND SEDIMENTATION CONTROL PLAN: A document containing narrative, drawings and details developed by a registered Professional Engineer (PE) or a Certified Professional in Erosion and Sedimentation Control (CPESC), which includes best management practices, or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related land disturbing activities.

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

ESTIMATED HABITAT OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS: Habitats delineated for state-protected rare wildlife and certified vernal pools under the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).

GRADING: Changing the level or shape of the ground surface by cutting or filling.

GROUNDWATER: Water beneath the surface of the ground.

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

ILLICIT DISCHARGE: Direct or indirect discharge to the municipal storm drain system that is not composed entirely of stormwater, except as exempted in the Manchester-by-the-Sea Stormwater Management By-law. The term does not include a discharge in compliance with an NPDES stormwater discharge permit or resulting from fire-fighting activities and other activities exempted pursuant the Manchester-by-the-Sea Stormwater Management By-law.

IMPERVIOUS SURFACE: Any surface that prevents or significantly impedes the infiltration of water into the underlying soil. This can include but is not limited to: roads, driveways, parking areas and other areas created using nonporous material;

buildings, rooftops, structures, artificial turf and compacted gravel or soil.

IMPOUNDMENT: A stormwater pond created by an obstruction of flow resulting in standing water.

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge, sequester nutrients in the soil, and reduce stormwater runoff from a project site.

LAND DISTURBING ACTIVITY: Any activity that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material; results in an increased amount of runoff or pollutants; measurably changes the ability of a ground surface to absorb waters; involves clearing, grading, cutting/filling, or excavating, including grubbing; or results in an alteration of drainage characteristics.

LAND USE WITH HIGHER POTENTIAL POLLUTANT LOAD (LUHPPL): Land uses such as auto salvage yards, auto fueling facilities, exterior fleet storage yards, vehicle service and equipment cleaning areas, commercial parking lots with high intensity use, road salt storage areas, outdoor storage and loading areas of hazardous substances, confined disposal facilities and disposal sites, marinas, boat yards or other uses as identified by the Massachusetts Stormwater Handbook and the DEP Wetlands Protection Act.

LOT: An individual tract of land as shown on the current Assessor's Map for which an individual tax assessment is made. For the purposes of these regulations, a lot also refers to an area of a leasehold on a larger parcel of land, as defined in the lease agreement and shown by approximation on the Assessor's Map.

LOW IMPACT DEVELOPMENT or LID: site planning and design strategies that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. LID practices include but are not limited to bioretention facilities, rain gardens, vegetated rooftops, rain barrels and permeable pavements.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act (310 CMR 10) 131, § 40 and Massachusetts Clean Waters Act G.L. c. 21, s. 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.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OR MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for

collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Manchester-by-the-Sea.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT: A permit issued by the EPA that authorizes the discharge of pollutants to Waters of the United States.

NEW DEVELOPMENT: any construction activities or land alteration on an area that has not previously been developed to include impervious cover.

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 man-made pollutants finally depositing them into a water resource area.

OPERATION AND MAINTENANCE PLAN: A plan setting up the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to ensure that it continues to function as designed.

OUTFALL: The point at which stormwater flows out from a point source that is a discernible, confined and discrete conveyance into downstream environmentally sensitive and regulated areas.

OUTSTANDING RESOURCE WATERS (ORWS): Waters designated by Massachusetts Department of Environmental Protection as ORWs. These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards (314 CMR 4.00) and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated.

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

PERSON: An individual, partnership, association, firm, company, trust, corporation, agency, authority, department or political subdivision of the Commonwealth or the Federal government, to the extent permitted by law, and any officer, employee, or agent of such person.

POINT SOURCE: Any discernible, confined, and discrete stormwater 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.

PRE-CONSTRUCTION: All activity in preparation for construction.

POLLUTANT: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, construction wastes and residues including discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes and industrial, municipal and agricultural waste discharged into water.

PRIORITY HABITAT OF RARE SPECIES: Habitats delineated for rare plant and animal populations protected pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its regulations.

RECHARGE: The process by which groundwater is replenished by precipitation through the percolation of runoff and surface water through the soil.

REDEVELOPMENT: Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites.

RUNOFF: Rainfall, snowmelt, or irrigation water flowing over the ground surface.

SEDIMENT: Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

SEDIMENTATION: The process or act of depositing of sediment.

SITE: The area extent of construction activities, including but not limited to the creation of new impervious cover and improvement of existing impervious cover.

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

SOIL: Any earth, sand, rock, gravel, or similar material.

STORMWATER: Storm water runoff, snow melt runoff, and surface water runoff and drainage.

STORMWATER AUTHORITY: **Manchester-by-the-Sea Department of Public Works (DPW)** or its authorized agent(s).

STORMWATER MANAGEMENT PLAN: A plan required as part of the application for a Stormwater Management Permit. See Section 8.

TOTAL MAXIMIM DAILY LOAD or TMDL: Section 303(d) of the Clean Water Act authorizes the EPA to assist states, territories and authorized tribes in listing impaired waters and developing Total Maximum Daily Loads (TMDLs) for these waterbodies. A TMDL establishes the maximum amount of a pollutant that a water body can accept and still meet water quality standards for protecting public health and maintaining the designated beneficial uses of those waters for drinking, swimming, recreation, and fishing. A TMDL includes Waste Load Allocations for

point source discharges, Load Allocations for nonpoint sources and/or natural background, and must include a margin of safety and account for seasonal variations.

TOTAL PHOSPHORUS OR TP: A measure of the total dissolved and particulate forms of phosphorus. Excessive phosphorus in stormwater runoff to surface waters can cause algal blooms and accelerated plant growth, which can lead to decreased dissolved oxygen availability and possible fish kills.

TOTAL SUSPENDED SOLIDS or TSS: Undissolved organic or inorganic particles in water.

VERNAL POOLS: Temporary bodies of freshwater which provide critical habitat for a number of vertebrate and invertebrate wildlife species.

WATERCOURSE: A natural or man-made channel through which water flows or a stream of water, including a river, brook or underground stream.

WATERS OF THE COMMONWEALTH: All waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and groundwater and Waters of the United States as defined under the Federal Clean Water Act (33 U.S.C. § 1251, et seq.) as hereafter amended.

WETLAND RESOURCE AREA: Areas specified in the Massachusetts Wetlands Protection Act G.L. c. 131, § 40.

WETLANDS: Tidal and non-tidal areas characterized by saturated or nearly saturated soils most of the year that are located between terrestrial (land-based) and aquatic (water-based) environments, including freshwater marshes around ponds and channels (rivers and streams), brackish and salt marshes; common names include marshes, swamps and bogs.

SECTION 3 AUTHORITY

A. The **Department of Public Works (DPW)** is designated as the Stormwater Authority under the Stormwater Management By-law. These Stormwater Regulations have been adopted by the Stormwater Authority in accordance with the Stormwater Management By-law. The Stormwater Authority shall administer, implement and enforce these Regulations. Any powers granted to or duties imposed upon the Stormwater Authority may be delegated in writing by the Stormwater Authority to its employees or agents.

B. The Stormwater Authority may periodically amend these Regulations pursuant to Section 12 of the Stormwater Management By-law.

C. Nothing in these Regulations is intended to replace or be in derogation of the requirements of any other Manchester-by-the-Sea by-law.

D. Permittees of the Stormwater Management Permit must also adhere to the latest

version of the DPW Rules and Regulations.

SECTION 4 APPLICABILITY

A. These regulations shall apply to all activities that individually or as part of a common plan of Development resulting in disturbance of land exceeding the thresholds below and which drain to the municipal separate storm sewer systems (MS4) or, directly or indirectly, into a Watercourse or Waters of the Commonwealth.

1. Administrative Land Disturbance Review is required for projects disturbing more than 20,000 square feet of land**, and/or grade changes over two (2) feet shall be completed in accordance with this document**

2. A Stormwater Management Permit is required for disturbance of one acre or more of land, or for the disturbance of any amount of land where the proposed use is a land use of higher pollutant loads pursuant to the Massachusetts Stormwater Management Standards.

3. The Stormwater Authority may require a permit for a project of any size which has caused or can reasonably be expected to cause or contribute to a violation of State Water Quality Standards or as deemed necessary by the Stormwater Authority for any proposed site plan.

4. Activities or land uses that otherwise require a special permit from the Planning Board shall not be required to obtain a Stormwater Management Permit from the Stormwater Authority under Article XXIII of the General By-Law provided that the applicable terms, conditions, and requirements of Article XXIII are imposed within the special permit issued by the Planning Board.

5. Projects that are wholly subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Stormwater Management Handbook, the Town's Wetlands Protection By-law and with the Stormwater Management Performance Standards of these Regulations as reflected in an Order of Conditions issued by the Conservation Commission will not require a separate Stormwater Management Permit. The entire project and construction activities and all Stormwater Management must be fully within the jurisdiction of the Conservation Commission.

B. Exemptions:

1. Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.04;

2. Maintenance of existing landscaping, gardens or lawn areas associated with a single- family dwelling;

3. The construction of fencing that will not substantially alter existing terrain or

drainage patterns;

4. Construction and installation of utilities other than drainage (gas, water, electric, telephone, etc.) which will not alter terrain or drainage patterns or provide obstruction to wildlife;

5. Large-Scale Ground-Mounted Solar Photovoltaic Installations.

6. The maintenance or resurfacing, but not reconstruction, of any public or private way.

C. Prohibited activities. The following activities are prohibited under these Regulations:

1. Illicit discharges. No person shall dump, discharge, cause or allow to be discharged any pollutant or non-stormwater discharge into the MS4, into a watercourse, or into the waters of the commonwealth.

2. Illicit connections. No person shall construct, use, allow, maintain, or continue any illicit connection to the municipal storm drain system, regardless of whether the connection was permissible under applicable law, regulation, or custom at the time of connection.

3. Obstruction of municipal storm drain system. No person shall obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior written approval from the Department of Public Works.

D. Stormwater Design Manual

1. A stormwater design manual, Massachusetts Stormwater Handbook: Volume 2 Technical Guide for Compliance with Massachusetts Stormwater Management Standard (Massachusetts Department of Environmental Protection, February 2008), as updated or amended, is hereby incorporated by reference as part of this section and shall furnish additional policy, criteria and information including specifications and standards, for the proper implementation of the requirements of this division. This manual includes a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. The manual may be updated and expanded from time to time, based on improvements in engineering, science, monitoring and local maintenance experience, at the discretion of the Massachusetts Department of Environmental Protection. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards.

SECTION 5 ADMINISTRATION

A. The Department of Public Works (DPW), or its representative, shall administer,

implement and enforce these Rules and Regulations pursuant to the Stormwater Management By-Law and the DPW Rules and Regulations through an Administrative Permit process, provided that activities or land uses do not otherwise require a special permit from the Planning Board or an Order of Conditions with the Conservation Commission; at which time Stormwater Authority will conduct a concurrent review providing comments to the Planning Board and/or Concom.

B. The DPW may periodically amend regulations, rules, and/or written guidance relating to the terms, conditions, definitions, enforcement, fees, procedures and administration of the Stormwater Management By-law by majority vote after conducting a Select Board public hearing to receive comments.

C. Waiver.

1. The Stormwater Authority may waive strict compliance with any requirement of these regulations, where such action is:

   a. Allowed by federal, state and local statutes and/or regulations;

   b. In the public interest; and

   c. Consistent with the purpose and intent of the Stormwater Management By-Law.

2. Any person seeking a waiver must submit a written waiver request. 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 this bylaw.

SECTION 6 ADMINSTRATIVE LAND DISTURBANCE REVIEW

A. Administrative Review and Approval Required. Administrative approval must be obtained prior to the commencement of land disturbing activity disturbing more than 20,000 square feet of land or a change in contour of 2-feet or more.

B. Application. A completed application for an Administrative Land Disturbance Review shall be filed with the Stormwater Authority. The Administrative Land Disturbance Review Application package shall include:

1. A completed Application Form with original signatures of all property owners;

2. Narrative describing the proposed work including existing site conditions, proposed work and methods to mitigate stormwater impacts;

3. One original, one copy, and one electronic version of the plan that include:

a. Existing site features including structures, pavement, plantings, and stormwater management systems, etc.;

b. Proposed work including proposed stormwater management systems and limits of disturbance; and

c. Basic erosion and sedimentation controls.

C. Application Requirements and Performance Standards

1. Application Requirements.

a. The application for an Administrative Land Disturbance Review shall contain sufficient information for the Stormwater Authority, or its agent, to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant to reduce adverse impacts form stormwater runoff during construction, and on a long-term basis.

b. Application shall include an operation and maintenance plan to inspect, properly maintain and repair installed BMPs after project completion to ensure that they are functioning according to manufacturer or design specification for the life of the BMP.

c. A non-refundable application fee shall be due and payable to the Town of Manchester-by-the-Sea at the time an application is filed.

d. Applicants shall submit as-built drawings upon project completion.

2. Performance Standards. Applicants shall retain on-site the first one (1) inch of runoff from the total post-construction impervious area. To the extent this is infeasible, the unretained portion shall meet the requirements below to the maximum extent practicable. When determining whether the requirements have been met, the Stormwater Authority shall consider all stormwater management practices available and capable of being implemented after taking into consideration costs, existing technology, proposed use, and logistics in light of overall project purposes. Project purposes shall be defined generally (e.g., single family home or expansion of commercial development). Applicants shall detail how the project will:

a. Comply with the Massachusetts Stormwater Management Standards as further defined in the Massachusetts Stormwater Handbook unless infeasible.

b. To the extent that the project will discharge, directly or indirectly, to an impaired water body subject to one or more pollutant-specific Total Maximum Daily Loads (TMDLs) implement structural and non-structural stormwater best management practices (BMPs) that are consistent with each TMDL.

c. To the extent the project will discharge, directly or indirectly, to an impaired water body not subject to a TMDL, implement structural and non-structural stormwater BMPs optimized to remove the pollutant or pollutants responsible for the impairment.

d. Avoid disturbance or areas susceptible to erosion and sediment loss.

e. Use Low Impact Development techniques unless infeasible. These may include but not limited to reduction in impervious surfaces, disconnection of impervious surfaces, bioretention (rain gardens), and infiltration systems.

3. Consent to Entry onto Property. An applicant consents to entry of the Stormwater Authority or its authorized agents in or on site to verify the information in the application and to inspect for compliance with permit conditions. Refusal to grant access may be grounds for denial and/or revocation of the permit.

4. Information requests. The applicant shall submit all additional information requested by the Stormwater Authority to issue a decision on the application.

5. Action by the Stormwater Authority. The Stormwater Authority may:

   a. Approve the Administrative Land Disturbance Review Application if it finds the proposed plan will protect water resources, not cause or contribute to a violation of State Water Quality Standards, and meets the objectives and requirements of the Manchester-by-the-Sea Stormwater Management Bylaw and related regulations;

   b. Approve the Administrative Land Disturbance Review Application with conditions, modifications or restrictions that the Stormwater Authority determines are required to ensure that the project will protect water resources and meets the objectives and requirements of the Manchester-by-the-Sea Stormwater Bylaw and related regulations; or

   c. Require submission of a Stormwater Management Permit Application if the project will disturb land beyond administrative review thresholds or in the opinion of the Stormwater Authority requires more extensive review.

6. Fee Structure. Each application must be accompanied by the appropriate application fee as established by the Stormwater Authority. Applicants shall pay review fees as determined by the Stormwater Authority sufficient to cover any expenses connected with the review of the Administrative Land Disturbance Review Application before the review process commences. The Stormwater Authority is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Stormwater Authority on any or all aspects of the Application.

7. Project Changes. The Applicant, or their agent, must notify the Stormwater

Authority in writing of any change or alteration of a land-disturbing activity or BMPs authorized in an Administrative Land Disturbance Review approval before any change or alteration occurs. If the Stormwater Authority determines that the change or alteration is significant, based on the design requirements listed in Section 8 (B.20) and accepted construction practices, the Stormwater Authority may require a Stormwater Management Permit application be filed. If any change or alteration from the Administrative Land Disturbance Review approval occurs during any land disturbing activities, the Stormwater Authority may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

SECTION 7 PERMITS AND PROCEDURE

A. Filing Application: The site owner or his agent shall file a completed application package for a Stormwater Management Permit (SMP) as follows: one copy (with the filing fee) with the Town Clerk, two (2) additional copies to the Stormwater Authority (by delivery with the above copy to the Town Clerk), and a PDF sent via email or thumb drive to the Stormwater Authority. 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. Each copy of the SMP Application package shall include:

1. a completed Application Form with original signatures of all owners;

2. a list of abutters, certified by the Assessor's Office;

3. the Stormwater Management Plan, project description, and report documenting stormwater hydrological compliance as specified in Section 8 of these Regulations;

4. the Operation and Maintenance Plan as required by Section 9 of these Regulations;

5. the Sedimentation and Erosion Controls Plan as specified by Section 10 of these Regulations.

B. Entry. Filing an application for a Stormwater Management Permit grants the Stormwater Authority , or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with the resulting Permit.

C. Other Boards. The applicant for a Stormwater Management Permit shall deliver a copy of the application package, within three (3) business days of filing the application with the Stormwater Authority, to each of the Board of Health, Conservation Commission and Planning Board and shall file a certificate of such delivery with the Town Clerk.

D. Fee Structure. The Stormwater Authority is authorized to establish and amend from time to time an application form and filing fees as referenced in the DPW

Rules and Regulations and Supplemental Rules and Regulations, and to retain, at the applicant's expense, Registered Professional Engineers, or other professional consultants, to review any or all aspects of these plans.

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

1. Approval of the Stormwater Management Permit Application based upon determination that the proposed plan meets the Standards in these Regulations and will adequately protect the water resources, environmentally sensitive areas and MS4 regulated areas of the Town and follows the requirements set forth in Article XXIII.

2. Approval of the Stormwater Management Permit Application; subject to any conditions, modifications, or restrictions required by the Stormwater Authority, which will ensure that the project meets the Standards in these Regulations and adequately protects water resources.

3. Disapproval of the Stormwater Management Permit Application based upon a determination that the proposed plan, as submitted, does not meet the Standards in these Regulations or adequately protect water resources, as required herein.

4. Project Completion. At completion of the project, the permittee shall submit as-built record drawings of all structural stormwater controls and best management treatment practices required for the site. The as-built drawing shall show deviations from the approved plans, if any, and be certified by a Registered Professional Engineer.

SECTION 8 STORMWATER MANAGEMENT PLAN

A. The Stormwater Management Plan shall contain sufficient information for the Stormwater Authority to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the Massachusetts Stormwater Management Standards as set forth in Part C of this section, the Small MS4 General Permit, and the Manchester-by-the-Sea's DPW Rules and Regulations, recognized engineering methodologies, and these regulations with an emphasis on including LID techniques and BMPs in the design. The Stormwater Management Plan shall fully describe the project in drawings, narrative, and calculations.

B. The Stormwater Management Plan shall at a minimum include:

1. A locus map;

2. The existing zoning and land use at the site;

3. The proposed land use;

4. The location(s) of existing and proposed easements;

5. The location of existing and proposed utilities;

6. The site's existing and proposed topography with contours at 2-foot intervals;

7. The existing site hydrology;

8. A description and delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows;

9. A delineation of 100-year flood plains, if applicable;

10. Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration;

11. The existing and proposed vegetation, soils, and ground surfaces with runoff coefficient for each;

12. A drainage area map showing pre-construction and post-construction watershed boundaries, drainage area, and stormwater flow paths;

13. A description and drawings of all components of the proposed drainage system including:

    a. locations, cross sections, and profiles of all brooks, streams, drainage swales, and their method of stabilization;

    b. all measures for the detention, retention, or infiltration of water;

    c. all measures for the protection of water quality;

    d. The structural details for all components of the proposed drainage systems and stormwater management facilities;

    e. LID techniques considered for this project and an explanation as to why they were included or excluded from the project;

    f. Identifying the watershed basin that the project is located in and the immediate down gradient waterbody(s) that stormwater runoff from the project site discharges to, EPA's watershed and waterbody assessment and TMDL and/or impairment status of the watershed and waterbody(s), and the LIDs and BMPs included in the project to address the pollutant(s) of concern;

    g. Summary of pre- and post-development peak rates and volumes of stormwater runoff demonstrating no adverse impacts to down-gradient properties, stormwater management systems and wetland resources;

h. Water quality calculations including:

i. TSS and TP removal calculation for each watershed based upon third party verified efficiencies. Manufacturer's specification may only be used in the absence of other data, and is subject to Stormwater Authority review and approval;

ii. Specific BMPs utilized in critical areas;

iii. Specific BMPs utilized for land uses of higher potential pollutant loads (LUHPPL); and

iv. Specific treatment for pollutant causing impairment of down-gradient waterbody identified by U.S. Environmental Protection Agency and Massachusetts Department of Environmental Protection.

i. notes on drawings specifying materials to be used and construction specifications; and

j. expected hydrology with supporting calculations.

k. A chart detailing existing total impervious area compared to proposed total impervious area for MS4 reporting.

14. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;

15. Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization;

16. A maintenance schedule for the period of construction; and

17. Massachusetts Department of Environmental Protection Checklist for Stormwater Report completed, stamped and signed by a registered 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 Massachusetts Stormwater Management Standards, Manchester-by-the-Sea Stormwater Management By-law and these regulations;

18. Any other information requested by the Stormwater Authority.

19. General Performance Standards for All Sites

a. LID site planning and design strategies must be utilized to the maximum extent feasible.

b. The selection, design and construction of all pre-treatment, treatment and infiltration BMPs shall be in accordance with Massachusetts Stormwater Handbook and shall be consistent with all elements of the Massachusetts Stormwater Standards including but not limited to those regarding new stormwater conveyances, peak runoff rates, recharge, land uses with higher potential pollutant loads, discharges to Zone II or interim wellhead protection areas, sediment and erosion control, and illicit discharges.

c. No new stormwater conveyances (e.g. outfalls) or non-point sources may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

d. A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

e. All stormwater management systems must have a long-term pollution prevention plan detailing the Operation and Maintenance Plan to ensure that systems function as designed.

f. All illicit discharges to the stormwater management system are prohibited.

g. When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

20. Stormwater Management Design Standards

a. Projects must be designed to collect and dispose of stormwater runoff from the project site in accordance with Massachusetts Stormwater Management Standards, the Small MS4 General Permit, Manchester-by-the-Sea Department of Public Works Rules and Regulations**,** recognized engineering methodologies and these regulations with an emphasis on including LID techniques in the design.

b. Projects must manage surface runoff so that no proposed flows are conducted over public ways, nor over land not owned or controlled by the Applicant unless a drainage easement in proper form is obtained permitting such discharge.

c. Projects must use LID techniques where adequate soil, groundwater and topographic conditions allow. These may include but not be limited to reduction in impervious surfaces, disconnection of impervious surfaces, bioretention (rain gardens) and infiltration systems.

d. The use of one or more LID site design measures by the applicant may allow for a reduction in the water quality treatment volume required by

these regulations. The applicant may, if approved by the Stormwater Authority, take credit for the use of stormwater LID measures to reduce some of the requirements specified in these regulations. The site design practices that qualify for these credits and procedures for applying and calculating credits are identified in the Massachusetts Stormwater Handbook.

e. Projects must use TR-55 and TR-20 methodologies to calculate peak rate and volume of runoff from pre-development to post-development conditions.

f. Watershed area for hydrologic analysis and BMP sizing calculations must include at a minimum the site area and all upgradient areas from which stormwater runoff flows onto the site.

g. For purposes of computing runoff, all pervious lands in the site are assumed prior to Development to be in "good hydrologic condition" regardless of the conditions existing at the time of the computation.

h. Length of sheet flow used for times of concentration is to be no more than 50 feet and minimum Time of Concentration (TOC) to be 6 min. ($1/10^{th}$ of an hour).

i. Soils tests to be conducted by a Registered Professional Engineer or Massachusetts Soil Evaluator, performed at the location of all proposed LID techniques and BMPs, to identify soil descriptions, depth to estimated seasonal high groundwater, depth to bedrock, and soil texture.

j. The design infiltration rate shall be determined from the on-site soil texture and Rawls rates as published in the Massachusetts Stormwater Handbook or saturated hydraulic conductivity tests.

k. Size drainage pipes to accommodate the 25 year storm event and maintain velocities between 2.5 and 10 feet per second, and provide calculations.

l. Size drainage swales to accommodate the 25 year storm event and velocities below 4 feet per second without overtopping.

m. Size culverts under roadways and driveways to accommodate the 50 year storm event and design adequate erosion protection. Design stream crossing culverts in accordance with the latest addition of the Massachusetts Stream Crossing Handbook.

n. Size stormwater basins to accommodate the 100-year storm event with a minimum of one foot of freeboard with stabilized emergency overflow/spillway for greater events.

o. All drainage structures are to be able to accommodate HS-20 loading. H-40 may be required where appropriate. Structures in floodplains shall be watertight with extended bases for anti-flotation.

p. Catch basins structures are to be constructed as required by Town Department of Public Works and spaced a maximum of 250 feet apart in roadways.

q. Catch basins adjacent to curbing are to be built with a granite curb inlet as required by Town Department of Public Works.

r. Catch basins in low points of road and on roads with profile grades greater than 5 percent are to be fitted with double grates (parallel with curb) as required by Town Department of Public Works.

s. All drainpipes are to be reinforced concrete pipe or High Density Polyethylene (HDPE) pipe and have a minimum diameter of 12 inches unless otherwise approved by the Stormwater Authority.

t. Outfalls are to be designed to prevent erosion of soils, and pipes 12 inches or larger are to be fitted with grates or bars to prevent ingress as well as flared ends/level spreaders to diffuse flow.

u. Drainage easements are to provide sufficient access for maintenance and repairs of system components and be at least 30 feet wide.

v. Minimize permanently dewatering soils by:

    i. Limiting grading within 4 feet of seasonal high groundwater elevation (SHGWE);

    ii. Raising roadways to keep roadway base course above SHGWE; and

    iii. Setting bottom floor elevation of building(s) a minimum of 2 feet above SHGWE.

w. Performance Standards for New Development

    i. Stormwater management systems on new development shall be designed to meet an average annual pollutant removal equivalent to 90% of the average annual load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) related to the total postconstruction impervious surface area on the site. Average annual pollutant removal requirements shall be achieved through one of the following methods:

a) installing stormwater BMPs that meet the pollutant removal percentages required in 9.D.(1) based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance, then any federally or State-approved BMP or third party removal certification design guidance or performance standards (e.g., State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance at the Stormwater Authority's discretion. Infiltration is highly encouraged; or

b) retaining the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the new development site; or

c) meeting a combination of retention and treatment that achieves the above standards.

x. Performance Standards for Redevelopment Sites.

i. Stormwater management systems on redevelopment sites shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual postconstruction load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site. Average annual pollutant removal requirements shall be achieved through one of the following methods:

a) installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance, then any federally or State-approved BMP or third party removal certification design guidance or performance standards (e.g., State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance at the Stormwater Authority's discretion. Infiltration is highly encouraged; or

b) retaining the volume of runoff equivalent to, or greater than, 0.8 inch multiplied by the total post-construction impervious surface area on the redeveloped site; or

c) meeting a combination of retention and treatment that achieves the above standards.

21. Reporting Requirements

a. The applicant shall prepare and submit semi-annual reports to the Stormwater Authority for the first two (2) years after issuance of the Certificate of Completion, and annual reports thereafter demonstrating compliance with the terms and conditions of the Permit received from the Stormwater Authority. The Owner is also required to maintain copies of all required reporting on site.

SECTION 9 OPERATION AND MAINTENANCE PLANS

A. An Operation and Maintenance Plan (O&M Plan) is required at the time of application for all projects. The O&M Plan shall be designed to ensure that compliance with the Stormwater Management Permit, this By- Law, DPW Rules and Regulations, and the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 are met in all seasons and throughout the life of the system. The Stormwater Authority shall make the final decision of what maintenance option is appropriate in each situation. The Stormwater Authority 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. The O&M Plan shall remain on file with the Stormwater Authority and shall be an ongoing requirement. The Owner is also required to maintain copies of all required reporting on site.

B. The O&M Plan shall include:

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 structural and nonstructural stormwater best management practices (BMPs), catch basins, manholes/access lids, pipes, and other stormwater devices. The plan showing such systems and facilities to be privately maintained, including associated easements shall be recorded with the Southern Essex Registry of Deeds prior to issuance of a Certificate of Compliance by the Stormwater Authority pursuant to Section 13.

3. Maintenance agreements that specify:

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. A Maintenance Schedule for all drainage structures including swales and

ponds;

d. A list of easements with the purpose and location of each; and

e. The signature(s) of the owner(s).

C. Stormwater Management Easement(s):

1. Stormwater management easements shall be provided by the property owner(s) as necessary for:

a. access for facility inspections and maintenance;

b. preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100- year storm event; and

c. direct maintenance access by heavy equipment to structures requiring regular cleanout.

2. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner(s);

3. Stormwater management easements are required for all areas used for off-site stormwater control unless a waiver is granted by the Stormwater Authority;

4. Easements shall be recorded with the Essex County South Registry of Deeds prior to issuance of a Certificate of Completion by the Stormwater Authority;

D. Changes to Operation and Maintenance Plans;

1. The owner(s) of the stormwater management system must notify the Stormwater Authority of changes in ownership or assignment of financial responsibility.

The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of the By-law 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 responsibility.

SECTION 10 EROSION AND SEDIMENTATION CONTROL PLAN

A. The Erosion and Sediment Control Plan shall be designed to ensure compliance with these regulations, the MS4, 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.

B. If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Storm Water Discharges From Construction Activities (and as amended), then the applicant is required to submit a complete copy of the SWPPP and the signed Notice of Intent. If the SWPPP meets the requirements of the General Permit, it will be considered equivalent to the Erosion and Sediment Control Plan described in this section.

C. The Erosion and Sediment Control Plan shall remain on file with the Stormwater Authority. Refer to the latest version of the Massachusetts Erosion and Sediment Control Guidelines for Urban & Suburban Areas for detailed guidance.

D. Erosion and Sedimentation Control Plan Content. The Plan shall contain the following information:

1. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;

2. Title, date, north arrow, names of abutters, scale, legend, and locus map;

3. Location and description of natural features including:

    a. Watercourses and water bodies, wetland resource areas and all 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 (PE) for areas not assessed on these maps;

    b. 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

    c. Habitats mapped by the Massachusetts Natural Heritage & 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 (500) feet of any construction activity.

4. Lines of existing abutting streets showing drainage and driveway locations and curb cuts;

5. Existing soils, volume and nature of imported soil materials;

6. Topographical features including existing and proposed contours at intervals no greater than two (2) feet with spot elevations provided when needed;

7. Surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed;

8. Drainage patterns and approximate slopes anticipated after major grading activities (Construction Phase Grading Plans);

9. 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 material stockpiling areas;

10. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable. When determining whether the requirements have been met, the Stormwater Authority shall consider all stormwater management practices available and capable of being implemented after taking into consideration costs, existing technology, proposed use, and logistics in light of overall project purposes. Project purposes shall be defined generally (*e.g*., single family home or expansion of a commercial development).;

11. Location and description of industrial discharges, including stormwater discharges from dedicated asphalt plants and dedicated concrete plants, which are covered by this permit;

12. Stormwater runoff calculations in accordance with the Massachusetts Department of Environmental Protection's Stormwater Management Handbook and Stormwater Standards;

13. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;

14. A description of construction and waste materials expected to be stored on-site. The Plan 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;

15. A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;

16. Plans must be stamped and certified by a qualified Professional Engineer registered in Massachusetts or a Certified Professional in Erosion and Sediment Control; and

17. Such other information as is required by the Stormwater Authority.

E. Erosion Controls Design Standards. The Sediment and Erosion Control Plan

shall be developed to comply with the Small MS4 General Permit and shall meet the following standards:

1. Minimize total area of disturbance;

2. Sequence activities to minimize simultaneous areas of disturbance;

3. Minimize peak rate of runoff in accordance with the Massachusetts Department of Environmental Protection Stormwater Standards;

4. Maintain or minimize volumetric discharges. Proposed discharges to Vernal Pools and Potential Vernal Pools shall mimic pre-existing conditions.

5. Minimize soil erosion and control sedimentation during construction;

6. Divert uncontaminated water around disturbed areas;

7. Maximize groundwater recharge;

8. Install and maintain all Erosion and Sediment Control measures in accordance with the Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas, manufacturers specifications and good engineering practices;

9. Prevent off-site transport of sediment;

10. Protect and manage on and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project);

11. Comply with applicable Federal, State and local laws and regulations including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;

12. Protect natural resources and prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage & 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 from the proposed activities;

13. Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site;

14. Properly manage on-site construction and waste materials, including truck washing and cement concrete washout facilities;

15. Prevent off-site vehicle tracking of sediments; and

Incorporate appropriate BMPs designed to comply with the Massachusetts Stormwater Handbook.

SECTION 11 SURETY

The Stormwater Authority may require the permittee to post a surety bond, irrevocable letter of credit, cash, or other acceptable security before the start of land disturbance or construction activity. The bond shall 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 below and has issued a Certificate of Completion. Where the applicant is simultaneously seeking approval from the Planning Board pursuant to the Site Plan Review, Special Permit or other permit, and the Subdivision Control Law, the performance bond provisions of G.L. c. 41, s. 81-U shall supersede the requirements of the Stormwater Management By-law and Regulations provided that, in the opinion of the Stormwater Authority, the performance bond so executed includes sufficient protections to the Town for work to be completed. The Stormwater Authority at its discretion may require a supplemental performance bond where deemed appropriate.

SECTION 12 INSPECTIONS

A. Pre-construction Meeting. Prior to starting the clearing, excavation, construction, Redevelopment or land disturbing activity, the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, may be required to meet with the Stormwater Authority, to review the approved plans and their proposed implementation. The need for a pre-construction meeting shall be determined by the Stormwater Authority based on the project scope.

B. Construction may not commence until the applicant has submitted EPA's approval of the Construction General Permit Notice of Intent to the Stormwater Authority and the final SWPPP is posted at the site.

C. Stormwater Authority Inspections. The Stormwater Authority or its designated agent shall make inspections as herein required and shall either approve that portion of the work completed or shall notify the applicant wherein the work fails to comply with the Erosion and Sedimentation Control Plan or the Stormwater Management Plan as approved.

1. Inspections will be conducted by a "qualified person" from the Stormwater Authority or a third party hired to conduct such inspections. A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site

that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of these Regulations.

2. The approved Erosion and Sedimentation Control Plan and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Stormwater Authority, shall be maintained at the site during the progress of the work.

3. In order to obtain inspections, the applicant shall notify the Stormwater Authority at least two (2) working days before each of the following events:

   a. Erosion and sedimentation control measures are in place and stabilized;

   b. Site Clearing has been substantially completed;

   c. Rough Grading has been substantially completed;

   d. Final Grading has been substantially completed;

   e. Close of the Construction Season; and,

   f. Final Landscaping (permanent stabilization) and project final completion.

4. Applicant Inspections. The applicant or his/her agent shall conduct and document inspections of all control measures no less than weekly or as 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 Erosion and Sedimentation Control Plan, and the need for maintenance or additional control measures as well as verifying compliance with the Stormwater Management Plan. The applicant or his/her agent shall submit monthly reports to the Stormwater Authority or designated agent in a format approved by the Stormwater Authority.

SECTION 13 CERTIFICATE OF COMPLETION

The Stormwater Authority will issue a letter certifying completion upon receipt and approval of the final inspection reports and/or upon otherwise determining that all work has been satisfactorily completed in conformance with the Stormwater Management Permit, the Stormwater Management By-law and Rules and Regulations, and DPW Rules and Regulations.

SECTION 14 SEVERABILITY

If any provision, paragraph, sentence, or clause of this By-law shall be held invalid for any reason, all other provisions shall continue in full force and effect.