CITY OF NORTHAMPTON

STORMWATER MANAGEMENT REGULATIONS

December 2022

Contents

SECTION 1: AUTHORITY

The Regulations contained herein have been adopted under the Authority of Chapter 281: Stormwater Management of the City of Northampton Code of Ordinances, which is further authorized by the Home Rule Amendment of the Massachusetts Constitution and the Home Rule Procedures Act, and pursuant to the regulations of the Federal Clean Water Act found at 40 CFR 122.34.

According to Chapter 281: Stormwater Management, the Director of the City of Northampton Department of Public Works (DPW) is the Stormwater Authority. The DPW Director or a designated representative shall administer, implement and enforce these regulations. Any powers granted to, or duties imposed upon, the Director of the Department of Public Works may be delegated in writing to employees or agents of the Department of Public Works.

SECTION 2: PURPOSE

The purpose of these Stormwater Management Regulations (Regulations) is to protect, maintain, and enhance the public health, safety, and general welfare of the citizens of Northampton by preventing or diminishing stormwater impacts resulting from site development and land disturbance pursuant to Chapter 281: Stormwater Management Ordinance. Increased and contaminated stormwater runoff associated with construction sites, developed land uses and the accompanying increase in impervious surface area contribute to flow and water quality impairments in rivers, lakes, ponds, streams, wetlands and groundwater. Protection of these resources is accomplished by establishing minimum requirements and procedures to control the adverse impacts associated with stormwater runoff from new development and redevelopment. These minimum requirements are identified in the US EPA National Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts ("MS4 Permit") and in the Massachusetts Stormwater Handbook.

Effective stormwater management provides safe and attractive facilities that reduce the adverse impacts of stormwater discharges to water resources in order to attain state and federal water quality standards. This is accomplished by preventing the discharge of pollutants into stormwater runoff, minimizing the volume and rate with which stormwater is discharged to waterbodies from developed sites, preventing erosion and sedimentation from construction activities, promoting infiltration for aquifer recharge, and minimizing damage to public and private property from flooding. These Stormwater Management Regulations have been developed to provide reasonable guidance for the regulation of project design, construction and post-development stormwater runoff for the purpose of protecting local water resources from degradation.

Nothing in the Ordinance or these Regulations is intended to interfere with, abrogate or annul the requirements of the Code of Ordinances, or any other ordinance, rule or regulation,

statute or other provision of law that may be adopted by the City of Northampton. The requirements of the Ordinance or these Regulations should be considered minimum requirements, and where any provision of the Ordinance or these Regulations imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

SECTION 3: DEFINITIONS

The definitions contained herein apply to issuance of a Stormwater Management Permit established by Ordinance Chapter 281: Stormwater Management and implemented through these Stormwater 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.

ACRE – A unit of land equal to 43,560 square feet (Imperial acre).

ADVERSE IMPACT – Any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses which are or may potentially be harmful or injurious to human health, welfare, safety or property, to biological productivity, diversity, or stability, or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

AGRICULTURAL ACTIVITY – Producing or raising one or more of the following agricultural commodities for commercial purposes:

a) Animals, including but not limited to livestock, poultry, and bees;
b) Fruits, vegetables, berries, nuts, maple sap, and other foods for human consumption; and
c) Feed, seed, forage, tobacco, flowers, sod, nursery or greenhouse products, and ornamental plants or shrubs.

ALTER – Any activity that will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage patterns.

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 or 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.

APPLICANT – Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision of the Commonwealth or the Federal government, to the extent permitted by law, requesting a Stormwater Management Permit.

AS-BUILT PLANS – Drawings that completely record and document the stormwater management system and other applicable features and conditions of a constructed project as described in Section 9.

BEST MANAGEMENT PRACTICES (BMPs) – Schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants from a site. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

CLEAN WATER ACT – The federal Water Pollution Control Act (33 USC § 1251 et seq.), and any subsequent amendments thereto.

CLEARING – Any activity that removes the vegetative surface cover.

COMMON PLAN OF DEVELOPMENT OR SALE – An area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

CONSTRUCTION ACTIVITY – Disturbance of the ground by removal of vegetative surface cover or topsoil, grading, excavation, clearing or filling.

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 flow.

DESIGN STORM – A rainfall event of specified size and return frequency that is used to calculate the runoff volume and peak discharge rate to a BMP.

DETENTION – The temporary storage of storm runoff in a BMP used to control the peak discharge rates and provide gravity settling of pollutants.

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 municipal storm drain system or into the Waters of the United States or Commonwealth of Massachusetts from any source.

DISTURBANCE – Any action that alters the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g. excavating, cutting, and filling), soil compaction and movement and stockpiling of top soils.

DRAINAGE AREA – The area contributing runoff to a single point, measured in a horizontal plane and enclosed by a ridgeline or other topographic divide.

EASEMENT – A grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

ENVIRONMENTALLY SENSITIVE SITE DESIGN – Site planning and layout that seeks to create pockets of development that avoid sensitive natural areas to prevent disruption of the natural hydrology and habitat function of the site.

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

EROSION AND SEDIMENT CONTROL PLAN – A document containing narrative, drawings and details developed by a qualified 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.

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.

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

GROUNDWATER – Water beneath the surface of the ground.

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

HAZARDOUS MATERIAL OR WASTE – Any material which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infections or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment. Toxic or hazardous materials include any synthetic organic chemical, petroleum product, heavy metal, radioactive or infectious waste, acid and alkali, and any substance defined as Toxic or Hazardous under M.G.L. Ch.21C and Ch.21E, and the regulations at 310 CMR 30.00 and 310 CMR 40.00.

HYDROLOGY MODEL – Computations to illustrate existing and proposed hydrologic flow at a site.

IMPERVIOUS SURFACES – 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 and soil surfaces.

IMPOUNDMENT – A stormwater pond created by either constructing an embankment or excavating a pit that retains a permanent pool of water.

INDIRECT STORMWATER DISCHARGE – The discharge of treated or untreated stormwater to the Waters of the U.S and Waters of the Commonwealth of Massachusetts, including rivers, streams, brooks, or wetlands without a connection to or discharge to the municipal separate storm sewer system (MS4) before flows reach the water resource.

INFEASIBLE – Not technologically possible, or not economically practicable and achievable in light of best industry practices.

INFILTRATION – The downward movement of water from the surface to the subsoil so as to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LAND DISTURBANCE 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, or excavating, including grubbing; or results in an alteration of drainage characteristics.

LAND USE WITH HIGHER POTENTIAL POLLUTION LOAD (LUHPPL) – LUHPPLs are defined in 310 CMR 10.04 and further described in the Massachusetts Stormwater Handbook.

LOT – An individual tract of land as shown on the current Assessor's Map on which a property 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 (LID) – A development strategy that seeks to mimic (or in the case of redevelopment, restore or recreate) a site's predevelopment hydrology through protection of on-site natural features and environmentally sensitive site design that limits impervious areas, reserves open space, and uses decentralized small-scale facilities to capture and manage rainfall (or snowmelt) close to where it falls. These small-scale facilities serve to slow, absorb, and treat flow and include bio-retention areas, vegetated swales, porous pavements, cisterns, and green roofs.

MASSACHUSETTS STORMWATER HANDBOOK AND STORMWATER STANDARDS – The guidance issued by Massachusetts Department of Public Works (MassDEP), and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act M.G.L c. 131 §40 and the Massachusetts Clean Waters Act M.G.L. c.21 §23-56. The Handbook and Standards address stormwater impacts through implementation of performance standards to promote increased stormwater recharge, the treatment of runoff from polluting land uses, low impact development (LID) techniques, pollution prevention, the removal of illicit discharges to stormwater management systems, and improved operation and maintenance of stormwater best management practices.

MUNICIPAL SEPARATE STORM SEWER SYSTEM ("MS4") – The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drain system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the City of Northampton.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS ("MS4 PERMIT") – A permit issued by United States Environmental Protection Agency that regulates the discharge of pollutants to waters of the United States.

NEW DEVELOPMENT – Any construction activities or land alteration on a site that has not previously been developed to include buildings or impervious cover.

NONPOINT SOURCE POLLUTION – Pollution from any diffuse source 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 before finally depositing them into a water resource area.

OUTFALL – The point at which stormwater flows out from a discernible, confined and discrete conveyance into Waters of the U.S. or Commonwealth of Massachusetts.

OWNER – A person who holds primacy title to the property.

PEAK DISCHARGE – The maximum instantaneous rate of flow during a storm, usually in reference to a specific design storm event.

PERSON – Any individual, group of individuals, association, partnership, corporation, company, business, organization, trust, estate, administrative agency, public or quasi-public corporation or body, the Commonwealth or political subdivision thereof, or any legal entity, its representatives, agents or assigns.

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

POLLUTANT – Any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, whether originating at a point or nonpoint source, that is or may be introduced into any sewage treatment works, watercourse, or Waters of the Commonwealth. Pollutants shall include, without limitation:

a) Paint, varnish, and solvents.
b) Oil, anti-freeze, and other automotive fluids.
c) Non-stormwater liquids
d) Solid wastes and yard wastes.
e) Refuse, rubbish, garbage, litter, or other discarded or abandoned objects, accumulations and floatables.
f) Pesticides, herbicides, and fertilizers.
g) Hazardous materials and wastes.
h) Sewage, fecal coliform and pathogens.
i) Dissolved and particulate metals.
j) Animal wastes and pet wastes.
k) Rock, sand, salt and soils.
l) Construction wastes and residues.
m) Noxious or offensive matter of any kind.

POST-DEVELOPMENT – The conditions that may reasonably be expected or anticipated to exist after stabilization and 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 stabilization and completion and does not refer to the construction phase of a project.

PRE-DEVELOPMENT – The conditions that exist at the time that plans for land development are submitted to the Stormwater Authority. Where phased development of plan approval occurs, the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

QUALIFIED PERSONNEL – A person or persons knowledgeable in the principles and practices of erosion and sediment controls who possess the skills to assess conditions at a construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater water discharges associated with construction activity (e.g., professional engineer, CPESC, etc).

RECHARGE – The process by which groundwater is replenished by precipitation through the percolation of water through the soil.

REDEVELOPMENT – Any development, rehabilitation, expansion, demolition or phased project that disturbs the ground surface that is not considered new development.

RESOURCE AREA – Any area protected under, including without limitation: the Massachusetts Wetlands Protection Act, the Massachusetts Rivers Act, or the City of Northampton Wetland Protection Ordinance.

RESPONSIBLE PARTIES AND POTENTIALLY RESPONSIBLE PARTIES – The property owner(s), persons with financial responsibility, persons with operations and/or maintenance responsibility and easement grantors.

RETENTION – The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

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

SEDIMENT – Any 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 of depositing material that has been suspended and transported in water.

SITE – The location and areal extent of construction or land disturbance activities, including but not limited to the creation of new impervious surface and modifications of existing impervious cover, or other site alterations such as clearing and grubbing.

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

STABILIZATION – The use, singly or in combination, or mechanical, structural or vegetative methods, to prevent or slow erosion.

STORMWATER – Runoff from precipitation or snowmelt and surface water runoff and drainage.

STORMWATER AUTHORITY – The Director of the City of Northampton Department of Public Works (DPW), or their authorized agent(s), acting pursuant to the Stormwater Management Ordinance to administer, implement, and enforce these Regulations and associated ordinance and to adopt any regulations pursuant to it.

STORMWATER MANAGEMENT CERTIFICATE OF COMPLIANCE (SMCC) – A document issued by the Stormwater Authority after all construction activities have been completed, which states that all conditions of an issued permit have been met and that a project has been completed in compliance with the conditions set forth in the permit.

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

STORMWATER MANAGEMENT OPERATION, MAINTENANCE AND INSPECTION AGREEMENT (MAINTENANCE AGREEMENT) – A legally recorded document that acts as a property deed restriction, and which provides for long-term operation, maintenance and inspection of stormwater management practices and structures.

STORMWATER MANAGEMENT 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 from the adverse effects of uncontrolled and untreated stormwater runoff.

STORMWATER MANAGEMENT PLAN – A document containing narrative, drawings, details and reporting requirements developed by a qualified professional engineer (PE), which describes structural and non-structural best management practices designed to control the discharge of pollutants from impervious surfaces and onsite activities as well as the volume and peak rate of surface runoff from a site on an ongoing basis both during and after the completion of construction.

START OF CONSTRUCTION – The first land-disturbing activity associated with a development, including land preparation, such as clearing and grubbing, grading and filling, installation of streets and walkways; excavation for basements; footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

SWALE – A natural depression or wide shallow ditch used to temporarily store, route or filter runoff.

TOTAL MAXIMUM 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 waterbody 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.

TOTAL SUSPENDED SOLIDS (TSS) – Undissolved organic or inorganic particles in water.

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

WATER RESOURCE AREA – Same as "Waters of the Commonwealth."

WATERS OF THE COMMONWEALTH – All waters within the jurisdiction of the Commonwealth of Massachusetts, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and groundwater. These are protected water resources through state and/or federal regulation and Waters of the United States as defined under the Federal Clean Water Act (33 U.S.C. § 1251, et seq.) as hereafter amended.

SECTION 4: ADMINISTRATION

4.1 Responsibility

4.1.1 The Stormwater Authority shall administer, implement and enforce these Regulations.

4.1.2 These Stormwater Regulations may be amended periodically by the Stormwater Authority in accordance with Section 281.3.4 of the City of Northampton Stormwater Management Ordinance. The Stormwater Authority may amend the Regulations due to changes in the MS4 Permit, revised guidance from Massachusetts Department of Environmental Protection (MassDEP) or to update any administrative procedures and practices described herein.

4.1.3 The process to amend or revise these Regulations is described in Section 281.3.4 of the Stormwater Management Ordinance and shall include a public hearing held by the Stormwater Authority.

4.2 Fees

The Stormwater Authority may establish an application fee schedule, based on the type and complexity of projects, and may update this fee as needed to cover the costs of permit administration for Stormwater Management Permits.

The Stormwater Authority is authorized to retain a Registered Professional Engineer (PE) or other professional consultant to advise the Stormwater Authority on any or all aspects of the permit application and/or the project's compliance with conditions of a Review or Permit. The Stormwater Authority may require the applicant to pay reasonable costs to be incurred by the Stormwater Authority for the employment of outside consultants as described in Section 6.6.2 and as authorized by M.G.L. c.44, § 53G.

4.3 Inspection and Site Supervision

The Stormwater Authority or its designated agent shall require inspections to verify and document compliance with the Stormwater Management Permit.

SECTION 5: APPLICABILITY

5.1 Stormwater Management Permit

5.1.1 Prior to the issuance of any site plan approval or city-required construction permit for any proposed development listed below, a Stormwater Management Permit must be approved by the Stormwater Authority. No person may initiate a construction or land disturbance activity, including clearing, grading, excavation or redevelopment that will disturb land at the thresholds outlined below, without first obtaining a Stormwater Management Permit. The following activities will be required to submit a complete Stormwater Management Permit application as provided for in the Stormwater Management Regulations:

(a) Any construction activity, new development or redevelopment that will disturb equal to or greater than 43,560 square feet, including land disturbance activity, new development or redevelopment that is part of a common plan of development or sale that will disturb equal to or greater than 43,560 square feet (construction activity that will disturb greater than 35,000 sf and less than 43,560 sf must provide written certification for an exemption in accordance with Section 281.2.3 (i) of the Stormwater Management Ordinance);

(b) An alteration, redevelopment, or conversion of land use to a "land use with a higher potential pollutant load" as defined in the most recent version of the Massachusetts Stormwater Handbook.

5.2 Exemptions

A list of activities that are exempt from the requirements of the Ordinance and these Regulations is found in Section 281.2.3 of the Stormwater Management Ordinance.

SECTION 6: APPLICATION PROCEDURES AND REQUIREMENTS

While the applicant can be a representative or agent of the owner, the permit is issued to the owner of the site. Approval must be obtained from the Stormwater Authority before the beginning of land-disturbing activities. Approval to proceed with site changes will be contingent on the application submission's completeness, demonstration of compliance with design standards and satisfactory permitting inspections.

6.1 Permit Required Prior to Activity

A Stormwater Management Permit must be obtained prior to the commencement of any construction or land disturbance activity for which such a permit is required. A Stormwater Management Permit must be obtained prior to issuance of any building, grading or other land development or construction permits required for the project.

6.2 Actions

The Stormwater Authority may take any of the following actions as a result of an application for a Stormwater Management Permit, rendered in writing and submitted to the applicant and the appropriate City department(s) and board(s):

(a) Approve the Stormwater Management Permit application, subject to such conditions, modifications or restrictions as the Stormwater Authority deems reasonable and necessary, based upon determination that the proposed plan, as conditioned, modified, or restricted, meets the purposes in Section 2 and the standards in Section 7 of these Regulations and will adequately protect the water resources of the community as set forth in the Ordinance and these Regulations;

(b) Request additional information that the Stormwater Authority deems necessary to adequately describe or review the proposed project, which information shall be provided within ninety (90) days or such other time period ordered by the Stormwater Authority.

(c) Disapprove the Stormwater Management Permit application for failure to provide further information in accordance with subparagraph (b), above, or based upon a determination that the proposed plan, as submitted, does not meet the purposes in 281.1.3 of the Stormwater Management Ordinance or the standards in these Regulations, nor adequately protect water resources, as set forth in the Ordinance and these Regulations.

6.3 Pre-Application Plan Review

It is recommended that applicants for a Stormwater Management Permit attend at least one pre-application meeting or submit draft plans and documents for review to the Stormwater Authority. The intention of such a meeting is to provide the applicant with advice and guidance relative to the approval process and to allow the applicant and the DPW to have a preliminary conversation about the site, stormwater management and erosion control performance standards for the proposed work.

6.4 Consent to Entry

Filing an application for a Stormwater Management Permit grants the Stormwater Authority, its agent, or designee permission to enter the property while the application is under review to verify the information in the application, to inspect for compliance throughout the term of the resulting permit and at any time after a Stormwater Management Permit is issued to conduct inspections, surveys or sampling as deemed reasonably necessary for compliance with the permit conditions. The property owner shall be provided verbal notification that an inspection will take place. In the event of an emergency, no notification is required.

6.5 Application Filing & Procedures

6.5.1 An application for a Stormwater Management Permit may be filed with the Stormwater Authority on any regular business day. The permit application filing date is the date

the Stormwater Authority receives the complete permit application, including all documents as required herein.

6.5.2 Filing Requirements - The applicant shall file with the Stormwater Authority one (1) original and one (1) electronic copy of a completed application package for a Stormwater Management Permit. While the applicant can be a representative or agent of the owner, the permittee must be the owner of the site. The Stormwater Management Permit application package shall include:

(a) A completed application form with original signatures for all owners and an owner certification statement;

(b) A list of names and addresses of abutters located immediately adjacent to the parcel(s) on which the proposed project is located, including property owners in another municipality and on the opposite side of a roadway;

(c) Proof of notification of abutters, including a copy of the completed form letter provided for in the Stormwater Management Permit application;

(d) Non-refundable payment of the application fee, if applicable (see Appendix A);

(e) One digital and one paper copy of each:

i. a complete Stormwater Management Report and Site Plans, per Section 8.1. 8.2, 8.3 and 8.4
ii. Erosion and Sediment Control Plan, per Section 8.5
iii. Draft Stormwater Operation, Maintenance and Inspection Plan per Section 8.6.

6.5.3 Determination of Administrative Completeness: The Stormwater Authority shall make a determination as to the administrative completeness of the application in accordance with the filing requirements listed in section 6.5.2.

6.5.4 Within 30 days of the receipt of an administratively complete permit application, including all documents as required herein, the Stormwater Authority shall inform the Applicant of the action taken, in accordance with Section 6.2.

6.5.5 If the Stormwater Authority determines that additional information is necessary as described in 6.2 (b), the Applicant may make the necessary revisions and resubmit the application in accordance with Section 6.2 (b) without paying an additional application fee. The Stormwater Authority shall have 30 days from the filing date of the additional information or revised application to inform the Applicant of the action taken, in accordance with Section 6.2.

6.5.6 Opportunity for Public Comment - Applicants must notify abutters located immediately adjacent to the parcel(s) on which the proposed project is located prior to submitting an application, using the form letter provided for in the Stormwater Management Permit application. The letter notifies abutters about the project, provides information for how to access application documents and provides information for abutters to contact the Stormwater Authority to provide any comments directly to the Stormwater Authority during the project review period.

The applicant must provide certificate of mailing and proof of mailing to the Stormwater Authority at the time of application submission.

The Stormwater Authority shall accept written comments and will share the comments with the applicant.

The Stormwater Authority is not required to hold a public hearing for projects or activities under the jurisdiction of these Regulations. For activities also requiring approval of other City Boards, a public hearing shall be held in accordance with their procedures.

Where a public hearing is required through another permit process for the same project, the requirements to notify abutters as part of the Stormwater Management Permit application shall be waived.

6.6 Application Fee and Technical Review

6.6.1 Application Fee

The non-refundable fee for review of any Stormwater Management Permit application shall be based on the amount of land to be disturbed and the project type and the fee structure established by the Stormwater Authority. All fees shall be credited to the Stormwater and Flood Control Utility Enterprise Fund. All fees must be paid in full before the permit application review begins.

A table of the stormwater management permit fee schedule is located in Appendix A.

6.6.2 Technical Review

Some permit applications may require the Stormwater Authority to engage the employment of outside consultants for specific expert services deemed necessary by the Stormwater Authority to come to a final decision on the application. Those services may include, but are not limited to, hydrologic and drainage analysis, hydrogeological analysis, stormwater quality analysis, inspections, as-built plan review and analysis of legal issues. The need to engage an outside consultant shall be at the sole discretion of the Stormwater Authority.

a) The consultant shall be chosen by, and report only to, the Stormwater Authority. The fee charged by the consultant shall be paid for by the Applicant.

b) The Stormwater Authority shall give written notice to the Applicant of the selection of an outside consultant, which notice shall state the identity of the consultant and the fee to be charged. Such notice shall be deemed to have been given on the date it is mailed or hand delivered.

c) The Applicant shall pay the consultant fee and pay the retainer, if required, in advance. Failure by the Applicant to pay the consultant fee and pay the retainer, if required, within (10) business days of written notice by the Stormwater Authority shall be cause for the Stormwater Authority to determine that the application is incomplete.

d) An Applicant may appeal the Stormwater Authority's selection of an outside consultant based only on the criteria provided in MGL Ch. 44, §53G. Such an appeal shall be made to the City Council, which must issue their decision within one month. In the event that the City Council does not make a decision within one month, the Stormwater Authority's selection shall stand. Consistent with the provisions of MGL Ch. 53G, the required time limits for action upon an application by the Stormwater Authority shall be extended by the duration of the administrative appeal.

6.7 Failure to Act

Failure of the Stormwater Authority to take final action upon an application within the timeframes specified in Sections 6.5.4 and 6.5.5 shall be deemed to be approval of said application and shall authorize the applicant to proceed in accordance with the plans filed unless such time is extended by agreement between the Applicant and the Stormwater Authority.

6.8 Appeals of Actions by the Stormwater Authority

A decision of the Stormwater Authority to approve or disapprove a permit application shall be final. Further relief of a decision by the Stormwater Authority shall be reviewable in a court of competent jurisdiction in accordance with MGL ch 249 §4. No approval of a Stormwater Management Permit shall become effective until a final decision on any appeal is entered.

6.9 Time Frame to Commence Activity

The construction activities shall begin within three years after issuance of the Stormwater Management Permit. If the project does not begin within three years, the permittee must request an extension from the Stormwater Authority. If the project has changed, revised plans and documents must be submitted. The Stormwater Authority may grant an extension, at its discretion, to the three-year time limit on a Stormwater Management Permit. If the project has changed in a substantive way, a new Stormwater Management Permit may be required.

6.10 Plan Changes

The permittee must notify the Stormwater Authority in writing of any drainage change or alteration in the system authorized in a Stormwater Management Permit before making any change or alteration. If the Stormwater Authority determines that the proposed change or alteration is significant, based on the stormwater management standards in Section 7 of these Regulations and accepted construction practices, the Stormwater Authority may require the filing of an amended application. If any change or deviation from the Stormwater Management Permit occurs during a project, the Stormwater Authority may require the installation of interim measures before approving the change.

6.11 Project Completion

At completion of the project, the permittee shall submit one (1) paper and one (1) electronic copy of as-built record drawings of all stormwater controls and treatment best management practices required for the site as required in Section 9 of these Regulations. The

Stormwater Authority shall issue a Stormwater Management Certificate of Compliance after the permittee has completed the steps outlined in Section 9.

SECTION 7: PERFORMANCE STANDARDS

7.1 Resources and Guidance on Requirements

7.1.1 Massachusetts Stormwater Standards and Stormwater Handbook – The MassDEP Stormwater Management Standards and the Massachusetts Stormwater Management Handbook, as updated or amended, is hereby incorporated by reference as part of these Regulations, and shall furnish additional policy, criteria and information, including specifications and standards, for the proper implementation of the requirements of these Regulations. The Massachusetts Stormwater Handbook includes a list of acceptable stormwater treatment practices, including design criteria for stormwater practices.

7.1.2 Rainfall Data – The recommendation for rainfall data to be used in calculations is currently being updated in the Massachusetts Stormwater Handbook. In the interim, applicants shall calculate stormwater peak runoff rates, using the 90% upper confidence interval mean of NOAA Atlas 14 data for Northampton. MassDEP refers to this as "NOAA plus" and has indicated that it incorporates risk observed in the current data to reflect a range of larger storms.

7.1.3 Erosion and Sediment Control – Refer to the *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas*, MassDEP, 2003, and as updated or amended.

7.1.4 Pollutant Removal – Pollutant removal capabilities for stormwater management facilities, unless otherwise stated, shall be calculated using EPA Region 1 BMP Accounting and Tracking Tool (BATT), MS4 Permit Appendix F Attachment 3 (see 2020 permit modifications) or other BMP performance evaluation tool provided by EPA Region 1 or MassDEP, where available.

7.2 Construction Stormwater Management

7.2.1 At a minimum, all projects shall implement practices to control construction-related erosion, sedimentation, and stormwater pollution in accordance with the most recent versions of the Massachusetts Stormwater Handbook and the *Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas*, or more stringent standards as specified in these Regulations.

7.2.2 The following performance standards shall be met:

(a) Natural Resource Protection: Before commencing land disturbance activities, the limits of permitted disturbance areas shall be marked with high-visibility flagging, fencing, and/or signage. Areas designated for revegetation and/or infiltration-based stormwater practices shall be marked with flagging, fencing, and/or signage to restrict use of heavy vehicles and equipment in those areas to avoid soil compaction. Tree protection shall be installed around the dripline for all trees to be preserved. Buffers

and other restricted areas shall be maintained as required in a wetlands protection authorization from the Northampton Conservation Commission or MassDEP.

(b) Area of Disturbance: Clearing and grading shall only be performed within areas needed to build the project, including structures, utilities, roads, recreational amenities, post-construction stormwater management facilities, and related infrastructure. Construction activities shall be phased to minimize the area of disturbed soil at any one time.

(c) Soil Stabilization: The time that soil is exposed shall be minimized by stabilizing dormant areas as work progresses. Exposed areas shall be vegetated, hydromulched, protected with erosion control blankets, or otherwise stabilized within 14 days after land disturbance activities have permanently ceased or will be temporarily inactive for 14 or more days. Vegetative cover shall be prepared in the fall to ensure that exposed areas have cover before the first freeze.

(d) Stockpiles: Materials shall not be stored or stockpiled near a storm drain or a wetland resource area. Stockpiled materials that will be unused for 14 or more days shall be covered with roof, tarp, or temporary seeding (of soil stockpiles). Perimeter controls shall be installed around stockpile and staging areas.

(e) Perimeter Controls: Perimeter sediment controls, such as silt fencing and filter tubes, shall be installed around downgradient boundaries, along all resource areas, and around stockpile and staging areas. Compost socks and straw bales shall be free of invasive species. Perimeter controls shall not be removed until the drainage areas have been permanently stabilized.

(f) Stabilized Construction Entrance: Track-out controls (e.g., gravel apron) shall be installed at each construction entrance to remove sediment from vehicles and prevent tracking onto public roads. Where sediment has been tracked-out from the site, paved roads, sidewalks, or other paved areas shall be swept or vacuumed at the end of the workday. Sediment shall not be swept or hosed into any stormwater conveyance, storm drain inlet, or waterbody.

(g) Inlet Protection: Filter bags, filter tubes, or other inlet protection controls shall be installed to prevent sediment from entering downgradient storm drains. Inlet controls shall not be removed until the drainage areas have been permanently stabilized.

(h) Runoff Diversion: Runoff shall be intercepted and diverted away from disturbed areas with berms, swales, or pipes toward stabilized outlets. Conveyances shall be stabilized with vegetation, erosion control blankets, check dams, or similar practices to slow velocities and prevent erosion.

(i) Sediment Removal: Sediment traps and basins shall be used to remove suspended solids from runoff before it discharges from the site. Traps and basins shall be designed to use baffles, multiple cells, and other practices to maximize the flow path

and settling time. Sediment controls shall not be removed until the drainage areas have been permanently stabilized.

(j) Dewatering: Dewatering activities shall use tanks, filter bags, or other practices to remove sediment before discharge. Water shall not be discharged in a manner that causes erosion or flooding.

(k) Outlet Protection: Pipe outlets shall have stone aprons, level spreaders, or other energy dissipation practices installed to prevent erosion.

(l) Construction Waste Management: Trash, debris, and sanitary wastes shall be removed on a regular basis. Dumpsters shall be covered at the end of every workday and before rain events. Concrete mixers shall be washed out only in designated areas with liners. Demolition debris, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes may not be discharged from the site and shall be legally disposed of.

(m) Post-Construction BMPs: Stormwater management facilities to be used after construction shall not be used as BMPs during construction unless otherwise approved by the Stormwater Authority. Many technologies are not designed to handle the high concentrations of sediments typically found in construction runoff, and thus must be protected from construction-related sediment loadings.

(n) Dust Control**:** Dust control shall be used during grading operations. Dust control methods may consist of grading fine soils on calm days only or dampening the ground with water.

(o) Inspection and Maintenance: Erosion and sediment controls shall be inspected as needed and at a minimum before and after rain events. Accumulated sediments shall be removed, and erosion and sediment controls shall be repaired or replaced as needed to ensure they perform as intended.

7.3 Post-Construction Stormwater Management

7.3.1 Massachusetts Stormwater Management Standards – All projects subject to these regulations shall comply with all current Massachusetts Stormwater Management Standards, or more stringent standards as specified in these Regulations.

7.3.2 Nitrogen-Removal Optimization – Stormwater BMPs must be optimized for nitrogen removal. Guidance is provided in Attachment 3 to Appendix F of the 2016 MS4 Massachusetts General Permit (see 2020 permit modifications). When proposed BMPs are not covered in EPA Region 1's tools, any other state or federally approved BMP performance estimates can be used to estimate pollutant removal of the proposed or installed BMP.

7.3.3 Low Impact Development (LID) – All projects must use LID site planning and design strategies to reduce the discharge of stormwater from both new and redevelopment projects. All projects must evaluate and, unless infeasible, implement LID site planning and design practices. If the Applicant finds that LID practices are infeasible, the Applicant shall

demonstrate which LID practices were evaluated and provide reasons why those practices are infeasible. If full compliance is not provided, an applicant must document why key steps in the process could not be met and what is proposed for mitigation.

7.3.4 Hazardous Chemicals and Petroleum Products – Projects involving the storage or use of hazardous chemicals or petroleum products shall incorporate handling and storage best management practices that prevent such chemicals from contaminating runoff from the site into infiltration systems, receiving water bodies, or the MS4, and shall include a list of such chemicals in the application.

7.3.5 Connection to City Stormwater System – If the destination for the outlet of a stormwater management facility is the City's stormwater system, the existing capacity and condition of that system will be determined by the Stormwater Authority who may require additional measures to reduce proposed volumes and peak flows based on existing capacity and condition of the City's stormwater system.

7.3.6 Performance Standards for New Development

(a) Stormwater management systems for new development projects 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 post-construction impervious surface area on the site.

(b) Average annual pollutant removal requirements are achieved through one of the following methods:

i. 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 design guidance or performance standard may be used to calculate BMP performance; or

ii. Retaining the volume of runoff equivalent to, or greater than, one (1) inch multiplied by the total post-construction impervious surface area on the new development site; or

iii. Meeting a combination of retention and treatment that achieves the above standards.

7.3.7 Performance Standards for Redevelopment

(a) Stormwater management systems on redevelopment sites shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual post-construction 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.

(b) Average annual pollutant removal requirements are achieved through one of the following methods:

i. 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 design guidance or performance standards (e.g., State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance; or

ii. 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

iii. Meeting a combination of retention and treatment that achieves the above standards.

7.4 Stormwater Management Design Standards

7.4.1 Projects must be designed to manage stormwater runoff from the project site in accordance with Massachusetts Stormwater Management Standards, the MS4 Permit, recognized engineering methodologies, and these Regulations with an emphasis on Low Impact Development techniques in the design.

7.4.2 Projects must manage surface runoff so that no flow is conducted over public ways, nor over land not owned or controlled by the Applicant unless an easement in proper form is obtained permitting such discharge.

7.4.3 Projects must use Low Impact Development 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.

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

7.4.5 Stormwater management systems shall be designed to avoid disturbance of areas susceptible to erosion and sediment loss, avoiding, to the greatest extent practicable: the damaging of large forest stands; building on steep slopes (15% or greater); and disturbing land in wetland buffer zones and floodplains.

7.4.6 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.

7.4.7 For purposes of computing runoff, all pervious lands on the site shall be assumed prior to development to be in "good hydrologic condition" regardless of the conditions existing at the time of the computation.

7.4.8 Length of sheet flow used for times of concentration is to be no more than 50 feet.

7.4.9 Utilize the 24-hour rainfall data taken from the NOAA Atlas 90% confidence interval for Northampton, or as specified in the Massachusetts Stormwater Handbook. If there is a discrepancy between these two numbers, the higher shall be used.

7.4.10 Soil tests are to be conducted by a Registered Professional Engineer or Massachusetts Soil Evaluator, performed at the location of all proposed infiltration and stormwater storage BMPs, to identify soil descriptions, depth to estimated seasonal high groundwater, depth to bedrock, and soil texture.

7.4.11 The design infiltration rate shall be determined from the on-site soil texture and published Rawls rates or saturated hydraulic conductivity tests or other methods included in the recommendations of the Massachusetts Stormwater Handbook.

7.4.12 Size drainage pipes to accommodate at least the 10-year storm event and maintain velocities between 2.5 and 10 feet per second using the Rational Method. At critical facilities, drainage pipes may be required to be designed for a minimum 25-year storm event.

7.4.13 Size drainage swales to accommodate at least the 25-year storm event and velocities below 4 feet per second.

7.4.14 Size culverts to accommodate at least the 10-year storm event and design adequate erosion protection.

7.4.15 Size stormwater basins to accommodate the 100-year storm event with a minimum of one foot of freeboard.

7.4.16 All subsurface drainage structures shall be designed to accommodate HS-20 loading.

7.4.17 Catch basin structures are to be constructed as required by Northampton DPW and spaced less than 250 feet apart in roadways.

7.4.18 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)**;**.

7.4.19 Outfalls are to be designed to prevent erosion of soils, and pipes 24 inches or larger are to be fitted with grates or bars to prevent ingress;

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

7.4.21 Minimize permanently dewatering soils by:

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

b) Raising roadways to keep roadway section above SHGWE; and

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

7.4.22 Emergency Overflow – All stormwater management facilities shall be designed to provide an emergency overflow system and incorporate measures to provide a non-erosive velocity to flow along its length and at any outfall.

7.4.23 Downstream Structures – The designed release rate of any stormwater structure shall be modified if any increase in flooding or stream channel erosion would result at a down-stream dam, highway, structure, or normal point of restricted stream flow.

7.4.24 Centralized Detention Facilities – Detention basins for stormwater management should be used only as a last resort and only if there are serious site constraints that prevent the use of other BMP stormwater management facilities.

7.5 Off-site Mitigation

The Stormwater Authority may develop guidelines for meeting stormwater management performance standards off-site in the future. These guidelines will be at least as strict as those allowed in the MS4 Permit and the most recent Massachusetts Stormwater Handbook.

SECTION 8: STORMWATER MANAGEMENT PLAN REQUIREMENTS

8.1 Overview

The Stormwater Management Plan shall be prepared by a Registered Professional Engineer (PE) licensed in the Commonwealth of Massachusetts and include sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed development on water resources, and the effectiveness and acceptability of measures proposed for reducing adverse impacts from stormwater runoff. The plan(s) shall be in accordance with the criteria established in these Regulations and with the Massachusetts Stormwater Handbook, and the MS4 Permit requirements for pollutant removal. Pollutant removal calculations shall be completed using the methodology found in Appendix F Attachment 3 of the 2016 MS4 Permit (see 2020 permit modifications), or other EPA-approved method. The applicant shall certify on the drawings that all clearing, grading, drainage, construction, and development shall be conducted in strict accordance with the plan. Low Impact Development site planning and design strategies shall be used to the maximum extent feasible.

The Stormwater Management Plan shall contain the following components:

1) Stormwater Management Report
2) Existing Conditions Plan
3) Proposed Stormwater Management and Site Plans and Construction Details Plans
4) Erosion and Sediment Control Plan
5) Stormwater Management Operation and Maintenance Plan

8.2 Stormwater Management Report

The Stormwater Management Report shall fully describe the project in narrative, drawings and calculations. At a minimum, the Stormwater Management Report shall include:

8.2.1 Names, addresses and phone numbers of the applicant, owner and preparer;

8.2.2 Locus map using the relevant USGS map to show the site and adjacent properties;

8.2.3 Assessors map and lot number for the site and abutters immediately adjacent to the parcel(s) on which the proposed project is located;

8.2.4 A narrative describing:

(a) Purpose;

(b) Methodologies and assumptions;

(c) Existing and proposed uses and conditions;

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

(e) Soils information from test pits performed at the location of proposed stormwater management facilities, including soil descriptions, depth to seasonal high groundwater, depth to bedrock, and infiltration rates. Soil information will be based on test pits logged by a Massachusetts Registered Soil Evaluator, a Massachusetts Registered Sanitarian, or a Massachusetts Registered Professional Engineer;

(f) Project impacts and mitigation techniques, including:

i. Summary of proposed total area of disturbance, proposed impervious area, work within proximity of regulated wetland resources, aquifer and surface water protection zones, earthwork within four (4) feet of seasonal high groundwater elevations, and other sensitive environmental areas;
ii. Low Impact Development (LID) techniques considered for this project and an explanation as to why they were included or excluded from the project;
iii. Proposed best management practices;
iv. The immediate downgradient waterbody(s) that stormwater runoff from the project site discharges to, EPA's waterbody assessment and TMDL and/or impairment status of the waterbody and the LID features 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 downgradient properties, stormwater management systems and wetland resources.

(h) Summary of how the project is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook and Section 7 of these Regulations.

(i) Summary of how the project meets water quality requirements for Total Suspended Solids (TSS) and Total Phosphorus in accordance with the Massachusetts Stormwater Handbook and Section 7 of these Regulations.

8.2.5 Hydrological and hydraulic design calculations for the pre-development and post-development conditions. Calculations shall include:

(a) Hydrologic soils group (HSG) information, soil type, and relevant characteristics for the purpose of modeling the project's runoff, using NRCS soils information;

(b) Description of design storm frequency, intensity, and duration;

(c) Time of concentration;

(d) Runoff Curve Number (RCN) for each land use and soil hydrologic group;

(e) Peak runoff rates and total runoff volumes for each watershed for the 2-year, 10-year and 100-year 24-hour storm events;

(f) Information on construction measures used to maintain the infiltration capacity of the soil where any kind of infiltration is proposed and anticipated infiltration rates where applicable;

(h) Groundwater recharge analysis and BMP drawdown (time to empty);

(i) Culvert capacities and hydraulic calculations used to determine size, if applicable;

(j) Flow velocities;

(k) Data on the increase in rate and volume of runoff for the specified design storms;

(l) Data showing how project stormwater BMPs are optimized for nitrogen removal, using estimated nitrogen load from the proposed project and the load reduction achieved through proposed BMPs (calculations should use the methodology provided in Attachment 3 of Appendix F of the Massachusetts MS4 Permit (see 2020 permit modifications) or as otherwise updated by EPA Region 1);

(m) Data and documentation of sources for all computation methods and field test results showing how the project will meet stormwater runoff water quality and/or retention requirements of New Development or Redevelopment as specified in Section 7. This shall include:

i. Water quality design calculations showing the estimated Total Suspended Sediment (TSS) and Total Phosphorus (TP) load from the proposed project and the load reduction achieved through proposed BMPs, and

ii. Calculations showing runoff volumes from the total post-construction impervious surface area and retention of required volume;

iii. Calculations showing how applicant will meet required standards through a combination of water quality treatment and retention.

(n) Data showing BMP performance in critical areas, if applicable;

(o) Data for BMPs used for land uses of higher potential pollutant loads, if applicable;

(p) Post-development downstream analysis, if deemed necessary by the Stormwater Authority.

8.2.6 Completed MassDEP Checklist for Stormwater Report, stamped and signed by a Professional Engineer (PE) licensed in the Commonwealth of Massachusetts.

8.3 Existing Conditions Plan

This plan shall include the following:

(a) Lot lines and lines of existing streets;

(b) The existing zoning (including overlay districts) and land use at the site;

(c) The site's existing hydrology and topography with 2-foot contour intervals;

(d) Locations of existing utilities;

(e) Location, size, material, inverts data and details for all existing stormwater management system components and impoundments and wetlands on or adjacent to the site or into which stormwater flows;

(f) Location of soil test pits;

(h) A delineation of 100-year floodplains and method of delineation, if applicable;

(i) Habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Priority Habitat of Rare Species, Estimated Habitats of Rare Wildlife and Certified Vernal Pools within five hundred (500) feet of any construction activity.

8.4 Proposed Stormwater Management and Site Plans

The proposed stormwater management plan, site plan and construction details shall include the following:

(a) Location, size, material, inverts data and details for all proposed stormwater management system components including structures, pipes, swales, detention, retention, and infiltration systems and any other LID techniques or BMPs, including but not limited to the following:

i. Cross-sections and profiles of all brooks, streams, drainage swales and their method of stabilization;
ii. All measures for the detention, retention or infiltration of water;
iii. Drainage patterns and approximate slopes anticipated after major grading activities;
iv. All measures for the protection of water quality;

v. The structural details for all components of the proposed drainage systems and stormwater management facilities;
vi. Drawing notes specifying materials to be used, construction specifications, and typical details;
vii. Expected hydrology with supporting calculations;

(b) Profiles of drainage trunk lines;

(c) The location(s) of existing and proposed easements (with distances and bearings);

(d) The proposed limits of disturbance and a square-foot estimate of the total area expected to be disturbed by excavation, grading, or other construction activities;

(e) Proposed improvements including location of buildings, utilities or other structures, impervious surfaces and drainage facilities;

(f) Proposed topography, with contours at one-foot intervals and spot grades as necessary based on NAVD88;

(g) A drainage area map showing pre and post-construction watershed boundaries including upgradient areas that contribute stormwater flow onto the project site, drainage areas and stormwater flow paths for time of concentration (Tc) calculation;

(h) Locations of soil test pits;

(i) Post-construction landscaping that shows and describes the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practices;

(j) Any other relevant information requested by the Stormwater Authority.

8.5 Erosion and Sediment Control Plan

8.5.1 The Erosion and Sediment Control Plan shall be designed to ensure compliance with these regulations, the MS4 Permit, and if applicable, the NPDES General Permit for Stormwater 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.

8.5.2 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 (including the signed Notice of Intent and approval letter).

At a minimum, the Erosion and Sediment Control Plan shall include:

(a) A general location map with enough detail to identify the location of the construction site and Waters of the United States and Commonwealth both upstream and

downstream of the site. This map should include: Title, date, north arrow, names and parcel numbers of abutting parcels, scale and legend.

(b) Legible site map, showing the entire site, identifying at a minimum:

i. 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, the delineation and number of square feet of the land area to be disturbed and amount left undisturbed;
ii. Direction(s) of stormwater flow and approximate slopes anticipated after major grading activity;
iii. Locations of all structural and non-structural erosion and sediment control measures and BMPs;
iv. Locations where stabilization practices are expected to occur;
v. Locations for storage of materials, waste, vehicles, equipment, soil, snow and other potential pollutants;
vi. All existing site vegetation including tree lines, canopy layer and ground cover, identification of significant trees (>20" dbh) on the property and methods for tree protection consistent with the Northampton Tree List and Tree Planting Guidelines;
vii. Locations of natural features including bodies of water, wetlands and the 100-year flood elevation;
viii. Locations where stormwater discharges to a surface water (including all roads, drains and other structures that could carry stormwater to a wetland or other waterbody, on or off site);
ix. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply;

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

(d) Name and contact information for the party responsible for maintaining erosion and sediment control measures,

(e) Description of the following in narrative, calculations or drawings, as appropriate:

i. Description of site conditions and location and details of selected erosion and sediment control measures appropriate to the site;
ii. A narrative of the construction sequence/phasing of the project, with timing, schedules and sequence of development, including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization;
iii. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas;
iv. Description of both operation and maintenance of structural and non-structural measures, interim grading, and material stockpiling areas;

v. Interim and permanent stabilization practices for the site including 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;

vi. A construction period maintenance schedule for each control measure and the operator responsible;

vii. A description of how demolition materials, litter, sanitary waste, and any other waste will be managed on site and a description of construction 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;

viii. 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;

ix. Measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust;

x. Pollutant sources from areas other than construction and a description of control measures that will be implemented at those sites to minimize pollutant discharges;

xi. All allowable sources of non-stormwater discharges as listed in Chapter 278-5(D): Storm Drains of the Code of Ordinances. Non-stormwater discharges should be eliminated or reduced to the extent feasible. The Erosion and Sediment Control Plan must identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater components of the discharge;

xii. A description of how the proposed BMPs comply with the Massachusetts Stormwater Handbook and the requirements of these Regulations.

(f) The Plan must be prepared by a Professional Engineer (PE) or by a Certified Professional in Erosion and Sediment Control (CPESC) who certifies that the Erosion and Sediment Control Plan is in accordance with the criteria established in the Ordinance and these Regulations.

8.6 Stormwater Management Operation, Maintenance, and Inspection Agreement

8.6.1 The owner shall be responsible for adequate maintenance of BMPs described in the stormwater management plan for post-construction measures. A draft Stormwater Operation and Maintenance Plan is required at the time of plan submission for all projects that include structural and non-structural stormwater BMPs. The draft Stormwater Operation and Maintenance Plan shall establish the actions, schedule, responsibility, and financial mechanisms for ongoing operation and maintenance to ensure that the stormwater management system continues to function as designed and permitted. Prior to issuance of any building permits and prior to the start of construction, the final Stormwater Operation and Maintenance Plan and all of its contents as approved by the Stormwater Authority shall be recorded at the Hampshire

Registry of Deeds by the permittee as a Stormwater Management Operation, Maintenance and Inspection Agreement (Maintenance Agreement). The permittee shall provide copies of the Maintenance Agreement to all persons responsible for the operation and maintenance of the stormwater system.

The recorded Maintenance Agreement shall remain on file with the Stormwater Authority and adherence to it shall be an ongoing requirement for the life of the system. Any proposed changes to the Maintenance Agreement should be submitted to the Stormwater Authority and follow the procedures described in Section 8.6.4.

8.6.2 The Stormwater Management Operation, Maintenance and Inspection Agreement shall include:

(a) The names and address of the person(s) responsible for operation and maintenance;
(b) The person(s) financially responsible for maintenance and emergency repairs;
(c) Agreement that the person(s) responsible for the operation and maintenance will follow this schedule and maintain an operation and maintenance log to include inspections, repairs, replacement and disposal (including type of material and disposal location, if known);
(d) Agreement to submit annual reports each year by January 1st for all operation and maintenance activities in the previous calendar year to the Stormwater Authority;
(e) A list of easements with the purpose and location of each;
(f) Information on how future property owners will be notified of the presence of the stormwater management system and the requirement for proper operation and maintenance;
(g) Provisions for the Department of Public Works or its agent to enter the property at reasonable times and in a reasonable manner for the purpose of inspection;
(h) The signature(s) of the owner(s);
(i) An estimated operations and maintenance budget, including the cost of inspections;
(j) A description of all BMPs, including proper operating parameters and how the owner will determine if a BMP is not functioning properly;
(k) An operation and maintenance schedule for all stormwater management facilities including routine and non-routine maintenance tasks to be performed;
(l) An inspection log and a description of all inspection and maintenance procedures, responsibilities, and frequencies;
(m) A plan that is prepared to scale and shows the location of all stormwater management system components and discharge points.

8.6.3 Stormwater Management Easement(s)

(a) Stormwater management easements shall be obtained 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; and

iii. Direct maintenance access to structures requiring maintenance by heavy equipment.

(b) The purpose of each easement shall be specified in the Maintenance Agreement signed by the property owner(s).

(c) Stormwater easements are required for all areas used for permanent off-site stormwater control, unless a waiver is granted by the Stormwater Authority pursuant to Section 10.

(d) Easements shall be recorded at the Hampshire Registry of Deeds prior to recording of the Maintenance Agreement.

8.6.4 Changes to the Stormwater Management Operation, Maintenance and Inspection Agreement

(a) The owner of the stormwater management system must notify the Stormwater Authority of changes in ownership or assignment of financial responsibility within 30 days of the change in ownership or financial responsibility.

(b) The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of the Regulations by mutual agreement of the Stormwater Authority and the Responsible Parties. Any proposed changes to the Maintenance Agreement should be submitted to the Stormwater Authority for review. If the changes are considered substantial, the revised Maintenance Agreement shall be filed at the Hampshire Registry of Deeds.

8.6.5 Post-Construction Responsibilities

To ensure adequate long-term operation and maintenance of stormwater management practices, the owners are required to implement the following procedures, as directed by the Stormwater Authority:

(a) Filing by the owner of an annual Stormwater Operation and Maintenance Report with the Stormwater Authority on a form specified by the Stormwater Authority;

(b) Establishment by the owner of a dedicated fund or escrow account or similar financial instrument, to be maintained for the life of the stormwater management system and for an amount specified by the Project Engineer equal to double the annual cost to inspect and maintain the system and approved by the Stormwater Authority. Such fund or account may be used by the owner to perform its operation and maintenance responsibilities.

SECTION 9: STORMWATER MANAGEMENT CERTIFICATE OF COMPLIANCE (SMCC)

9.1 Stormwater Management Certificate of Compliance Requirements

Prior to issuance of a final certificate of occupancy and within six (6) months after the completion of construction and land disturbance activities permitted under a Stormwater Management Permit, the permittee must submit in writing a request for a Stormwater Management Certificate of Compliance (SMCC). The request shall include the following certification: "I hereby certify that all construction, development, and/or re-development has been completed in accordance with the project application and City requirements and all information is truthful to the best of my knowledge. The Stormwater Authority or its authorized agent may conduct inspections whenever necessary to determine compliance with the provisions of the Stormwater Management Permit, all applicable requirements of the Stormwater Management Ordinance and the Stormwater Management Regulations. Furthermore, I acknowledge that I am now responsible for the long-term operation and maintenance of all stormwater management facilities. During a transfer of ownership, I am responsible for informing prospective new owner(s) of the requirements of the Stormwater Management Operations, Maintenance and Inspection Agreement." The permittee must complete the following actions before the Stormwater Authority will consider the request for a SMCC:

9.1.1 As-Built Plans

Prior to issuance of a final certificate of occupancy and within six (6) months after the completion of construction and land disturbance activities, the permittee must submit an as-built report and certified as-built plans both signed and sealed by a Registered Professional Engineer (PE) licensed in the Commonwealth of Massachusetts (one hard copy and one electronic copy). The as-built report shall certify that the stormwater management facilities have been constructed in accordance with the approved Stormwater Management Plan, the conditions of the approved Stormwater Management Permit and any modifications to the plan approved by the Stormwater Authority. The as-built report must include an inspection of the stormwater management system consistent with the annual report required by the Stormwater Management Operation, Maintenance and Inspection Agreement for the project, confirmation that the stormwater management system has been cleaned of all sediment of debris and certification that the stormwater management system is functioning as designed. The as-built plans must depict all structural and non-structural stormwater management systems, including subsurface components, impervious and pervious surface areas on site, elevations, inverts, grading, materials, plantings, stormwater storage volumes, discharge points, layout, specification of proprietary stormwater structures and other critical details of the stormwater management systems and any easements obtained. Any discrepancies from the approved Stormwater Management Plan should be noted in the as-built report. The Stormwater Authority shall review the as-built plans and notify the permittee of any deficiencies with the plan and compliance issues with the constructed stormwater management systems.

9.1.2 Recording of Documents

Prior to issuance of a final certificate of occupancy and within six (6) months after the completion of construction and land disturbance activities, the permittee shall record the as-built plans as approved by the Stormwater Authority and any accompanying stormwater easements at

the Hampshire District Registry of Deeds and provide a receipt to the Stormwater Authority certifying this action.

9.2 Stormwater Management Certificate of Compliance Issuance

Upon written request by the permittee, the Stormwater Authority shall assess whether the work has been completed in substantial conformance with the Stormwater Management Ordinance, these Regulations, the approved Stormwater Management Plan and any conditions of the Stormwater Management Permit. Upon determination that the project is in compliance with the Stormwater Management Ordinance, these Regulations and the conditions of the Stormwater Management Permit, the Stormwater Authority shall issue a SMCC. An SMCC must be obtained prior to issuance of a final certificate of occupancy.

9.3 Non-compliance

It is the responsibility of the permittee to request, in writing, the issuance of a SMCC. A permittee who fails to request a SMCC may be found in noncompliance with the Stormwater Management Ordinance and face applicable enforcement actions. The Stormwater Authority may also withhold the performance guarantee until the SMCC is issued.

SECTION 10: WAIVERS

10.1 Authority

The Stormwater Authority may waive strict compliance with any requirement of the City of Northampton Stormwater Management Ordinance or the Regulations promulgated thereunder where such action is allowed by federal, state and local statutes and/or regulations; is in the public interest; and is not inconsistent with the purpose and intent of these Regulations or the Northampton Stormwater Management Ordinance.

10.2 Waiver Process

Any person seeking a waiver of the permit application requirements under Section 281.3.3 of the Ordinance must submit a written waiver request. Such a request shall be accompanied by an explanation and, where appropriate, documentation supporting the waiver request and demonstrating that strict application of the Ordinance or these Regulations does not further the purposes or objectives of the Ordinance or the Regulations.

All waiver requests shall be considered and either approved or disapproved within the 30 day application review period. If, in the opinion of the Stormwater Authority, additional time or information is required for review of a waiver request, the Stormwater Authority may request an extension of the review period.

SECTION 11: FINANCIAL PERFORMANCE GUARANTEE

The Stormwater Authority or their designee may require the permittee to secure an irrevocable letter of credit or other means of financial performance deposit deemed acceptable to

the Stormwater Authority prior to the start of construction and prior to the issuance of any building permit for the construction of a development requiring stormwater management under these regulations. The amount of the security shall not be less than the total estimated construction cost of the stormwater management elements at applicable Massachusetts state prevailing wage rates and public bidding requirements. The guarantee so required in this section shall include provisions relative to the forfeiture for failure to complete work specified in the approved Stormwater Management and Erosion and Sediment Control Plans, compliance with all of the provisions of this chapter and the applicable laws and regulations, and any time limitations identified therein. The guarantee shall not be fully released without a final inspection of the completed work by the Stormwater Authority, submission of as-built plans, and a Stormwater Management Certificate of Completion issued by the Stormwater Authority. When a letter of credit or other financial performance guarantee is supplied by the permittee to guarantee completion of elements of a permit issued by the Planning Board, the principal held by the City on behalf of the Planning Board may be increased by the amount determined by the Stormwater Authority, instead of the Stormwater Authority holding a separate letter of credit or bond, to avoid the double funding of projects and to avoid the added cost of carrying two letters of credit or bond. The Stormwater Authority must sign off on the Stormwater Management Certificate of Compliance before the applicant seeks release of the amount required by this permit.

SECTION 12: INSPECTIONS AND SITE SUPERVISION

12.1 Pre-construction Meeting

12.1.1 Prior to the start of land clearing, excavation, construction, redevelopment or any other construction activity, the permittee, the Project Engineer, 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.

12.2 Erosion and Sediment Control Inspection

12.2.1 The permittee shall be responsible for all inspections of erosion and sediment control measures on the site during construction. The permittee shall retain a Qualified Personnel to ensure that erosion and sediment control practices are installed in accordance with the approved Erosion and Sediment Control Plan and are providing effective erosion and sediment control. At a minimum, inspections of the erosion and sediment control measures by Qualified Personnel shall be performed at the following intervals during construction:

(a) Erosion and sedimentation control measures shall be inspected before the start of construction. The Stormwater Authority shall be notified at least 24 hours prior inspection. Additional erosion and sedimentation control inspections shall occur either:

- At least once every seven (7) calendar days; or

- Once every fourteen (14) calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater or the occurrence of runoff from snowmelt sufficient to cause a discharge.

(b) Site clearing – to occur after site clearing, rough grading and final grading to ensure erosion control practices are in accord with the plan;

(c) Rough grading has been substantially completed;

(d) Final Grading has been substantially completed;

(e) Final inspection – when all work, including construction of stormwater management facilities and landscaping have been completed and the site is stabilized.

The permittee is required to notify the Stormwater Authority of any change in inspection frequency, including termination of inspections due to site stabilization.

12.2.2 Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, discharge of pollutants. Sedimentation and erosion control measures identified in the Erosion and Sediment Control Plan and implemented on site must be observed to ensure proper operation and functioning. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

12.2.3 For each inspection required above, an inspection form must be completed and kept on-site, or submitted to the DPW upon request. The form must include the following information, at a minimum:

a) Inspection date;

b) Names, titles and qualifications of personnel conducting the inspection;

c) Weather information and a description of any discharges occurring at the time of the inspection;

d) Weather information for the period since the last inspections;

e) Location of discharges of sediment or other pollutants from the site;

f) Location of BMPs that need to be maintained;

g) Location of BMPs that failed to operate as designed or proved inadequate for a particular location;

h) Location where additional BMPS are needed that did not exist at the time of inspection;

i) Corrective action required including any changes to the SWPPP necessary and implementation dates; and

j) Corrective actions performed.

k) The inspection reports must identify incidents of non-compliance with permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the construction project or site complies with the permit.

12.3 Stormwater Management System Inspections

12.3.1 The permittee shall be responsible for all inspections of the construction of the stormwater management system. The permittee shall retain a Project Engineer (the design engineer or another professional engineer of record in the Commonwealth of Massachusetts) to document the construction of the proposed stormwater system and site development during all phases of the project and complete and certify As-Built Plans at the completion of the project as required in Section 9. The Project Engineer, through inspections and surveys of the site construction, shall check all elevations, inverts, grading, materials, plantings, layout, stormwater management structures (including subsurface components), stormwater storage volumes, discharge points, specification of proprietary stormwater structures, impervious and pervious areas and other critical aspects of the stormwater system and the site as they are being constructed during all phases of the project. The inspections by the Project Engineer are to be completed in coordination with the Stormwater Authority, which may be conducting its own inspections as noted in Section 12.4. All proposed changes to the approved stormwater facilities and site development shall be documented by the Project Engineer and submitted to the Stormwater Authority for review and approval by the Stormwater Authority prior to construction. The Project Engineer shall notify the permittee and the Stormwater Authority wherein the work fails to comply with the Stormwater Management Plan as approved. The approved plans shall be maintained at the site during the progress of the work. The inspections by the Project Engineer must identify any incidents of non-compliance with the permit conditions. Where an inspection does not identify any incidents of non-compliance, the inspection report must contain a certification that the construction project or site complies with the permit.

12.4 Stormwater Authority Inspections

12.4.1 The Stormwater Authority may conduct compliance inspections of the site and the stormwater management system including but not limited to the following: initial inspection during review of the application, erosion control inspection, bury inspection of subsurface systems, final inspection at the completion of work and spot inspections to review erosion and sediment control and compliance during all phases of construction.

12.5 Inadequacy of Stormwater Management System or Erosion and Sediment Controls

12.5.1 If the stormwater management system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the permittee prior to issuance of a Stormwater Management Certificate of Compliance. If the permittee fails to act, the Stormwater Authority may use the surety bond to complete the work.

12.5.2 If the erosion and sediment control system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Erosion and Sediment Control Plan, it shall be corrected by the permittee upon notice.

12.5.3 If the Stormwater Authority determines that there is a failure to comply with the Erosion and Sediment Control Plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order may be issued until any violations are corrected and all work previously completed has received approval by the Stormwater Authority.

12.5.4 If the Stormwater Authority determines that there is a failure to comply with the Stormwater Management 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 DPW.

SECTION 13: PERPETUAL OPERATION, MAINTENANCE, AND INSPECTION

13.1 Maintenance Responsibility

The owner of the property on which work has been performed for a project subject to a Stormwater Management Permit 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.

13.2 Maintenance Inspections

13.2.1 Stormwater management facilities and practices included in a Stormwater Management Operation, Maintenance and Inspection Agreement in accordance with Section 8 of these Regulations must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the Maintenance Agreement and these Regulations.

13.2.2. Inspections shall be completed by the owner in accordance with the recorded Stormwater Management Operation, Maintenance and Inspection Agreement.

13.2.3 Inspection reports for all stormwater management systems shall be kept on file by the owner and submitted to the Stormwater Authority as part of the Annual Report by January 1st of each year.

13.3 Right of Entry for Inspection

The terms of the Stormwater Management Operation and Maintenance and Inspection Agreement as specified in Section 8 of these Regulations shall provide for the Stormwater Authority or its agent to enter the property at reasonable times and in a reasonable manner for the purpose of inspections, surveys or sampling as deemed reasonably necessary. The Stormwater

Authority, its agents, officers, and employees shall have authority to enter upon the property for the purpose of performing their duties under this Regulation 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.

13.4 Records of Repair and Maintenance Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall provide a certified Annual Report that includes records of all maintenance and repairs that occurred over the last twelve (12) months to the Stormwater Authority. Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least five (5) years.

13.5 Failure to Maintain

If a responsible person fails or refuses to maintain the stormwater management facilities in good condition or meet the requirements of the Stormwater Management Operation, Maintenance and Inspection Agreement, the Stormwater Authority may take action to enforce compliance in accordance with Section 14.

SECTION 14: ENFORCEMENT

14.1 Authorized Enforcement Agency

The Stormwater Authority shall enforce this Ordinance and any associated regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

14.2 Enforcement and Penalties

14.2.1 Orders and Notices of Violation

When the Stormwater Authority determines that an activity is not being carried out in accordance with the Stormwater Management Ordinance or these Regulations, they shall issue a written notice of violation to the owner of the property. Written notices of violation shall contain the following:

i. The name and address of the owner;
ii. The address (when available) or the description of the building, structure, or land upon which the violation is occurring;
iii. A statement specifying the nature of the violation;
iv. A description of the remedial measures necessary to bring the development activity into compliance with the Ordinance and these Regulations and a time schedule for the completion of such remedial action. Remedial measures may include the following:
    (1) Maintenance, installation or performance of additional erosion and sediment control measures;

(2) Monitoring, analyses, and reporting;

(3) Remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity;

(4) Construction, reconstruction, repair or maintenance of stormwater BMPs or any other aspect of the post-construction stormwater management system;

(5) Remediation of adverse impacts resulting from improper construction or operation of the post-construction stormwater management system; and/or

(6) A requirement to eliminate discharges, directly or indirectly, into the municipal stormwater system, a watercourse or into the Waters of the Commonwealth.

v. A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

14.2.2 Stop-work Orders

Persons receiving an order or notice of violation may be required to halt all construction activities. This "stop work order" will be in effect until the Stormwater Authority confirms that the development activity is in compliance and the violation has been satisfactorily addressed. The Stormwater Authority may utilize the services of a Massachusetts registered professional engineer to verify compliance at the owner's expense.

14.2.3 Failure to address a notice of violation in the timeframe specified in the notice of violation can result in civil, criminal or monetary penalties as authorized in the Stormwater Management Ordinance and in these regulations.

14.2.4 Emergency Enforcement Action

The Stormwater Authority may determine that an imminent threat to public health, safety, or the environment exists, and the Stormwater Authority or designated agent may take immediate, emergency action to suspend access to the municipal stormwater system or perform actions to bring the site into compliance. The Stormwater Authority has the right to bill the violator for penalty fees, reasonable costs of materials, and personnel labor to perform these emergency actions, and administrative costs. Within 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 Stormwater Authority, including administrative costs.

Any bills sent to violators which remain unpaid for a time period of 30 days shall become a lien against the property until paid.

14.2.5 Restoration of Land

Any person who violates any provision of the Stormwater Management Ordinance,

these regulations or the terms and conditions in a Stormwater Management Permit may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within the time set forth in the notice, the Stormwater Authority, or its designated agent, may take necessary corrective action, the cost of which shall become a lien upon the property until paid in accordance with section 281.6.9 of the Stormwater Ordinance.

14.2.6 Hold on Certificate of Occupancy

To any person who violates any provision of the Stormwater Management Ordinance, these regulations or the terms or conditions in any Stormwater Management Permit, a certificate of occupancy will not be granted until the Stormwater Authority has confirmed that the construction activity is in compliance, a SMCC has been issued as described in Section 9 and any notices of violation have been satisfactorily addressed.

14.2.7 A decision of the Stormwater Authority shall be final. Further relief of a decision made under these Regulations shall be to a court of competent jurisdiction in accordance with MGL ch 249 §4.

14.2.8 Remedies Not Exclusive. The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law.

SECTION 15: SEVERABILITY

If any provision, paragraph, sentence, or clause of these Regulations or the application thereof to any person, establishment, or circumstances shall be held invalid for any reason, all other provisions or applications of these Regulations shall remain in full force and effect.

APPENDIX A: STORMWATER MANAGEMENT PERMIT APPLICATION FEE SCHEDULE

Project Type	**Application Fee**
Residential Site (1 unit and 1-5 Acres Disturbed)	$700
Residential Site (1 unit and greater than 5 Acres Disturbed)	$1,100
Minor Residential Subdivision (1 lot and disturbing 1 to 5 acres of land)	$700 or $1 per linear foot of roadway or common driveway (whichever is greater)
Residential Subdivision (2 or more units in a common plan of development)	$2,000 or $2 per linear foot of roadway or common driveway (whichever is greater)
Other Residential such as condominiums, townhouse or retirement development (2 or more units in a common plan of development)	$700 per acre disturbed ($5,000 maximum)
Commercial Subdivision	$2,000 or $2 per linear foot of roadway or common driveway (whichever is greater)
Commercial or Industrial Site	$700 per acre disturbed ($5,000 maximum)
Land Disturbance Only (No change in site use, buildings and impervious surface area). May include reconstruction of parking lots, roads, and driveways; utility work; and lawn and landscaping work.)	$100 per acre disturbed