



DEPARTMENT OF PUBLIC WORKS

525 Canton Avenue
Milton, MA 02186
Tel: (617) 696-5727
Fax: (617) 698-1540

PROPOSED STORMWATER BYLAWS

NOVEMBER 2004

Chapter 21 “Stormwater Management”

Section A, Discharges To The Municipal Storm Drain System

1. Purpose

The purpose of this section is to eliminate non-stormwater discharges to the Town of Milton’s Municipal Storm Drain System. Non-stormwater discharges contain contaminants and supply additional flows to the Town of Milton’s Storm Drain System. Non-stormwater discharges are major causes of:

- a. impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands, and groundwater;
- b. contamination of drinking water supplies;
- c. alteration or destruction of aquatic and wildlife habitat; and
- d. flooding.

Regulation of illicit connections and discharges to the storm drain system is necessary for the protection of the Town’s natural resources, municipal facilities, general public health, safety, and welfare, and the environment.

The objectives of Section A are:

- a. to prevent pollutants from entering the storm drain;
- b. to prohibit illicit connections and unauthorized discharges to the storm drain;
- c. to remove all such illicit connections;
- d. to comply with state and federal statutes and regulations relating to stormwater discharges; and
- e. to establish the legal authority to ensure compliance with the provisions of this Chapter through inspection, monitoring, and enforcement.

2. Definitions

The following definitions and provisions shall apply to Sections A, B, and C.

APPLICANT –Applicant shall refer to a property owner or agent of a property owner who has filed a stormwater management plan.

AUTHORIZED ENFORCEMENT AGENCY – The Department of Public Works (hereafter DPW), its employees or agents designated to enforce this bylaw.

BEST MANAGEMENT PRACTICE (BMP) – An activity, procedure, restraint, or structural improvement that helps reduce the quantity or improve the quality of stormwater runoff.

BUILDING – For the purpose of this Section, building shall refer to any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property and occupying more than 100 square feet of area.

CHANNEL – A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

CLEAN WATER ACT – The Federal Water Pollution Control Act (33 U.S.C. section 1251 *et seq.*) and as it is amended from time to time.

CLEARING – Any activity that removes the vegetative surface cover.

DETENTION – The temporary storage of storm runoff in a stormwater management facility with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

DEVELOPER – A person who undertakes land disturbance activities.

DISCHARGE OF POLLUTANTS: The addition from any source of any pollutant or combination of pollutants into the storm drain or into waters of the United States or Commonwealth from any source.

DRAINAGE WAY – Any channel that conveys surface runoff throughout the site.

EROSION CONTROL – A measure that prevents erosion.

EROSION AND SEDIMENT CONTROL PLAN – A set of plans prepared by or under the direction of a licensed professional engineer, certified professional in erosion and sediment control, or other appropriately licensed and experienced professional, indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

GRADING – Excavation or fill of material, including the resulting conditions thereof.

GROUNDWATER: Water beneath the surface of the ground except where the water under the ground is the result of a perched water table.

ILLICIT CONNECTION: A surface or subsurface drain or conveyance which allows an illicit discharge into the storm drain, including without limitation sewage, process wastewater, or wash water and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed, permitted, or approved before the effective date of this bylaw.

ILLICIT DISCHARGE: Direct or indirect discharge to the storm drain that is not composed entirely of stormwater, except as exempted in Section 7. The term does not include a

discharge in compliance with an NPDES Stormwater Discharge Permit or resulting from fire fighting activities that are exempted.

IMPERVIOUS SURFACE OR COVER: Any material or structure on or above the ground that prevents water infiltrating the underlying soil. Impervious surface includes without limitation roads, paved parking lots, sidewalks, and rooftops.

INFILTRATION – The process of percolating stormwater into the subsoil.

LAND DISTURBANCE ACTIVITY – Any activity which changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural man-made watercourse.

LANDOWNER – The legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding propriety rights in the land.

MUNICIPAL STORM DRAIN SYSTEM or Municipal Separate Storm Sewer System (MS4): The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Milton.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT: A permit issued jointly by the United States Environmental Protection Agency and the State of Massachusetts that authorizes the discharge of pollutants to waters of the United States or Commonwealth.

NONPOINT SOURCE POLLUTION – Pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, mining, construction, subsurface disposal and urban runoff sources.

NON-STORMWATER DISCHARGE: Discharge to the storm drain not comprised entirely of stormwater.

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

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

POLLUTANT: Any element or property of sewage, residential, agricultural, industrial, or

commercial waste, runoff, leachate, heated effluent, or other matter whether originating at a point or non-point source, that is or may be introduced into any storm drain system, waters of the United States, and/or Commonwealth. Pollutants shall include without limitation:

- 1) paints, varnishes, solvents;
- 2) oil, grease, antifreeze, other automotive fluids and/or products;
- 3) non-hazardous liquid and solid wastes;
- 4) refuse, garbage, litter, rubbish, yard wastes, or other discarded or abandoned objects, ordnances, accumulations and floatables;
- 5) pesticides, herbicides, and fertilizers;
- 6) hazardous materials and wastes;
- 7) sewage;
- 8) dissolved and particulate metals;
- 9) metal objects or materials;
- 10) animal wastes;
- 11) rock, sand, salt, soils, or other products/materials that mobilize in surface water runoff;
- 12) construction wastes and/or residues; and
- 13) noxious or offensive material of any kind.

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

RESOURCE AREA – Any area protected under the Massachusetts Wetlands Protection Act or Massachusetts Rivers Act.

SEDIMENT CONTROL – Measures that prevent eroded sediment from leaving the site or entering off-site drainage structures.

SITE – A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation

STABILIZATION – The use of practices that prevent exposed soil from eroding.

START OF CONSTRUCTION – The first land-disturbing activity associated with a development, including but not limited to land preparation such as clearing, 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

STORMWATER: Runoff from precipitation or snowmelt, stream of water, including a river, brook or underground stream.

STOP WORK ORDER – An order issued which requires that all construction activity on a

site be stopped.

STORMWATER MANAGEMENT – The use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, peak flow discharge rates, and detrimental changes in stream temperature that affect water quality and habitat.

WASTEWATER: Any sanitary waste, sludge, or septic tank or cesspool overflow, and water that during manufacturing, cleaning or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct or waste product.

WATERS OF THE COMMONWEALTH: All waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and groundwater.

WATERCOURSE – Any body of water, including, but not limited to, lakes, ponds, rivers, and streams.

3. Applicability

This section shall apply to flows entering the municipally owned and/or operated storm drainage system.

4. Authority

Chapter 21 is adopted under the authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and the regulations of the federal Clean Water Act found at 40 CFR 122.34.

5. Responsibility for Administration

The DPW shall administer, implement and enforce Chapter 21. Any powers granted to or duties imposed upon the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

6. Regulations

The DPW may promulgate rules and regulations to effectuate the purpose of Chapter 21. Failure by the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

7. Prohibited Activities

ILLICIT DISCHARGES – No person shall dump, discharge, cause or allow to be discharged

any pollutant or non-stormwater discharge into the storm drain system, into a watercourse, or into waters of the United States and/or Commonwealth.

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

OBSTRUCTION OF THE MUNICIPAL STORM DRAIN SYSTEM – No person shall obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior approval from the DPW.

EXEMPTIONS

Discharge or flow resulting from fire fighting activities and DPW ice and snow control operations.

The following non-stormwater discharges or flows are considered exempt provided that the source is not a significant contributor of pollution to the municipal storm drain system:

- i. waterline flushing;
- ii. flow from potable water sources;
- iii. springs;
- iv. natural flow from riparian habitats and wetlands;
- v. diverted stream flow;
- vi. rising groundwater;
- vii. uncontaminated groundwater infiltrating as defined in 40 CFR 35.2005(20), or uncontaminated pumped groundwater;
- viii. water from exterior foundation drains, footing drains (not including active groundwater dewatering systems), crawl space pumps, or air conditioning condensation; also water from sump pumps and other pumps that remove flood waters from basements.
- ix. discharge from landscape irrigation or lawn watering;
- x. water from individual residential car washing;
- xi.** water from individual residences used for washing walkways, patios, house siding, windows, or similar house-related activities;

- xii. discharge from dechlorinated swimming pool water (less than one ppm chlorine) provided the water is allowed to stand for one week prior to draining and the pool is drained in such a way as not to cause a nuisance;
- xiii. discharge from street sweeping;
- xiv. dye testing, provided verbal notification is given to the DPW prior to the time of the test;
- xv. non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order administered under the authority of the United States Environmental Protection Agency, provided that the discharge is in full compliance with the requirements of the permit, waiver, or order and applicable laws and regulations; and
- xvi. discharge for which advanced written approval is received from the DPW as necessary to protect public health, safety, welfare, and the environment.

8. Emergency Suspension of Storm Drainage System Access

The DPW may suspend municipal storm drain system access to any person or property without prior written notice when such suspension is necessary to stop an actual or threatened discharge of pollutants that presents imminent risk of harm to public health, safety, welfare or the environment. In the event any person fails to comply with an emergency suspension order, the DPW may take all reasonable steps to prevent or minimize harm to the public, health, safety, welfare, or the environment.

9. Notification of Spills

Any spills or releases that require notification under local, state or federal law will be the responsibility of the person responsible for a facility or operation, or for an emergency response for a facility or operation (i.e., construction). In the event of a spill or release which may result in a discharge of pollutants or non-stormwater discharge to the municipal storm drain system, waters of the United States, and/or waters of the Commonwealth, the responsible parties, potentially responsible parties, or any person or persons managing a site or facility shall take all necessary steps to ensure containment, and remediate any municipal storm drains that have been impacted. However, if in the opinion of DPW, there is an excessive amount of pollutants in the storm drain system, the DPW can require remediation by the responsible party regardless of other state or federal regulations.

10. Enforcement

The DPW or an authorized agent of the DPW shall enforce Chapter 21 regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for

such violations.

- a) Civil Relief – If a person violates the provisions of this bylaw, regulations, permit, notice, or order issued thereunder, the DPW may seek injunctive relief in a court of competent jurisdiction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.
- b) Orders – The DPW or an authorized agent of the DPW may issue a written order to enforce the provisions of this bylaw, which may include:
 - i) elimination of illicit connections or discharges to the storm drain system;
 - ii) performance of monitoring, analyses, and reporting;
 - iii) that unlawful discharges, practices, or operations shall cease and desist; and
 - iv) remediation of contamination in connection therewith.

If the enforcing person determines that abatement or remediation of contaminations is required and is the responsibility of the property *owner*, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town may, at its option, undertake such work, and expenses times three thereof shall be charged to the violator.

Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner will be notified of the costs incurred by the Town of Milton, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the DPW within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the DPW affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owners property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in M.G.L. Ch. 59, section 57 after the thirty-first day at which the costs first become due.

- c) PENALTY- Any person who violates any provision of this bylaw, order or

permit issued thereunder, shall be punished by a fine twice the cost to correct the violation.

- d) **ENTRY TO PERFORM DUTIES UNDER THIS BYLAW** – To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the DPW, its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties and may make or cause to be made such examinations, surveys or sampling as the DPW deems reasonably necessary.
- e) **APPEALS** – The decision or orders of the DPW shall be final. Further relief shall be to a court of competent jurisdiction.
- f) **REMEDIES NOT EXCLUSIVE** – The remedies listed are not exclusive of any other remedies available under any applicable federal, state or local law.

11. Severability

The provisions of Chapter 21 of the Town’s bylaws are hereby declared to be severable. If any provision, paragraph, sentence, or clause of Chapter 21 or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of said Chapter.

END OF CHAPTER 21, SECTION A

CHAPTER 21

Section B: Erosion And Sediment Control

1. Purpose

The purpose of this section is to eliminate or reduce the adverse effects of soil erosion and sedimentation on the environment, public welfare/health, and municipal facilities.

These adverse effects may be the result of managed construction and other activities including but not limited to earth alteration, excavation, removal of vegetation and general construction activities.

2. Applicability

This section shall apply to flows entering the municipally owned and/or operated storm drainage system.

3. Authority

Chapter 21 is adopted under the authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and the regulations of the federal Clean Water Act found at 40 CFR 122.34.

4. Responsibility for Administration

The DPW shall administer, implement and enforce Chapter 21. Any powers granted to or duties imposed upon the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

5. Regulations

The DPW may promulgate rules and regulations to effectuate the purpose of Chapter 21. Failure by the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

6. Jurisdiction

No person shall excavate, cut, grade or perform any land-disturbing activities of significance, without an approved Erosion and Sediment Control Plan. Activities of significance are those which meet or exceed the following thresholds:

- a. Any change of existing grade of more than 2500 sq. ft. or 25% of the lot whichever is smaller.
- b. Removal of existing vegetation of more than 2500 sq. ft. or 25% of the lot

- whichever is smaller.
- c. Storage of more than 100 cubic yards of excavate or fill.

Activities which are exempt from the requirement of an approved Erosion and Sediment Control Plan are as follows:

- a. Emergency activities for the protection of life, property, or natural resources.
- b. Existing permitted nursery and agricultural operations.

7. Erosion and Sediment Control Plan

- a. Activities which require the change of existing grade or removal of existing vegetation on any parcel of less than 20,000 sq. ft. or storage of excavate or fill between 100 and 1300 cubic years shall be deemed a project of minor significance and will require that the following information to be included on the Erosion and Sediment Control Plan:
 - 1) Name, address and telephone number of owner, civil engineer and person responsible for implementation of the plan.
 - 2) Property lines.
 - 3) Location of all existing and proposed building and impervious surface.
 - 4) Location of all existing and proposed stormwater utilities, including structures, pipes, swales and detention basins.
 - 5) Erosion and sediment control provisions to minimize on-site erosion and prevent off-site sediment transport, including provisions to preserve topsoil and limit disturbance.
 - 6) Design details for both temporary and permanent erosion control structures.
 - 7) The DPW may require any additional information or data deemed appropriate and/or may impose such conditions thereto as may be deemed necessary to ensure compliance for the preservation of public health and safety.
- b. Activities which require 1) the change of existing grade or removal of exiting vegetation on more than 20,000 sq. ft.; or 2) storage of excavate or fill in excess of 1300 cubic yard shall be deemed a project of significant impact and will require that the Erosion and Sediment Control Plan include all of the information required of projects of minor significance plus the following additional information:
 - 1) An attached vicinity map showing the location of the site in relationship to the surrounding area's watercourses, water bodies and other significant geographic features, and roads and other significant structures.

- 2) Suitable contours for the existing and proposed topography.
- 3) A clear and definite delineation of any areas of vegetation or trees. Note all vegetation that is to be removed and all vegetation that is to be saved.
- 4) A clear and definite delineation of any wetlands, natural or artificial water storage detention areas, and drainage ditches on the site.
- 5) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities; infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, the areas of clearing and the establishment of permanent vegetation.

8. Performance Standards

A construction project shall be considered in conformance with this section if soils or other eroded matter has been prevented from being deposited onto adjacent properties, rights-of-ways, public storm drainage system, or wetland or watercourse. The design, testing, installation, and maintenance of erosion and sediment control operations and facilities shall adhere to the standards and specifications contained in the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas dated March 1997 or the latest edition thereof.

9. Review and Approval

An Erosion and Sediment Control Plan review is triggered by a building permit application or other activity that falls within the jurisdiction described in paragraphs 3 and 4 above. Applicants are referred by the permit issuing agency to the Department of Public Works to conduct the Erosion and Sediment Control review. Activities that fall within the jurisdiction described in paragraphs 3 and 4 above that do not require a permit from any Town department are not exempt from this provision. In this situation, the applicant must seek Erosion and Sediment Control review directly from the Department of Public Works.

The Department of Public Works will review each Erosion and Sediment Control Plan to determine its conformance with the provisions of this section. Within 30 calendar days after receiving an application, the Department of Public Works shall, in writing:

- a. Approve the plan as submitted.
- b. Approve the plan subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or

- c. Disapprove the plan, indicating the reason(s) and procedure for submitting a revised application and/or submission.

Failure of the Department of Public Works to act on an original or revised plan within 30 calendar days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the Department of Public Works. Pending preparation approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the Department of Public Works.

10. Inspections

The Director of Public Works, or designated agent, shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the owner or person responsible for the implementation of the plan wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the DPW shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the DPW at least 72 hours before the following:

- a. Installation of sediment and erosion control measures
- b. Start of construction
- c. Completion of site clearing
- d. Completion of rough grading
- e. Close of the construction season
- f. Completion of final landscaping

The person responsible for implementation of the plan shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be able to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to the DPW at the time interval specified in the approved permit.

The Director of Public Works or designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed as noted above.

11. Enforcement

Suspension of Construction or Site Alteration Activity – In the event that the activity at a site violates the conditions as stated or shown on the approved Erosion and Sediment Control Plan in such a manner as to adversely affect the environment, public welfare/health and municipal facilities, then the Director of Public Works may suspend work until the

violation(s) is corrected.

END OF CHAPTER 21, SECTION B

CHAPTER 21

Section C: Post-Construction Stormwater Management

1. Purpose

The purpose of this section is to establish minimum requirements and controls to protect and safeguard the environment, natural resources, general health, safety, and welfare of the public residing in watersheds within the Town's jurisdiction from the adverse impacts of stormwater runoff. Stormwater management controls are typically permanent features of a complete project, and as such require maintenance and management. This section seeks to meet that purpose through the following objectives:

- a. to minimize stormwater runoff from any development;
- b. to minimize nonpoint source pollution caused by stormwater runoff from development;
- c. to provide for groundwater recharge where appropriate; and
- d. to ensure controls are in place to respond to objectives a and b and are properly operated and maintained.

2. Applicability

This section shall apply to flows entering the municipally owned and/or operated storm drainage system.

3. Authority

Chapter 21 is adopted under the authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and the regulations of the federal Clean Water Act found at 40 CFR 122.34.

4. Responsibility for Administration

The DPW shall administer, implement and enforce Chapter 21. Any powers granted to or duties imposed upon the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

5. Regulations

The DPW may promulgate rules and regulations to effectuate the purpose of Chapter 21. Failure by the DPW to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

6. Jurisdiction

No person shall conduct land disturbance activities which would exceed the following thresholds without an approved Stormwater Management Plan:

- a. Any land disturbance activity greater than 2500 sq. ft. which would result in an increased amount of stormwater runoff from the property to public/private property or resource areas.
- b. Any activity which would increase the flow to the municipal storm or sanitary sewer systems.
- c. Any activity which would alter or modify an existing drainage system.

Activities which are exempt from the requirements of an approved Stormwater Management Plan are:

- a. Emergency repairs to any stormwater structure.
- b. **Maintenance of existing gardens or lawns.**
- c. Construction of utilities, other than drainage, which would not alter the terrain, ground cover or drainage patterns.

4. Stormwater Management Plan

A Stormwater Management Plan, which meets the design requirements of this Bylaw, shall be prepared by a licensed professional engineer and submitted to the Department of Public Works. The plan shall include, but not be limited to, the items listed below and, at a minimum, be designed to provide 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 managing stormwater runoff. The applicant shall certify on the drawings that all clearing, grading, drainage, construction, and development shall be conducted in strict accordance with the plan. The minimum information, in addition to the name, address and telephone number of the owner, civil engineer and person responsible for implementation of the plan, submitted for support of the stormwater management plan shall be as follows:

- a. Locus map.
- b. Drainage area map showing drainage area and stormwater flow paths.
- c. Location of existing and proposed utilities.

- d. Location of all existing and proposed stormwater utilities, including structures, pipes, swales and detention basins.
- e. Topographic survey showing existing and proposed contours.
- f. Soils investigation, including borings or test pits, for areas where construction of infiltration practices will occur.
- g. Description of all watercourses, impoundments, and wetlands on or adjacent to the site or into which stormwater flows.
- h. Delineation of 100-year floodplains, if applicable.
- i. Groundwater levels at the time of probable high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration.
- j. Existing and proposed locations, cross sections, and profiles of all brooks, streams, drainage swells and the method of stabilization.
- k. Location of existing and proposed easements.
- l. Proposed improvements including location of buildings or other structures, impervious surfaces and storm drainage facilities, if applicable.
- m. Structural details for all components of the proposed drainage systems and stormwater management facilities.
- n. Timing schedules and sequences of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization.
- o. Operation and maintenance schedule.
- p. Notes on drawings specifying materials to be used, construction specifications, and typicals.
- q. Location of areas to be cleared of more than 50 percent of the vegetation.

5. Design Requirements and Performance Standards

- a. Performance Standards – control of stormwater runoff shall meet the performance standards for both flood control (volume and peak discharge) and nonpoint source pollution reduction as defined in the Massachusetts

Stormwater Management Policy dated March 1997 as amended. All assumptions, methodologies and procedures used to design BMP's and stormwater management practices shall accompany the design. All activities, project design, BMP's, and stormwater management practices should aim to minimize stormwater runoff, maximize infiltration and recharge where appropriate, and minimize pollutants in stormwater runoff.

- b. Major and Minor Projects – Activities will be classified as major and minor projects. Major projects are defined as projects which have activities that result in the land disturbance of one (1) acre or more. All other activities will be considered minor projects. Requirements for major and minor projects are as follows:
 - 1) Major projects must either meet the requirements of the stormwater management standards or demonstrate that an equivalent level of environmental protection is provided in the event that one or more of the standards are not met.
 - 2) Minor projects must meet the stormwater management standards, however, at the discretion of the DPW, certain aspects of the Stormwater Management Plan may be waived. In general, projects which fall into this category will not require the submission of an operation and maintenance plan.

6. Review and Approval

The Department of Public Works will review the Stormwater Management Plan to determine its conformance with the provisions of this section. For major projects, the Conservation Commission shall also review the Stormwater Management Plan. Within 30 days after receiving the plan, the Department of Public Works shall, in writing:

- a. Approve the plan as submitted.
- b. Approve the plan subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation and approve the plan subject to these conditions.
- c. Disapprove the plan indicating the reason(s) and procedure for submitting a revised plan and/or submission.

Failure of the Department of Public Works to act on an original or revised application within calendar 30 days of receipt shall authorize the applicant to proceed in accordance with the plan as filed unless such time is extended by agreement between the applicant and the Department of Public Works. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established

by the Department of Public Works.

7. Inspections

The Director of Public Works, or designated agent, shall make inspections as hereinafter required. To obtain inspections, the applicant shall notify the Department of Public works at least two working days before the following:

- a. Start of construction
- b. Installation of stormwater controls
- c. Close of construction season
- d. Completion of final grading and landscaping

The applicant shall submit an “as-built” plan for the stormwater controls after the final construction is completed. The plan must show the final design specifications of all stormwater management controls and must be prepared by a professional engineer.

8. Enforcement

When the Department of Public Works determines that an activity is not being carried out in accordance with the requirements of this bylaw, a written notice of non compliance to the applicant shall be issued which, at a minimum, will contain the following:

- a. The name and address of the applicant.
- b. The street address or description of the building, structure or land upon which the non-compliance is occurring.
- c. A statement specifying the nature of the non-compliance.
- d. A description of the remedial measures necessary to bring the activity into compliance with this bylaw and a time schedule for the completion.

Applicants receiving a notice of non-compliance will be required to halt all construction activities. This “stop work order” will be in effect until the Department of Public Works confirms that the activity involved in the non-compliance has been satisfactorily addressed. Occupancy permits, if applicable, will not be granted until the requirements of this bylaw are complied with.

In the event that damages occur to the environment, natural resources, municipal facilities, and/or to the general health, safety and welfare of the public due to improper installation, operation or maintenance of stormwater controls, a fine may be imposed by the Town in the

amount of two times the cost of satisfactorily addressing the violations, or at the discretion of the Department of Public Works, be fined the following penalties:

First Violation: \$100

Second Violation \$200

Third and Subsequent Violations: \$300

END OF CHAPTER 21, SECTION C