# TOWN OF MILFORD STORMWATER MANAGEMENT AND EROSION CONTROL REGULATIONS



Prepared for:

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# Chapter 5.32

# STORMWATER MANAGEMENT AND EROSION CONTROL

Sections

- 5.32.010 Purpose and Objectives.
- 5.32.020 Authority.
- 5.32.030 Jurisdiction.
- 5.32.040 Severability.
- 5.32.050 Amendments.
- 5.32.060 Applicability.
- 5.32.070 Abbreviations/Definitions.
- 5.32.080 Design Standards.
- 5.32.090 Application, Approval and Review.
- 5.32.100 Responsibility for Installation/Construction/Inspection.
- 5.32.110 Maintenance and Inspection.
- 5.32.120 Other Required Permits.
- 5.32.130 Post-Construction Operation.
- 5.32.140 Enforcement and Penalties.
- 5.32.150 Mandatory Regulated MS4s in Urbanized Areas Map. Map 1: Town of Milford "Urbanized Areas"

# Chapter 5.32

# STORMWATER MANAGEMENT AND EROSION CONTROL

#### 5.32.010 Purpose and Objectives.

The purpose of this Regulation is to provide for the health, safety, and general welfare of the citizens of the Town of Milford through the regulation of discharges into the Town's Stormwater Drainage System, waterbodies, streams, and wetlands in a manner compliant with the requirements of State and federal law, including the provisions of the Federal Stormwater Management legislation for Municipal Separate Storm Sewer Systems (MS4's), as amended.

The objective of this Regulation shall be to:

• Prohibit unpermitted discharges into the Stormwater Drainage System;

• To set forth the legal authority and procedures to carry out all inspection, monitoring, and enforcement activities necessary to ensure compliance with this Regulation and applicable State and federal law; and

• To establish, for new construction, design and construction standards for stormwater drainage systems that will result in the construction of systems that will be compliant with this Regulation and State and federal laws and to have such standards incorporated into the existing standards and review processes governing new construction in site plan and subdivision review, as well as building permits that implicate the requisite disturbance of the site.

# 5.32.020 Authority.

This Regulation is adopted pursuant to the authority vested in:

• The authority vested in the Selectmen pursuant to RSA 41:11, RSA 47:17, VII, VIII, and XVIII; and

• The Planning Board pursuant to RSA 674:35 and 36, and RSA 674:44; and, RSA 155-E:11; and

• The authority vested in the Health Officer and Board of Health pursuant to RSA 147:1 and 147:14; and

• The authority vested in the Water and Sewer Commissioners pursuant to RSA 38:26 and RSA 149:1:6, respectively.

The Regulation shall become effective upon adoption by the Town of Milford Planning Board, Health Officer/Board of Health, the Board of Selectmen, Water and Sewer Commissions, in accordance with the statutory sections identified above.

#### 5.32.030 Jurisdiction.

A. This Regulation shall pertain to all land within the boundaries of the Town of Milford, New Hampshire.

B. In any case where a provision of the Regulation is found to be in conflict with a provision of any other Ordinance, regulation, code, or covenant in effect in the Town of Milford or with any State Statute with particular reference to NHRSA Chapter 676:14 and 674:16 and 674:17 and the relevant sections therein, the provision which is the more restrictive shall prevail.

# 5.32.040 Severability.

The invalidity of any section, subsection, paragraph, sentence, clause, phrase, or word of this Regulation shall not be held to invalidate any other section, subsection, paragraph, sentence, clause, phrase, or word of this Regulation.

#### 5.32.050 Amendments.

This Regulation may be amended by the approval of the several boards identified in Section 5.32.020 above, provided that each such agency complies with any applicable statutory or local procedures governing their authority to adopt such regulations. Amendments to zoning aspects must be approved at Milford Town Meeting.

# 5.32.060 Applicability.

This Regulation shall apply to any action that will hinder, interfere with, alter, or modify the existing stormwater flow, drainage, or infrastructure constructed for such purpose unless and until this Regulation has been complied with. It shall apply to any discharges into the Town's Stormwater Drainage System, waterbodies, streams, and wetlands.

A. Permit and SWMP.

1. Permit Required. Except as permitted by this Regulation, no person shall alter land or engage in any activity which causes or contributes to stormwater runoff discharge without first having obtained a Stormwater Management Permit (SMP) for land proposed to be altered or which will be affected by such activity. The owner shall be required to apply to the Director of Community Development and obtain such permit from the Planning Board, Health Officer, DPW Director, Water and/or Sewer Commissioners, or their designees, as their jurisdiction warrants, prior to undertaking any such action. This requirement shall apply to any activity that will disturb or impact a land area greater than 5,000 cumulative square feet unless noted as an exclusion in a through e below.

a. Normal maintenance and improvement of land in agricultural use provided Best Management Practices as established by NHDES Regulations are being observed.

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

c. The construction of any fence that will not alter existing terrain or drainage patterns.

d. Construction of utilities (gas, water, electric, telephone, etc.) other than drainage, disturbing less than 20,000 contiguous square feet, within the limits of an existing paved roadway, which will not permanently alter terrain, groundcover, or drainage patterns, where trenches are paved at the end of each working day.

e. Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the Health Officer.

2. Requirement of Construction Stormwater Management and Erosion Control Plan. The applicant for a permit required under Section 5.32.060.A.1 above, shall be required, additionally, as part of the application review process, to design and submit a Construction Stormwater Management and Erosion Control Plan (unique to the site) to the Director of Community Development for distribution to the Planning Board and Town Engineer for any tract of land being developed, redeveloped, or subdivided within the boundaries of Milford, where one or more of the following conditions are proposed:

a. A cumulative disturbed area exceeding 20,000 square feet, unless the disturbance is solely related to construction or reconstruction of a street or road, which will allow up to one (1) acre of disturbance prior to requiring a complete Construction Stormwater Management and Erosion Control Plan.

b. A subdivision of more than three building lots.

c. Proposed work adjacent to a wetlands or wetlands buffer.

d. Phasing of greater than three lots per year of an existing or proposed subdivision.

e. Construction of utilities (gas, water, electric, telephone, etc.) requiring contiguous ground disturbance of greater than 20,000 square feet unless the disturbance is proposed within the limits of an existing paved roadway utilizing a contractor with no history of erosion concerns.

f. Disturbed critical areas (see Definitions).

B. Standards and Requirements of Plan Submission. Such plans shall be submitted to the Director of Community Development for distribution to the Planning Board, Health Officer, DPW Director, Water and/or Sewer Commissioners, or their designees, for review and approval to the extent that the proposed use involves areas of their jurisdiction. The Planning Board, Health Officer, DPW Director, Water and/or Sewer Commissioners, or their designees may, if in their judgment they deem it necessary or helpful to assist them in their review of such plan, require that the plan be reviewed by a Registered Professional Engineer or other professional consultant acceptable to them, the cost of which shall be borne by the applicant. The Plan, which shall be unique to the site, shall contain all information required by Sections 5.32.080 and 5.32.090, below.

# 5.32.070 Abbreviations/Definitions.

<u>BEST MANAGEMENT PRACTICE (BMP):</u> A proven or accepted structural, nonstructural, or vegetative measure; the application of which reduces erosion, sediment, or peak storm discharge, or improves the quality of stormwater runoff.

BMP: Best Management Practice.

<u>CEASE AND DESIST</u>: Document issued related to a parcel or activity in violation of the <u>Town of Milford Stormwater Management and Erosion Control</u> <u>Regulations</u> and/or the Town of Milford Site Plan, Subdivision, other Land Use Regulations or Ordinances, or plans approved thereunder.

<u>CERTIFIED SOIL SCIENTIST:</u> A person qualified in soil classification and mapping who is certified by the State of New Hampshire Board of Natural Scientists.

CRITICAL AREAS: Disturbed areas of any size

1. Within 25 feet of a permanent or intermittent vernal pool, stream, bog, water body; or

2. Within 25 feet of poorly or very poorly drained soils; floodplain; or

3. Disturbed areas exceeding 2,000 square feet in highly erodible soils; or

4. Disturbed areas containing slope lengths exceeding 25 feet on slopes greater than 15 percent.

<u>DEVELOPMENT:</u> Any construction or land disturbance or grading activities other than for agricultural and silvicultural practices.

<u>DISTURBED AREA:</u> An area where the natural vegetation has been removed exposing the underlying soil or where vegetation has been covered.

<u>ENVIRONMENTAL PROTECTION AGENCY (EPA)</u>: The Federal agency of the United States responsible for implementing the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES) program.

EPA: (United States) Environmental Protection Agency.

<u>EROSION</u>: The detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

<u>HIGHLY ERODIBLE SOILS:</u> Any soil with an erodibility class (K factor) greater than or equal to 0.43 in any layer as found in Table 3-1 of the <u>Stormwater</u> <u>Management and Erosion and Sediment Control Handbook for Urban and</u> <u>Developing Areas in New Hampshire</u>.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM: An EPA Clean Water Act Permit program.

NOI: Notice of Intent.

<u>NOPV:</u> Notice of Probable Violation.

NOT: Notice of Termination.

<u>NOTICE OF INTENT (NOI)</u>: Document to apply for coverage under the EPA's Construction General Permit for stormwater discharges from construction activities.

<u>NOTICE OF PROBABLE VIOLATION (NOPV)</u>: Document describing nonconformance with the <u>Town of Milford Stormwater Management and Erosion</u> <u>Control Regulations</u>.

<u>NOTICE OF TERMINATION (NOT)</u>: Document to end coverage of a construction activity under EPA's Construction General Permit.

<u>NPDES:</u> National Pollutant Discharge Elimination System.

<u>PROJECT AREA:</u> The area within the subdivision or site plan boundaries plus any areas with associated off-site improvements.

<u>SEDIMENT:</u> Solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

<u>STABILIZED:</u> When the soil erosion rate approaches that of undisturbed soils. Soils which are disturbed will be considered protected when covered with a healthy, mature growth of grass, or a good covering of straw mulch or other equivalent (seedless) mulch (2 tons/acre). Mulch is only a temporary measure; ultimately, the site needs vegetation.

STORMWATER MANAGEMENT AND EROSION CONTROL PLAN (SWMP): A plan which may be required by the Town which outlines project features, proposed temporary and permanent erosion control features, maintenance schedules and practices, and design basis used to establish temporary and permanent stormwater design features. If a SWPPP is required under Federal law, the applicant may completely incorporate SWMP requirements into the SWPPP and request that the SWPPP cover both the SWPPP and SWMP requirements.

<u>STORMWATER PERMIT (SWP)</u>: A permit issued by the Town of Milford per the requirements outlined in this Regulation.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): A plan required by the Environmental Protection Agency (EPA) that clearly describes appropriate pollution control measures that include a description of all pollution control measures (i.e., BMP's) that will be implemented as part of the construction activity to control pollutants in stormwater discharges and describes the interim and permanent stabilization practices for the site.

<u>STORMWATER RUNOFF:</u> The water from precipitation that is not absorbed, evaporated, or otherwise stored within the contributing drainage area.

<u>STREAM</u>: Areas of flowing water occurring for sufficient time to develop and maintain defined channels but which may not flow during dry portions of the year. Includes but is not limited to all perennial and intermittent streams located on U.S. Geological Survey Maps.

<u>SWMP:</u> Stormwater Management and Erosion Control Plan. <u>SWP:</u> Stormwater Permit. SWPPP: Stormwater Pollution Prevention Plan.

TOWN: The Town of Milford, New Hampshire.

TOWN ENGINEER: It is understood that there is no official position in the Town of Milford identified as the "Town Engineer". Thus, the term "Town Engineer" when contained in this Regulation, is intended to refer to and identify any qualified engineering consultant which the Selectmen, Town Administrator, Planning Board, Health Officer, DPW Director, Water and/or Sewer Commissioners, or their designees engage(s) for the purpose of reviewing any application or plan submitted in accordance with this Regulation or determining compliance herewith, when, in their judgment, such review is appropriate or necessary in order to insure compliance with this Regulation or determine if the provisions hereof have been violated.

UA: Urbanized Area.

<u>URBANIZED AREA (UA):</u> An area as defined by the EPA (based upon data collected from the US Census Bureau) serving a population of 10,000 or greater and a population density of 1,000 people per square mile.

#### 5.32.080 Design Standards.

A. Temporary/Construction Stormwater Management Design. The following standards shall be applied in planning for stormwater management and erosion control as related to construction: (These standards are in addition to requirements that may be found in this and other sections of the Site Plan, Subdivision, other Land Use Regulations or Ordinances.)

1. All measures in the Plan shall meet as a minimum the Best Management Practices set forth in the <u>Stormwater Management and Erosion and Sediment</u> <u>Control Handbook for Urban and Developing Areas in New Hampshire</u>, Rockingham County Conservation District, NH Department of Environmental Services, Soil Conservation Service (now the Natural Resources Conservation Service), August 1992, as amended.

Additional BMP's are available at the following locations:

a. <u>http://www.des.state.nh.us/factsheets/wqe/wqe-6.htm</u> - NHDES Environmental Fact Sheet WD-WQE-6, (*Soil Erosion and Sediment Control on Construction Sites*, 1996)

b. <u>http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm</u> EPA National Pollution Discharge Elimination System, (NPDES) (*Stormwater Menu of Best Management Practices (BMP's) and Construction Site Stormwater Runoff Control)*).

Note: The web site links in this section are provided for information and are subject to change. The most current link reference should be utilized.

2. Whenever practical, natural vegetation shall be retained, protected, or supplemented. The stripping of vegetation shall be done in a manner that minimizes soil erosion.

3. Appropriate erosion and sediment control measures shall be installed. The Town Engineer or his designee shall review and approve installation of the measures prior to land disturbance.

4. The area of disturbance shall be kept to a minimum. Disturbed areas remaining idle for more than 30 days shall be stabilized.

a. Measures shall be taken to control erosion within the project area. Sediment in runoff water shall be trapped and retained within the project area using approved measures. Wetland areas and surface waters shall be protected from sediment.

b. Off-site surface water and runoff from undisturbed areas shall be diverted away from disturbed areas where feasible or carried non-erosively through the project area. Integrity of downstream drainage systems shall be maintained. c. Measures shall be taken to control the post-development peak rate of runoff so that it does not exceed pre-development runoff for the two-year, 24-hour storm event and for additional storm event frequencies as specified in the design criteria of the <u>Stormwater Management and Erosion and Sediment Control Handbook for</u> <u>Urban and Developing Areas in New Hampshire</u>.

d. Priority should be given to preserving natural drainage systems including perennial and intermittent streams, wetlands, swales, and drainage ditches for conveyance of runoff leaving the project area.

e. All temporary erosion and sediment control measures shall be maintained in functioning condition until final site stabilization is accomplished.

f. All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 days unless conditions dictate otherwise.

g. Naturally occurring streams, channels, and wetlands shall be used for conveyance of runoff leaving the project area only after appropriate sedimentation control measures have been employed.

B. Permanent Stormwater Management General Design Criteria. The following standards shall be applied in planning for stormwater management and erosion control as related to long-term management of municipal water quality (Note: See Section 5.32.150 for the EPA map of the Urbanized Area):

1. Under One Acre of Total Disturbance (includes non-contiguous areas):

a. Within the urbanized area (UA) will require a basic stormwater quality management system. At a minimum, all stormwater must pass through basic pretreatment (beyond catch basin sumps) prior to leaving the site.

b. Outside of the UA, water quality measures will be required on a case-by-case basis.

2. Over One Acre of Total Disturbance (includes non-contiguous areas):

a. Within the UA requires a well thought out, systematic permanent stormwater quality management system. Latest technology and most up-to-date performance data must be considered when selecting permanent control measures. As noted above, catch basin sumps alone are not considered a valid water quality control measure. Mechanical devices may be required to supplement any proposal. Maintenance programs and schedules will be required as part of the proposal. In addition to the one-time maintenance bond at the time of road acceptance, off-site water quality control measures may require long-term escrow funds to cover future maintenance expenses (including removal of erosion control measures not removed as part of the project). Sites with appropriate separation to the seasonal high groundwater table must also consider groundwater recharge. All groundwater recharge systems will require on-site test pit and percolation test data to be submitted as part of the review.

b. Outside the UA requires a basic systematic permanent stormwater quality management system. Catch basin sumps alone are not considered a valid water quality control measure.

3. Adjacent to the Wetlands Buffer (Any Size Disturbance):

a. Any new project adjacent to the wetlands buffer will require permanent water quality control measures.

b. Projects involving redevelopment or expansion will be considered on a caseby-case basis. 4. Municipal Projects:

All municipal projects will comply with water quality control measures defined in this Regulation. Nothing regarding municipal projects is intended to impose any greater requirement than is already required by RSA 674:54.

C. Permanent Stormwater Management Technical Design Criteria

1. All measures in the plan shall, as a minimum, meet the Best Management Practices set forth in the <u>Stormwater Management and Erosion and Sediment</u> <u>Control Handbook for Urban and Developing Areas in New Hampshire</u>, Rockingham County Conservation District, NH Department of Environmental Services, Soil Conservation Service (now the Natural Resources Conservation Service), August 1992, as amended.

2. The design of proposed features must consider the following:

a. Existing and proposed methods of handling stormwater runoff so that there will be no increase in the amount of runoff that leaves the boundaries of the site. (The Planning Board may permit an increase in off-site stormwater runoff on submission of a detailed downstream study and on the recommendation of the Town Engineer.)

b. Engineering calculations used to determine drainage requirements based upon 25-year storm frequency, 24-hour duration shall be provided if the project will significantly alter the existing drainage patterns due to such factors as the amount of new impervious surfaces (such as pavement and building areas) being proposed. All closed drainage systems, culverts, major ditches, swales, and detention facilities must be sized for the 25-year storm frequency. All structural measures such as detention/retention facilities must be reviewed for 50-year storm impacts.

c. If the project will affect drainage flow to an existing roadway culvert, or if a detention or retention area is proposed, a minimum of a 25-year storm shall be used to evaluate potential off-site effects. If a State-owned or maintained culvert is affected by the development, State of New Hampshire Department of Transportation (NHDOT) Guidelines shall be used for evaluation of the culvert. Written approval from the NHDOT must be submitted before final approval is granted.

d. Access for maintenance of stormwater facilities must be included as part of the design, where necessary. Access easements may be required.

e. All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil area resulting from the removal of temporary measures shall be permanently stabilized within thirty (30) days unless conditions dictate otherwise. If local, State, or Federal authorities determine that the trapped sediment contains pollutants, trapped sediment must be removed and disposed of in a manner which satisfies Federal, State, and local regulations.

f. Velocities of less than ten feet per second (10 fps) are required prior to entering a sedimentation swale. The maximum design velocity within the swale shall be 1.0 feet per second during passage of the 25-year storm.

g. Flows less than ten cubic feet per second (10 cfs) are required prior to entering a sedimentation swale.

h. All slopes equal to or steeper than 2:1 adjacent to a public right-of-way must have special stabilization details provided with the submission.

i. Forebays for stilling and sediment trapment must be included in all basin and swale designs.

j. Velocities of ten feet per second (10 fps) or less are desirable within a closed drainage system. Higher velocities may be allowed provided special design criteria have been used.

k. A minimum velocity of two feet per second (2 fps) is required within a closed drainage system.

I. Proposed riprap within a public right-of-way shall be placed a minimum of twelve inches deep.

m. Seasonal highwater table elevations must be accounted for in all BMP design criteria.

n. Drainage design should follow the guidelines presented in the <u>Stormwater</u> <u>Management and Erosion and Sediment Control Handbook for Urban and</u> <u>Developing Areas in New Hampshire</u>, as published by the New Hampshire Department of Environmental Services, Rockingham County Conservation District and the USDA Soil Conservation Service, and additional guidelines published in the <u>Manual on Drainage Design for Highways</u>, as published by the State of New Hampshire Department of Transportation.

# 5.32.090 Application, Approval and Review.

A. Initial Application Requirements. The following minimum requirements apply to all demolition or construction projects subject to 5.32.060.A.1 or 5.32.060.A.2. Additional requirements may be found in this and other sections of the Site Plan, Subdivision, or Other Land Use Regulations. If the project is part of a formal Planning Board Approval process, documents must be submitted for consideration as part of Final Approval.

- 1. Site drawing of existing and proposed conditions including:
- a. Locus map showing property boundaries.
- b. North arrow, scale, and date.
- c. Property lines.
- d. Easements.
- e. Structures, utilities, roads, and other paved areas.
- f. Topographic contours.
- g. Critical areas, as defined herein.
- h. Surface water and wetlands, drainage patterns, and watershed boundaries.
- i. Vegetation.
- j. Limits of work.

2. Soils information for design purposes or for determining highly erodible soils shall be determined from a National Cooperative Soil Survey (NCSS) soil series map. A High Intensity Soil Map of the site, prepared in accordance with the Society of Soil Scientists of Northern New England (SSSNNE) <u>Special Publication No. 1</u>, can only be used for design purposes and not for determining highly erodible soils.

3. Construction details and/or application procedures for temporary and permanent stormwater management and erosion and sediment control BMP's.

4. Areas and timing of soil disturbance.

5. A schedule for self-inspection and maintenance of all BMP's. (The schedule must be included within the plan set.)

6. Narrative section including discussion of each measure, its purpose, construction sequence, and installation timing as they apply to the site.

7. If infiltration or exfiltration is proposed as part of the drainage solution, test pit information including estimated seasonal high water table elevations shall be provided at the location and approximate elevation of the proposed infiltrating or exfiltrating device.

8. Calculations for the infiltration or exfiltration system. These calculations should also account for frozen ground conditions, when the devices may not function at their optimal design.

9. Any other specific study, calculation, or investigation as requested by the Town.

10. The drainage plans and calculations portion of the SWMP or SWPPP shall be certified by a Licensed Professional Engineer, registered in the State of New Hampshire.

B. Final Application Requirements. The following additional requirements shall be required (in paper and electronic form) as part of the final plan unless the project is deemed of sufficiently minimal impact to qualify for the minimum requirements specified in Section 5.32.080 (Design Standards) of this Regulation as determined by the Public Works Director or Town Engineer. Applicants with projects approved prior to the effective date of this Regulation, whose submission(s) included an Erosion Control Plan and a Stormwater Management Plan as a component of such submission(s) may present such submission(s) in lieu of the requirements of Section 5.32.090.A and Section 5.32.090.B.

- 1. Construction Drawings/Supporting Documents:
- a. A project narrative including a description of the development.
- b. Locus map showing property boundaries.
- c. North arrow, scale, date.
- d. Property lines.
- e. Structures, roads, and utilities.
- f. Topographic contours at two-foot (2') intervals.
- g. Critical areas.

h. Within the project area and within 200 feet of project boundary surface waters, wetlands, and drainage patterns and watershed boundaries.

- i. Vegetation.
- j. Extent of 100-year floodplain boundaries if published or determined.

k. Soils information for design purposes from a National Cooperative Soil Survey (NCSS) soil series map or a High Intensity Soil Map of the site, prepared in accordance with Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 1. Highly erodible soils shall be determined by soil series.

I. Easements.

m. Areas of soil disturbance.

- n. Areas of cut and fill.
- o. Locations of earth stockpiles.
- p. Locations of equipment storage and staging.

q. Locations of proposed construction and/or permanent vehicle or equipment fueling.

r. Stump disposal plan.

s. Highlighted areas of poorly and very poorly drained soils.

t. Highlighted areas of poorly and/or very poorly drained soils proposed to be filled.

u. Construction and earth movement schedule including project start and completion dates, sequence of grading and construction activities, sequence for installation and/or application of soil erosion and sediment control measures, and the sequence for final stabilization of the project site.

v. Locations, descriptions, details, and design criteria and calculations for all structural, non-structural, permanent, and temporary erosion and sedimentation control measures and BMP's.

w. Identification of all permanent control measures.

- x. Identification of permanent snow storage areas.
- y. Identification of snow management measures during construction.

z. Description of the combination of sediment and erosion control measures which are required to achieve maximum pollutant removal such as:

i. Sediment Basins: For common drainage that serves an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin must provide storage for a calculated volume of runoff from a drainage area from a 2-year, 24-hour storm, or equivalent control measures, must be provided, where attainable, until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, must be provided where attainable until final stabilization of the site. When computing the number of acres draining to a common location, it is not necessary to include flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed areas and the sediment basin. In determining whether a sediment basin is attainable, the operators may consider such factors as site soils, slope, available area on-site, etc. In any event, the operator must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design.

ii. Drainage locations which serve 10 or more disturbed acres at one time and where temporary sediment basins or equivalent controls are not attainable, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fence, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).

iii. Drainage locations serving less than 10 acres may utilize smaller sediment basins and/or sediment traps. At a minimum, silt fence, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.

2. Stormwater Management and Erosion Control Plan (SWMP) shall include the following:

a. Design calculations for all temporary and permanent structural control BMP measures.

b. A proposed schedule for the inspection and maintenance of all measures for the site prior to achieving final site stabilization. Inspections must be conducted at least once every 7 calendar days, or once every 14 calendar days <u>and</u> within 24 hours of the end of a storm event of 0.5 inches or greater.

c. Identification of all permanent control measures and responsibility for continued maintenance.

d. Drainage report with calculations showing volume, peak discharge, and velocity of present and future runoff for the 25-year, 24-hour storm event.

e. Plans showing the entire drainage area affecting or being affected by the development of the site. Proposed lot boundaries and drainage areas shall be clearly shown on the plan.

f. The direction of flow of runoff through the use of arrows shall clearly be shown on the plan.

g. The location, elevation, and size of all existing and proposed catch basins, drywells, drainage ditches, swales, retention basins, and storm sewers shall be shown on the plan.

h. When detention structures are planned to reduce future condition peak discharge, the soil cover complex method shall be used to compute the runoff volume and peak discharge for designing the structure. The design will conform to the criteria outlined for those types of structures given in the <u>Stormwater</u> <u>Management and Erosion and Sediment Control Handbook for Urban and</u> <u>Developing Areas in New Hampshire</u>.

i. Copies of pertinent State and Federal Permits.

j. An example SWMP table of contents is as follows:

i. Project overview.

ii. Owner.

iii. Address of development.

iv. Location of the site.

v. Description of receiving waters.

vi. Nature and purpose of the land disturbing activity.

vii. Limits of disturbance.

viii. Construction schedule.

ix. Existing conditions summary.

x. Definition of topography, drainage patterns, soils, groundcover, critical areas, adjacent areas, upstream areas draining through site, existing development, existing stormwater facilities, on- and off-site utilities, construction limitations, buffers, wetlands, streams, sensitive areas, and other pertinent features.

xi. Include an existing conditions plan (drawing) showing the above existing conditions and labeled per the narrative above.

xii. Off-site analysis.

xiii. Description of the tributary area (include at least <sup>1</sup>/<sub>4</sub>-mile downstream), drainage channels, conveyance systems, and downstream receiving waters.

xiv. Summary of a review of existing or potential problems resulting from the development including, but not limited to, sedimentation, erosion, water quality issues, and chemical spills.

xv. Demonstration that development of the site will not negatively affect the downstream systems.

xvi. Demonstrate adequate capacity of the downstream system to handle flow conditions after development.

xvii.As applicable, include an off-site drainage plan (the plan may be part of the existing conditions plan).

xviii.Special reports, studies, and maintenance information.

xix. As applicable, include test pit log forms, soil conditions data, and wetland delineation information.

xx. As applicable, include information regarding long-range maintenance of any closed drainage systems, detention/retention facilities, etc.

xxi. Appendix (include copies of all tables, graphs, charts, and test pit and percolation test data used in any of the above calculations).

C. Plan Approval and Review.

1. The Planning Board or other agency having jurisdiction (per 5.32.060.B.) shall indicate approval of the SWMP, as filed, if it complies with the requirements and objectives of this Regulation. As applicable, such approval shall be a component of subdivision or site plan approval.

2. Final SWMP approval shall be contingent upon collection of any required fees or escrow amounts related to technical review of any SWMP prepared under this Regulation.

# 5.32.100 Responsibility for Installation/Construction/Inspection.

A. The applicant and the applicant's engineer (or technical representative) shall schedule and attend a mandatory preconstruction meeting with the Town Engineer or his designee at least two weeks prior to commencement of construction. All required escrow deposits and bonding must be in place prior to the scheduled meeting. Three copies of the Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) (if required), the SWMP, up-to-date construction schedule, and associated construction documents must be provided at that time. The SWMP must bear the seal and signature of the New Hampshire Registered Professional Engineer preparing the documents. The SWMP may be combined with the SWPPP if labeled as both, meeting the requirements of both. Prior to commencement of construction, the Department of Community Development will confirm that the documents submitted meet the conditions of plan approval. An appropriate notation will be made on the "official" construction set used by the Code Enforcement and Public (Note: Preconstruction conferences will typically not be Works Departments. required for construction of one single-family home or one residential duplex, not part of a larger plan of construction.)

B. The Department of Community Development and/or Department of Public Works reserve the right to prepare and request the applicant's acknowledgement of a preconstruction checklist.

C. The applicant shall bear final responsibility for the installation, construction, inspection, and disposition of all stormwater management and erosion control measures required by the provisions of this Regulation.

D. The Department of Community Development may require a bond or other security with surety conditions in an amount satisfactory to the Town, providing for the actual construction, installation, and removal of such measures within a period specified by the Town and expressed in the bond or the security.

E. The Department of Community Development and/or Code Enforcement may require the owner or his authorized agent to deposit in escrow with the Town an amount of money sufficient to cover the Town's costs for inspection and any professional assistance required for site compliance monitoring.

F. Site development shall not begin before the SWMP and SWPPP (if required) have been reviewed and approved by the Town, a NOI has been acknowledged by the EPA, and NHDES has been contacted regarding impaired waters in accordance with a NOI (if applicable). Best Management Practices shall be installed as designed and scheduled as a condition of final approval of the SWMP.

G. Commercial and Industrial Development and/or Redevelopment. The applicant, owner, and owner's legally designated representative (if any) shall all hold responsibility for implementing the SWMP and SWPPP (if required).

H. Residential Development and Redevelopment. The applicant is responsible for implementing the SWMP and SWPPP (if required). Excluding any postdevelopment requirements of plan implementation, there are two ways for the Town to consider an applicant to be removed as the responsible party (the applicant may also be required to comply with other regulating entities' additional requirements):

1. The applicant completes the project in a manner satisfactory to the Town and files a Notice of Termination (NOT) with the EPA in accordance with the terms of the Federal requirements.

2. The applicant passes legal responsibility for the plan to another competent party. In the case of a new subdivision where lots may be transferred to a different

entity for construction of the buildings, it is the applicant's responsibility to ensure that the applicant has a legal basis to require compliance by the new entity.

I. Individual Homeowner Development. The homeowner or a homeowner who has taken control of a subdivided property bears responsibility for compliance with the approved SWMP and SWPPP (if required). If the homeowner is contracting building services to another person or entity, the homeowner may choose to pass legal responsibility of compliance to the contracted entity. If the responsibility is not passed, the homeowner remains the responsible party and must comply with the terms of the original plan.

# 5.32.110 Maintenance and Inspection.

A. Maintenance and Inspection – Planning Board Approved Projects. The following provisions shall pertain and be applicable only to those plans which come under the jurisdictional purview of the Planning Board, (site plan/subdivision review).

1. A narrative description of ongoing construction and operational maintenance requirements for water quality measures required by the SWMP after final Planning Board approval shall be incorporated into the final plan and supporting documentation or development agreement of the property on which such measures are located and recorded at the Hillsborough County Registry of Deeds. The narrative shall be in the form of a typical site plan management or development agreement, or as otherwise set forth by the Planning Board.

2. If the applicant is unable to adequately provide the required maintenance activities during construction, work may be stopped and the Town may require additional escrow funding to be used by either the applicant or the Town solely to repair, replace, and/or maintain the required measures.

3. The Town may require periodic compliance inspections to verify ongoing maintenance of water quality protection measures. Such inspections shall be performed by the Town or their designee at reasonable times to the landowner.

4. As a condition of Planning Board approval, the owner, his successor, and assigns shall consent to periodic compliance inspections by the Planning Board or their designee for compliance with this Regulation.

5. Self-inspections are to be performed in accordance with the SWMP and SWPPP (if required).

6. Self-inspection reports are to be filed on-site in a location readily accessible to the Town Inspector.

B. Maintenance and Inspection – Other Projects. The following provisions shall pertain and be applicable only to those plans which come under the jurisdictional purview of the Planning Board, (site plan/subdivision review).

1. Right to inspect. The Code Enforcement Officer, Health Officer, and/or DPW Director or their designee, are authorized to conduct inspections of any site that is the subject of a permit issued hereunder, irrespective of whether such permit also required the approval of a Plan in accordance with Section 5.32.060.A.2, above, in order to insure that any conditions of the issuance of such permit are being maintained and that no violation of any of the provisions of this Regulation are taking place.

2. Confirmation by Registered Professional Engineer. Upon such inspection, when the circumstances of any suspected breach of condition or violation of this Regulation involve standards that implicate technical engineering criteria either included in this Regulation or as a condition of such permits, the Code Enforcement Officer, Health Officer, and/or DPW Director or their designee shall seek confirmation

that such circumstances constitute a violation of such criteria prior to taking any enforcement action under Section 5.32.140 of this Regulation.

3. Enforcement. Upon such confirmation by a Registered Professional Engineer, or when such confirmation is not required due to the fact that the circumstances of such violation do not implicate technical engineering criteria either included in this Regulation or as a condition of such permit, the Code Enforcement Officer, Health Officer, and/or DPW Director or their designee may proceed to enforce the provisions of this Regulation or conditions of the permit in accordance with applicable statutes, rules or regulations.

# 5.32.120 Other Required Permits.

In addition to local approval, copies of the following permits shall be required if applicable:

A. Terrain Alteration (Site Specific Permit). RSA 485-A:17 requires a permit from the Department of Environmental Services for "...any person proposing to significantly alter the characteristic of the terrain, in such a manner as to impede natural runoff or create an unnatural runoff ...". Regulations require this permit for any project involving more than 100,000 contiguous square feet of disturbance or 50,000 contiguous square feet in the protected shoreland.

B. National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. A permit issued by the EPA or by the State under authority delegated pursuant to 33 USC, section 1342 (b) that authorizes the discharge of pollutants to waters of the United States. For a cumulative disturbance of one acre of land that EPA considers "construction activity", which includes, but is not limited to clearing, grading, excavation, and other activities that expose soil typically related to landscaping, demolition, and construction of structures and roads, a Federal Permit will be required. Consult EPA for specific rules. This EPA Permit is in addition to any State or local permit required. To apply, the entity or individual responsible for construction site operations shall file a NOI with the EPA at least 7 days prior to work beginning. Discharge is authorized when the application status is listed as "authorized" in the EPA public NOI database or when the applicant receives an EPA authorization letter by mail.

C. Wetlands Permit. RSA 482-A requires a permit from the Department of Environmental Services for any person desiring to "...excavate, remove, fill, dredge or construct any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the State ...".

# 5.32.130 Post-Construction Operation.

A. Stormwater Discharges Associated with Commercial/Industrial Activities. Each commercial and industrial facility approved under this Regulation is required to perform annual site inspections (at a minimum). The site inspection must be documented and at a minimum should include: review of stormwater flow paths, condition of any sediment or contaminant control devices, water quality notations, corrective actions and time frames if unacceptable water quality runoff is noted, and the name and position of the inspector. All records of the inspections must be made available to the Town or authorized agent upon request.

B. Notification for Spills or Other Non-Stormwater Discharges. As soon as any person responsible for a facility, site, activity, or operation has information of any known or suspected release of pollutants or non-stormwater discharges which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the Town of Milford's municipal storm system, State waters, or waters of the United

States, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release as to minimize the effects of the discharge. (If said individual is not competent to assess, contain, or clean up, that person shall immediately notify another competent individual or firm.) If the substance poses an immediate health or safety concern, the Town of Milford Emergency Services must immediately be notified. If the substance does not pose an immediate concern, the Town of Milford Code Enforcement, Health Officer, and Department of Public Works should be notified. This notification should be made as soon as possible; however, no later than 24 hours post event. This notification does not preclude and must be made in addition to any Federal or State required notifications. The site operator/owner must be aware that discharges such as treated swimming pool water are not allowed discharges unless appropriate measures have been taken to reduce the treatment chemical concentrations in the water.

# 5.32.140 Enforcement and Penalties

The Code Enforcement Officer, DPW Director, Health Officer, or their designee, as the case may be and subject to the provisions below, shall be responsible for enforcement of all aspects of this Regulation. In that regard, said official(s) shall be empowered hereby to invoke any and all statutory enforcement prerogatives that may be applicable to the purported violation as it relates to the plan submitted hereunder or activity regulated hereby. By way of illustration and not by way of limitation, it is contemplated that the following statutory enforcement prerogatives would apply:

Type of Proposal	Applicable Board	Applicable Enforcement Statute
Site Plan/Subdivision Proposals	Planning Board	RSA 676:15, 16, 17, 17-a, & 17-b
Proposals affecting single existing tracts	Health Officer/ Board of Health/ Planning Board	RSA 147:9
Proposals affecting existing public roads or public stormwater systems in place	Selectmen/DPW	RSA 41:11, 47:17, RSA 625:V-a.
Proposals affecting any water/sewer infrastructure in place	Water/Sewer Commission	RSA 38:26, II, and RSA 149-I:6, III
Proposals implementing or involving Earth Material Removal Permits or other activities regulated by RSA 155-E	Planning Board	RSA 155-E:10

The Code Enforcement Officer, DPW Director, Health Officer, or their designee is authorized by means of this Regulation to take any action to enforce the conditions hereof and to act on behalf of the various boards or agencies identified above, depending on the nature or form of the conduct constituting the alleged violation. It is intended that said Code Enforcement Officer, DPW Director, Health Officer, or their designee shall have the authority to seek individual specific remedies, including, where appropriate, injunctive relief, the issuance of Notices of Violation, the pursuit of civil and/or criminal sanctions, or, without limitation, any other sanction as authorized by applicable law, regulation or statute, and said Officer(s) are hereby designated as the appropriate designee of any board or agency having jurisdiction, whenever there is reason to believe that a violation of any of the provisions of this Regulation or any permit issued hereunder has taken place. Nothing herein shall be interpreted to limit or otherwise curtail any statutory authority which such board or agency is entitled to exercise independent of this Regulation.

Further, nothing in this section is intended to limit, in any way, the Code Enforcement Officer, DPW Director, Health Officer, or their designee from exercising any authority that State law allows them to exercise on behalf of any State agency which has preemptive or concurrent jurisdiction over any conduct that would be considered a violation of this Regulation.

# 5.32.150 Mandatory Regulated MS4s in Urbanized Areas – Map.

Municipal Separate Storm Sewer Systems (MS4s) within "urbanized areas" (UA), as defined by the Bureau of Census, fall under mandatory regulation under EPA Phase II Stormwater Management Regulations. Within the UA, all roads and streets and associated drainage systems, both open and closed fall under regulation. Map 1 depicts the two urbanized areas in Milford. The northern area is within the Nashua, New Hampshire UA and the southern area is within the Boston, Massachusetts, New Hampshire, and Rhode Island UA. All land in Milford shall comply with this Regulation.

Map 1: Town of Milford "Urbanized Areas"

Insert Town Copy of EPA Map