

# STORMWATER MANAGEMENT RULES & REGULATIONS

ADOPTED BY THE DEDHAM CONSERVATION COMMISSION May 23, 2002

First Revision May 15, 2003

Second Revision October 2, 2008

## SECTION 1: AUTHORITY

- a.) The rules and regulations contained herein have been adopted by the Dedham Conservation Commission in accordance with Section 5 of the Town of Dedham Stormwater Management By-Law.
- b.) Nothing in these rules and regulations is intended to replace or be in derogation of the requirements of the Town of Dedham General Wetlands Protection Bylaw or the Town of Dedham Floodplain Zoning Bylaw or any rules and regulations adopted thereunder.

## SECTION 2: PURPOSE AND GOALS

- a.) These regulations are intended to require practices that will control stormwater generated by any project site, while insuring public safety and providing treatment to protect groundwater and surface water from degradation. Where stormwater is to be treated, best management practices (BMPs) to minimize pollution prior to discharge shall be required.

## SECTION 3: DEFINITIONS

- a.) The definitions contained herein apply to the Town of Dedham Stormwater Management By-Law and the regulations adopted thereunder. 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.

### 1. ALTER

- A. To measurably change the ability of a ground surface area to absorb water or to change existing surface drainage patterns.
- B. New or replacement impervious areas of less than 120 square feet in ground surface coverage are presumed not to alter under these Regulations; therefore, no pre-construction filing shall be required.

Examples of projects which may proceed under this presumption include attached additions to Single Family or duplex residences not greater than 120 square feet, regardless of foundation type; detached sheds, garden tool houses, woodsheds or other accessory buildings of less than 120 square feet in ground coverage; prefabricated or cast-in-place staircases or landings; support pads for outside access staircases; air conditioning equipment pads; tents; metal, fabric, or plastic covered carports; swimming or wading pools of less than two (2) feet in water depth; all, not subject to pre-construction review provided such impervious surfaces of less than 120 square feet are associated with a single family or duplex residence.<sup>1 2</sup>

- C. Clearing of existing vegetation, including trees, or ground surface disturbance (grading), is

<sup>1</sup> Although these structures or activities are presumed to be exempt from pre-construction review under the Regulations promulgated pursuant to the Stormwater Management Bylaw, an Applicant or Owner should consult the Building Department as to whether the structure(s) or activity complies with the Town's Zoning provisions, especially the percentage of impervious area lot coverage allowed in certain Zoning districts.

<sup>2</sup> Although these structures or activities are similarly presumed to be exempt from pre-construction review, if they are proposed to be in a wetland (including floodplains or riverfront areas) or within 100 feet of these areas, a filing may be required under the Commonwealth's Wetlands Protection Act, or the Towns Wetlands Protection Bylaw, Chapter 28. Contact the Conservation Commission office for guidance.

presumed not to alter, providing the square footage of such activity is less than ten (10) percent of the total area of the parcel upon which the work is conducted.

- D. The construction of a wall of less than four (4) feet in height is presumed not to alter these regulations; therefore, no pre-construction filing shall be required.
- E. Notwithstanding the provisions of subsections B, C, or D, above, the presumption that the listed structures or activities do not cause a regulatory alteration, is refutable; upon written complaint by a direct abutter to the parcel upon which the structure or activity was accomplished, and upon a finding by either the Building Inspector or the Stormwater Officer, that the structure or activity, As-Built, has created a nuisance and/or derogates from the purposes of the Stormwater Management Bylaw, the Stormwater Officer shall order the owner of the parcel upon which the offending structure or activity is located, to file an after-the fact Stormwater Management Permit Application, and comply with all Conditions that may issue within the Permit that issues pursuant to the Application.

2. BEST MANAGEMENT PRACTICES (BMPs)

- A. Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce point source and non-point source pollution, in order to promote stormwater quality and protection of the environment.
- B. Best Management Practices are activities or equipment whose purpose is the maintenance of stormwater quality and the protection of the environment. Please see the applicable section of the Dedham Engineering Design Standards as well as the Town of Dedham Conservation Commission Rules and Regulations for a more detailed description and explanation of BMPs

3. BLANKET STORMWATER MANAGEMENT PERMIT (BSMP)

A permit for projects in the categories and meeting the standards outlined in Section 5 of these Rules and Regulations. Projects in these categories that meet these generic standards are assumed to meet the requirements and intent of the Town of Dedham Stormwater Management By-Law.

4. COMMISSION (ConCom)

The term "Commission" refers to the Dedham Conservation Commission.

5. CONVEYANCE

- A. Any structure or device, including pipes, drains, culverts, curb breaks, paved swales and man-made swales of all types designed or utilized to move or direct stormwater runoff or existing water flow.
- B. Any impervious surface where surface/sheet flow is utilized to remove rainfall. An example of such a surface would be a parking lot that drains directly onto a vegetated surface without any curbing or drainage system to intercept the flow.

6. DEDHAM DRAINAGE AND STORMWATER DESIGN STANDARDS

The Drainage and Stormwater Design Standards promulgated by the Department of Public Works of the Town of Dedham.

7. DPW

Dedham Department of Public Works.

8. DUPLEX HOUSE

A building containing two residential units or two single-unit residential buildings on one parcel of land whether the units have the same or different owners. Only two residential units may be located on the parcel of land.

9. EMERGENCY STORMWATER PERMIT (ESP)

An Emergency Stormwater Permit issued in cases where a delay or failure to perform work poses an imminent danger to public health or safety.

10. EROSION CONTROL

The prevention or reduction of the movement of soil particles or rock fragments

11. EROSION CONTROL PLAN

A plan that shows the location and construction detail(s) of the erosion controls to be utilized for a plan site, as described in Section 6(d) of these Regulations.

12. FILL

The placement or deposit of any material that raises, either temporarily or permanently, the elevation of any area subject to the bylaw.

13. FLOOD CONTROL

The prevention or reduction of flooding and flood damage.

14. 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.

15. GROUNDWATER

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

16. HOODED CATCH BASIN

A catch basin that is fitted with an inverted elbow over its outlet pipe or similar structure that is designed to retain oils and other floatables within the catch basin sump and prevent them from flowing into the drainage system.

17. IMPERVIOUS AREA

Any manmade cover or surface that impedes the natural infiltration of stormwater.

18. INFILTRATION

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

19. OPERATION AND MAINTENANCE PLAN (O&M PLAN)

This term shall have the meaning set forth in Section 9.

20. REDEVELOPMENT

- A. Maintenance and improvement of existing roadways, including widening less than a single lane, adding shoulders, and correcting substandard intersections and drainage, and repaving.
- B. Development, rehabilitation, expansion, and phased projects on previously developed sites, provided the redevelopment results in no net increase in impervious area.

21. RESOURCE AREA

Any area protected under the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act, or Section 3 of the Dedham General Wetlands Protection Bylaw.

22. SEDIMENTATION

A process of depositing material that has been suspended in water.

23. SFD

A single family dwelling. For the purpose of these regulations, a SFD is a single house lot/dwelling not part of a new subdivision project.

24. STORMWATER

Rain water or snow and ice melt that flows across a surface or through a drainage system.

25. STORMWATER MANAGEMENT COMPLIANCE CERTIFICATE (SMCC)

A document issued by the Conservation Commission which states that all conditions of a previously issued Stormwater Management Permit have been met and that a project has been completed in compliance with the conditions set forth in a SMP.

26. STORMWATER MANAGEMENT PERMIT (SMP)

A permit issued by the Conservation Commission, after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the Town from the deleterious effects of uncontrolled and untreated stormwater runoff.

27. STORMWATER OFFICER

The Conservation Officer or other person(s) designated by the Conservation Commission to review Stormwater Management Permit Applications, hold public meetings on SMP applications, and advise the Dedham Conservation Commission on Stormwater Permit Applications as outlined in this By-Law.

**SECTION 4: PROJECTS REQUIRING A STORMWATER MANAGEMENT PERMIT (SMP)**

- a.) It shall be the responsibility of any person proposing any project to which these regulations apply to obtain a Stormwater Management Permit (SMP) from the Dedham Conservation Commission (ConCom) prior to beginning construction of any such project.
- b.) The following items and activities shall specifically require a Stormwater Management Permit (SMP):
  - 1. Any activity that will increase the impervious area of a parcel of land.
  - 2. Any activity that will result in an increased amount of stormwater runoff or pollutants flowing from the property onto or into a public way, public property, or into a resource area.
  - 3. Any alteration or redevelopment of a facility listed in Table 1 below, or any conversion of a property to a use listed in Table 1.
  - 4. Any activity that will modify or alter an existing conveyance.
  - 5. Any activity that will include the construction of a conveyance, including but not limited to, catch basins, drainage swales and ditches, and stormwater infiltration systems (other than those permitted under a Blanket Stormwater Management Permit).
- c.) Exceptions: No Stormwater Permit shall be required for the following activities:
  - 1. Repair or replacement of an existing roof of a single-family or duplex dwelling.

2. Maintenance of existing gardens or lawn areas associated with a single family or duplex dwelling.
3. The construction of any fence that will not alter existing terrain or drainage patterns.
4. Construction of utilities (gas, water, electric, telephone, etc.) other than drainage that will not alter terrain, ground cover, or drainage patterns.

<b>TABLE 1 PROJECTS WHICH ALWAYS REQUIRE STORMWATER PERMITS</b>	
1	Stormwater discharges associated with Standard Industrial Classifications (NPDES stormwater permit program requirements apply)
2	Auto salvage yards (e.g., auto recycler facilities)
3	Auto fueling facilities (e.g., gas stations)
4	Fleet storage areas (e.g., cars, buses, trucks, public works)
5	Vehicle service, maintenance and equipment cleaning areas and business sites. This includes car dealerships
6	Commercial parking lots with high intensity use. Such areas include fast-food restaurants, convenience stores, high-turnover (e.g., chain) restaurants, shopping centers and supermarkets
7	Road salt storage areas
8	Commercial nurseries and landscaping supply operations
9	Metal rooftops, including roofs made from aluminum, tin, galvanized steel, copper, or rooftops that have been documented to contribute significant pollutant loads
10	Outdoor storage and loading/unloading areas of hazardous substances
11	SARA 312 generators (if materials or containers are exposed to rainfall)
12	Marinas (including service, repainting, and hull maintenance areas)

- d.) Certain projects may meet the requirements for Blanket Stormwater Management Permits (BSMP). The requirements for Blanket Stormwater Management Permits are outlined in Section 5 of these Rules and Regulations. The Stormwater Officer or any other designee of the Conservation Commission shall have the authority to issue any BSMP if the project in question meets the requirements of Section 5.
- e.) An Emergency Stormwater Permit (ESP) may be issued in cases where a delay or failure to perform work poses an imminent danger to public health or safety. The Stormwater Officer or any member of the Conservation Commission may, in such individual's discretion, issue an ESP. Any person to whom an ESP is issued shall, prior to the next scheduled meeting of the Conservation Commission (or, in the Stormwater Officer's discretion, as soon as reasonably practical thereafter), submit the materials described in Section 6 with respect to any work permitted by such ESP. Each ESP shall be presented to the Conservation Commission for ratification.

**SECTION 5: PROJECTS ELIGIBLE FOR A BLANKET STORMWATER MANAGEMENT PERMIT (BSMP)**

- a.) Blanket Stormwater Management Permits (BSMPs) shall cover certain types of projects associated with existing Single Family and Duplex dwellings listed in Table 2 Below, provided these projects meet all the requirements as outlined in this Section 5.
- b.) If a project cannot meet each of the requirements set forth in this Section 5, then the project shall be filed under an application for a standard Stormwater Management Permit (SMP).
- c.) Once issued, Blanket Stormwater Management Permits are not required to be recorded at the Norfolk County Registry of Deeds.
- d.) Unless specifically required by a condition in the BSMP, no Stormwater Management Compliance Certificate is required to close out the BSMP once work is completed.

<b>TABLE 2</b>	
<b>PROJECTS ELIGIBLE FOR BLANKET STORMWATER PERMITS</b>	
<b>PROJECT TYPE</b>	<b>PERMIT DETAILS FOUND IN SECTION</b>
Deck Construction	5.e.1
Patio Construction	5.e.2
Retaining Wall Construction	5.e.3
Expansion of Existing Paved Driveway	5.e.4
Shed	5.e.5
Swimming Pool	5.e.6
Additions to Single Family or Duplex Residences	5.e.7

- e.) Detailed eligibility requirements for each project type potentially eligible for a Blanket Stormwater Permit are contained in the subsections below.
  1. **Deck Construction-** Construction of a raised deck associated with an existing Single Family Dwelling (SFD) or Duplex House, providing that the following criteria are met:
    - A. The ground area beneath the proposed deck shall not be paved or otherwise made impervious if it is presently bare ground or landscaped, including lawn.
    - B. If the ground area is presently paved or impervious, it may remain so after construction of the deck and will still qualify for this BSMP.
    - C. There shall be no roof constructed over the proposed deck. Should a roof be constructed over the deck in the future, a Stormwater Management Permit (SMP) will be required.
    - D. The proposed deck shall be constructed in such a manner to allow rainfall to pass through to the ground below. An example of this is the typical wooden deck with expansion spaces between the boards that form the deck surface.
  2. **Patio Construction-** Construction of a patio associated with an existing Single Family Dwelling (SFD) or Duplex House, providing that the following criteria are met:
    - A. The patio shall be constructed of brick, stone, or other materials in such a fashion to permit infiltration of rainfall to the soil below.

- B. Any modular brick, block or paver patio regardless of size, shall be provided with a sub-base of one (1) foot of three-quarter inch double washed stone, compacted in place, with a leveling course of not greater than two (2) inches of three-eighths inch crushed stone. Joints between the surface treatment shall be not less than one half inch, meeting the requirements of subparagraph A, above, shall be filled with three-eighths inch crushed stone or pea stone; use of sand or stone dust is prohibited.
  - C. Any patio constructed pursuant to a Blanket Stormwater Management Permit shall, for purposes of winter snow or ice control, not utilize any sand or other non-dissolving traction control materials. Use of such materials may, over time, compromise the infiltration capacity of the joint filling materials, or may limit the water storage capacity of the voids within the crushed stone patio base.
3. **Retaining Wall Construction-** Construction of retaining walls associated with an existing Single Family Dwelling (SFD) or Duplex House, providing that the following criteria are met:
- A. A building permit application is filed with the Dedham Building Department and a building permit is subsequently issued.
  - B. The retaining wall shall not alter the flow direction of stormwater runoff leaving the site, nor shall it alter the stormwater flow to any wetland resource areas on the project site or adjoining properties.
  - C. Construction of the retaining wall will not increase the amount of stormwater runoff flowing to a public street or onto other publicly owned properties.
4. **Expansion of Existing Paved Driveway-** Expansion, under 250 square feet in additional surface area, of an existing paved driveway associated with an existing Single Family Dwelling (SFD) or two family residence do not need to file for a Stormwater Management Permit providing the following criteria are met:
- A. Expansion of the driveway surface shall not result in additional stormwater runoff flowing to a public street or onto other publicly owned properties.
  - B. No previous BSMP for a driveway expansion has been issued for the SFD or Duplex House unit. If a BSMP has been issued for a previous driveway expansion, a full SMP shall be required for this and any future expansion of the driveway surface.
5. **Shed** - Construction of a shed (a structure detached from the principle structure, and located in compliance with zoning setbacks) of up to 400 square feet in size, associated with an existing Single Family Dwelling (SFD), or Two Family Dwelling, provided that:
- A. Detached accessory buildings of less than 400 square feet may be constructed on a raised footing foundation (i.e., block, pressure treated wooden sleepers, concrete piers); if so constructed, the area under the building shall remain pervious.
6. **Swimming Pool** - Construction of a swimming pool associated with an existing Single Family Dwelling (SFD) or Duplex House, providing that the following criteria are met:
- A. Pool water will not be discharged to a public street or into any Resource Area.
7. **Additions to Single Family or Duplex Residences** - Construction of an addition to an existing Single Family Dwelling (SFD), or Two Family Dwelling, or construction of a new Single Family Dwelling (SFD) provided that the following criteria are met:

- A. The proposed addition shall not be greater than 1000 square feet.<sup>3</sup>
  - B. The addition is provided with a gutter and downspout system.
  - C. The downspouts are directed to a subsurface roof water infiltration system of a type approved by the Conservation Commission, or their designated agent(s).
  - D. The infiltration system is designed and installed in accordance with the requirements of the Conservation Commission or their designated agent(s).
  - E. The roof water infiltration system is inspected periodically and maintained in accordance with the manufacturer's specifications.
- f.) Any applicant seeking a BSMP shall submit to the Stormwater Officer such information, plans, drawings, specifications, photographs, or other materials the Stormwater Officer may require in order to determine the eligibility of the proposed work for a BSMP.

#### **SECTION 6: STORMWATER MANAGEMENT PERMIT (SMP) SUBMITTAL REQUIREMENTS**

- a.) The application for a Stormwater Management Permit shall consist of submittal to the Stormwater Officer of a completed permit form and fees, plus any plans or documents explaining and detailing the proposed project. This application shall contain sufficient information for the Stormwater Officer and Commission to evaluate the environmental impact, and the effectiveness and acceptability of those measures proposed by the applicant for reducing adverse impacts from stormwater.
- b.) The submitted plan and supporting documents shall contain all information listed in Section 7, Standards and Specifications for Stormwater Management Systems, as applicable, as well as any other information requested by the Stormwater Officer or Commission to evaluate the potential stormwater impacts of the project.
- c.) The existing environmental and hydrological conditions of the site, proposed alterations of the site, and all proposed components of the drainage system and any measures for the detention, retention or infiltration of water, for the protection of water quality and protection from flooding, shall be described in detail with sufficient information to evaluate the proposed project.
- d.) An erosion and sedimentation control plan shall be required as part of any filing under these Regulations. All projects proposing the alteration of 1/2 acre or more of surface area, shall require an expanded erosion control plan approved by the Stormwater Officer. The 1/2 acre area threshold includes areas that will be temporarily altered during the construction phase of the project, for such purposes as stockpiling of materials and equipment storage. Each erosion control plan shall include the following items:
  - 1. Property lines.
  - 2. Existing and proposed topography
  - 3. Location of all existing and proposed buildings and impervious surfaces.
  - 4. Location of all existing and proposed stormwater utilities, including structures, pipes, swales and detention basins.
  - 5. Construction details for all erosion controls proposed to be utilized.

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<sup>3</sup> Additions greater than 1000 square feet are not eligible for processing as a Blanket Stormwater Management Permit. All projects larger than 1000 square feet shall submit a full Stormwater Management Permit application to the Dedham Conservation Commission

6. Information indicating when the erosion controls shall be installed.
  7. The plan shall state who will be responsible for the weekly inspection and maintenance of the erosion controls.
- e.) An Operation and Maintenance plan (O&M Plan) shall be required as part of any filing under these Regulations. Details relating to Operation and Maintenance plans are set forth in Section 9 of these Regulations.
  - f.) Where an applicant believes that the physical conditions of a site proposed for redevelopment or expansion make full compliance with the standards contained in Section 7 impractical, the application package shall contain a detailed narrative explaining why the specific performance standard cannot be met along with how failure to meet the performance standard could potentially impact stormwater runoff quality and quantity.
  - g.) Ten copies of the SMP and supporting documentation described in items a through d above.
  - h.) A filing fee per Section 12 of the Stormwater Management By-Law shall be paid at the time the application is filed with the Town. Additional review fees may be required as provided in Section 12 of these Regulations.
  - i.) Filing and action deadlines are outlined in Sections 4.d, e, and f of the Town of Dedham Stormwater Management By-Law.
  - j.) Failure to submit any of the foregoing materials or comply with any of the foregoing requirements shall be grounds for denial of any Stormwater Management Permit application..

#### **SECTION 7: STANDARDS AND SPECIFICATIONS FOR STORMWATER MANAGEMENT SYSTEMS**

- a.) The design and performance standards for Stormwater Management Systems shall be as provided in these Regulations and in the Dedham Drainage and Stormwater Design Standards.
- b.) Flooding: Design requirements specific to flooding and quantity shall be as provided in these Regulations, in the Dedham Drainage and Stormwater Design Standards, and in the Dedham Floodplain Bylaw.
- c.) Stormwater management for each site shall accomplish the following:
  1. Reproduce, as nearly as possible, the hydrological conditions in the ground and surface waters prior to the development.
  2. Reduce stormwater pollution to the maximum extent possible using Best Management Practices (BMPs).
  3. Have an acceptable future Operation and Maintenance Plan (O&M Plan) covering method and execution.
  4. Have a beneficial effect on the natural and human environment.
  5. Be appropriate for the site given physical constraints.
  6. Provide sufficient level of health, public safety, and environmental protection during the construction phase.
  7. Provide proper management prior to the discharge of such runoff onto adjacent property owned by others, into the existing storm drainage system, or wetland resources listed in the

Wetland Protection Act Regulations, 310 CMR 10.00.

8. Comply with the DEP standard described in Table 3 below.
- d.) Erosion and sedimentation controls shall be required as part of any proposed construction or earthwork activities.
  - e.) Water Quantity, Duration and Quality information to be included in the Stormwater Management Plan (SMP). Water quantity and duration information requirements are outlined in the Conservation Commission Rules and Regulations. These Rules and Regulations cover Quality information requirements.
    1. Pre-development conditions in narrative form and calculations: existing site surface water quality classifications found in 314 CMR 4.04.
    2. Post-development conditions: a discussion regarding whether the proposed BMPs meet or exceed the performance standards identified in the General Requirements for SMPs, as well as an evaluation of the pollutant removal efficiency of each proposed treatment facility or group of facilities.

<b>TABLE 3 D.E.P. STORMWATER QUALITY PERFORMANCE STANDARDS</b>	
1	No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater or cause erosion.
2	Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.
3	Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types.
4	For new development, stormwater management systems must be designed to remove 80% of the average annual load (post-development conditions) of Total Suspended Solids (TSS). It is presumed that this standard is met when: <ol style="list-style-type: none"> <li>(a) Suitable nonstructural practices for source control and pollution prevention are implemented;</li> <li>(b) Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume; and</li> <li>(c) Stormwater management BMPs are maintained as designed.</li> </ol>
5	Stormwater discharges from areas with higher potential pollutant loads require the use of specific stormwater management BMPs. The use of infiltration practices without pretreatment is prohibited.
6	Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas (see list on page 1-8). Critical areas are Outstanding Resource Waters (ORWs), shellfish beds, swimming beaches, cold water fisheries and recharge areas for public water supplies.
7	Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. However, if it is not practicable to meet all the Standards, new (retrofitted or expanded) stormwater management systems must be designed to improve existing conditions.
8	Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.
9	All stormwater management systems must have an operation and maintenance plan to ensure that systems will function as designed.

- f.) All proposed work for any project requiring an SMP shall be designed in accordance with the technical design criteria contained in the Dedham Drainage and Stormwater Design Standards.

- g.)** All proposed work for any project requiring an SMP shall be designed in accordance with the Best Management Practices described in Section 8 below.

**SECTION 8. BEST MANAGEMENT PRACTICES (BMPs)**

- a.)** The Dedham Drainage and Stormwater Design Standards contains a list of BMPs that have been approved by the Town of Dedham. The applicant may propose alternative BMPs not listed in the Dedham Drainage and Stormwater Design Standards, subject to a full technical review and approval by the Stormwater Officer and Conservation Commission. The applicant shall be responsible for any technical costs incurred by the Commission for the review of alternative BMPs.
- b.)** Mitigation measures may be required, including but not limited to the following, in order to improve the quality of stormwater runoff or groundwater discharge:
1. Oil hoods in catch basins.
  2. Oil and gasoline separation chambers in drainage systems prior to discharge into a resource area or drainage basin.
  3. Use of salt alternatives for de-icing of roadways, sidewalks and parking areas.
  4. Limiting the use of fertilizers or requiring the use of low nitrogen fertilizers.
  5. Check dams in drainage swales to reduce the volume of suspended sediments.
  6. "Wet" detention ponds to promote nutrient absorption.
  7. Elimination and replacement of invasive plant species within wetland mitigation areas. Such species shall be those classified as invasive by the Massachusetts Department of Environmental Protection.
  8. Minimizing the amount of impervious area on a site.
  9. "Staged" detention pond systems to reduce the volume of suspended solids in runoff discharge by providing a multi-stage sedimentation system.
  10. Velocity reduction devices on stormwater discharge pipes.
  11. New technologies aimed at the reduction of stormwater and groundwater contamination.

**SECTION 9. OPERATION AND MAINTENANCE PLAN (O&M Plan)**

- a.)** All soil erosion and stormwater runoff control facilities and measures shall be maintained in accordance with permit conditions. The person(s) or organization (s) responsible for maintenance shall be designated in the permit application submitted to the Stormwater Officer. An Operation and Maintenance plan (O&M Plan) shall be required for all projects and should identify at a minimum:
1. Stormwater management system(s) owner(s) and emergency contact information.
  2. The party or parties responsible for operation and maintenance. Maintenance agreements shall specify responsibilities for financing maintenance and emergency repairs. The Stormwater Officer or Conservation Commission shall make the final decision of what maintenance option is appropriate in a given situation. Natural features, proximity of site to lakes, streams and protected wetlands, extent of impervious surfaces, size of the site and potential need for ongoing maintenance activities will be considered when making this

decision.

3. The types of maintenance tasks to be included in the O&M Plan include:
  - A. Cleaning and removal and the disposal of sediments and other collected pollutants from the system.
  - B. Emergency procedures appropriate for the site.
- b.) Maintenance Schedule. Any project that involves the use of drainage structures, including swales and ponds, shall include a maintenance schedule as part of the O&M Plan.
  1. Details of such a maintenance plan shall be incorporated onto the plans submitted to the Stormwater Officer.
  2. Such maintenance plans shall be designed to ensure that Water Quality standards are met throughout the year.

**SECTION 10. MEETINGS; PROCEDURAL REQUIREMENTS; ISSUANCE OR DENIAL OF PERMITS; BURDEN OF PROOF**

- a.) With respect to meeting and notice requirements, procedural requirements, issuance or denial of permits, burdens or proof, and the like, the Commission, the Stormwater Officer, and any applicant shall adhere to the applicable provisions in the Dedham Stormwater Management By- Law.
- b.) If a project is determined to meet the standards for issuance of a Blanket Stormwater Management Permit as outlined in Section 5 of these Rules and Regulations, no public meeting shall be required with respect to the review of such project's permit application or the issuance of a Blanket Stormwater Management Permit for such project.
- c.) The Commission reserves the right to require corrections or improvements to a stormwater management system after issuance of any SMP based on the system's performance under actual storm conditions.

**SECTION 11. INSPECTION; STORMWATER MANAGEMENT COMPLIANCE CERTIFICATE (SMCC)**

- a.) After the stormwater management system has been constructed and before a Stormwater Management Compliance Certificate is issued, the applicant shall submit As-Built Plans detailing the actual stormwater management systems, structures and devices as installed. As-Built Plans shall be stamped by a Registered Professional Engineer or Land Surveyor indicating that the constructed facility(s) have been constructed in accordance and meet the requirements of the Stormwater Management Permit, including compliance with performance standards and best management practices.
- b.) After receipt of the As Built Plans and prior to the issuance of a Stormwater Management Compliance Certificate, the Stormwater Officer or other designee of the Conservation Commission shall inspect the system to confirm its "as-built" features. This representative shall also evaluate the effectiveness of the system in actual storm conditions. A system will be deemed inadequate if errors in the infiltrative capability, the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins are found. If the 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 Permit, the Commission shall have the right to require corrections or improvements to the "as-built" system before issuing a Stormwater Management Compliance Certificate.
- c.) It is the responsibility of the project applicant to request the issuance of a Stormwater Management Compliance Certificate from the Conservation Commission upon completion of the work approved under a SMP. No SMCC is required for work approved under a BSMP.

**SECTION 12. ENGINEERING AND CONSULTANT REVIEW FEES**

- a.) In addition to the filing fee, the Commission is authorized to require an applicant to pay reasonable costs and expenses borne by the Commission for specific expert engineering and consultant services deemed necessary by the Commission to review a Stormwater Management Permit Application. Payment may be required at any point in the deliberations prior to a final decision.
- b.) Any application filed with the Commission must be accompanied by a completed ENGINEERING CONSULTANT FEE ACKNOWLEDGEMENT form. This is to acknowledge that the applicant is aware that the application may be subject to Stormwater Officer Assistance as well as Engineering and Consultant Review fees as outlined in this section of the Stormwater Management Rules and Regulations.

<b>TABLE 4A – EXAMPLES OF PROJECTS AND ACTIVITIES SUBJECT TO ENGINEERING CONSULTANT REVIEW FEE (\$115.00 per hour)</b>	
	<u>Activity</u>
1.	Alteration of a bank or waterway.
2.	Alteration of a resource area and/or construction of a resource replication/restoration area.
3.	Alteration of 500 or more square feet of land within the resource area buffer zone.
4.	Alteration of land under a water body.
5.	Discharge of any pollutants into or contributing to resource areas protected by this bylaw. This includes stormwater runoff from paved roadway or parking lot surfaces.
6.	The construction of a drainage system, including a detention or retention basin or a stormwater management system. This includes the modification of such existing systems.
7.	Construction of new streets, roadways and parking lots within a resource area or buffer zone.
8.	Major reconstruction of existing roadways and parking lots within a resource area or buffer zone.
9.	The delineation, verification or determination of more than 125 feet of resource area boundary under a Notice of Resource Area Delineation.
10.	The construction of any new stormwater discharges in an area subject to jurisdiction under the Dedham Wetlands Protection Bylaw, including buffer zones and public ways and property.
11.	Any project requiring stormwater/drainage calculations, including the sizing of dry wells.

- c.) Examples of the types of items for which an Engineering and consultant review fees may be required are listed in Table 4A above.
- d.) The services for which a fee may be utilized include, but are not limited to, wetland survey and delineation, hydrologic and drainage analysis, wildlife evaluation, stormwater quality analysis, and analysis of legal issues. This fee shall be calculated at a rate of \$115.00 per hour (or at such other rate as the Commission may determine).
- e.) Also, the Commission is authorized to require an applicant to pay reasonable costs and expenses for certain activities which utilize the services of the Stormwater Officer as outlined in this section. This includes such activities as inquires concerning potential projects as well as site inspections not associated with a pending permit application. Examples of such items for which a fee may be required are included in Table 4B below.

<b>TABLE 4B – EXAMPLE OF ACTIVITIES SUBJECT TO STORMWATER OFFICER CONSULTANT FEE (\$30.00 per hour)</b>	
	<u>Activity</u>
1.	Pre-filing meeting with Conservation Officer.
2.	Pre-filing site inspections requested by applicant or their agent.
3.	Pre-construction meeting requested by applicant or their agent.
4.	Additional Site Inspections beyond the normal 3 inspections (pre-construction, stormwater system construction, final project inspection) as well as more than 2 hours total inspection time.

- f.) The Commission may require any applicant to pay an additional fee of \$ 30.00 per hour for review, inspection and monitoring services for any project filing that requires an excess of two (2) hours of review, inspection, and monitoring time by the Stormwater Officer.
- g.) Wetlands delineation and the verification of wetlands lines are subject to an additional fee of \$75.00 per hour for the time spent by the Commission's consultant in the review of such items. This includes the verification of wetland lines to verify that the proposed project is not located in an area subject to jurisdiction under the Massachusetts Wetlands Protection Act or the Town of Dedham General Wetlands Protection Bylaw.
- h.) Subject to applicable law, any unused portion of any fees collected shall be returned by the Commission to the applicant within forty-five calendar days of a written request by the applicant, unless the Commission decides in a public meeting that other action is necessary.
- i.) The Engineering and Consultant Review fees collected under this section, shall be deposited in the revolving account authorized under Chapter 398 of the Acts of 1996. The Commission shall include a full accounting of the revolving account as part of its annual report to the Town.

**SECTION 13. WAIVERS**

- a.) The Conservation Commission shall have the discretionary authority to grant waivers to any section of these Rules and Regulations.
- b.) Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that:
  - 1. Strict application of the Rules and Regulations will result in an undue hardship.
  - 2. Substantially the same level of protection to the Resource Areas protected by the Town of Dedham Stormwater Management Bylaw will be provided without strict application of the Rules and Regulations.
- c.) All waiver requests shall be discussed and voted on at the public hearing for the project.
- d.) If in the Commission's opinion, additional time or information is required for review of a waiver request, the Commission may request to continue a hearing to a date certain announced at the meeting. In the event the applicant objects to a continuance or postponement, or fails to provide requested information, the waiver request shall be denied.

**END OF DEDHAM STORMWATER MANAGEMENT BYLAW RULES AND REGULATIONS**

<b>STORMWATER MANAGEMENT FORMS AND DOCUMENTS</b>	
<b>Form</b>	<b>Title</b>
1	Stormwater Management Permit Application (SMP Application) Form filled out by project applicant
2	Stormwater Management Permit (SMP) Form issued by the Conservation Commission or Stormwater Officer
3	Blanket Stormwater Management Permit Application (BSMP) Form filled out by project applicant
4	Stormwater Management Compliance Certificate (SMCC) Form issued by the Conservation Commission
5	Stormwater Operation & Maintenance Plan Schedule Form to be utilized in preparation of an Operation & Maintenance (O&M) Plan