

## DRAFT

The following model bylaw for Low Impact Development (LID) was developed for the Plymouth-Carver Aquifer Advisory Committee (PCAAC) by Horsley Witten Group, Inc. under contract with the Executive Office of Energy and Environmental Affairs (EEA). This model bylaw represents one of a larger suite of local regulations developed for this project to address the highest priority issues identified by PCAAC and other meeting attendees.

LID is a planning technique that focuses on two primary objectives to achieve lower environmental impacts: better site design and innovative stormwater management. The model LID Bylaw provided here deals primarily with stormwater management and only peripherally addresses those larger issues associated with better site design. These broader site development issues are better addressed through other smart growth techniques such as Open Space Residential Design and Transfer of Development Rights. Models for these “better site design” techniques were also developed for PCAAC in this project.

The model LID Bylaw provided below is presented as a General Bylaw with associated Regulations. This document represents the continued refinement of the Stormwater Bylaw that was originally developed for Plymouth, Duxbury and Marshfield in 2005. The bylaw was subsequently amended for the EEA Smart Growth/Smart Energy Toolkit over the following two years. During that time, the Commonwealth of Massachusetts was working to revise its Stormwater Policy and eventually adopted many of the standards and guidelines proposed as part of these local models. Because the state has adopted many of these plan requirements and standards, the local bylaw can be drafted in a way that simply references the state level standards. HW has reviewed the bylaw from the EEA Toolkit and removed those sections where reference to the state standards can achieve the same level of performance. The result of this exercise is that local authorities would need to adopt less than half the written material originally proposed.

The reduced volume of material associated with this new model will make it easier for communities to present this material, as there is a marked reduction in the amount of technical material that would need to be discussed at the local level. However, although this bylaw would be significantly easier to present (and to pass at Town Meeting), it should be noted that the material referenced in the Massachusetts Stormwater Policy is often very technical in nature. Local authorities will need to carefully consider their capacity to review projects at this level. Provisions in the bylaw for hiring peer review consultants at the applicant’s expense are included to help increase local capacity for technical review.

It is important to note that the following document is a *model* bylaw and, therefore, cannot be adopted “as is”. Communities that may be interested in adopting a bylaw of this nature will need to address several policy issues that will inevitably shape the standards listed below. Throughout the document, HW has provided commentary sections that will help the reader identify these policy issues and weigh the relative “pros and cons” for employing different standards. Where numeric standards may be changed to suit local needs, these standards have been placed in

[brackets]. Also very important, no community should consider adopting any bylaw language without first receiving review from Town Counsel or other legal resource.

## MODEL LOW IMPACT DEVELOPMENT (LID) BYLAW

### 1. PURPOSE AND INTENT

- A. The purpose of this Bylaw is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that LID site planning and proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, protect water and aquatic resources, and promote groundwater recharge to protect surface and groundwater drinking supplies. This Bylaw seeks to meet that purpose through the following objectives:
- (1) Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
  - (2) Require that new development, redevelopment and all land conversion activities maintain the natural hydrologic characteristics of the land in order to reduce flooding, stream bank erosion, siltation, nonpoint source pollution, property damage, and to maintain the integrity of stream channels and aquatic habitats;
  - (3) Establish minimum post-development LID Management standards and design criteria for the control of stormwater runoff quantity and quality, the protection of properties and aquatic and groundwater resources downstream from land development, and to minimize nonpoint source pollution from stormwater runoff which would otherwise degrade water quality;
  - (4) Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development LID Management standards;
  - (5) Encourage the use of LID practices such as the reduction of impervious cover and the preservation of green space and other natural areas, to the maximum extent practicable;
  - (6) Coordinate site design plans, which include green space, with the Town's Open Space and Recreation Plan;
  - (7) Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and nonstructural LID Management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety;
  - (8) Establish provisions to ensure there is an adequate funding mechanism, including surety, for the proper review, inspection and long-term maintenance of stormwater facilities implemented as part of this Bylaw;
  - (9) Establish administrative procedures for the submission, review, approval

- or disapproval of LID plans, and for the inspection of approved active projects, and long-term follow up; Establish certain administrative procedures and fees for the submission, review, approval, or disapproval of stormwater plans, and the inspection of approved projects; and
- (10) Meet certain provisions of the Town's requirements to comply with the Clean Water Act National Pollutant Discharge Elimination System (NPDES) Regulations for the Revision of the Water Pollution Control Program Addressing Storm Water Discharges (Phase I and II Rules). Phase I of the storm water program covers municipal storm sewer systems serving populations over 100,000, construction sites above five acres, and industrial activities. The Phase II rule expands the existing NPDES storm water program to address storm water discharges from small (those serving less than 100,000 persons) municipal separate storm sewer systems (MS4) and construction sites that disturb one to five acres. The Bylaw will ensure that the Town meets the requirements of their NPDES Storm Water General Permit, submitted to the Massachusetts Department of Environmental Protection on July 15, 2003, particularly the specific elements of their Stormwater Management Program outlined in the Permit.

- B. Nothing in this Bylaw or any associated Regulations is intended to replace the requirements of either, the Town of [\_\_\_\_\_] Flood Plain Zoning Bylaw, the Town of [\_\_\_\_\_] General Wetlands Protection Bylaw, or any other Bylaw that may be adopted by the Town of [\_\_\_\_\_]. Any activity subject to the provisions of the above-cited Bylaws must comply with the specifications of each.

## 2. DEFINITIONS

The following definitions shall apply in the interpretation and implementation of this Bylaw. Additional definitions may be adopted under promulgated regulations.

**ALTER:** Any activity, which will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage patterns. Alter may be similarly represented as "alteration of drainage characteristics," and "conducting land disturbance activities."

**APPLICANT:** A property owner or agent of a property owner who has filed an application for a LID Permit.

**BEST MANAGEMENT PRACTICE (BMP):** Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater runoff. "Nonstructural" BMPs use natural measures to reduce pollution levels, do not require extensive construction

efforts, and/or promote pollutant reduction by eliminating the pollutant source.

**CONVEYANCE:** Any structure or device, including pipes, drains, culverts, curb breaks, paved swales or man-made swales of all types designed or utilized to move or direct stormwater runoff or existing water flow.

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

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

**DRAINAGE EASEMENT:** A legal right granted by a landowner to a grantee allowing the use of private land for LID Management purposes.

**GRADING:** Changing the level or shape of the ground surface.

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

**HIGHER POTENTIAL POLLUTANT LOADS:** These areas include auto salvage yards, auto fueling facilities (gas stations), fleet storage yards, high-intensity commercial parking lots, road salt storage areas, commercial nurseries, outdoor storage and loading areas of hazardous substances, and marinas or other areas defined in the Massachusetts Stormwater Standards, Volume 1, Stormwater Policy Handbook.

**HOTSPOT:** Land uses or activities with higher potential pollutant loadings, such as auto salvage yards, auto fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas.

**LID AUTHORITY:** Town of [\_\_\_\_\_] [*Planning Board, Conservation Commission, Board of Health or other duly authorized Town entity that has the authority to administer, implement, and enforce these LID Bylaws*]. The [*LID Authority*] is responsible for coordinating the review, approval and permit process as defined in this Bylaw. Other Boards and/or departments participate in the review process as defined in Section 5 of this LID Bylaw.

**LID MANAGEMENT:** The use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM:** The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-

made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of [\_\_\_\_\_].

**NEW DEVELOPMENT:** Any construction or land disturbance of a parcel of land that is currently in a natural vegetated state and does not contain alteration by man-made activities.

**NONPOINT SOURCE POLLUTION:** Pollution from many diffuse sources caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water resource areas.

**OPERATION AND MAINTENANCE PLAN:** A plan that defines the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a LID Management system to ensure that it continues to function as designed.

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

**PERSON:** Any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, or the Commonwealth or political subdivision thereof to the extent subject to Town Bylaws, administrative agency, public or quasi-public corporation or body, the Town of [\_\_\_\_\_], and any other legal entity, its legal representatives, agents, or assigns.

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

**POST-DEVELOPMENT:** The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land. Post-development refers to the phase of a new development or redevelopment project after completion, and does not refer to the construction phase of a project.

**RECHARGE:** The replenishment of underground water reserves.

**REDEVELOPMENT:** Any construction, alteration, transportation, improvement exceeding land disturbance of [5,000] square feet, where the existing land use is commercial, industrial, institutional, or multi-family residential.

**RESOURCE AREA:** Any area protected under including without limitation: the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act, or Town of [\_\_\_\_\_] Wetlands Protection Bylaw.

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

**SEDIMENTATION:** A process of depositing material that has been suspended and transported in water.

SITE: The parcel of land being developed, or a designated planning area in which the land development project is located.

*Commentary: Definitions provided above are designed to be consistent with the Massachusetts Stormwater Policy and could be transferred to the general Definitions section of the Town's Bylaw.*

### 3. AUTHORITY

This Bylaw is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and pursuant to the Bylaws of the federal Clean Water Act found at 40 CFR 122.34, and as authorized by the residents of the Town of [\_\_\_\_\_] at Town Meeting, dated [\_\_\_\_\_].

### 4. ADMINISTRATION

A. Establishment. The (*Planning Board, Conservation Commission, Board of Selectmen, Board of Health, etc.*) is hereby designated as the LID Authority. The LID Authority shall administer, implement and enforce this Bylaw. The LID Authority may, with the concurrence of the Applicant, designate another Town Board, including the Planning Board, Conservation Commission, Board of Health, as its authorized agent for the purposes of reviewing all LID submittals and issuing LID permits for any project within that particular Board's (the Reviewing Board") jurisdiction.

*Commentary: The intent of the above is to streamline the application process. All Boards should include, as part of their instruction, notice of this procedure. An Applicant must concur to having a delegated board handle the LID process in conjunction with another required permit*

B. LID Regulations. The LID Authority may adopt, and periodically amend, rules and regulations relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), procedures and administration of this LID Bylaw by majority vote of the LID Authority, after conducting a public hearing to receive comments on any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation, at least seven (7) days prior to the hearing date. After public notice and public hearing, the LID Authority may promulgate rules and regulations to effectuate the purposes of this Bylaw. Failure by the LID Authority to promulgate such rules and regulations or a legal declaration of their invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.

Through promulgated LID regulations, the LID Authority may specify circumstances or conditions under which permit issuance authority is delegated without deliberation to the Planning Director/Agent or to another town board or

authority (such as minor projects or projects in wetland areas).

*Commentary: The ability of the LID Authority to delegate review jurisdiction is designed to streamline permitting processes and reduce redundant requirements.*

- C. Reviewing Boards. When a Reviewing Board is designated as the LID Authority's agent, the Applicant shall submit all required information in compliance with any promulgated LID rules and regulations, to the Reviewing Board, in addition to any requirements of the Reviewing Board. There shall be no additional fee or application form required other than that specified in the Bylaw. The Reviewing Board shall review the submittal for compliance with the performance standards of this Bylaw or promulgated LID rules and regulations as part of its public hearing process on the proposed project. The Reviewing Board shall grant a LID permit if the proposed project complies with this Bylaw, in addition to any other approval or permit it may grant. The Reviewing Board shall notify the LID Authority of all LID permits it grants. Both the LID Authority and the Reviewing Board shall have authority to enforce this Bylaw.
- D. Actions by the LID Authority or Reviewing Board. The LID Authority or Reviewing Board may take any of the following actions as a result of an application for a LID Permit as more specifically defined as part of any LID regulations promulgated as a result of this Bylaw: Approval, Approval with Conditions, Disapproval, or Disapproval without Prejudice.
- E. Appeals. A decision of the LID Authority or Reviewing Board shall be final. Further relief shall be to a court of competent jurisdiction.

## 5. SCOPE AND APPLICABILITY

- A. This Bylaw shall be applicable to all new development and redevelopment, including, but not limited to, site plan applications, subdivision applications, grading applications, land use conversion applications, any activity that will result in an increased amount of stormwater runoff or pollutants flowing from a parcel of land, or any activity that will alter the drainage characteristics of a parcel of land, unless exempt pursuant to Section 5.C of this Bylaw. All new development and redevelopment under the jurisdiction of this Bylaw as prescribed in this Bylaw shall be required to obtain a LID Permit.
- B. An alteration, redevelopment, or conversion of land use to a hotspot such as, without limitation: auto salvage yards, auto fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas, shall require a LID Permit.
- C. Exemptions

- (1) Any activity that will disturb an area less than [5,000] square feet or less than [25%] of a contiguous property, whichever is less. This exception shall not apply to the following conditions:
  - (a) Contiguous properties held in common ownership at the time of adoption of this Bylaw that may have been previously subdivided and/or are attributed to multiple separate owners;
  - (b) Any development or redevelopment involving land uses with “higher potential pollutant loads” as defined by the Massachusetts Stormwater Standards, Volume 1, Stormwater Policy Handbook, and described in Section 2 of this Bylaw.
- (2) Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act Bylaw 310 CMR 10.04 and MGL Chapter 40A Section 3;
- (3) Maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling;
- (4) Repair or replacement of an existing roof of a single-family dwelling;
- (5) The construction of any fence that will not alter existing terrain or drainage patterns;
- (6) Construction of utilities (gas, water, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns;
- (7) Emergency repairs to any Stormwater Management facility or practice that poses a threat to public health or safety, or as deemed necessary by the [LID Authority];
- (8) Any work or projects for which all necessary approvals and permits have been issued before the effective date of this Bylaw;
- (9) Redevelopment projects are presumed to meet the specified LID requirements described in the LID Bylaw of the Town of [\_\_\_\_\_] if redevelopment standards provided in the Massachusetts Stormwater Policy Volume 2/Chapter 3 are met.

*Commentary: As with any local bylaw, exemptions need to be carefully considered. The examples provided above attempt to capture those day-to-day or emergency activities that would either be too cumbersome to review or would otherwise preclude the Town’s ability to address basic service or safety issues. Further exemptions are directly linked to the Massachusetts Stormwater Policy.*

## **6. PERMIT PROCEDURES AND REQUIREMENTS**

Permit Procedures and Requirements shall be defined and included as part of any rules and regulations promulgated as permitted under Section 4 of this Bylaw.

## **7. ENFORCEMENT**

The LID Authority or an authorized agent of the LID Authority shall enforce this Bylaw, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations. Enforcement shall be further defined and included as part of any LID regulations promulgated as permitted under Section 4 of this Bylaw.

**8. SEVERABILITY**

The invalidity of any section, provision, paragraph, sentence, or clause of this Bylaw shall not invalidate any section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.

# MODEL LOW IMPACT DEVELOPMENT (LID) REGULATIONS

## 1. PURPOSE AND INTENT

The purpose of these LID Regulations is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that LID site planning and proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, protect water and aquatic resources, and promote groundwater recharge to protect surface and groundwater drinking supplies.

## 2. DEFINITIONS

Definitions associated with terms in these Regulations shall be the same as those established as part of the Town's General Bylaw enabling these Regulations.

## 3. AUTHORITY

- A. The Rules and Regulations contained herein have been adopted by the [applicable town boards, commissions and/or departments] in accordance with the Town of [insert Town name] LID Bylaw.
- B. These LID Regulations may be periodically amended by the [LID Authority] in accordance with the procedures outlined in Section 4 of the Town of [\_\_\_\_\_] LID Bylaw.

## 4. ADMINISTRATION

The LID Authority shall administer, implement and enforce these Regulations. The LID Authority shall, with the concurrence of the Applicant, designate another Town Board, including the Planning Board, Conservation Commission, Board of Health, as its authorized agent for the purposes of reviewing all LID submittals and issuing LID permits for any project within that particular Board's (the Reviewing Board) jurisdiction. These Town Boards shall formally adopt these Regulations, either directly, or by reference, and shall issue a LID Permit under the rules set forth in Section 4 of the LID Bylaw. Each approving [insert board, commission or department] shall forward written documentation of an issued permit to the [LID Authority] within [10 business days] of said issuance.

*Commentary: The above provision is designed to allow existing Town Boards, Commissions and/or Departments who have current jurisdiction over project approval activities to continue their current review procedures, but to add a provision that would authorize these entities to*

*review and approve development/redevelopment projects designed in accordance with this Regulation.*

## **5. SCOPE AND APPLICABILITY**

These LID Regulations apply to all activities in accordance with the Applicability section of the Town of [\_\_\_\_\_] LID Bylaw.

## **6. PERMIT PROCEDURES AND REQUIREMENTS**

A. Projects requiring a LID permit shall be required to submit the materials as specified in this section, and are required to meet the LID criteria as specified in Section 7. Any references to the Massachusetts Department of Environmental Protection (“MA DEP”) Stormwater policies or Stormwater Management Manual do not signify or imply endorsement of these Regulations by MA DEP.

### **B. Permit Required**

No land owner or land operator shall receive any of the building, grading or other land development permits required for land disturbance activities without first meeting the requirements of these Regulations prior to commencing the proposed activity. Should a land-disturbing activity associated with an approved plan in accordance with this section not begin during the [180-day] period following permit issuance, the [LID Authority] may evaluate the original application to determine whether the plan still satisfies local program requirements and to verify that all design factors are still valid. If the authority finds the previously filed plan to be inadequate, a modified plan shall be submitted and approved prior to the commencement of land-disturbing activities.

### **C. Filing Application**

The Applicant shall file with the [LID Authority], [three (3)] copies of a completed application package for a LID Permit. Permit issuance is required prior to any site altering activity. While the Applicant can be a representative, the permittee must be the owner of the site or holder of an easement. The LID Application package shall include:

- (1) A completed [Application Form] with original signatures of all owners;
- (2) A list of abutters, certified by the Assessor’s Office; (abutters at their mailing addresses shown on the most recent applicable tax list of the assessors, including owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line of the Applicant, including any in another municipality or across a body of water);

- (3) A Stormwater Report that demonstrates compliance with the latest standards and information requirements promulgated in the Massachusetts Stormwater Policy;
- (4) Payment of the application and review fees;
- (5) Surety bond.

*Commentary: Subsection #3 above replaces a significant portion of the language originally included in this model bylaw. Issues of erosion and sediment control, right of entry to the property and Operations and Maintenance Plans are covered in the state-level Stormwater Report.*

#### D. Fees

The [LID Authority] shall obtain with each submission an Application Fee established by the [LID Authority] to cover expenses connected with the review of the LID Permit and a technical review fee sufficient to cover professional review services for the project. The [LID Authority] is authorized to retain a Registered Professional Engineer or other professional consultant to advise the [LID Authority] on any or all aspects of these plans. Applicants must pay review fees before the review process may begin.

##### (1) Rules:

- (a) Application Fees are payable at the time of application and are non-refundable.
- (b) Application Fees shall be calculated by the [LID Authority] in accordance with the fee schedule below.
- (c) These fees are in addition to any other local or state fees that may be charged under any other law, bylaw, or local ordinance.
- (d) The fee schedule may be reduced or increased by the [LID Authority]. Any such change shall be made at a posted public hearing of the [LID Authority] not less than [30] days prior to the date upon which the change is to be effective.

##### (2) Application Fees:

A non-refundable Application Fee of the larger of [\$30.00] or [\$0.0030] per square foot of the parcel to which the permit will be issued shall be due and payable to the Town of [\_\_\_\_\_] at the time an application is filed.

*Commentary: Instead of the above fee approach, the [LID Authority] may adopt reasonable administrative fees and technical review fees for site plan review.*

##### (3) Engineering and Consultant Reviews and Fees:

- (a) The [LID Authority] is authorized to require an applicant to pay a fee for the reasonable costs and expenses for specific expert engineering and other consultant services deemed necessary by the [LID Authority] to come to a final decision on the application. This fee is called the “Engineering and Consultant Review Fee.”
  - (b) Payment may be required at any point in the deliberations prior to a final decision.
  - (c) Any application filed with the [LID Authority] must be accompanied by a completed [Engineering Consultant Fee Acknowledgement] form.
  - (d) Consultant fees shall be determined at the time of project review based on a specific scope of work, and shall be calculated at a rate of [as the LID Authority may determine].
  - (e) 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, site inspections, as-built plan review, and analysis of legal issues.
  - (f) The [LID Authority] is authorized to require an applicant to pay reasonable costs and expenses for certain activities which utilize the services of Town Staff. This includes such activities as inquiries concerning potential projects as well as site inspections not associated with a pending permit application.
  - (g) The [LID Authority] 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 a Town Staff member.
  - (h) Subject to applicable law, any unused portion of any fees collected shall be returned by the [LID Authority] to the applicant within forty-five (45) calendar days of a written request by the applicant, unless the [LID Authority] 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 a revolving account. The [LID Authority] shall include a full accounting of the revolving account as part of its annual report to the Town.
- (4) Revision of Fee Schedules and Bylaws Governing Fees. The [LID Authority] may review and revise its Bylaws, Regulations, and fee schedules periodically as it sees fit, yet it must adhere to the following procedures:
- (a) Amendments shall be preceded by a public hearing.
  - (b) A copy of the written decision will be filed with the town clerk within ten (10) days after final action is taken.

E. Public Hearings

The [LID Authority] need not hold a public hearing for projects or activities outside the currently regulated jurisdiction of [insert existing town boards, commissions and/or departments]. For projects or activities within the currently regulated jurisdiction of [insert existing town boards, commissions and/or departments], the applicable town board, commission and/or department shall hold a public hearing in accordance with their own Bylaws and procedures.

F. Actions

The [LID Authority]'s action, rendered in writing, shall consist of either:

- (1) Approval of the LID Permit Application based upon determination that the proposed plan meets the Standards in Section 7, will adequately protect the water resources of the community and is in compliance with the requirements set forth in these Regulations;
- (2) Approval of the LID Permit Application subject to any conditions, modifications or restrictions required by the [LID Authority] which will ensure that the project meets the Standards in Section 7 and adequately protects water resources as set forth in these Regulations;
- (3) Disapproval of the LID Permit Application based upon a determination that the proposed plan, as submitted, does not meet the Standards in Section 7 or adequately protects water resources, as set forth in these Regulations; or
- (4) Disapproval of an application "without prejudice" where an applicant fails to provide requested additional information that in the [LID Authority]'s opinion is needed to adequately describe the proposed project.

H. Failure of the [LID Authority] to take final action upon an Application within [30 calendar days] of receipt of a complete application shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without [LID Authority] action, the [LID Authority] must issue a LID Permit.

I. Plan Changes

The permittee must notify the [LID Authority] in writing of any drainage change or alteration in the system authorized in a LID Permit before any change or alteration is made. If the [LID Authority] determines that the change or alteration is significant, based on the LID Standards in Section 7 and accepted construction practices, the [LID Authority] may require that an amended or new application be filed.

J. Appeals of Actions of the [LID Authority]

A decision of the [LID Authority] shall be final. Further relief of a decision by the [LID Authority] made under these Bylaws shall be reviewable in the Superior Court in an action filed within [60 days] thereof, in accordance with M.G.L. Ch 249. § 4. An appeal of an action by a board, commission or department that has current regulatory authority for a project and/or activity shall be conducted under the applicable appeal provisions of said board, commission and/or department of the Town of [\_\_ \_\_]. Such an appeal shall result in revocation of the written approval as described under Section 4 of the LID Bylaw, until such time as the appeal process of the applicable board, commission and/or department has been resolved.

K. Project Completion

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

**7. PERFORMANCE STANDARDS**

At a minimum all projects shall comply with the general criteria and performance standards of the most recent version of Massachusetts Stormwater Policy including those identified in Volume 1/Chapter 1 “Stormwater Management Standards”; Volume 2/Chapter 1 “The Three Components of Stormwater Management”; and Volume 2/Chapter 2 “Structural BMP Specifications for the Massachusetts Stormwater Handbook”.

*Commentary: The references to the Stormwater Policy above represent the largest deferral of the original model bylaws to the recently amended state-level standards.*

**8. ENFORCEMENT**

A. The [LID Authority] or an authorized agent of the [LID Authority] shall enforce these Regulations, Bylaws, orders, violation notices, and enforcement orders, and may pursue all civil, criminal and non-criminal remedies for such violations.

B. Notices and Orders:

(1) The [LID Authority] or an authorized agent of the [LID Authority] may issue a written notice of violation or enforcement order to enforce the provisions of these Regulations, which may include requirements to:

- (a) Cease and desist from construction or land disturbing activity until there is compliance with the Bylaw and the LID Permit;
  - (b) Repair, maintain, or replace the Stormwater Management system or portions thereof in accordance with the operation and maintenance plan;
  - (c) Perform monitoring, analyses, and reporting; and/or
  - (d) Fix adverse impacts resulting directly or indirectly from malfunction of the Stormwater Management system.
- (2) If the enforcing person determines that abatement or remediation of adverse impacts is required, the order may set forth a deadline by which such abatement or remediation must be completed. Said order may further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town of [\_\_\_\_] may, at its option, undertake such work, and the property owner shall reimburse the Town of [\_\_\_\_] for expenses incurred.
- (3) Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town of [\_\_\_\_] including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the [LID Authority] within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the [LID Authority] affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in G.L. Ch. 59, § 57, after the thirty-first day at which the costs first become due.
- C. Any person who violates any provision of the Town of [\_\_\_\_] LID Bylaw, Regulations, order or permit issued thereunder, may be ordered to correct the violation and/or shall be punished by a fine of not more than [\$\_\_\_\_\_]. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.
- D. Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town of [\_\_\_\_] may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and [the citation town enabling vote/bylaw (if applicable)] of the Town of [\_\_\_\_] in which case [title or other authorized agent] of the Town of [ \_\_\_\_ ] shall be the enforcing person. The penalty for the 1st violation shall be [\$\_\_\_\_\_]. The penalty for the 2nd violation shall be [\$\_\_\_\_\_]. The penalty for the 3rd and subsequent violations shall be [\$\_\_\_\_\_].

\_\_\_\_\_]. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

- E. Appeals. The decisions or orders of the [LID Authority] shall be final. Further relief shall be to a court of competent jurisdiction.
- F. Remedies Not Exclusive. The remedies listed in these Regulations are not exclusive of any other remedies available under any applicable federal, state or local law.

## **9. SURETY**

The [LID Authority] may require the permittee to post before the start of land disturbance or construction activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of the bond shall be approved by town counsel, and be in an amount deemed sufficient by the [LID Authority] to ensure that the work will be completed in accordance with the permit. If the project is phased, the [LID Authority] may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the [LID Authority] has received the final inspection report as required by Section 10 of these Regulations and issued a Certificate of Completion.

## **10. CONSTRUCTION INSPECTIONS**

- A. Notice of Construction Commencement. The applicant must notify the [LID Authority] in advance before the commencement of construction. In addition, the applicant must notify the [LID Authority] in advance of construction of critical components of stormwater management facility.
- B. At the discretion of the [LID Authority], periodic inspections of construction and stormwater management facilities shall be conducted by the Town Officer or a professional engineer or their designee who has been approved by the [LID Authority]. All inspections shall be documented and written reports prepared that contain the following information:
  - (1) The date and location of the inspection;
  - (2) Whether construction is in compliance with the approved stormwater management plan;
  - (3) Variations from the approved construction specifications; and
  - (4) Any other variations or violations of the conditions of the approved stormwater management plan.
- C. The [LID Authority] or its designee shall inspect the project site at the following stages, at a minimum.

- (1) Initial Site Inspection: prior to approval of any plan;
- (2) Erosion Control Inspection: to ensure erosion control practices are in accord with the filed plan;
- (3) Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground drainage or stormwater conveyance structures.
- (4) Final Inspection:
  - (a) After the project, including the stormwater management facilities, has been constructed and before the surety has been released, all applicants are required to submit actual “as built” plans which must be certified by a Professional Engineer.
  - (b) The [LID Authority] shall inspect the site to determine its conformity to “as-built” features. This inspector shall also evaluate the effectiveness of the stormwater management system in an actual storm. If the inspector finds the system to be adequate he/she shall so report to the [LID Authority], which will issue a Certificate of Completion. “As built” plans shall be full size plans which reflect the “as built” conditions, including all final grades, developed by a Professional Engineer. All changes to project design should be recorded in red ink on plans to define changes made. All work deleted, corrections in elevations, and changes in materials, should be shown on the “as built” drawings.

D. Inadequacy of Stormwater Management Facilities

- (1) If the stormwater management facilities are found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the LID Management Plan, it shall be corrected by the applicant before the Certificate of Completion is released. If the applicant fails to act the [LID Authority] may use the surety bond to complete the work.
- (2) If the [LID Authority] determines that there is a failure to comply with the plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order shall be issued until any violations are corrected and all work previously completed has received approval by the [LID Authority].

## 11. CERTIFICATE OF COMPLETION

- A. Upon completion, the applicant is responsible for certifying that the completed project is in accordance with the approved plans and specifications and shall provide regular inspections sufficient to adequately document compliance.

- B. The [LID Authority] will issue a letter certifying completion upon receipt and approval of the final inspection and reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with these Regulations.

## 12. PERPETUAL INSPECTION AND MAINTENANCE

### A. Maintenance Responsibility

- (1) Stormwater management facilities and practices included in a Stormwater Report with an inspection and maintenance agreement must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the plan and these Regulations.
- (2) The owner of the property on which work has been done pursuant to these Regulations for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.

### B. Maintenance Inspections

- (1) All stormwater management facilities must undergo inspections to document maintenance and repair needs and ensure compliance with the requirements of these Regulations and accomplishment of its purposes as specified in the Stormwater Report.
- (2) Inspection reports shall be submitted to and maintained by the [LID Authority] for all stormwater management systems. Inspection reports for stormwater management systems shall include:
  - (a) The date of inspection;
  - (b) Name of inspector;
  - (c) The condition of:
    - (i) Pretreatment devices;
    - (ii) Vegetation or filter media;
    - (iii) Fences or other safety devices;
    - (iv) Spillways, valves, or other control structures;
    - (v) Embankments, slopes, and safety benches;
    - (vi) Reservoir or treatment areas;
    - (vii) Inlet and outlet channels and structures;
    - (viii) Underground drainage;
    - (ix) Sediment and debris accumulation in storage and forebay areas (including catch basins);

- (x) Any nonstructural practices; and
- (xi) Any other item that could affect the proper function of the stormwater management system.
- (d) Description of the need for maintenance.

C. Records of Maintenance and Repair Activities

Parties responsible for the operation and maintenance of a stormwater management facility shall provide records of all maintenance and repairs to the [LID Authority], upon request. Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least [five (5)] years. These records shall be made available to the [LID Authority] during inspection of the facility and at other reasonable times upon request.

D. Failure to Maintain

- (1) If a responsible person fails or refuses to meet the requirements of the inspection and maintenance agreement, the [LID Authority], after [thirty (30)] days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the facility or practice in proper working condition. The [LID Authority] may assess the owner(s) of the facility for the cost of repair work which shall be a lien on the property.

*Commentary: Each Town should investigate whether the [LID Authority] would be authorized to impose a lien on property through its bylaws and/or has the ability to automatically establish a lien.*

- (2) After notification is provided to the person responsible for carrying out the maintenance plan of any deficiencies discovered from an inspection of a stormwater management system, the person responsible for carrying out the maintenance plan shall have 30 days or other time frame mutually agreed to between the [LID Authority] and the person responsible for carrying out the maintenance plan to correct the deficiencies. The [LID Authority] shall then conduct a subsequent inspection to ensure completion of repairs.