

RULES & REGULATIONS FOR STORMWATER MANAGEMENT

UNDER THE GENERAL BYLAWS OF THE TOWN OF EAST BRIDGEWATER, PART EIGHT: EAST BRIDGEWATER CONSTRUCTION PHASE STORMWATER MANAGEMENT AND SOIL EROSION CONTROL BYLAW

(Stormwater Management Bylaw adopted at Town Meeting on May 9, 2022 and approved by the Massachusetts Attorney General's Office on August 23, 2022)

1.0 PURPOSE

The purpose of these 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 construction SITE and POST-DEVELOPMENT stormwater RUNOFF, decreased groundwater RECHARGE, and NONPOINT SOURCE POLLUTION associated with NEW DEVELOPMENT and REDEVELOPMENT, as more specifically addressed in the Stormwater Management Bylaw of the Town of East Bridgewater.

2.0 DEFINITIONS

Terms defined herein and in the Bylaw are shown in all CAPITAL LETTERS. The definitions contained herein apply to issuance of a STORMWATER PERMIT established by the Town of East Bridgewater Stormwater Management Bylaw and implemented through these Regulations. Terms not defined in this section, in the Bylaw, or in the Massachusetts Wetlands Regulations shall be construed according to their customary and usual meaning.

The following terms are defined in the Massachusetts Wetlands Regulations (310 CMR 10.00): Cold-water fishery, Critical areas, environmentally sensitive SITE design, Flood control, ground water, Illicit discharge, Land uses with higher potential pollutant loads, LOW IMPACT DEVELOPMENT (LID) TECHNIQUES, Maintenance of a stormwater management system, REDEVELOPMENT, STORMWATER BEST MANAGEMENT PRACTICE, Stormwater management system, Surface waters, and Vernal pool habitat.

The following terms are *in addition to* the terms defined in Part Eight of the East Bridgewater Construction Phase Stormwater Management and Soil Erosion Control Bylaw.

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.

IMPAIRED WATERS: According to EPA, Impaired Waters are waterbodies that do not meet one or more of its designated uses(s) in the applicable surface water quality standards. These waterbodies are listed in categories 4 and 5 of the most recent Massachusetts Integrated List of Waters. See the Massachusetts Department of

Environmental Protection website for the most recent Integrated List of Waters.

IMPERVIOUS SURFACE or IMPERVIOUS COVER (IC) or IMPERVIOUS AREA

(IA): Any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, but is not limited to: paved surfaces (parking lots, sidewalks, driveways), roof tops, swimming pools, patios, and paved, gravel and compacted dirt surfaced roads.

INVASIVE SPECIES: Those plant species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health. For the purpose of this bylaw, a plant species is considered “invasive” only when it occurs on the List of Federal Noxious Weeds (available on the U.S. Department of Agriculture Natural Resources Conservation Service website) or on the Massachusetts Prohibited Plant List (available on the Massachusetts Department of Agricultural Resources website).

INFILTRATION: The act of conveying surface water into the ground to permit groundwater RECHARGE and the reduction of stormwater RUNOFF from a project SITE.

MASSACHUSETTS STORMWATER MANAGEMENT MANUAL (MANUAL): The Stormwater Manual, and as amended from time to time, that was produced by MassDEP to be used as guidance for controlling stormwater. Implementation of the STORMWATER MANAGEMENT STANDARDS shall be in accordance with the Stormwater Manual.

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

OWNER: An individual, firm, association, syndicate, partnership, or corporation having sufficient proprietary interest to seek development of land.

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

PRE-DEVELOPMENT: The conditions that exist at the time that plans for the land development of a tract of land are submitted to the Stormwater Authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

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 of construction, and does not refer to the construction phase of a project.

RECHARGE: The replenishment of underground water reserves.

RESOURCE AREA: Any area protected under, including without limitation: the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act, or Local Wetlands Protection Bylaw.

RUNOFF: Rainfall or snowmelt flowing over the ground surface.

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

SITE: Any lot or parcel of land or area of property where land-disturbing activities are, were, or will be performed.

STOP WORK ORDER: An order issued by the STORMWATER AUTHORITY or its agent which requires that all construction activity on a site be stopped.

SUBDIVISION: Defined in the Subdivision Control Law of Massachusetts (M.G.L. – Chapter 41, Section 81L Definitions).

TOTAL MAXIMUM DAILY LOAD (TMDL): The greatest amount of a pollutant that a water body can accept and still meet water quality standards for protecting public health and maintaining the designated beneficial uses of those waters for drinking, swimming, recreation, and fishing. A TMDL is implemented by specifying how much of that pollutant can come from point, nonpoint, and natural sources. See section 303(d) of the Clean Water Act and 40 CFR §130.2 and §130.7.

WATER QUALITY VOLUME (WQ_v): The storage volume needed to capture a specified average annual stormwater RUNOFF volume. Numerically (WQ_v) will vary as a function of drainage area or IMPERVIOUS AREA.

3.0 AUTHORITY

- A) The Rules and Regulations contained herein have been adopted by the Board of Selectman in accordance with the Town of East Bridgewater Stormwater Management Bylaw.
- B) Nothing in these Rules and Regulations is intended to replace or be in derogation of the requirements of the Zoning Bylaw of the Town of East Bridgewater, Town of East Bridgewater Rules & Regulations Governing the Subdivision of Land, Wetlands Bylaw, Board of Health Board of Health Groundwater Protection Regulations, Board of Health Supplementary Rules and Regulations, or any Rules and Regulations adopted there under.

- C) These Stormwater Management Regulations may be periodically amended by the Board of Selectman accordance with the procedures outlined in Section 5.C of the Town of East Bridgewater Stormwater Management Bylaw.

4.0 ADMINISTRATION

The Board of Selectman is designated as the STORMWATER AUTHORITY under the Stormwater Management Bylaw. The Board shall administer, implement and enforce these Regulations. The Board designates the Director of the Department of Public Works or an outside consultant as its designee for the purposes of reviewing all stormwater submittals and conducting inspections described in Section 10.0.

5.0 APPLICABILITY

- A) These Stormwater Management Regulations apply to all activities in accordance with Section 6 of the Stormwater Management Bylaw as described in this section. No Order of Conditions from the Conservation Commission, Site Plan approval from the Planning Board, Building Permit, Subdivision approval, Special Permit, variance or finding shall constitute compliance with this bylaw, unless issuance of such permit included review by the Director of the Department of Public Works or Town Consultants on behalf of the Board of Selectmen relative to the Stormwater Bylaw.

Projects and/or activities not specifically under the currently regulated jurisdiction of any of the Town of East Bridgewater Boards, Commissions or Departments but still within the jurisdiction of the Town of East Bridgewater Stormwater Management Bylaw must obtain a STORMWATER PERMIT from the Department of Public Works in accordance with the permit procedures and requirements defined in Section 6.0 of these Regulations. Projects not requiring regulatory approval from other boards, departments, or commissions will undergo administrative review through the Town of East Bridgewater Department of Public Works. Administrative Stormwater Management Permit applications will be accepted and reviewed for two types of projects. These include projects that have greater than 10,000 square feet but less than one acre of land clearing OR single family residential lots that have been created through the Definitive Subdivision Process through an approval by the Planning Board.

- B) If a portion of a project or activity meets the Scope and Applicability of Section 5 of the Stormwater Management Bylaw and it is within the specific jurisdiction of another Town board, then the Board of Selectman will remain the STORMWATER AUTHORITY, responsible for facilitating stormwater review and approval of the STORMWATER PERMIT. The specific application submission requirements, public notices, and fee requirements of the applicable board, commission, and/or department shall remain in effect in addition to the requirements of the Stormwater Management Bylaw. To the extent possible, the Board of Selectman and other Town boards shall coordinate any necessary expert engineering and other consultant services. No SITE ALTERING activity may commence without a STORMWATER PERMIT issued by

the Select Board (issued by the Department of Public Works).

6.0 PERMIT PROCEDURES AND REQUIREMENTS

- A) Projects requiring a STORMWATER PERMIT per Sections 5 and 6 of the Stormwater Management Bylaw shall be required to submit the materials as specified in this Section, and are required to meet the Performance Standards: Stormwater and LID Criteria as specified in Section 7.0 of these Regulations. Filing Application – General Stormwater Permit
- B) For a General Stormwater Management Permit, the applicant shall file with the approving Board, Commission, and Department of Public Works, three (3) copies and one (1) digital copy in Portable Document Format (PDF) of a completed application package for a STORMWATER PERMIT. While the applicant can be a representative, the permittee must be the OWNER of the SITE or holder of an easement. The General Stormwater Management Permit application package shall include:
- a) A completed Application Form with original signatures of all OWNERS;
 - b) Plans depicting the proposed project;
 - c) Stormwater Report to document compliance with the STORMWATER MANAGEMENT STANDARDS and all additional requirements specifically described in these Regulations;
 - d) Payment of the application fee; and
 - e) Draft Operation & Maintenance Agreement.
 - f) Draft Stormwater Pollution Prevention Plan (SWPPP).
- C) Filing Application – Administrative Stormwater Management Permit – Land Clearing
1. For an Administrative Stormwater Management Permit due to Land Clearing greater than 10,000 square feet and less than one acre, the applicant shall file with the Department of Public Works original copies of the following items with copies to the Planning Board and Conservation Commission as follows:
 - a) A completed Application Form with original signatures of all OWNERS;
 - b) Plans depicting the proposed project, including erosion and sedimentation controls;
 - c) Stormwater Narrative that generally describes the proposed project and the method for handling stormwater. The narrative should describe how there will be no negative downstream impacts. This narrative should also include a description of Erosion and Sedimentation control measures that will be established during construction;
 - d) Payment of the application fee; and
 - e) Draft Operation & Maintenance Agreement as appropriate.
- D) Filing Application – Administrative Stormwater Management Permit – Subdivision Lots
1. For an Administrative Stormwater Management Permit required for Single Family Residential Lots that were approved as part of a Definitive Subdivision process, the

applicant shall file with the Department of Public Works original copies of the items listed below. All application materials shall be submitted prior to the submission of a building permit application.

- a) A completed Application Form with original signatures of all OWNERS;
- b) Plans depicting the development of the Single Family Residential Lots, including erosion and sedimentation controls;
- c) Copy of the approved Definitive Subdivision Plan that created the subject lot. This plan should include the endorsement of the Planning Board.
- d) Copy of the decision prepared by the Planning Board regarding the above-referenced Definitive Subdivision Plan.
- e) Stormwater Narrative that generally describes the proposed project and the method for handling stormwater. The narrative should describe how there will be no negative downstream impacts. This narrative should also include a description of Erosion and Sedimentation control measures that will be established during construction. The narrative should also describe and/or demonstrate how the proposed plan is consistent with the plans submitted as part of the approved Definitive Subdivision Plan. If the approved Definitive Subdivision Plan included elements that were part of the approved drainage design, including but not limited to subsurface infiltration units for rooftop drainage, rain gardens, stormwater basins, etc., these elements MUST be included as part of the single family residential lot design;
- f) Payment of the application fee; and
- g) Draft Operation & Maintenance Agreement as appropriate.

E) Filing Fees

1. General. A non-refundable application fee shall be due and payable to the Town of East Bridgewater at the time an application is filed. The application fee will be used for processing of the application, coordination of Town staff, posting hearings, inspections by Town staff and other expenses connected with the review of the application by Town staff.
2. Rules
 - a) Stormwater Permit Application and Review Fees are non-refundable. All fees shall be calculated by the Department of Public Works in accordance with the fee schedule in Table 1 below.
 - b) These fees are in addition to any other local or state fees that may be charged under any other law, regulation, or local Bylaw.
 - c) Federal, State, and Municipal projects shall be exempt from Application Fees associated with a STORMWATER PERMIT.
 - d) The fee includes two follow-up reviews for plan and document revisions.
 - e) The fees denoted below shall not be used to calculate review fees for outside consultants. Additional review fees may be charged to cover outside professional consultant review services for a project if the Director of the

Department of Public Works determines that such services are necessary due to the scope and complexity of the project.

- a) Filing Fees will be deposited into the Stormwater Revolving Fund.

Table 1: Filing Fee Schedule for Stormwater Permits

Application Type	Fee
Administrative Stormwater Management Permit	\$100
Disturbance area is 1.0 to 2.0 acres	\$1,000
Disturbance area is 2.0 to 5 acres	\$1,500
Disturbance area is 5.0 to 10.0 acres	\$2,000
Disturbance area of 10.0 acres or more	\$2,500

3. Revision of Fee Schedules and Regulations Governing Fees

- a) The Board of Selectman may review and revise its Regulations and fee schedules periodically at its discretion.
- b) Amendments to these Regulations shall be preceded by a posted public hearing of the Board of Selectman not less than 15 calendar days prior to the date upon which the change is to be effective. All hearings will provide notice consistent with Open Meeting law requirements.
- c) A copy of the written decision of revised Regulations and/or fee schedules will be filed with the Town Clerk within 12 business days after final action by the Board is taken.

4. Revolving Fund for consultant Services. The Board of Selectman may, at its discretion, require deposit of funds into a revolving fund in accordance with Chapter 44 Section 53E ½ to pay for peer review of projects. Generally, such projects are more complicated and require extensive review; however, the Board may also consider such peer review upon the recommendation of the Director of the Department of Public Works. The Board of Selectman will strive to make such reviews concurrent with other permits being sought by the applicant, and not duplicate efforts of peer reviewers.

F) Public Hearings and Meetings

- 1. For projects or activities within the currently regulated jurisdiction of Town Boards and Commissions (including but not limited to projects requiring Site Plan Review, Subdivision, Special Permit, or an Order of Conditions), the Department of Public Works shall review the STORMWATER PERMIT concurrently with other permits in order to streamline the review process for the applicant.

2. For projects that are not otherwise subject to review by Town Boards and Commissions, a STORMWATER PERMIT application shall be reviewed administratively by the Department of Public Works within thirty (30) calendar days of the receipt of a complete application. All STORMWATER PERMIT applications shall be discussed at regularly scheduled meetings of the East Bridgewater Technical Review Advisory Committee. All applicants will have the opportunity to present their projects at the Technical Review Advisory Committee meetings. The Department of Public Works may continue its consideration of the application to a further date, in order to receive additional information as deemed necessary. Failure of the Department of Public Works to take final action within forty-five (45) days shall not result in constructive approval of the application. The BOARD OF SELECTMAN shall be notified of all STORMWATER PERMIT applications that have been received.

G) Plan Changes

The permittee must notify the Department of Public Works or its designee in writing of any drainage change or alteration in the system authorized in a STORMWATER PERMIT before any change or alteration is made. If the Department of Public Works or its designee determines in writing that the change or alteration is significant, based on the STORMWATER MANAGEMENT STANDARDS, Performance Standards in Section 7.0, and accepted construction practices, the Department of Public Works may require that an amended application be filed. A change will be required when 25% of the land area of the previously approved project plans are revised, OR, any changes are made to the stormwater system including any stormwater BMPs.

H) Entry

To the extent permitted by state law, or if authorized by the OWNER or other party in control of the property, Board or its designee, officers, and employees may enter upon privately owned property for the purpose of performing their duties under the Stormwater Management Bylaw and these Regulations and may make or cause to be made such examinations, surveys or sampling as the Board deems reasonably necessary to determine compliance with the permit.

I) Project Completion

At completion of construction of the project, the permittee shall submit as-built record drawings of all structural best management practices required in the STORMWATER PERMIT and an updated Maintenance Agreement noting any changes and new responsible parties. As-built plans will be required for both Administrative and General Permits. As-built Plans shall be full size plans at a scale approved by the Planning Board that reflect the “as built” conditions, including all final grades, as determined by a Registered Land Surveyor. As-built plans will not be acceptable if they consist of simple edits to the approved design plans. Rather, they will reflect a full survey of the

as-built condition. Topographic information shall be collected for all of the surface stormwater management features including contours of stormwater basins, top of berm elevations, outlet control elevations, etc. All changes to project design shall be bubbled on plans to define changes made or otherwise noted as changes. All work deleted, corrections in elevations, and changes in materials, shall be shown on the as-built drawings. Deviations from the approved plans, if any, shall be certified in writing by a Registered Professional Engineer. As-built plans shall be submitted within two years of the completion of construction projects. The as-built drawings must depict all on site controls, both structural and non-structural, designed to manage stormwater generated by the site. The applicant shall also submit as-built drainage calculations using the information collected by the as-built drawings to insure that the proposed stormwater BMP's have been constructed consistent with the approved design. The applicant shall also submit copies of all inspection reports pertaining to the construction of the stormwater management system and erosion and sedimentation controls with the As-built plans.

Surveyed latitude and longitude position of all structural STORMWATER BEST MANAGEMENT PRACTICES, including drainage structures, conveyances, outfalls, catch basins, curbing and headwalls compatible with East Bridgewater's Electronic Mapping Systems shall be submitted digitally to the Department of Public Works. Record drawings shall also include a calculation of IMPERVIOUS AREA (IA) and DIRECTLY CONNECTED IMPERVIOUS AREA (DCIA) in square feet (ft²) for pre- and post-development conditions.

J) Permit Expiration

If work has not been completed within three (3) years, the Applicant shall notify the Department of Public Works. The Board may re-evaluate the originally approved STORMWATER PERMIT to determine whether the plan still satisfies local program requirements. Permits may be extended by the Department of Public Works. If the Department of Public Works finds the previously filed Plan to be inadequate, a modified plan shall be submitted and approved prior to the commencement or continuation of land- disturbing activities per the procedure in Section 6.0 of these Regulations.

K) Stormwater Report Contents – General Permit

1. The application for a STORMWATER PERMIT for a General Stormwater Permit shall include the submittal of a Stormwater Report to the Applicable Board, Commission, or Department of Public Works prepared in accordance with the MASSACHUSETTS STORMWATER MANUAL and the criteria established in these Regulations. This Stormwater Report shall document compliance with each of the STORMWATER MANAGEMENT STANDARDS as provided in the MANUAL as well as the performance standards as described in Section 7.0 and shall contain sufficient information for the Department of Public Works to evaluate the environmental impact, effectiveness, and acceptability of the SITE planning process and the measures proposed by the applicant for reducing adverse

impacts from stormwater RUNOFF. The Stormwater Report shall remain on file with the Department of Public Works.

2. The Stormwater Report shall fully describe the project in drawings, narrative, and calculations. To demonstrate compliance with these Regulations to the Department of Public Works, the applicant shall include the following in addition to the Stormwater Report requirements in the MANUAL:
 - a) Locus Map;
 - b) Existing Conditions SITE Plan. Stamped by a Registered Land Surveyor including existing topography, wetlands resources (if any), special flood zones or 100-year flood plain, topography at 1-foot contours, site detail, utilities;
 - c) The existing zoning, and land use at the SITE and abutting properties;
 - d) A proposed condition SITE Plan including the layout of the project, proposed buildings, parking areas, sidewalks, driveways, etc.;
 - e) Description of proposed Low Impact Development and green infrastructure best management practices
 - f) The location(s) of existing and proposed easements;
 - g) The location of existing and proposed utilities;
 - h) The SITE's existing & proposed topography with contours at 1-foot intervals;
 - i) The existing SITE stormwater flow patterns including surface flows and any existing subsurface conveyance or RECHARGE facilities);
 - j) Information regarding whether the site is located in a watershed that drains to an impaired water.
 - k) A written description and delineation of existing stormwater conveyances, impoundments, wetlands, drinking water protection areas, swimming beaches, and other protected RESOURCE AREAs, on or adjacent to the SITE or into which stormwater flows;
 - l) A delineation of 100-year flood plains, if applicable;
 - m) The existing and proposed vegetation and ground surfaces with RUNOFF coefficients for each; (including all IMPERVIOUS COVER – parking, driveways, etc.)
 - n) A drainage area map showing pre- and post-construction watershed boundaries (as governed by topography, not the property line), drainage areas, time of concentration (tc) path, and stormwater flow paths, including MUNICIPAL STORM DRAIN SYSTEM flows;
 - o) A description and drawings of all components of the proposed Stormwater Management system including:
 - i. All measures for the collection, detention, retention, treatment or INFILTRATION of water;
 - ii. Description of non-structural BMPs;
 - iii. All measures for the protection of water quality;
 - iv. The structural details for all components of the proposed drainage systems and Stormwater Management facilities;
 - v. Notes on drawings specifying materials to be used, construction specifications, and expected hydrology with supporting calculations;

- vi. Proposed SITE plan including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
- vii. Any other information requested by the Board.
- p) Hydrologic and hydraulic design calculations for the PRE-DEVELOPMENT and POST-DEVELOPMENT conditions for the design storms specified in the MASSACHUSETTS STORMWATER MANUAL. Such calculations shall include:
 - i. Description of the design storm frequency, intensity and duration as required by the most current version of the MASSACHUSETTS STORMWATER MANUAL;
 - ii. Time of concentration;
 - iii. Soil Runoff Curve Number (RCN) based on land use and soil hydrologic group;
 - iv. Peak RUNOFF rates and total RUNOFF volumes for each watershed area;
 - v. Provisions for protecting, during construction, the INFILTRATION capacity of the soil where INFILTRATION is proposed;
 - vi. Culvert capacities;
 - vii. Flow velocities;
 - viii. Data on the change in stormwater rates and volume of RUNOFF for the specified design storms,
 - ix. Documentation of sources for all computation methods and field test results.
 - x. Sizing calculations for all stormwater Best Management Practices indicating required and proposed BMP sizing.
 - xi. Soil test pits at locations consistent with the requirements of the Standards. All test pits should include estimated seasonal high groundwater elevations as determined using soil mottles, Frimpter, or another suitable method, as well as soil INFILTRATION rates Stormwater Management checklist as described in the Standards
- q) Landscaping Plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practice.
- r) An Erosion and Sedimentation Control Plan consistent with the requirements of the Massachusetts Standards including the following:
 - i. Minimizing land disturbance
 - ii. Site perimeter controls
 - iii. Slope stabilization
 - iv. Stabilized construction site entrances and exits to prevent off-site tracking of sediment
 - v. Storm drain inlet protection
 - vi. Temporary sedimentation basins
 - vii. Locations of proposed waste control including discarded building materials, concrete truck wash out areas, chemicals, litter, and sanitary wastes. These areas are prohibited from discharging to the MS4.
 - viii. Appropriate erosion and sedimentation control notes including notes that require that no land clearing is to be undertaken prior to installation of erosion and sedimentation control measures

- ix. Operations plan for the construction site
- x. Planned temporary Best Management Practices
- xi. Site stabilization following construction
- xii. Inspection of stormwater controls at regular intervals

3. If, in the applicant's opinion, one or more of the Stormwater Management Standards or other requirements cannot be reasonably met, the applicant shall provide a detailed explanation in the Stormwater Report. This narrative shall include reasons that the requirement or Standard could not be met and a description of potential consequences if no mitigating measures are provided.

J) Operations & Maintenance Agreement

The Maintenance Agreement shall include the signature(s) of the OWNER(s) and the party or parties responsible for operation and maintenance as specified in the STORMWATER PERMIT and party or parties responsible for perpetual inspections as specified under Section 12.B of these Regulations. The Maintenance Agreement shall include a map showing the "as-built" location of the systems and facilities including all structural and nonstructural stormwater best management practices (BMPs), low impact design best management practices, catch basins, manholes/access lids, pipes, and other stormwater devices. The Maintenance Agreement and plan showing such systems and facilities to be privately maintained, including associated easements shall be recorded, by the OWNER with the Plymouth County Registry of Deeds as conditioned in the STORMWATER PERMIT. Evidence of recording shall be presented to the Department of Public Works prior to the issuance of the Town's final approval. The Operations & Maintenance agreement will require the annual submission of all Operations and Maintenance Reports to the Town of East Bridgewater Department of Public Works. It is the responsibility of the OWNER to convey the Operations and Maintenance Agreements and requirements to subsequent owners of the property at the time of conveyance.

7.0 PERFORMANCE STANDARDS - GENERAL STORMWATER PERMITS: STORMWATER AND LID CRITERIA

- A) For compliance with Performance Standards of these Regulations, the applicant for a General Stormwater Permit must meet all standards of the Massachusetts Department of Environmental Protection's STORMWATER MANAGEMENT STANDARDS and MANUAL using current Best Management Practices (BMPs) as well as the additional design criteria specified below.

B) Additional Design Criteria

1. Low Impact Design (LID) site planning and stormwater design strategies must be used to the maximum extent practicable. Specific strategies and BMPs to be considered include - but are not limited to – reducing or minimizing impervious surfaces, incorporating stormwater management facilities into landscape islands, bioretention basins, grass and surface swales, infiltrative basins and chambers, pervious pavers, etc.

A decentralized approach to stormwater management, including installing different BMP's throughout the site, should be included. Traditional collect and convey systems should be minimized. In the event that LID site design strategies and BMPs are not proposed, the applicant should provide a narrative describing why these facilities cannot be incorporated into the site design.

2. Landscape Design

SITE plans and landscape plans for all proposed projects must take appropriate steps to minimize water use for irrigation and to allow for natural RECHARGE of groundwater. Native species and habitat-creating species shall be used in all landscape plans to the maximum extent possible as SITE conditions allow. INVASIVE SPECIES shall not be planted in the Town of East Bridgewater under any circumstances.

Low Impact Development surface BMP's should include a landscape plan that includes appropriate plantings. It is the intent of these Regulations that surface stormwater BMP's be incorporated into the landscape to the maximum extent practicable and not simply be shallow grassed depressions used to collect, infiltrate and/or store water.

3. Hydrologic Basis for Design

For stormwater facility sizing criteria, refer to DEP Stormwater Management Regulations & MANUAL and standard engineering practices. In addition to the requirements described in the DEP Stormwater Management Regulations & Manual, the following performance standards apply to NEW developments:

- a) Retain the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the site;
- b) Remove 90% of the annual Total Suspended Solids (TSS) generated from the total post-construction impervious area on site AND 60% of the average annual load of Total Phosphorus (TP) generated from the total post-construction impervious area on site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool.

4. For REDEVELOPMENT Projects, the following performance standards apply:

- a) Retain the volume of runoff equivalent to, or greater than, .80 inch multiplied by the total post-construction impervious surface areas on the site;
- b) Remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site and 50% of the annual load of Total Phosphorus (TP) generated from the total post-construction impervious surface area on site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool.
- c) Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways (including widening less than a single lane,

adding shoulders, correcting substandard intersections, improving existing drainage systems where feasible) are exempt from section 4a-c above. Roadway widening or improvements that increase the amount of impervious area on a redevelopment site are required to comply with the requirements described above.

5. Sensitive Areas – Additional Design Criteria

Stormwater discharges to Critical Areas with sensitive resources as defined in the Massachusetts STORMWATER MANAGEMENT STANDARD No. 6 are subject to additional criteria, and may need to utilize or restrict certain STORMWATER MANAGEMENT practices at the discretion of the Board. The Board has also designated the following Sensitive Areas with specific design criteria. The Board may designate additional Sensitive Areas and specific criteria for these areas by amending these Regulations.

1. Discharges to Water Quality Impaired Waters

The applicant must determine whether stormwater discharges from the proposed SITE will contribute, either directly or indirectly, to an IMPAIRED WATER body. Structural and non-structural BMPs shall be selected that will control the discharge of the pollutants of concern and ensure that the discharges will not cause an instream exceedance of applicable water quality standards. Pollutants of concern refer to the pollutant identified as causing the impairment. For more information on impaired waters and the most recent Integrated List of Impaired Waterbodies, see MassDEP's TMDL website.

- a) Beaver Brook – E. Coli, Fecal Coliform
- b) Meadow Brook – E. Coli, Fecal Coliform
- c) Matfield River – Algae, Benthic Macroinvertebrates, Dissolved Oxygen, E. Coli, Fecal Coliform, Nutrient/Eutrophication Biological Indicators, Odor, Phosphorus
- d) Salisbury Plain River - Algae, Benthic Macroinvertebrates, Dissolved Oxygen, E. Coli, Fecal Coliform, Odor, Phosphorus, Turbidity
- e) Satucket River – Temperature

2. Projects that are located within a Sensitive Area or watershed that contributes to a water body that is impaired for phosphorus shall include structural BMPs that are optimized for phosphorus removal. The applicant shall document the estimated phosphorus removal consistent with Appendix F of the Massachusetts MS4 Permit.

3. Projects that are located within a Sensitive Area or watershed that contributes to a water body that is impaired for nitrogen shall include structural BMPs that are optimized for nitrogen removal. The applicant shall document the estimated nitrogen removal.

8.0 WAIVERS

- A) The Board may in its discretion and after due considerations decide to waive and exempt strict compliance with any requirement of the Stormwater Management Bylaw and these Regulations, where it makes a written finding that such action is:
 - 1. Allowed by federal, state and local statutes and/or regulations;
 - 2. In the public interest; and
 - 3. Consistent with the purpose and intent of the Town of East Bridgewater Stormwater Management Bylaw and these Regulations.
- B) An 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 strict application of the Bylaw does not further the purposes or objectives of the Bylaw.
- C) Waivers described herein shall not constitute an exemption from any applicable Federal or State permitting requirements.

9.0 CONSTRUCTION INSPECTIONS

A) NOTICE OF CONSTRUCTION COMMENCEMENT

The applicant must notify the Department of Public Works or its designee not less than 14 days prior to the commencement of construction and schedule a pre-construction meeting. In addition, the applicant must notify the Department of Public Works or its designee 48 hours in advance of construction of critical components of any stormwater management facility. At this time, the applicant should produce a copy of the final Stormwater Pollution Prevention Plan as well as evidence that the project has a filed a Notice of Intent with the United States Environmental Protection Agency under the National Pollutant Discharge Elimination System Construction General Permit.

- B) At the discretion of the Department of Public Works, periodic inspections of the stormwater management system construction shall be conducted by qualified personnel (a Town Officer, a professional engineer, or their designee who has been approved by the Department of Public Works). All inspections shall be documented and written reports prepared that contain the following information:
 - 1. The date and location of the inspection as well as weather conditions;
 - 2. Names, titles, and qualifications of personnel making the inspection;
 - 3. Whether construction is in compliance with the approved STORMWATER PERMIT;
 - 4. Variations from the approved construction specifications; and
 - 5. Any other variations or violations of the conditions of the approved STORMWATER PERMIT.

C) EROSION CONTROL INSPECTION

1. If a project is covered by the EPA NPDES General Permit for Stormwater Discharges from Construction Activities (Construction General Permit), the permittee is required to conduct inspections in accordance with requirements of the Construction General Permit, and must submit reports of all inspections required thereunder to the Engineering Department.
2. If a project is not covered by the Construction General Permit, to ensure EROSION CONTROL practices are in accordance with the STORMWATER PERMIT, EROSION CONTROL Inspections will be conducted by the OWNER or an authorized representative at least once every seven (7) calendar days from the start of construction until the SITE is permanently stabilized. Inspection frequency may be reduced to at least once a month if the SITE is determined by the Board or its designee to be temporarily stabilized, such as RUNOFF is unlikely due to winter conditions (e.g., SITE is covered with snow, ice, or the ground is frozen, site is covered with mulch, stone, etc.). The permittee is required to notify the Board of Selectman or its designee of any change in inspection frequency, including termination of inspections due to SITE stabilization.
 - a. The inspection form will include:
 - i. Date of inspection
 - ii. Name, title, qualifications, and signature of inspector;
 - iii. Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
 - iv. Weather information and a description of any discharges occurring at the time of the inspection
 - v. Location(s) of discharges of sediment or other pollutants from the SITE;
 - vi. Location(s) of BMPs that need to be maintained;
 - vii. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
 - viii. Location(s) where additional BMPs are needed that did not exist at prior inspection; and
 - ix. Corrective action required including any changes to the STORMWATER PERMIT necessary and implementation dates.

D) INSPECTION SCHEDULE

The Department of Public Works 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. Inspection of site following installation of erosion and sedimentation control measures and prior to any clearing. All erosion and sedimentation control practices must be installed prior to any land clearing activities.
3. Inspection of the excavation for any infiltration facilities prior to the installation of any of the facility components (i.e. stone, pipe, chambers, etc.) to insure that adequate soil conditions exist consistent with the approved plans.
4. 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.
5. Final Inspection
 - a) After the stormwater management system has been constructed and stabilized, all applicants are required to submit actual "as built" plans for any stormwater management facilities or practices after final construction is completed and must be certified by a Professional Engineer. As-built plans must be submitted within two years of completion of construction.
 - b) The Department of Public Works or its designee shall inspect the system to confirm its "as- built" features.
 - c) A copy of the Construction General Permit Notice of Termination (NOT) (required by the EPA within 30 days after land disturbance has ceased and the site is stabilized; with seventy percent (70%) permanent vegetation coverage or 70% permanent erosion and sediment controls installed) shall be submitted with the As-built.
 - d) An Illicit Discharge Compliance Statement shall be submitted by the permittee's Technical Representative and Registered Professional Engineer to verify that no illicit discharges exist on the site. For redevelopment projects, the Illicit Discharge Compliance Statement shall also document all actions taken to identify and remove illicit discharges, including, without limitation, visual screening, dye or smoke testing, and the removal of any sources of illicit discharges to the stormwater management system.
 - e) The permittee's Technical Representative and Registered Professional Engineer shall evaluate the effectiveness of the stormwater best management practices (BMPs) during an actual storm and document the findings. The Final Report shall also include certification from the Applicant's Technical Representative as to the effectiveness of the installed system during storm events.

E) INADEQUACY OF SYSTEM

1. If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built in accordance with the STORMWATER PERMIT, it shall be corrected by the applicant at the applicant's cost.

2. If the Department of Public Works or its designee determines that there is a failure to comply with the plan, the OWNER shall be notified in writing of the nature of the violation and the required corrective actions. The Department of Public Works or its designee shall issue a STOP WORK ORDER until any violations are corrected and all work previously completed has received approval by the Department of Public Works or its designee.

F) STORMWATER CERTIFICATE OF COMPLIANCE

The Stormwater Authority – or their representative - 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 this Regulation.

10.0 SURETY

The Stormwater Authority may require the permittee to post before the start of or during land disturbance or construction activity, a surety bond, irrevocable letter of credit, cash, or other security acceptable to the Treasurer of the Town of East Bridgewater. A surety bond shall be required for all General Permits. A surety bond may be required for Administrative Permits at the discretion of the Stormwater Authority or their agent. The bond shall be in an amount deemed sufficient by the Stormwater Authority to ensure that the work will be completed in accordance with the permit. The amount of the surety bond shall be based on the a cost estimate of the project's stormwater management system developed by the Applicant's Engineer. If the project is phased, the Stormwater 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 Stormwater Authority has received the final inspection report and issued a Certificate of Completion.

11.0 CONTINUING INSPECTION AND MAINTENANCE REQUIREMENTS

A) Maintenance Responsibility

The Town of East Bridgewater will not accept ownership of stormwater BMPs located outside of street rights of way, and the maintenance of such facilities shall remain the permanent responsibility of the applicant or his successors and/or assigns. 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. When a project is a Definitive Subdivision, it is responsibility of the developer to maintain the stormwater system until the Subdivision is accepted by the Town. In the event a homeowner's association is created to maintain the subdivision, it will be the responsibility of the homeowner's association to maintain the stormwater management system. Inspections are required for projects receiving

General and Administrative Stormwater Permits.

B) Maintenance Inspections

1. A Maintenance Agreement as specified under Section 6.J of these Regulations between the OWNER and the Board shall be executed for privately-owned stormwater management systems that specify the PERSON for conducting long term inspections.
2. At a minimum, inspections shall occur consistent with the Operation and Maintenance requirements outlined in each project's STORMWATER PERMIT application. Inspections will be performed by a registered professional engineer, a competent professional under the direction of a registered professional engineer, or a Certified Professional in Erosion and Sedimentation Control (CPESC). The cost of all inspections will be borne by the OWNER. All BMPs require –at a minimum – annual maintenance. Some BMPs may require more frequent inspection, as specified in the STORMWATER PERMIT.
3. Inspection reports shall be submitted to the Department of Public Works for all stormwater management systems. Inspection reports for stormwater management systems shall include at a minimum:
 - a) The date of inspection;
 - b) Weather conditions, including temperature and precipitation, if any;
 - c) Name and signature of inspector;
 - d) Qualifications of inspector;
 - e) 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 fore bay areas (including catch basins)
 - x. Any nonstructural practices
 - xi. Any other item that could affect the proper function of the stormwater management system
 - f) Description of the need for maintenance.
 - g) In the event that maintenance activities are performed by a private contractor, a copy of the contract or agreement to provide the maintenance.

C) Right-of-Entry for Inspection

The terms of the Maintenance Agreement as specified in Section 6.J of these

Regulations shall provide for the Department of Public Works or its designee to enter the property at reasonable times and in a reasonable manner for the purpose of inspection.

D) Records of Inspections, Maintenance, Repair, Replacement and Operations

OWNERS are responsible for the operation and maintenance of a stormwater management facility shall prepare records of the installation and of all inspections, maintenance, repairs, replacement, and disposal activities, and shall retain the records for at least five years. These records shall be submitted to the Department of Public Works annually, at a minimum, and upon request. For disposal, the record must indicate the type of material, quantity of material, and disposal location.

E) Failure to Maintain

1. If the OWNER fails or refuses to meet the requirements of the Maintenance Agreement, the Department of Public Works, after 30 days' written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour 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 Department of Public Works may assess the OWNER(s) of the facility for the cost of repair work, which shall be a lien on the property.
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 Department of Public Works and the PERSON responsible for carrying out the maintenance plan to correct the deficiencies. The Department of Public Works shall then conduct a subsequent inspection to ensure completion of repairs.

12.0 ILLICIT DISCHARGES

Any property owner or party, who illegally discharges non-stormwater pollutants, including sanitary sewer discharges, as described in the Stormwater Management Bylaw, Part Eight, must eliminate discharges to the MS4 system within 60 days of identification.

13.0 ENFORCEMENT

A) Enforcement powers of the Board of Selectman or its designee are granted in the Stormwater Management Bylaw, Section Eight.

B) Notices and Orders

1. The Board of Selectman or an authorized agent of the Board of Selectman may

issue a written notice of violation or enforcement order to enforce the provisions of the Stormwater Management Bylaw and these Regulations, which may include:

- a) Elimination of illicit connections or discharges to the MS4;
- b) That unlawful discharges, practices, or operations shall cease and desist;
- c) Remediation of contamination in connection therewith;
- d) Suspension or revoke of approval of any STORMWATER PERMIT;
- e) Cease and desist from all or a portion of construction or land disturbing activity until there is compliance with the Bylaw and the STORMWATER PERMIT;
- f) Repair, maintain, or replace the stormwater management system or portions thereof in accordance with the Maintenance Agreement;
- g) Perform monitoring, analyses, and reporting; and/or
- h) Fix adverse impact resulting directly or indirectly from malfunction of the stormwater management system.

2. The suspension or revocation of the STORMWATER PERMIT shall not relieve the Applicant of his obligation thereunder except at the discretion of the Board.
- C) Any PERSON who purchases, inherits or otherwise acquires real estate upon which work has been done in violation of the provisions of the Stormwater Management Bylaw and these Regulations, or in violation of the approved Plans under this Section shall forthwith comply with any such Order, and restore such real estate to its condition prior to such violation, as the applicable Board, Commission, or Department of Public Works deems necessary to remedy such violation.
 - D) Criminal Violation. Any PERSON who violates any provision of the Town of East Bridgewater Stormwater Management Bylaw, these Regulations, or order or permit issued thereunder, may be ordered to correct the violation and/or shall be punished by a fine of not more than \$300.00, excluding the cost of damages. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.
 - E) Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town of Eats Bridgewater may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and the Town of East Bridgewater General Bylaws Part Three Section XVI.B in which case the Board shall be the enforcing PERSON. The penalty for the 1st violation shall be \$100.00. The penalty for the 2nd and subsequent violations shall be \$300.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.
 - F) Entry to Perform Duties Under these Regulations. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Board, its agents, officers and employees may enter upon privately owned property for the purpose of performing their duties under these Regulations and may make or cause to be made such examinations, surveys or sampling as the Board deems reasonably

necessary.

- G) Appeals. The decisions or orders of the Board shall be final. Further relief shall be to a court of competent jurisdiction.
- H) 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.

14.0 SEVERABILITY

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

APPENDIX A

SUMMARY OF STORMWATER PERMIT PROCESS

