

**CITY OF BROCKTON, MASSACHUSETTS
STORMWATER MANAGEMENT MANUAL
ORDINANCE No. 496**

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Attachment

Stormwater Management Permit Application
Land Disturbance Permit Application

STORMWATER MANAGEMENT MANUAL

1.0 PURPOSE

The purpose of this Manual is to establish Standard practice and Requirements of the City of Brockton, for Stormwater Management that is in compliance with the Brockton Stormwater Ordinance (BSO).

2.0 DEFINITIONS

The following definitions shall apply in the interpretation and implementation of this Manual:

ABUTTER: The owner(s) of land abutting the property on which land disturbance or other Stormwater activity is taking place, up to two hundred feet from the property lines. Except that if an abutting is in the same ownership with the subject property, the next abutting property that is of different ownership, is an abutter, irrespective of distance.

ADMINISTRATIVE LAND REVIEW: For small projects that will involve minimal land disturbance, applicant shall be submitted stipulated documents to the City Engineer's office, to determine if a permit is required for the work.

AGRICULTURE: The normal maintenance or improvement of land in use in agricultural or Aquaculture, as defined by the Massachusetts Wetlands Protection Act and its implementing 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, see Ordinance," and "conducting land disturbance activities."

APPLICANT: Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the Commonwealth or the Federal government to the extent permitted by law requesting any Stormwater management permit for proposed land-disturbance activity or alteration of drainage characteristics. A property owner or agent of a property owner who has filed an application for a Stormwater management permit.

AUTHORIZED ENFORCEMENT AGENCY: The Brockton Stormwater Authority, its employees or agents designated to enforce provisions of the Stormwater Ordinance and this Manual.

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means of preventing and/or reducing increases in stormwater volumes and flows; reducing point source and nonpoint source pollution; and promoting stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide groundwater recharge temporary storage and treatment of stormwater runoff. "Nonstructural" BMPs use natural measures to recharge groundwater, provide temporary storage and reduction pollution levels, do

not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site’s impact on the watershed through the use of nonstructural stormwater management practices. Better site design, includes conserving and protecting natural areas and greenspace, reducing impervious cover, and using natural features for Stormwater management.

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

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

HOT SPOT: Site expose to release or release of oil and/or hazardous material.

LAND-DISTURBING ACTIVITY: Any activity that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material.

LAND-DISTURBING PERMIT (LDP): A permit issued by the Stormwater Authority, after review of an application, plans, specifications, calculations, and other supporting documents, which is designed to protect the environment of the City from the deleterious effects of uncontrolled and untreated Stormwater runoff, erosion and sedimentation migration.

MASSACHUSETTS ENDANGERED SPECIES ACT: (G.L. c. 131A) and its implementing regulations at (321 CMR 10.00) which prohibit the “taking” of any rare plant or animal species listed as Endangered, Threatened, or of Special Concern.

MASSACHUSETTS STORMWATER MANAGEMENT POLICY: The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state Ordinance promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 § 40 and Massachusetts Clean Waters Act G.L. c. 21, §. 23-56. The Policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

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 manmade or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the City of Brockton.

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.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

STORM WATER DISCHARGE PERMIT: A permit issued by United States Environmental Protection Agency or jointly with the State that authorizes the discharge of pollutants to waters of the United States.

NON-STORMWATER DISCHARGE: Discharge to the municipal storm drain system not composed entirely of stormwater.

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 stormwater management system to ensure that it continues to function as designed.

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

PRIORITY HABITAT OF RARE SPECIES: Habitats delineated for rare plant and animal populations that are protected, pursuant to the Massachusetts Endangered Species Act and its regulations.

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 City Ordinances, administrative agency, public or quasi-public corporation or body, the City of Brockton, 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.

POLLUTANT: Any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter whether originating at a point or nonpoint source, that is or may be introduced into any sewage treatment works or waters of the Commonwealth. Pollutants shall include without limitation:

1. Paints, varnishes, and solvents;
2. Oil and other automotive fluids;
3. Non-hazardous liquid and solid wastes and yard wastes;
4. Refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, accumulations and floatables;
5. Pesticides, herbicides, and fertilizers;
6. Hazardous materials and wastes; sewage, fecal coliform and pathogens;
7. Dissolved and particulate metals;
8. Animal wastes;

9. Rock, sand, salt, soils;
10. Construction wastes and residues; and
11. Noxious or offensive matter of any kind.

PROCESS WASTEWATER: Water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any material, intermediate product, finished product, or waste product.

PRE-CONSTRUCTION: All activity in preparation for construction.

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

REDEVELOPMENT: Are projects that can be defined as:

1. Development, rehabilitation, expansion, and phased projects on previously developed sites, that do not meet the definition of new development. (MA DEP Standard 7); or
2. Maintenance and improvements of existing roadways 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, and repaving. Roadway widening or improvements that increase the amount of impervious area on the redevelopment site by greater than or equal to a single lane width shall meet the requirements of new development.

RESOURCE AREA: Any area protected under including without limitation: the Massachusetts Wetlands Protection Act, Massachusetts Rivers Act, or City of Brockton Wetlands Protection Ordinance.

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

SEDIMENT: Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

SEDIMENTATION: The process or act of deposition of sediment.

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

SLOPE: The inclination of a ground surface expressed as a ratio of horizontal distance to vertical distance.

SOIL: Any earth, sand, rock, gravel, or similar material.

STABILIZATION: The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or retard erosion.

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

STOP WORK ORDER: An order issued which requires that all construction activity on a site be stopped.

STORMWATER AUTHORITY: The City of Brockton Stormwater Authority consisting of Delegates from the Department of Public Works, one from Engineering Division and one from Operations Division; Conservation Agent/Planning Department The Engineering Division shall be responsible for coordinating the review, approval and permit process as defined in this Manual. The Authority at its discretion, may solicit review input by other City Boards and departments, and /or Consultants, as needed in the review process.

STORMWATER UTILITY: A special assessment regimen, set up to generate funding specifically for stormwater management. Users within the City pay a stormwater fee, and the revenue thus generated directly supports maintenance and upgrade of existing storm drain systems; development of drainage plans, flood control measures, and water quality programs; administrative costs; and sometimes construction of major capital improvements.

STORMWATER CREDITS: A form of incentive for developers, property owners and property managers, to promote conservation of natural and open space areas. Projects and developed properties that comply with prescribed requirements are allowed reductions in stormwater management requirements when they use techniques to improve quality and/or reduce stormwater runoff at the site.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Stormwater Authority, after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the City from the deleterious effects of uncontrolled and untreated stormwater runoff.

STORMWATER: Stormwater runoff, snowmelt runoff, and surface water runoff and drainage.

STRIP: Any activity which removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil or impervious surface.

SURFACE WATER DISCHARGE PERMIT: A permit issued by the Department of Environmental Protection (DEP) pursuant to 314 CMR 3.00 that authorize the discharge of pollutants to waters of the Commonwealth of Massachusetts.

TOXIC OR HAZARDOUS MATERIAL or WASTE: Any material, which because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment. Toxic or hazardous materials include any synthetic organic chemical, petroleum product, heavy metal, radioactive or infectious waste, acid and alkali, and any substance defined as Toxic or Hazardous under G.L. Ch.21C and Ch.21E, and the Ordinance at 310 CMR 30.000 and 310 CMR 40.0000.

TSS: Total Suspended Solids.

VERNAL POOLS: Temporary bodies of freshwater which provide critical habitat for a number of vertebrate and invertebrate wildlife species.

WATER QUALITY VOLUME (WQv): The storage needed to capture a specified average annual stormwater runoff volume. Numerically (WQv) will vary as a function of drainage area and soil type.

WATERCOURSE: A natural or man-made channel through which water flows or a stream of water, including a river, brook or underground stream.

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

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

WETLAND RESOURCE AREA: Areas specified in the Massachusetts Wetlands Protection Act G.L. c. 131, § 40 and in the Brockton Wetland Ordinance.

WETLANDS: Tidal and non-tidal areas characterized by saturated or nearly saturated soils most of the year that are located between terrestrial (land-based) and aquatic (water-based) environments, including freshwater marshes around ponds and channels (rivers and streams), brackish and salt marshes; common names include marshes, swamps and bogs.

3.0 AUTHORITY

A. This Manual is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, General Laws of Massachusetts - Chapter 43B, and the regulations of the federal Clean Water Act found at 40 CFR 122.34.

B. Rules contained herein in this Manual have been adopted by the Brockton City Council.

C. Nothing in this Manual is intended to replace or be in derogation of the requirements of the City's General Wetlands Protection Ordinance, the Floodplain Zoning Ordinance or any Rules

and Ordinance adopted there under. Where the requirements of this manual conflict with or overlap with one of the above ordinances, the more stringent requirement applies, as determined by the Stormwater Authority.

D. This Stormwater Management Manual may be periodically amended by the Stormwater Authority in accordance with the procedures outlined in Section 5.0 B of the City of Brockton Stormwater Management Manual.

E. Stormwater Authority shall make a master plan study of the city's drainage system and shall from time to time make a careful evaluation of the system, when necessary to prepare stormwater management optimization plan and resources necessary for implementation of the plan.

4.0 APPLICABILITY

- A. This Manual shall be applicable to all new development and redevelopment projects, 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 4.0 B of this Manual. All new development and redevelopment under the jurisdiction of this Manual as prescribed in this Manual shall be required to obtain a Stormwater Management Permit and a Land Disturbance Permit.
1. No person may undertake a construction activity or land disturbance, including clearing, grading, excavation or redevelopment that will disturb equal to or greater than thresholds outlined in the City of Brockton Stormwater Ordinance, without a written approval in the form of a permit from the Stormwater Authority or as otherwise provided in this Manual. Any person that fails to follow the requirements of a Stormwater Management Permit and the related Erosion and Sedimentation Control Plan, and Operations and Maintenance Plan in this Stormwater Manual, shall be in violation of the City of Brockton Stormwater Ordinance. Exceptions granted to some class of projects listed under Section 4.0 B, require Administrative Land review by the Stormwater Authority.
- B. Exemptions

No person shall alter land within the City of Brockton without having obtained a Stormwater Management Permit and Land Disturbance Permit for the property with the following exceptions:

1. Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act 310 CMR 10.04 and MGL Chapter 40A Section 3;
2. Maintenance of existing landscaping, gardens or lawn areas associated with a Single-family dwelling;
3. A single-family house, less than a quarter acre in size, with Administrative Land Review;
4. Housing redevelopment projects comprised of detached single-family dwelling, provided that Stormwater runoff will not be directly or indirectly discharged outside the project property limits, with Administrative Land Review;
5. Emergency repairs to roads or their drainage systems;

6. The construction of any fence that will not alter existing terrain or drainage patterns;
 7. Construction of utilities (gas, water, sewer, electric, telephone, etc.), other than drainage, which will not alter terrain, ground cover, or drainage patterns;
 8. Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, with Administrative Land Review; or as deemed necessary by the Stormwater Authority.
- C. Any existing work or projects that can show proof to the Authority, of a compliant stormwater pollution prevention plan prepared under the NPDES Construction General Permit, will be considered to have a sufficient Erosion and Sedimentation Control Plan and will not have to submit one for compliance with this Manual; except that NPDES General Permit filled without a compliant plan, as determined by the Authority, is not exempted from compliance with Stormwater Ordinance and this Manual, by this provision.
- D. Redevelopment projects are presumed to meet the specified Stormwater management requirements described in herein, if the total impervious cover is reduced by 40% from existing conditions, as determined by the Stormwater Authority. Where site conditions prevent the reduction or complete reduction, in impervious cover, stormwater management practices shall be implemented to reduce peak rate and volume of stormwater runoffs by at least 40% for the site's pre-redevelopment impervious area.
- E. 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, landfills, outdoor storage and loading areas of hazardous substances, or marinas, shall require a Stormwater Management Permit, and a Land Disturbance Permit.

5.0 ADMINISTRATION

5.1 General

The Stormwater Authority, shall administer, implement and enforce the requirements of this Manual. Any powers granted to or duties imposed upon the Stormwater Authority may be delegated in writing by the Stormwater Authority to its employees or agents. Projects or activities approved by the Stormwater Authority shall be deemed in compliance with the intent and provisions of this Stormwater Management Manual.

5.2 Review Timeline

Stormwater Authority shall commence review meeting within twenty-one (21) days, from the date a Stormwater Management Permit Application submission, is completed; shall complete review and make determination either to grant or deny the permit, within sixty (60) business days of the start of the review process. The permit application review clock shall start to run from the date, all the relevant documents and materials that are required for the proper review and evaluation of the permit application, is submitted to the Authority. An incomplete submission, will trigger a clock reset to the date the missing information is submitted to the Authority, except that if the applicant requests a continuation of a review meeting, the review clock will freeze, till the date the meeting is continued. The same process applies to the Land Disturbance Permit.

5.3 Manual Amendment

Stormwater Management Manual. The Stormwater Authority may adopt, and periodically amend, rules and the Manual relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), procedures and administration of this Stormwater Management Manual by majority vote of the Stormwater Authority.

5.4 Guidance Documents

Stormwater Management Policy: The Stormwater Authority will utilize guidance documents, criteria and information including specifications and standards of the latest edition of:

1. The Commonwealth of Massachusetts Department of Environmental Protection Stormwater Management Policy;
2. The Commonwealth of Massachusetts Department of Environmental Protection Stormwater Management Standards;
3. The Commonwealth of Massachusetts Department of Environmental Protection and the Massachusetts Office of Coastal Zone Management Stormwater Management – Stormwater Technical Handbook (Volumes 1&2);
4. The Commonwealth of Massachusetts Department of Environmental Protection Erosion and Sediment Control Guidelines for Urban and Suburban Areas (A Guide for Planners, Designers, and Municipal Officials);
5. The Commonwealth of Massachusetts Department of Environmental Protection Guidelines on Deicing Chemical (Road Salt) Storage; and
6. The Commonwealth of Massachusetts Bureau of Resource Protection Snow
 - a. Disposal Guidance. Unless specifically altered in the Stormwater Management Manual, Stormwater management practices that are designed, constructed, and maintained in accordance with these design and sizing criteria, will be presumed to be protective of Massachusetts water quality standards.

5.5 Actions of Stormwater Authority

The Stormwater Authority may take any of the following actions as a result of an application for a Stormwater Management Permit as more specifically defined as part of Stormwater Management Manual promulgated as a result of this Manual: Approval, Approval with Conditions, Disapproval, or Disapproval due to incomplete information.

5.6 Revocation of Prior Approved Plan

Written Approval Revocation by the Stormwater Authority: The Stormwater Authority may revoke any written approval issued by it for reason agreed upon as being substantially significant to successful Stormwater Management or successful Erosion and Sedimentation Control. The revocation must be carried out within six (6) months of permit issuance, or from the date which said significant reason is identified by the Stormwater Authority, and after conducting a public hearing as specified in Section 6.6

Section 5.7 Appeal of Authorities' Decision

Appeals of Action by the Stormwater Authority: A decision of the Stormwater Authority shall be final. Further relief of a decision by the Stormwater Authority made under this Manual shall be reviewable in the Superior Court in an action filed in accordance with M.G.L.Ch 249 § 4.

Section 5.8 Stormwater Utility

The Stormwater Authority implements the following Stormwater Utility Fee

Residential Single Family= \$ 6.00 per quarter

Residential Multi Family = \$6 Plus \$0.25 per 1000 square feet of gross impervious surface; per unit, per Quarter $\{(\$6 + \$0.25/1000 \text{ SF of impervious area})/\text{units}\}$

Example: For multi-family of 10 units, with a gross impervious area of 24,000 SF. The fee per unit is: $\{(\$6 + \$0.25 \times 24,000/1000)/10\} = \1.20 per unit, per quarter or \$4.8 per unit, per year

Non-Residential = \$ 10.00 per 3000 square footage of gross impervious surface, per quarter $\{\$10/3000 \text{ SF of gross impervious surface/quarter}\}$. Minimum \$10.00 per quarter

The fee will be established, in the manner the existing sewer and water utilities were and in accordance with the provisions of the Stormwater Ordinance. This Stormwater utility fees will enable the responsible Stormwater Authority and the Department of Public Works to run a robust Stormwater Management practice, not limited to: installation; maintenance and upgrade stormwater infrastructure; street sweeping; upgrade of catch basin, drain pipes, and brook channels, etc.; and protect the City's natural water bodies (e.g., Thirty Acre Pond, Salisbury Brook, Trout Brook, Beaver Brook, and Edson Brook) from potentially harmful elements in stormwater discharges. It will also be used in developing best practice, technical assistance on stormwater management issues for developers; property managers, and for educational programs for businesses, developers, residents and schools.

5.9 Abatements

Instructions and Guidelines for Stormwater Fee Abatements The City of Brockton offers abatements against the stormwater fee for stormwater service customers who undertake specific actions to reduce the impact of stormwater runoff on the public stormwater system or provide an on-going benefit related to stormwater management. Abatements are evaluated based upon two categories 1) On-site stormwater management systems and 2) Stormwater Quality Treatment. Residential and non-residential properties may apply using the same form.

If a property owner, school or business wishes to obtain abatement for the storm drain fee, a completed application form with supporting documentation shall be submitted to the City Engineer. Any plans, sketches or engineering reports that indicate the location of these structures (e.g., dry wells, leaching galleys, detention basins, etc.) and the area captured by these stormwater controls or best management practices, shall be attached to the application.

The City Engineer's office will review the application and conduct a site visit, as necessary; thereafter prepare and submit a report to the Stormwater Authority, recommending the appropriate fee reduction, if any, based upon the following schedule.

	Residential	Non-Residential
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Roof runoff captured and infiltrated:	15-50%	15-50%
Driveway/parking lot captured and infiltrated:	15-25%	15-50%
Stormwater Quality (treatment prior to entering public drainage system):	10-30%	10-30%

Since house, building, driveway and/or parking lot areas vary greatly with the properties in Brockton; a range of percentages is given so that a fair evaluation may be given to all applicants.

The following are examples of how the above rate structure may be applied:

- Single-family house with all roof leaders connected underground to a properly designed infiltration system, sized to handle 7 inches of rain over a 24-hour period (100-year storm) = 50% deduction.
- All driveway runoff is collected by catch basin that conveys runoff water to a properly designed infiltration system, sized for the 100-year storm = 25% reduced fee.
- Local gas station or mall, installs and maintains an appropriately sized, stormwater treatment unit, such as Stormceptor™ or Vortechs®, such that all stormwater runoff on their property, except roof runoff, passes through this unit prior to entering the public drain = 20% deduction.

The total number of deductions given to any property cannot exceed 75% of the stormwater fee for that property. The schedule above is a guide and maybe modified, expanded to add other categories of mitigation that can attract abatement similar to those in the Schedule above.

It is the responsibility of the property owner to apply for abatement and to provide the necessary supporting documentation with the application. Abatement applications will only be reviewed if they are filled out completely. The review will be performed within four (4) weeks of receiving the application. Final approval of the abatement, if any, shall be made by the Commissioner of Public Works or his designee.

6.0 PERMITTING PROCEDURES AND REQUIREMENTS

6.1 General

Projects requiring a Stormwater Management Permit and Land Disturbance Permit from the City of Brockton shall be required to submit the materials as specified in this section, and are required to meet the criteria as specified in this Manual.

6.2 Permit Required

- A. No landowner 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 this Manual prior to commencing the proposed activity.

- B. Should a land-disturbing activity associated with an Approved Plan in accordance with this section not begin during the 365-day period following permit issuance, the Approved Plan shall be resubmitted to the Stormwater Authority to reevaluate the existing and proposed stormwater management plan 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.

6.3 Entry

Filing an application for a permit grants the Stormwater Authority, or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with the resulting permit.

6.4 Fees

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

A. Rules

1. Application fees are payable at the time of application and are non-refundable.
2. Application fees shall be calculated by the Stormwater Authority in accordance with the permit application fee assessment and as discussed in this section of this Manual.
3. These fees are in addition to any other local or state fees that may be charged under any other law, Ordinance, or local ordinance.
4. The fee schedule may be reduced or increased by the Stormwater Authority. Any such change shall be made at a posted public hearing of the Stormwater Authority not less than ninety (90) days prior to the date upon which the change is to be effective.

B. Application Fees

1. A non-refundable application fee of the amount specified on the permit applications shall be due payable to the City of Brockton at the time an application is filed. Except that Application fee is not required for Administrative Land Review.

C. Engineering and Consultant Reviews and Fees

1. The Stormwater 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 Stormwater Authority to come to a final decision on the application. This fee is called the "Engineering and Consultant Review Fee."
2. Payment may be required at any point in the deliberations prior to a final decision.

3. Consultant fees shall be determined at the time of project review based on a specific scope of work, and shall be calculated by the Stormwater Authority.
4. The services for which a fee may be utilized include, but are not limited to, engineering design review, wetland survey and delineation review, hydrologic and drainage analysis review, wildlife evaluation review, stormwater quality analysis review, site inspections, as-built plan review, and analysis of legal issues.
5. The Stormwater Authority is authorized to require an applicant to pay reasonable costs and expenses for certain activities which utilize the services of City Staff. This includes such activities as inquiries concerning potential projects as well as site inspections not associated with a pending permit application; work that is required for the applicant's convenience, to be performed outside normal 8:00 AM to 4:00 PM, City of Brockton working hours.
6. The Stormwater Authority may require any applicant to pay an additional long-term inspection fee for future inspections to be performed by City Staff after a
7. Certificate of Completion has been issued.
8. The Stormwater Authority may require any applicant to pay an additional fee of
9. \$40.00 (forty dollars) per hour for review, inspection and monitoring services for any project filing that requires an excess of four (4) hours of review, inspection, and monitoring time by the City Engineer's office or designated staff.
10. Subject to applicable law, any unused portion of any fees collected shall be returned by the Stormwater Authority to the applicant within forty-five calendar days of a written request by the applicant, unless the Stormwater Authority decides in a public meeting that the remaining funds will be applied to necessary, but pending review/inspection action on the same project.
11. The Engineering and Consultant Review fees collected under this section shall be deposited into the Stormwater Enterprise.

D. Revision of Fee Schedules

The Stormwater Authority may revise its fee schedules periodically as to cover the cost of its permitting work and with approval, where required, by the City Council.

1. A copy of the written decision will be filed with the City clerk within ten (10) business days after final action is taken.

6.5 Other Boards

The stipulated number of copies of Permit Application documents, including fees, shall be filed at the Department of Public Works and time stamped.

6.6 Public Hearings

The Stormwater Authority need not hold a public hearing for projects or activities outside their currently regulated jurisdiction. For example, projects or activities concurrently within the

jurisdiction of the Planning Board, a public hearing shall be held in accordance with existing relevant Ordinances and procedures as they relate to public hearings. If it is required that the Stormwater Agency hold a public hearing, they will do so through the procedures as set forth in the Public Hearings section of the City of Brockton Rules and Regulations of the Planning Board.

6.7 Public Inclusion Activities

All projects covered under this manual must allow a fourteen (14) day public review and comment period on any Stormwater Management Plan and Erosion and Sedimentation Control Plan. An applicant-paid notice will be placed in a local newspaper notifying the public about the review time period and where the review documents can be found.

Abutters of any construction activity that requires compliance with this Manual will be notified by certified mail unless abutters have already been notified of the project under other City review processes. The mailings are to be paid for by the applicant with proof provided to the authority.

The concerns raised from the public review period are to be considered during the Stormwater Authority review of the project.

During Construction Activities, a sign with a "public concerns" phone number must be placed at the site to allow the public to voice concerns of construction activities to the Stormwater Authority.

6.8 Actions

The Stormwater Authority's action, rendered in writing, shall consist of either:

- A. Approval of the Stormwater Management Permit Application based upon determination that the proposed plan meets the Standards in Section 7 and will adequately protect the water resources of the community and is in compliance with the requirements set forth in this Manual;
- B. Approval of the Land Disturbance Permit Application based upon determination that the proposed plan meets the Standards in Section 8 and will adequately protect the erosion and sedimentation controls of the community and is in compliance with the requirements set forth in this Manual;
- C. Approval of the Stormwater Management Permit Application and/or the Land Disturbance Permit Application subject to any conditions, modifications or restrictions required by the Stormwater Authority which will ensure that the project meets the Standards in Sections 7-10 and adequately protects water resources, erosion and sedimentation controls, and municipal drainage connections as set forth in this Manual;
- D. Disapproval of the Stormwater Management Permit Application and/or the Land Disturbance Permit Application based upon a determination that the proposed plans, as submitted, do not meet the Standards in Sections 7-10 to adequately protect water resources, erosion and sedimentation controls, and municipal drainage connections as set forth in this Manual.
- E. The Stormwater Authority may disapprove applications "information deficient" where an applicant fails to provide requested additional information that in the Stormwater Authority's opinion is needed to adequately describe the proposed project. Information shall generally be limited to those applicable items listed in Sections 7-10 of this Manual.

6.9 Lack of Stormwater Authority Response

- A. Failure of the Stormwater Authority to take final action upon an Application within 80 calendar days of receipt of a complete application and complete review fees, shall be deemed to be approval of said Application. Upon certification by the City Clerk that the allowed time has passed without Stormwater Authority action, the Stormwater Authority must issue the Permit unless more time has been granted based on the public hearing process mentioned in Section 5b.

6.10 Plan Changes

The permittee, shall notify the Stormwater Authority in writing of any drainage change or alteration in the system authorized in a Stormwater Management Permit and/or a Land Disturbance Permit before any change or alteration is made. If the Stormwater Authority determines that the change or alteration is significant, based on the Stormwater Management Standards or Erosion and Sediment Control Standards in Sections 7 & 8 and accepted construction practices, the Stormwater Authority may require that an amended application be filed.

6.11 Appeal of Actions

A decision of the Stormwater Authority shall be final. Further relief of a decision by the Stormwater Authority made under this Manual 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 City of Brockton. Such an appeal shall result in a stay of the said written approval as described under Section 5 of this Manual, until such time as the appeal process of the applicable board, commission and/or department has been resolved.

6.12 Project Completion

At completion of the project the permittee shall submit as-built record drawings; as-built drawing of all structural stormwater controls and treatment best management practices required for the site as required in Sections 7-9; the Operation and maintenance plans and manual(s). The as-built drawings and manuals shall show deviations from the approved plans, if any, and be certified by a Registered Professional Engineer.

7.0 STORMWATER MANAGEMENT PERMIT

7.1 General

A Stormwater Management Permit shall be obtained for all developments that fall under the applicability as defined in Section 4.0. The permit application shall be comprised of a Stormwater Management Plan and Operation and Maintenance manual. A completed application for a Stormwater Management Permit shall be filed with Stormwater Authority. The permit package can be delivered in person or by a certified mail. A permit must be obtained prior to the commencement of land disturbing activity that may result in the disturbance of an area or any other activity as described in section 4.0.

7.2 Filing Application

- A. Permit Application (SMP): The applicant shall file with the Stormwater Authority, at the Department of Public Works Office, six (6) copies of a completed application package for a Stormwater Management Permit (SMP). Permit issuance is required prior to any site altering activity. While the application can be filed by a representative of the owner, the permittee must be the owner of the site. The SMP Application package shall include:
 - a. 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 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. Stormwater Management Design Plan and project description;
 4. Operation and Maintenance Manual;
 5. Payment of the application and review fees;
 6. Inspection and Maintenance agreement;
 7. Design Analysis, input data, calculations and narrative report
 8. Surety bond.
- B. Administrative Land Review (ALR): A completed Application ALR Form with original signatures of all owners; three (3) sets of copies of plan that include existing site features such as, structures, pavements, plantings, stormwater management systems, etc. The plan shall also show the proposed work including the proposed stormwater management system, limit of disturbance, erosion control, etc.
- C. In any instance where a disturbance that is covered under this Manual is performed but the disturbing agent does not file an application, the disturbing agent shall be deemed in violation of the BSO and the requirements of this Manual.

7.3 Stormwater Management Plan

- A. The application for a stormwater management permit shall include the submittal of a Stormwater Management Plan to the Stormwater Authority. This Stormwater Management Plan shall contain sufficient information for the Stormwater Authority to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from Stormwater runoff. This plan shall be in accordance with the criteria established in this Manual and must be submitted with the stamp and signature of a Professional Engineer (PE) licensed in the Commonwealth of Massachusetts.
- B. The Stormwater Management Plan shall fully describe the project in drawings, narrative, and calculations. It shall include:

1. Contact Information. The name, address, and telephone number of all persons having a legal interest in the property and the tax reference number and parcel number of the property or properties affected;
2. A locus map;
3. The existing zoning, and land use at the site;
4. The proposed land use;
5. The location(s) of existing and proposed easements;
6. The location of existing and proposed utilities;
7. The site's existing and proposed topography with contours at a maximum of 2-foot intervals;
8. The existing site hydrology;
9. A description and delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows;
10. A delineation of 100-year flood plains, if applicable;
11. Estimated seasonal high groundwater elevation in areas to be used for stormwater retention, detention, or infiltration;
12. The existing and proposed vegetation and ground surfaces with runoff coefficients for each;
13. A drainage area drawing showing pre and post construction watershed boundaries, drainage area and stormwater flow paths, including municipal drainage system flows;
14. A description and drawings of all components of the proposed Stormwater management system including:
 - a. Any new BMP's including location, design and installation plans, vendor manufacturer, and maintenance requirements;
 - b. Any information requested by the Stormwater Authority regarding accepted existing BMP's;
15. Plans with locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization;
 - a. All measures for the detention, retention or infiltration of water;
 - b. All measures for the protection of water quality;
 - c. The structural details for all components of the proposed drainage systems and stormwater management facilities;
 - d. Notes on drawings specifying materials to be used, construction specifications, and expected hydrology with supporting calculations;
 - e. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
 - f. Any other information requested by the Stormwater Authority.
16. Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in this Manual in Sections 9.3, 9.4, 9.5. Such calculations shall include:
 - a. Description of the design storm frequency, intensity and duration;
 - b. Time of concentration;
 - c. Soil Runoff Curve Number (RCN) based on land use and soil hydrologic group;
 - d. Peak runoff rates and total runoff volumes for each watershed area;
 - e. Information on construction measures used to maintain the infiltration capacity of the soil where any kind of infiltration is proposed;

- f. Infiltration rates, where applicable;
 - g. Culvert capacities;
 - h. Catch basin and other drainage inlet capacities.
 - i. Flow velocities;
 - j. Data on the increase in rate and volume of runoff for the specified design storms, and
 - k. Documentation of sources for all computation methods and field test results.
17. Description of annual groundwater recharge methods to be utilized as mentioned in section 9.6 of this Manual;
 18. Post-Development downstream analysis if deemed necessary by the
 19. Stormwater Authority;
 20. A detailed description of how the Post-Development stormwater management criteria in section 9.0 of this Manual are met;
 21. Soils Information from test pits performed at the location of proposed stormwater management facilities, including but not limited to soil descriptions, depth to seasonal high groundwater, depth to bedrock, and percolation rates. Soils information will be based on site test pits logged by a Massachusetts Registered Soil Evaluator/Massachusetts Registered Professional Engineer;
 22. Landscaping plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practice. Drawings and plans, not including the Locus Plan, shall be drawn to scale of either one-Inch equal to 40-feet or one-Inch equal to 20-feet.

7.4 Operation and Maintenance Plan (MA DEP SMP Standard 9)

An Operation and Maintenance plan (O&M Plan) is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with the Permit, this Manual and the Massachusetts Surface Water Quality Standards, 314, CMR 4.00 are met in all seasons and throughout the life of the system. The Operation and Maintenance Plan shall be recorded in the deed and recorded at the registry, with a copy on file with the Stormwater Authority. The O&M Plan shall be an ongoing requirement for the facility. The O&M Plan shall include:

- A. The name(s) of the owner(s) for all components of the system;
- B. A map showing the location of the systems and facilities including catch basins, manholes/access covers, main, and stormwater devices;
- C. Maintenance agreements that specify:
 1. The names and addresses of the person(s) responsible for operation and maintenance;
 2. The person(s) responsible for financing maintenance and emergency repairs;
 3. An Inspection and Maintenance Schedule for all stormwater management facilities including routine and non-routine maintenance tasks to be performed;
 4. A list of easements with the purpose and location of each;
 5. The signature(s) of the owner(s).
- D. Stormwater Management Easement(s)
 1. Stormwater management easements shall be provided by the property owner(s) as necessary for:
 - a. Access for facility inspections and maintenance;

- b. Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event;
 - c. Direct maintenance access by heavy equipment to structures requiring regular maintenance.
 - 2. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
 - 3. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Stormwater Authority.
 - 4. Easements shall be recorded with the Plymouth County Registry of Deeds, by the site owner, prior to issuance of a Certificate of Completion by the Stormwater Authority.
- E. Changes to Operation and Maintenance Plans
- 1. The owner(s) of the stormwater management system must notify the Stormwater Authority of changes in ownership or assignment of financial responsibility.
 - 2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this Manual by mutual agreement of the Stormwater Authority and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility.
 - 3. The Stormwater Authority retains the authority of inspection and enforcement of the Operation and Maintenance Plan as described in Sections 15 and 16.

8.0 LAND DISTURBANCE PERMIT

8.1 General

A completed application for a Land Disturbance Permit shall be filed with the Stormwater Authority. A permit must be obtained prior to the commencement of land disturbing activity that may result in the disturbance of an area of one quarter acre or more or any other activity as described in Section 4.0.

8.2 Filing Application

A. The applicant shall file with the Stormwater Authority, six (6) copies of a completed application package for a Land Disturbance Permit (LDP). The permit package can be delivered in person or by certified mail. 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. The LDP 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. Erosion and Sedimentation Control Plan and project description;
- 4. Payment of the application and review fees;
- 5. Surety bond.

B. In any instance where a disturbance that is covered under this Manual is performed but the disturbing agent does not file an application, the disturbing agent shall be deemed in violation of the requirements of this Manual.

8.3 Erosion and Sediment Control Plan

- A. The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls.
- B. This plan shall be in accordance with the criteria established in this Manual and must be submitted with the stamp and signature of a competent Professional Engineer (PE) licensed in the Commonwealth of Massachusetts. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed below.
- C. If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Construction Activities, the Stormwater Authority may require the applicant to submit a copy of the SWPPP or the permit file number.
- D. The performance principles of the Erosion and Sediment Control Plan are:
 - 1. Minimize total area of disturbance;
 - 2. Sequence activities to minimize simultaneous areas of disturbance;
 - 3. Minimize peak rate of runoff in accordance with the Massachusetts Stormwater Policy;
 - 4. Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;
 - 5. Apply perimeter sediment controls to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site. Divert uncontaminated water around disturbed areas;
 - 6. Maximize groundwater recharge;
 - 7. Install and maintain all Erosion and Sediment Control measures in accordance with the manufacturers' specifications and good engineering practices;
 - 8. Prevent off-site transport of sediment, including off-site vehicle tracking;
 - 9. Protect and manage on and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project);
 - 10. Comply with applicable Federal, State and local laws and regulations including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;
 - 11. Prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or Of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species from the proposed activities;
 - 12. Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site; and
 - 13. Properly manage on-site construction and waste materials.
- E. Erosion and Sedimentation Control Plan Content. The Plan shall contain the following information:

1. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;
2. Title, date, north arrow, names of abutters, scale, legend, and locus map;
3. Location and description of natural features including:
 - a. The location and names, if applicable, of any streams, wetlands, resource areas, water bodies, drainage swales, watercourses, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps, and areas subject to periodic flooding, both on and within 100 feet of the site on which the work is to be performed;
 - b. Existing vegetation including tree lines, canopy layer, shrub layer, and ground cover, and trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities; and
 - c. Habitats mapped by the Massachusetts Natural Heritage & Endangered
 - d. Species Program as Endangered, Threatened or of Special Concern,
 - e. Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and
 - f. Priority Habitats of Rare Species within five hundred (500) feet of any construction activity.
4. Lines of existing abutting streets showing drainage and driveway locations and curb cuts;
5. Existing soils, volume and nature of imported soil materials and the approximate total quantity of earthwork involved in the proposed work, with appropriate breakdown as to cut and fill;
6. The location, extent, and type of all proposed work to be performed, including all existing and proposed buildings, structures, utilities, sewers, water mains, and storm drains on the site;
7. Topographic mapping with elevations keyed to the City of Brockton base showing existing contours at intervals of not more than two feet intervals of the finished grade of all disturbed land area(s) at the conclusion of the construction and/or land-disturbance activities;
8. A description of the general topographic and soil conditions at the project site, including all significant limitations such as rock outcrops, existing alterations to natural drainage, and any other site characteristics pertinent to the work to be performed;
9. Surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed;
10. Drainage patterns and approximate slopes anticipated after major grading activities (Construction Phase Grading Plans);
11. Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading, and material stockpiling areas;
12. All drainage provisions shall be of such a design and capacity so as to adequately handle stormwater runoff, including runoff from tributary upstream areas which may be outside the locus of the project.
13. Drainage facilities shall be installed as early as feasible during construction, prior to site clearance, if possible.

14. Fill located adjacent to watercourses shall be suitable protected from erosion by means of rip rap, gabions, retaining walls, vegetative stabilization, or similar measures;
 15. Temporary vegetation and/or mulching shall be used to protect bare areas and stockpiles from erosion during construction; the smallest areas feasible shall be exposed at any one time; disturbed areas shall be protected during the non-growing months, November through March;
 16. Permanent vegetation shall be placed immediately following fine grading;
 17. Trees and other existing vegetation shall be retained whenever feasible; the area beyond the drip line shall be fenced or roped off to protect trees from construction equipment;
 18. Areas damaged during construction shall be re-sodded, reseeded, or otherwise restored. Monitoring and maintenance schedules, where required, shall be predetermined;
 19. Location and details for the site entrance stabilization features;
 20. Location and details for storm drain inlet protection;
 21. A description of slope stabilization plans and procedures to limit the grade of slopes;
 22. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
 23. Location and description of industrial discharges, including storm water discharges from dedicated asphalt plants and dedicated concrete plants, which are covered by this permit;
 24. The location of all existing and proposed buildings or structures, utilities including drainage facilities, and all significant natural features within 100 feet of the proposed work to be performed;
 25. Stormwater runoff calculations in accordance with the Department of Environmental Protection's Stormwater Management Policy and this Manual;
 26. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
 27. A description of construction and waste materials expected to be stored and generated on-site. The Plan shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, spill prevention and response, and maintenance plan;
 28. A description of the measures taken to store any on-site Deicing Chemicals;
 29. A description of the procedures in place concerning on-site Snow Disposal;
 30. A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;
 31. Plans must be stamped and certified by a Certified Professional in Erosion Sediment Control and/or a qualified Professional Engineer registered in Massachusetts; and
 32. Such other information as is required by Stormwater Authority.
- F. Access Permission. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, Stormwater Authority, its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this Manual and may make or cause to be made such examinations, surveys or sampling Stormwater Authority deems reasonably necessary to determine compliance with the permit.

9.0 POST-DEVELOPMENT STORMWATER MANAGEMENT CRITERIA

9.1 General

All projects shall comply with, or be more stringent than, the performance standards of the most recent version of the Massachusetts Department of Environmental Protection (DEP) Stormwater Handbook and the regulations specified below. All redevelopment projects shall improve existing conditions unless infeasible. In addition, the following general performance criteria shall be included in all Stormwater Management Plans, unless otherwise provided for in this Manual.

9.2 No Untreated Discharges

All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.

9.3 Channel Protection (MA DEP SMP Standard 2)

Protection of channels from bank and bed erosion and degradation shall be provided by controlling the peak discharge rate from the 2-yr storm event to the pre-development rate.

9.4 Overbank Flooding Protection (MA DEP SMP Standard 2)

Downstream overbank flood and property protection shall be provided by attenuating the post-development peak discharge rate to the pre-development rate for the 10-year, 24-hour return frequency storm.

9.5 Extreme Flooding Protection (MA DEP SMP Standard 2)

Extreme flooding and public safety protection shall be provided by evaluating the 100-year, 24-hour return frequency storm event to demonstrate no increased flooding impacts off-site.

9.6 Recharge (MA DEP SMP Standard 3)

- A. Annual groundwater recharge rates shall be maintained, by promoting infiltration through the use of structural and non-structural methods. At a minimum, annual recharge from the post development site shall mimic the annual recharge from predevelopment site conditions.
- B. The stormwater runoff volume to be recharged to groundwater should be determined using the methods prescribed in the latest version of the Massachusetts DEP Stormwater Management Manual. The recharge requirements shall apply to all activities within the jurisdiction of this Manual except as noted, and unless specifically waived by Stormwater Authority. The recharge criterion is not required for any portion of a site designated as a stormwater hotspot (see Sections 4.0 (b) (10) and 9.11 of this Manual). In addition, the Stormwater Authority may relax or eliminate the recharge requirement at its discretion, if the site is situated on unsuitable soils or is in a redevelopment area with documentation of prior contaminated soils.
- C. For recharger using infiltrators, to prolong the useful life of the buried infiltrator system, 80% TSS removal is required, prior to introduction to the infiltrator recharge system.

9.7 Structural Practices for Water Quality (MA DEP SMP Standard 4)

A. Presumed Compliance with Massachusetts Water Quality Standards All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the most recent version of the Massachusetts DEP Stormwater Management Manual. For other structural stormwater controls not included in the Massachusetts Stormwater Management Manual, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of

the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the Stormwater Authority before being included in the design of a stormwater management system. Structural best management practices (BMPs) must be designed to remove 80% of the average annual post development total suspended solids (TSS). It is presumed that a BMP complies with this performance goal if it is:

1. Sized to capture the prescribed water quality volume;
2. Designed according to the specific performance criteria outlined in the Massachusetts Stormwater Management Manual or an approved local equivalent;
3. Constructed properly; and
4. Maintained regularly.

9.8 Water Quality Volume

The water quality volume for new development shall be considered met if stormwater management systems are designed to be optimized for phosphorus and nitrogen removal and meet an average annual pollutant removal equivalent to 90% of the average annual load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site. This may be achieved through one of the following methods:

- Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance, then any federally or State-approved BMP design guidance or performance standards (e.g., State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance; or
- Retaining the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the new development site; or
- Meeting a combination of retention and treatment that achieves the above standards; or
- Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the new development site.

The water quality volume for redevelopment shall be considered met if stormwater management systems are designed to be optimized for phosphorus and nitrogen removal and meet an average annual pollutant removal equivalent to 80% of the average annual post-construction load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site. This may be achieved through one of the following methods:

- Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EA Region 1 tools do not address the planned or installed BMP performance, then any federally or State-approved BMP design guidance or performance standards (e.g., State

stormwater handbooks and design guidance manuals) may be used to calculate BMP performance; or

- Retaining the volume of runoff equivalent to, or greater than, 0.8 inch multiplied by the total post-construction impervious surface area on the redeveloped site; or
- Meeting a combination of retention and treatment that achieves the above standards; or
- Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the redevelopment site.
- Retain the volume of runoff equivalent to, or greater than, 0.80 inches multiplied by the total post-construction impervious surface area on the site AND/OR remove 80% of the average annual post-construction load of Total Suspended Solids generated from the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus generated from the total post-construction impervious surface area on the site.

New development and redevelopment on land designated as commercial and industrial must also incorporate designs that allow for shutdown and containment, where appropriate, to isolate the BMP in the event of an emergency spill or other unexpected event.

9.9 Hydrologic Basis for Design of Structural Practices

For facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development sites are as follows:

- A. Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel and compacted dirt surfaced roads.
- B. Off-site areas shall be assessed based on their "pre-developed condition" for computing the water quality volume (i.e., treatment of only on-site areas is required). However, if an offsite area drains to a proposed BMP, flow from that area must be accounted for in the sizing of a specific practice.
- C. Off-site areas draining to a proposed facility should be modeled as "present condition" for peak-flow attenuation requirements.
- D. The length of sheet flow used in time of concentration calculations is limited to no more than 50 feet for predevelopment conditions and 50 feet for post development conditions.
 1. Detention time for the one-year storm is defined as the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
 2. The models TR-55 and TR-20 (or approved equivalent) will be used for determining peak discharge rates.
 3. The standard for characterizing pre-development land use for on-site areas shall be woods.
 4. For purposes of computing runoff, all pervious lands in the site shall be assumed prior to development to be in good condition regardless of conditions existing at the time of computation.

5. If an off-site area drains to a facility, off-site areas should be modeled, assuming an "ultimate buildout condition" upstream.
6. Determination of flooding and channel erosion impacts to receiving streams due to land development projects shall be measured at each point of discharge from the development project and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge.
7. The specified design storms shall be defined as a 24-hour storm using the rainfall distribution recommended by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) or the Northeast Regional Climate Center "Atlas of Precipitation Extremes for the Northeastern United State and Southeastern Canada."
8. Proposed residential, commercial, or industrial subdivisions shall apply these stormwater management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.

9.10 Sensitive Areas

Stormwater discharges to critical areas with sensitive resources (i.e., shellfish beds, swimming beaches, aquifer recharge areas, water supply reservoirs) may be subject to additional criteria, or may need to utilize or restrict certain stormwater management practices at the discretion of the Stormwater Authority. The Stormwater Authority may designate sensitive areas and specific criteria for these areas after conducting a public hearing in accordance with the provisions of Sections 5.0 (B) and 6.6 of the City of Brockton Stormwater Management Manual.

9.11 Hotspots

Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots", as defined in the most recent version of the MA DEP Stormwater Management Manual require the use of specific stormwater management BMPs as specified in the most recent version of the MA DEP Stormwater Management Manual. The use of infiltration practices without pretreatment is prohibited.

9.12 Low Impact Development (LID)

Low Impact Development site planning and design strategies must be implemented unless infeasible in order to reduce the discharge of stormwater from development sites. Use of LID design strategies must be formally documented in the Stormwater Management Plan.

10.0 DISCHARGES TO THE MUNICIPAL STORM DRAIN SYSTEM

10.1 Purpose

Increased and contaminated stormwater runoff is a major cause of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater; contamination of drinking water supplies; alteration or destruction of aquatic and wildlife habitat; and flooding. Regulation

of illicit connections and discharges to the municipal storm drain system is necessary for the protection of the City's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment.

Further objectives of this section are:

- A. to prevent pollutants from entering the City's municipal separate storm sewer system (MS4);
- B. to prohibit illicit connections and unauthorized discharges to the MS4;
- C. to require the removal of all such illicit connections;
- D. to comply with state and federal statutes and Ordinance relating to stormwater discharges; and
- E. to establish the legal authority to ensure compliance with the provisions of this Manual through inspection, monitoring, and enforcement.

10.2 Applicability

Section 10 of this Manual shall apply to flows entering the municipally owned storm drainage system.

10.3 Prohibited Activities

- A. **Illicit Discharges.** No person shall knowingly or unknowingly dump, discharge, cause or allow to be discharged any pollutant or non-stormwater discharge into the municipal separate storm sewer system (MS4), into a watercourse, or into the waters of the Commonwealth.
- B. **Illicit Connections.** No person shall knowingly or unknowingly construct, use, allow, maintain or continue any illicit connection to the municipal storm drain system, regardless of whether the connection was permissible under applicable law, ordinance or custom at the time of connection.
- C. **Obstruction of Municipal Storm Drain System.** No person shall knowingly or unknowingly obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior written approval from the Stormwater Authority.

10.4 Exemptions

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

- A. Discharge or flow resulting from firefighting activities. Approved City of Brockton Firefighting activity as performed solely by the City of Brockton Fire Department.
- B. Waterline flushing;
- C. Flow from potable water sources;
- D. Springs;
- E. Natural flow from riparian habitats and wetlands;
- F. Diverted stream flow;
- G. Rising groundwater;
- H. Uncontaminated groundwater infiltration as defined in 40 CFR 35.2005(20), or uncontaminated pumped groundwater;
- I. Water from exterior foundation drains, footing drains (not including active groundwater dewatering systems), crawl space pumps, or air conditioning condensation;
- J. Discharge from landscape irrigation or lawn watering;

- K. Water from individual residential car washing;
- L. Discharge from dechlorinated swimming pool water (less than one ppm chlorine) provided the water is allowed to stand for one week prior to draining and the pool is drained in such a way as not to cause a nuisance;
- M. Discharge from street sweeping;
- N. Dye testing, provided verbal notification is given to the Stormwater Authority prior to the time of the test;
- O. Non-stormwater discharge permitted under an NPDES permit or a Surface Water Discharge Permit, waiver, or waste discharge order administered under the authority of the United States Environmental Protection Agency or the Department of Environmental Protection, provided that the discharge is in full compliance with the requirements of the permit, waiver, or order and all applicable laws and Ordinance; and P. Discharge for which advanced written approval is received from the Stormwater Authority as necessary to protect public health, safety, welfare or the environment.

10.5 Emergency Suspension of Storm Drainage System Access

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

10.6 Notification of Spills

Notwithstanding other requirements of local, state or federal law, as soon as a person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of or suspects a release of materials at that facility or operation resulting in or which may result in discharge of pollutants to the municipal drainage system or waters of the Commonwealth, the person shall take all necessary steps to ensure containment, and cleanup of the release. In the event of a release of oil or hazardous materials, the person shall immediately notify the municipal fire and police departments and other appropriate departments, as required. In the event of a release of non-hazardous material, the reporting person shall notify the Authorized Enforcement Agency no later than the next business day. The reporting person shall provide to the Authorized Enforcement Agency written confirmation of all telephone, facsimile or in person notifications within three business days thereafter. If the discharge of prohibited materials is from a commercial or industrial facility, the facility owner or operator of the facility shall retain on-site a written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

11.0 WAIVERS

- A. The Stormwater Authority may waive strict compliance with any requirement of the
- B. City of Brockton Stormwater Management Manual or the rules and regulations promulgated hereunder, where:
 1. Such action is allowed by federal, state and local statutes and/or Ordinance;
 2. is in the public interest, and

3. is not inconsistent with the purpose and intent of the City of Brockton Stormwater Management Ordinance.
- A. Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the Manual does not further the purposes or objectives of this Manual.
- B. All waiver requests shall be acted on within 60 calendar days and written finding will be provided by the Stormwater Authority.
- C. If in the Stormwater Authority's opinion, additional time or information is required for review of a waiver request, the Stormwater Authority may request an extension of the review period. In the event the applicant objects to an extension, or fails to provide requested information, the waiver request may be denied, "without prejudice" by the Stormwater Authority.

12.0 SURETY

The Stormwater 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 Stormwater Authority, and be in an amount deemed sufficient by the Stormwater Authority to ensure that the work will be completed in accordance with the permit. 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 as required by Section 13 of this Manual and issued a Certificate of Completion.

13.0 CONSTRUCTION INSPECTIONS

- A. Notice of Construction Commencement. The applicant must notify the Stormwater Authority in advance before the commencement of construction. In addition, the applicant must notify the Stormwater Authority in advance of construction of critical components of the Stormwater Management Plan and Erosion and Sediment Control Plan.
- B. At the discretion of the Stormwater Authority, periodic inspections of the stormwater management system and Erosion and Sedimentation Control system construction shall be conducted by the City Engineer's office or a designee, professional engineer that has been approved by the Stormwater 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 being conducted 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 and the erosion and sedimentation control plan.
- C. The Stormwater 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;

- a. Prior to starting clearing, excavation, construction, or land disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with Stormwater Authority to review the permitted plans and their implementation plan and schedule.
 - b. Board Inspection. Stormwater Authority or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the land disturbance permit as approved. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of Stormwater Authority shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify Stormwater Authority at least two (2) working days before each of the following events:
 - (1) Erosion and sediment control measures are in place and stabilized;
 - (2) Site clearing has been substantially completed;
 - (3) Rough Grading has been substantially completed;
 - (4) Final Grading has been substantially completed;
 - (5) Close of the Construction Season; and
 - (6) Final landscaping (permanent stabilization) and project final completion.
3. Permittee Inspections. The permittee or his/her agent shall conduct and document inspections of all control measures) no less than weekly or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to Stormwater Authority or designated agent in a format approved by Stormwater Authority.
- D. Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground stormwater treatment, storage or stormwater conveyance system.
- E. Final Inspection
- 1. After the permanent erosion and sedimentation control measures have been constructed, the stormwater management system is in place, and before the surety has been released, all applicants are required to submit actual "as built" plans and a softcopy of the operation and maintenance manual, for any stormwater management facilities or practices after final construction is completed and must be certified by a Professional Engineer.
 - 2. The Stormwater Authority's inspector shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the Stormwater 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 Land Survey and/or 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.

F. 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 as called for in the Stormwater Management Plan and the Erosion and Sedimentation Control Plan, it shall be corrected by the applicant before the Certificate of Completion is released. If the applicant fails to act the Stormwater Authority may use the surety bond to complete the work.
2. If the Stormwater 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 Stormwater Authority.

14.0 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 Stormwater 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 this Manual.

15.0 LONG TERM INSPECTION AND MAINTENANCE

A. Maintenance Responsibility

1. Stormwater management facilities and practices included in a stormwater management plan with an inspection and maintenance agreement in accordance with Section 7.4 of this Manual must undergo ongoing inspections to document maintenance and repair needs and ensure compliance with the requirements of the agreement, the plan and this Manual.
2. The owner of the property on which work has been done pursuant to this Manual 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 this Manual and the Operation and Maintenance Plan and Maintenance Agreement described under Section 7.4 of this Manual.
2. At a minimum, inspections shall occur during the first year of operation, at the beginning of spring (March to April) and in the fall (September to October) and at least once every other year, at the beginning of spring thereafter. In addition, a maintenance agreement as specified under Section 7.4 of this Manual between the owner and the Stormwater Authority shall be executed for privately-owned stormwater management system that specifies the Responsible Party for conducting long term inspections.

3. Inspection reports shall be submitted to and maintained by the Stormwater 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:
 - (1) Pretreatment devices
 - (2) Vegetation or filter media
 - (3) Fences or other safety devices
 - (4) Spillways, valves, or other control structures
 - (5) Embankments, slopes, and safety benches
 - (6) Reservoir or treatment areas
 - (7) Inlet and outlet channels and structures
 - (8) Underground drainage
 - (9) Sediment and debris accumulation in storage and forebay areas (including catch basins)
 - (10) Any nonstructural practices
 - (11) Any other item that could affect the proper function of the stormwater management system
 - (12) Recharge System, check evidence of water retention and depth of water in the recharge system.
 - d. Description of the need for maintenance;

C. Right-of-Entry for Inspection

The terms of the inspection and maintenance agreement as specified in Section 7.4 of this Manual shall provide for the Stormwater Authority or its designee to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. The Stormwater Authority, its agents, officers, and employees shall have authority to enter upon privately owned land for the purpose of performing their duties under this Manual and may make or cause to be made such examinations, surveys, or sampling as the Stormwater Authority deems necessary, subject to the constitutions and laws of the United States and the Commonwealth.

D. 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 Stormwater 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 5 years. These records shall be made available to the Stormwater Authority during inspection of the facility and at other reasonable times upon request.

E. Failure to Maintain

1. If a responsible person fails or refuses to meet the requirements of the inspection and maintenance agreement, the Stormwater 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 hour notice shall be sufficient, may at its discretion, 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 Stormwater Authority 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 Stormwater Authority and the person responsible for carrying out the maintenance plan to correct the deficiencies. The Stormwater Authority shall then conduct a subsequent inspection to ensure completion of repairs.

16.0 ENFORCEMENT

- A. The Stormwater Authority or an authorized agent of the Stormwater Authority shall enforce this Manual, Ordinance, 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 Stormwater Authority or an authorized agent of the Stormwater Authority may issue a written notice of violation or enforcement order to enforce the provisions of this Manual or the Ordinance there under, which may include requirements to:
 - a. Cease and desist from construction or land disturbing activity until there is compliance with the Manual and Permits described herein;
 - b. Repair, maintain; or replace the stormwater management system or portions thereof in accordance with the operation and maintenance plan;
 - c. portions thereof in accordance with the erosion and sedimentation, control system;
 - d. Perform monitoring, analyses, and reporting;
 - e. Fix adverse impact resulting directly or indirectly from malfunction of the stormwater management system.
 2. If the Authority or its agent or representative 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 Authority may, at its option, undertake such work, and the property owner shall reimburse the City of Brockton 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 City of Brockton including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Stormwater 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 Stormwater 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. Criminal Penalty.

Any person who violates any provision of the City of Brockton Stormwater Management Manual, or ordinance, order or permit issued there under, may be ordered to correct the violation and/or shall be punished by a fine of not more than \$1,000.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense, but no further notification is required.

D. Non-Criminal Disposition.

As an alternative to criminal prosecution or civil action, the City of Brockton may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D in which case the Representative of the Stormwater Authority of the City of Brockton shall be the enforcing person. The penalty for the 1st violation shall be no more than \$500. The penalty for the 2nd violation shall be \$750. The penalty for the 3rd and subsequent violations shall each be \$1000.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

E. Appeals.

The decisions or orders of the Stormwater Authority shall be final. Further relief shall be to a court of competent jurisdiction.

F. Remedies Not Exclusive.

The remedies listed in this Manual are not exclusive of any other remedies available under any applicable federal, state or local law.

17.0 SEVERABILITY

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