STORMWATER MANAGEMENT
RULES AND REGULATIONS

Lincoln Planning Board
Adopted: July 27, 2021

1.0 Purpose

The purpose of these rules and regulations is to establish Stormwater Management Rules and Regulations for the Town of Lincoln Stormwater Management Bylaw.

2.0 Authority

The Lincoln Planning Board, under the authority of Article XXIX of the General Bylaws` of the Town of Lincoln, and after holding a duly called Public Hearing on July 27, 2021, adopts these Stormwater Management Rules and Regulations.

3.0 Definitions

3.1. For the purposes of these rules and regulations, the following shall mean:

(1) ABUTTER: The owner(s) of land abutting the site on which the activity occurs as defined by a certified abutter list issued by the Town of Lincoln assessor's office.

(2) APPLICANT: Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the Commonwealth of Massachusetts or the federal government to the extent permitted by law requesting a Stormwater Management Permit for proposed land-disturbance activity.

(3) BEST MANAGEMENT PRACTICE (BMP): An activity, procedure, restraint, or structural improvement that helps reduce the quantity or improve the quality of stormwater runoff.

(4) CERTIFICATE OF COMPLETION: A document issued by the Town of Lincoln Permit Granting Authority, its employees, or authorized agents upon receipt of a final inspection report and certification by the Applicant's licensed Professional Engineer (P.E.) that all conditions of the Stormwater Management Permit have been satisfactorily completed.

(5) CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC): A certified specialist in soil erosion and sediment control. This certification program, sponsored by the Soil and Water Conservation Society in cooperation with the American Society of Agronomy, provides the public with evidence of professional qualifications.

(6) CERTIFIED VERNAL POOLS: Temporary bodies of freshwater that provide critical habitat for a number of vertebrate and invertebrate wildlife species, certified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP).

(7) CLEARING: Any activity that removes vegetative surface cover.

(8) CONSTRUCTION WASTE AND MATERIALS: Excess or discarded building or site materials, including but not limited to concrete truck washout, chemicals, litter, and sanitary waste at a construction site that may adversely impact water quality.

(9) DISCHARGE OF POLLUTANTS: The addition from any source of any pollutant or combination of pollutants into the municipal storm drain system or into the Waters of the Commonwealth of Massachusetts from any source.

(10) DISTURBANCEOF LAND: Any action that alters the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top-soils.

(11) DPW: Lincoln Department of Public Works.

(12) EROSION: The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

(13) EROSION AND SEDIMENT CONTROL PLAN: A document containing narrative, drawings, and details developed by a licensed Professional Engineer or CPESC, which includes BMPs, or equivalent measures designed to control surface runoff, erosion, and sedimentation during pre-construction and construction-related land disturbance activities.

(14) ESTIMATED HABITAT OF RARE WILDLIFE: Habitats delineated by the NHESP for state-protected rare wildlife and certified vernal pools for use with the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).

(15) GRADING: Changing the level or shape of the ground surface.

(16) GROUNDWATER: Water beneath the surface of the ground including confined or unconfined aquifers.

(17) IMPERVIOUS SURFACE: Any surface that prevents or significantly impedes the infiltration of water into the underlying soil. This can include but is not limited to: roads, driveways, parking areas and other areas created using non porous material; buildings, rooftops, structures, impervious artificial turf and compacted gravel or soil.

(18) INFEASIBLE: means not technologically possible, or not economically practicable and achievable in light of best industry practices.

(19) LOW IMPACT DEVELOPMENT (LID): An approach to land development design and stormwater management that attempts to mimic the natural hydrology of the site by avoiding, reducing, and mitigating impacts with natural, non-structural, and structural measures.

(20) MASSACHUSETTS ENDANGERED SPECIES ACT (MESA): (G.L. c. 13lA) and it's implementing regulations at (321 CMR 10.00). This Act prohibits the "taking" of any rare plant or animal species listed as "Endangered", "Threatened", or of "Special Concern".

(21) MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The Stormwater Management Standards promulgated by the Massachusetts Department of Environmental Protection (DEP) 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, and further described in the Wetlands Protection Act Regulations (310 CMR 10.00) and the 401 Water Quality Certification Regulations (314 CMR 9.00). The Stormwater Management Standards address stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and to control the quantity of runoff from a site.

(22) MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Lincoln, MA.

(23) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT: A permit issued by the United States Environmental Protection Agency (EPA) or jointly with the Commonwealth of Massachusetts that authorizes the discharge of stormwater to Waters of the Commonwealth.

(24) NEW DEVELOPMENT: 1. Any construction activities or land alteration resulting in total Disturbance of Land equal to or greater than one acre; or 2. Any construction activities or land alteration that are part of a larger common plan of development resulting in Disturbance of Land equal to or greater than one acre.

(25) NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP): The Commonwealth of Massachusetts' program for implementing MESA requirements.

(26) OPERATION AND MAINTENANCE PLAN (OMP): A plan setting up 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.

(27) OUTFALL: The point where stormwater flows out from a point source which is a discernible, confined, and discrete conveyance into Waters of the Commonwealth.

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

(29) PERSON: An individual, partnership, association, firm, company, trust, corporation, agency, authority, department or political subdivision of the Commonwealth of Massachusetts or the federal government, to the extent permitted by law, and any officer, employee, or agent of such person.

(30) PLANNING BOARD: Town of Lincoln Planning Board, its employees, or authorized agents designated to enforce these regulations.

(31) 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 stormwater is or may be discharged.

(32) 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 non-point source, that is or may be introduced into any sewage treatment works or Waters of the Commonwealth. Pollutants shall include, but are not limited to:

(a) Chemicals, paints, varnishes, and solvents;
(b) Oil and other automotive fluids;
(c) Non-hazardous liquid and solid wastes and yard wastes;
(d) Refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordnances, accumulations, and floatables;
(e) Pesticides, herbicides, and fertilizers;
(f) Hazardous materials and wastes, sewage, fecal coliform, and pathogens;
(g) Dissolved and particulate metals;
(h) Animal wastes;
(i) Rock, sand, salt, and soils;
(j) Concrete truck washout;
(k) Sanitary wastes;
(l) Construction wastes, demolition debris, and discarded building materials; and,
(m) Noxious or offensive matter of any kind.

(33) PRIORITY HABITAT OF RARE SPECIES: Habitats delineated for rare plant and animal populations protected pursuant to the MESA and its regulations.

(34) RECHARGE: The process by which groundwater is replenished by precipitation through the percolation of runoff and surface water through soil.

(35) REDEVELOPMENT: any construction, land alteration, or improvement of impervious surfaces resulting in total Disturbance of Land equal to or greater than one acre: or 2. Activities that are part of a larger common plan of development resulting in a Disturbance of Land equal to one acre or more that does not meet the definition of New Development.

(36) RUNOFF: Rainfall, snow melt, or irrigation water flowing over the ground surface.

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

(38) SEDIMENTATION: The process or act of deposition of sediment.

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

(40) SLOPE: The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

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

(42) STABILIZATION: The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or minimize erosion.

(43) STORMWATER: Stormwater, snow melt, and surface water runoff and drainage.

(44) STORMWATER MANAGEMENT PERMIT: The written approval granted by the Permit Granting Authority to undertake a construction activity in response to a Stormwater Management Permit Application.

(45) STORMWATER MANAGEMENT PLAN: A plan required as part of the application for a Stormwater Management Permit.

(46) 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 or organic chemical, petroleum product, heavy metal, radioactive, biological, or infectious waste, acid and alkali, and any substance defined as Toxic or Hazardous under G.L. Ch.21C and Ch.21E, and the regulations at 310 CMR 30.000 and 310 CMR 40.0000.

(47) TOTAL SUSPENDED SOLIDS (TSS): Sediment being carried in stormwater.

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

(49) WATERS OF THE COMMONWEALTH: All waters within the jurisdiction of the Commonwealth of Massachusetts, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, groundwaters, and vernal pools.

(50) WETLAND RESOURCE AREAS: Areas specified in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, as amended, and in the Town of Lincoln Wetlands Protection Bylaw, as amended.

4.0 Amendments

The Planning Board may adopt, and periodically amend, these Stormwater Management Rules and Regulations by majority vote of the Planning Board, after conducting a minimum of an advertised public hearing to receive comments on any proposed revisions. The hearings shall be duly advertised in a paper of general circulation in the Town of Lincoln no less than fourteen (14) days prior to the date of the public hearing.

5.0 Applicability

These rules and regulations apply to all projects meeting the applicability criteria of the Stormwater Management Bylaw (Chapter XXIX of the Town's General Bylaws). New Development and Redevelopment projects must comply with the rules and regulations contained herein unless expressly waived by the Permit Granting Authority. Normal maintenance and improvement of land in agricultural or aquacultural use as defined in 310 CMR 10.04 is exempt from the requirement of these Regulations.

6.0 Procedure and Requirements

No Building Permit shall issue without confirmation that a Stormwater Management Permit has been obtained or is otherwise not required.

6.1. Permit Granting Authority: The following Town boards and commissions or their designees shall serve as the Permit Granting Authority (PGA) as described below and their respective permits may serve as the Stormwater Management Permit upon a finding that the Project has demonstrated compliance with these rules and regulations:

(1) Planning Board: Any Site Plan Approval, Subdivision Approval, or Special Permit Approval issued by the Lincoln Planning Board shall serve as the Stormwater Management Permit, provided the project demonstrates compliance with these rules and regulations and the decision includes a finding as such.

(2) Conservation Commission: An Order of Conditions issued by the Lincoln Conservation Commission may serve as the Stormwater Management Permit, provided the project demonstrates compliance with these rules and regulations and the Order includes a finding as such. In the event that an Order of Conditions is issued by the Conservation Commission to serve as the Stormwater Management Permit, a copy of such Order of Conditions shall be provided to the Planning Department.

(3) In cases where the above boards or commissions do not include a clear finding of compliance with these rules and regulations or when none of the above permits are required, the Planning Board shall serve as the Stormwater Management PGA.

6.2. Application.

(1) The site owner or his/her agent shall file with the Permit Granting Authority, two (2) paper copies and one digital copy of a completed Stormwater Management Permit Application package. Permit issuance is required prior to any applicable site-altering activity. While the Applicant may be a representative of the owner of the site, the Stormwater Management Permit must be issued to the owner of the site.

(2) The Permit Granting Authority shall provide one (1) copy of a completed Stormwater Management Permit Application package to the Conservation Commission.

(3) Stormwater Management Permit Application package:

(a) Completed Application Form with original signatures of all owners;

(b) List of abutters within 300-feet of the project as certified by the Assessors' Office;

(c) Two (2) paper copies and one digital copy of the Stormwater Management Plan as specified in Section 7.0;

(d) Two (2) paper copies and one digital copy of the Erosion Control Plan as specified in Section 8.0;

(e) Two (2) paper copies and one digital copy of the Operation and Maintenance Plan as specified in Section 9.0;

(f) Payment of any application and review fees.

6.3. Fee Structure.

(1) The Applicant shall submit with each Application, an Application Fee payable to the Town of Lincoln. Applicants shall pay review fees as listed below to cover any expenses connected with the public hearing and review of the Stormwater Management Permit Application before the review process commences The Permit Granting Authority may, at the Applicant's expense, retain a licensed P.E. or other professional consultant to advise the Permit Granting Authority on any or all aspects of these plans.

(a) ....Application fee for single family residence..... $100
(b) ....Application fee for projects from 1 to 2 acres..... $200
(c) ....Application fee for projects from 3 to 10 acres..... $300
(d) ....Application fee for projects greater than 10 acres..... $500

(e) ....Application fee for a resubmittal / amendment.....$100
(f).....Fees for a professional peer review..... Assessed on a case by case basis.

(2) In addition to the above fee, the PGA is authorized to require an Applicant to pay an initial fee of up to $5,000.00 for the reasonable costs and expenses associated with retaining specific expert engineering and other peer review consultant services deemed necessary by the PGA. Payment may be required at any point during the PGA's deliberations prior to a final decision. The PGA shall notify the Applicant of such amount in writing. Failure to submit such amount within 14 days of receipt of said notice shall be deemed sufficient reason by the PGA to deny said application.
   (a) If the PGA finds that the initial fee is insufficient to cover the costs and expenses associated with specific expert engineering and other peer review consultant services necessary for review of the application and to monitor the construction of the project, the PGA may require the Applicant to submit any additional funding required to fund peer review services. The PGA shall notify the Applicant of any additional funding required in writing. Failure to submit such additional amount of funds to the PGA within 14 days of receipt of said notice shall be deemed an adequate reason by the PGA to deny said application.
   (b) Such fee shall be held in escrow, to be used to engage independent expert engineering and other peer review consultant services and shall be governed and administered in accordance with G.L c. 44, § 53G or § 53E 1/2.
   (c) If the actual cost incurred by the Town for review of said application is less than the amount on deposit as specified above, the PGA shall authorize that such excess amount be refunded to the Applicant upon issuance of the Certificate of Completion.
   (d) The services for which a fee may be utilized include, but are not limited to, review of wetland survey and delineation, hydrologic and drainage analysis, wildlife evaluation, stormwater quality analysis, site inspections, as-built plan review, and analysis of legal issues.

6.4. Entry. Filing an application for a permit grants the Permit Granting Authority, and its agents, permission to enter the site throughout the construction project to verify the information in the application and to inspect for compliance with the resulting permit.

6.5. Information Requests. The Permit Granting Authority may request, and the Applicant shall submit additional information and/or documentation at any time prior to the issuance of the Certificate of Completion.

6.6. Actions. The Permit Granting Authority's action, rendered in writing, shall consist of either:
   (1) "Approval" of the Stormwater Management Permit Application based upon determination that the proposed Stormwater Management Plan meets the Standards as set forth in Section 7.3 herein and will adequately protect the water

resources of the community and complies with the requirements set forth in these rules and regulations;

(2) "Approval with Conditions" of the Stormwater Management Permit Application subject to any conditions, modifications, or restrictions required by the Permit Granting Authority that will ensure the proposed Stormwater Management Plan meets the Standards and will adequately protect the water resources of the community and complies with the requirements set forth in these rules and regulations;

(3) "Disapproval" of the Stormwater Management Permit Application based upon determination that the proposed Stormwater Management Plan, as submitted, does not meet the Standards, or will not adequately protect the water resources of the community and does not comply with the requirements set forth in these rules and regulations.

6.7. Appeals. A decision of the Permit Granting Authority shall be final. The Applicant may appeal the decision to a court of competent jurisdictions in the time allowed by law.

6.8. Plan Changes. The Applicant must notify the Permit Granting Authority in writing of any drainage change or alteration in the system authorized in the Stormwater Management Permit before any change or alteration is made. If the Permit Granting Authority determines that the change or alteration is significant, based on the Standards, the requirements set forth in these rules and regulations, or accepted construction practices, the Permit Granting Authority may require that an amended application be filed. If any change or alteration from the Stormwater Management Permit occurs during any land disturbing activities, the Permit Granting Authority may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

6.9. Stormwater Pollution Prevention Plans (SWPPPs). Applicants may be required to prepare a SWPPP to satisfy US EPA requirements under the NPDES Construction General Permit (CGP). Applicants are responsible for verifying requirements and preparing a SWPPP in full compliance with CGP regulations, as well as filing any additional materials with EPA, such as a Notice of Intent (NOI).

7.0 Stormwater Management Plan

7.1. The Stormwater Management Plan shall contain sufficient information for the Permit Granting Authority to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the Applicant for reducing adverse impacts from stormwater. The Stormwater Management Plan shall be designed to meet the Standards as set forth in 7.3 below, and the latest version of the Massachusetts Department of Environmental Protection (DEP) Stormwater Handbook.

7.2. The Stormwater Management Plan shall fully describe the project in engineering plans, drawings, and narrative. It shall include, at a minimum, the following:

(1) Names, addresses, telephone numbers, and email addresses of the owner, Applicant, and person(s) or firm(s) preparing the plan;
(2) Project Narrative containing relevant information related to stormwater requirements;
(3) Locus Map of the Site;
(4) Any Conservation Restriction, Conservation Commission Restriction, Restrictive Covenant, or Conservation Deed Restrictions for the site;
(5) Description of existing and proposed conditions;
(6) Existing and Proposed Zoning and Land Use at the Site;
(7) Existing and Proposed Easements and Utilities at the Site;
(8) Existing Conservation Land as owned by the Town of Lincoln or neighboring community;
(9) Existing and Proposed Topography (1-foot interval contours with additional spot grades as needed to depict detailed drainage patterns) at the Site;
(10) Existing and Proposed hydrology, watershed boundaries, drainage area, and stormwater flow paths;
(11) Existing and Proposed Stormwater Conveyances, Impoundments, and Wetlands into which stormwater flows at and adjacent to the Site;
(12) Existing and Proposed 100-year flood plain, if applicable;
(13) High Groundwater Elevation (November to April) as determined via completion of representative test pits or other geological investigations in areas to be used for stormwater retention, detention, or infiltration;
(14) Description of subsurface conditions in areas to be used for stormwater retention, detention, or infiltration;
(15) Evaluation of opportunities for using Low Impact Development (LID) and green infrastructure techniques and BMPs;
(16) Plans, Drawings and Descriptions of Proposed Drainage System and all components including:
    (a) Locations, cross-sections, and profiles of stormwater conveyances such as drainage swales and their method of stabilization;
    (b) All measures for the detention, retention, and/or infiltration of stormwater;
    (c) All measures for the protection of water quality;
    (d) The structural details and sizing for all components of the proposed drainage systems and stormwater management facilities;
    (e) Notes on drawings specifying materials to be used, construction specifications, and typical details and cross-sections;
    (f) Analysis of existing and proposed hydrology with supporting calculations;
    (g) Calculations supporting the estimate of stormwater treatment performance;
    (h) Calculations supporting the design of infiltration practices, including design infiltration rates, estimated dewatering times, and mounding analyses, where applicable.
(17) Stormwater runoff shall be calculated using latest Northeast Regional Climate Center (NRCC) extreme precipitation amounts for recurrence intervals (storm events) 2-, 10-, 25-, 50- and 100-year frequencies.

(18) Any supplemental materials filed with US EPA under the CGP, such as a SWPPP and/or NOI as outlined in Section 6.9;
(19) Documents must be stamped and certified by a qualified licensed P.E.; and,
(20) Any other information requested by the Permit Granting Authority.

7.3. Stormwater Management Standards ("Standards"). Projects shall meet the following Standards:

(1) No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or Waters of the Commonwealth.
(2) Low Impact Development (LID) site planning and design strategies must be implemented unless determined Infeasible by the PGA to reduce the discharge of stormwater from development sites;
(3) Stormwater management system design shall be consistent with, or more stringent than, the requirements of the latest version of the Massachusetts DEP Stormwater Handbook;
(4) Stormwater management systems on New Development shall be designed to 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.
    (a) Average annual pollutant removal requirements in 7.3.(4) are achieved through one of the following methods:
        i. Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with US EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by US EPA Region 1, where available. If US 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
        ii. Retaining the volume of runoff equivalent to, or greater than, 1.0 inch multiplied by the total post-construction impervious surface area on the new development site; or
        iii. Meeting a combination of retention and treatment that achieves the above standards; or
        iv. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the new development site.
(5) Stormwater management systems on Redevelopment sites shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual post-construction load of TSS related to the total post-construction impervious area on the site AND 50% of the average annual load of TP related to the total post-construction impervious surface area on the site.

(a) Average annual pollutant removal requirements in 7.3.(5) are achieved through one of the following methods:
   i. Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with US EPA Region 1's BMP Accounting and Tracking Tool (2016) or other BMP performance evaluation tool provided by US EPA Region 1, where available. If US 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
   ii. Retaining the volume of runoff equivalent to, or greater than, 0.8 inches multiplied by the total post-construction impervious surface area on the redevelopment site; or
   iii. Meeting a combination of retention and treatment that achieves the above standards; or
   iv. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the redevelopment site.

(6) Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems, and repaving projects) shall improve existing conditions where feasible and are exempt from Section 7.3.(5). 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 Section 7.3.(5).

8.0 Erosion and Sediment Control Plan

8.1. . The Erosion and Sediment Control Plan shall contain sufficient information for the Permit Granting Authority about the nature and purpose of the proposed development, pertinent conditions of the site and adjacent areas, proposed erosion and sedimentation controls, and proposed control for other wastes on construction sites such as demolition debris, litter, and sanitary wastes to ensure they are not discharged into the MS4, drainage system, or Waters of 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 as follows:

(1) Minimize total area of disturbance;
(2) Sequence activities to minimize simultaneous areas of disturbance;
(3) Installing erosion and sediment controls prior to the commencement of any construction activity;
(4) Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;
(5) Divert uncontaminated water around disturbed areas;
(6) Maximize infiltration and groundwater recharge;

(7) Install, inspect, and maintain all Erosion and Sediment Control measures in accordance with the manufacturer's specifications and good engineering practices;
(8) Prevent off-site transport of sediment and wastes;
(9) Protect all storm drain inlets and armor all newly constructed outlets;
(10) 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);
(11) 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;
(12) Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than fourteen (14) days after construction activity has temporarily or permanently ceased on that portion of the site;
(13) Properly manage on-site construction waste and materials;
(14) Stabilize construction site entrances and exits and prevent off-site vehicle tracking of sediments; and,
(15) Ensure that any stormwater BMP (for post-construction stormwater management) installed during construction will be protected from compaction, siltation, and erosion or will be restored or replaced such that the BMP will be capable of functioning as designed in accordance with these stormwater regulations.

8.2. The content of the Erosion and Sediment Control Plan shall contain the following information:
(1) Names, addresses, telephone numbers, and email addresses of the owner, Applicant, and person(s) or firm(s) preparing this plan;
(2) Title, date, north arrow, names of abutters, scale, legend, and locus map;
(3) Location and description of natural features including:
(a) Watercourses and water bodies, wetland resource areas, and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a qualified P.E. for areas not assessed on these maps;
(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 Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife, and Certified Vernal Pools, and 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;

(6) Topographical features including existing and proposed contours at intervals no greater than one (1) foot with spot elevations provided when needed;
(7) 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;
(8) Drainage patterns and approximate slopes anticipated after major grading activities;
(9) 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;
(10) Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
(11) Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
(12) A description of construction and waste materials expected to be stored 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, and spill prevention and response;
(13) A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed:
(14) A description of how the project owner will inspect the site during the course of construction to monitor the management of stormwater in accordance with applicable town, state, and federal regulations;
(15) Plans must be stamped and certified by a qualified Professional Engineer or a Certified Professional in Erosion and Sediment Control (CPESC); and,
(16) Such other information required by the Permit Granting Authority.

9.0 Operation and Maintenance Plan

9.1. The Operation and Maintenance Plan (OMP) shall be designed to ensure ongoing compliance with the Stormwater Management Permit, these rules and regulations, and that the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, are met in all seasons and throughout the life of the system. The Permit Granting Authority shall make the final determination of what maintenance option is appropriate in any given situation. The Permit Granting Authority will consider natural features, proximity of the site to MS4 infrastructure, proximity of the site to waterbodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. The OPM shall remain on file with the Permit Granting Authority and shall be an ongoing requirement. The OMP shall include:
(1) The name(s) of the owner(s) of all components of the system;
(2) Maintenance agreements that specify:
(a) Names, addresses, telephone numbers, and email addresses of the person(s) responsible for operation and maintenance

(b) The person(s) and their contact information responsible for financing maintenance and emergency repairs.
(c) A Maintenance Schedule that includes routine inspection along with routine and non-routine maintenance tasks for each BMP.
(d) A list of easements, if applicable, with the purpose and location of each.
(e) The signature(s) of the owner(s).
(f) Estimated operation and maintenance budget.
(g) The responsible party shall:
i. Maintain a log of all operation and maintenance activities for the last three years including inspections, repair, replacement, and disposal (the log shall indicate the type of material and the disposal location);
ii. Make this log available to the Permit Granting Authority and the Commonwealth of Massachusetts upon request; and,
iii. Allow Massachusetts DEP and the Town of Lincoln to inspect each BMP to determine whether the responsible party is implementing the Operation and Maintenance Plan.

(3) Stormwater Management Easement(s).
(a) Stormwater management easements shall be provided by the property owner(s) if the Permit Granting Authority deems necessary for:
i. Access for facility inspections and maintenance;
ii. Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event; and,
iii. Direct maintenance access by heavy equipment to structures requiring regular cleanout.
(b) The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
(c) Stormwater management easements are required for all areas used for off-site stormwater control unless a waiver is granted by the Permit Granting Authority.
(d) Easements shall be recorded by the Owner with the Middlesex South Registry of Deeds prior to issuance of a Certificate of Completion.

(4) Changes to Operation and Maintenance Plans.
(a) The owner(s) of the stormwater management system must notify the Permit Granting Authority of changes in ownership or assignment of financial responsibility.
(b) The maintenance schedule in the OMP may be amended to achieve the purposes of these rules and regulations by mutual agreement of the Permit Granting 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 during future years.

9.2. Stormwater infrastructure shall be privately owned, inspected, and maintained per the OMP procedures approved for the project. Inspection and maintenance logs shall be provided to the Planning Board on a yearly basis by final day in June for the Town to

use in preparation of its annual report to the US EPA as part of the NPDES MS4 Permit requirements.

9.3. The Applicant shall provide the PGA an annual report prepared and stamped by a licensed Professional Engineer documenting and certifying performance of required maintenance and providing an assessment of overall system performance.

9.4. The OMP shall include procedures for using dedicated funds, establishing an escrow account, and/or developing a maintenance contract, if determined appropriate to ensure adequate long-term maintenance.

9.5. Stormwater Management operation and maintenance duties shall be recorded with the deed for each lot in a subdivision. The Applicant may elect to set up a homeowner's association (HOA) or other means to ensure all BMPs are inspected and maintained as required.

9.6. Long-term operators responsible for OMP implementation shall submit an annual report to the Planning Board documenting all inspection and maintenance completed on the stormwater system.

10.0 Site Inspections, Supervision, and Final Reports

10.1. Pre-Construction Meeting. Prior to the commencement of any clearing, excavation, construction, or Disturbance of Land, the Applicant, the Applicant's licensed Professional Engineer, the general contractor, the Town's third-party expert engineer, or any other person with authority to make changes to the project, shall meet with the Permit Granting Authority or its designee to review the permitted Stormwater Management, Erosion and Sediment Control, and Operation and Maintenance Plans and their implementation.

10.2. Erosion and Sediment Control Inspections. The Applicant shall conduct and document inspections of all erosion and sediment control measures no less than weekly or as specified in the Stormwater Management Permit, and prior to and following anticipated storm events. The purpose of such inspections is to determine the overall effectiveness of the erosion and sediment control plan, and the need for maintenance or additional control measures. The Applicant shall submit monthly erosion and sediment control reports to the Planning Board in a format approved by the Planning Board.

10.3. Routine Inspections. Routine inspections shall be performed by the Applicant's licensed Professional Engineer as follows:

(1) Initial Site Inspection: prior to approval of any permit/plan (note, an inspection will also be completed by the Town's third-party expert engineer);

(2) Erosion and Sediment Control Inspection prior to the commencement of any construction activity: to ensure erosion and sediment control measures are in place and stabilized, and to ensure erosion control practices are in accordance

with the filed plan (note, an inspection will also be completed by the Town's third-party expert engineer).

(3) Site Clearing has been substantially completed;
(4) Rough Grading has been substantially completed;
(5) Final Grading has been substantially completed;
(6) Bury Inspections: prior to backfilling of any underground drainage or stormwater structures.
(7) Close of the Construction Season;
(8) Landscaping (permanent stabilization); and,
(9) Final Inspection. After the stormwater management system has been constructed the Applicant must submit a record as-built plan detailing the actual stormwater management system as installed. Such plans shall show compliance with the final approved plans by the Permit Granting Authority. The Permit Granting Authority or their designee shall inspect the system to confirm its "as-built" features match those depicted on the project plans. If the inspector finds the system to be adequate, the inspector shall so report to Permit Granting Authority which will issue a Certificate of Completion.

10.4. Inspector Qualifications. Inspections shall be performed by a licensed Professional Engineer or CPESC as hired by the Applicant.

10.5. Access Permission. To the extent permitted by Massachusetts law, the Permit Granting Authority and third-party inspectors/engineers may enter upon privately-owned property for the purpose of performing their duties under these rules and regulations and may make or cause to be made such examinations, surveys, or sampling as the Permit Granting Authority deems reasonably necessary to determine compliance with the Stormwater Management Permit.

10.6. Final Reports. Upon completion of the work, the Applicant shall submit a report (including certified as-built construction plans) from the Applicant's licensed Professional Engineer. As-built drawings shall be submitted to the Permit Granting Authority prior to the Building Inspector's issuance a Certificate of Occupancy. The as-built drawings must depict all on site controls, both structural and non-structural, designed to manage the stormwater associated with the completed site (post-construction stormwater management). The report shall certify that all permitted construction, plans, and approved changes and modifications, were completed in accordance with the conditions of the approved Stormwater Management Permit. Any discrepancies should be noted in the report.

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, it shall be corrected by the Applicant at no cost to the Town of Lincoln. Examples of inadequacy include but are not limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins or other structural BMPs.

11.0 Certification of Completion

Upon receipt of a final inspection report and certification by the Applicant's licensed Professional Engineer, the Permit Granting Authority will issue a Certificate of Completion determining that all work of the Stormwater Management Permit has been satisfactorily completed in conformance with these rules and regulations. The Permit Granting Authority may, in addition to certifying satisfactory completion of the project, require ongoing maintenance procedures as outlined in the OMP and/or work deemed necessary by the Permit Granting Authority.

12.0 Enforcement

12.1 Enforcement powers of the Planning Board or its designee (enforcing agent) are granted in the Article XXIX of the General Bylaws, Section 7.

12.2 Notices and Orders

(1) The Planning Board or an authorized agent (enforcing agent) of the Planning Board may issue a written notice of violation or enforcement order to enforce the provisions of the Stormwater Management Bylaw and these Regulations, which may include but not limited to, requirements to:

(2) Suspend or revoke approval of any Stormwater Management Permit;

(3) Cease and desist from all or a portion of construction or land disturbing activity until there is compliance with the Bylaw, Regulations and the Stormwater Management Permit;

(4) Repair, maintain, or replace the stormwater management system or portions thereof in accordance with the Operation and Maintenance Agreement;
(5) Perform monitoring, analyses, and reporting; and/or
(6) Fix any adverse impacts resulting directly or indirectly from malfunction of the stormwater management system.

(7) The Property owner or its designee may appeal the decision of the enforcing agent to the full Permit Granting Authority within five (5) calendar days of receipt of the written notice of violation or enforcement order. Failure to appeal with five (5) calendar days shall preclude any further appeal.

(8) If the Stormwater Permit Authority, or its authorized agent determines that abatement or remediation of adverse impacts is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further provide that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town may, at its option, pursue a Court Order allowing the Town to undertake such work, and expenses thereof shall be charged to the violator.

i. If the Permit Granting Authority takes action upon failure of the violator or owner to abate or remediate, notice shall be given to the violator and owner of the costs, including administrative costs, incurred by the Town. Said notice shall be sent within thirty (30) days of completion of all measures necessary to abate the violation or to perform remediation. The violator or owner shall also be notified that they may, within thirty (30) days of receipt of said notice, file an appeal in writing to the Select Board objecting to either the amount or basis of the costs incurred. If the amount due is not received by the expiration of the time in which to file an appeal or within (30) days following a decision by the Select Board affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become final and payable to the Town.

(9) The suspension or revocation of the Stormwater Management Permit shall not relieve the Applicant of its obligations thereunder except at the discretion of the Board as stated in writing.

(10) Any Person who purchases, inherits or otherwise acquires real estate upon which work has been done in violation of the provisions of the Stormwater Management Bylaw and these Regulations, or in violation of the approved Plans under these Regulations shall forthwith comply with any such Order, and restore such real estate to its condition prior to such violation, as the Planning Board deems necessary to remedy such violation.

(11) Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Planning Board or its designee may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and the Town's Bylaws in which case the Planning Board or its designee shall be the enforcing entity. The penalty for the 1st violation shall be $100.00. The penalty for the 2nd and all subsequent violations shall be $300.00. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

Remedies Not Exclusive. The remedies listed in these Regulations are not exclusive of any other remedies available under any applicable federal, state, or local law.

End of Document