Town of Wellesley Planning Board
Drainage Review Rules and Regulations (PROPOSED)

1. Authority and Purpose

Pursuant to Section 5.8.D, *Drainage Review Rules and Regulations*, of the Town of Wellesley Zoning Bylaw, the Planning Board is authorized to adopt and amend Rules and Regulations to implement Section 5.8, *Drainage Review*, of the Zoning Bylaw.

The purpose of these Rules and Regulations is to effectuate the purposes of the Drainage Bylaw.

2. Definitions

Applicant – Any person or entity requesting a Drainage Review Permit.

Application – A Drainage Review Permit application.

Critical Area – Any of the following: An Outstanding Resource Water or Special Resource Water as designated in 314 CMR 4.00, a recharge area for a public water supply as defined in 310 CMR 22.02 (a Zone I, Zone II, or Interim Wellhead Protection Area for a groundwater source or a Zone A for a surface water source), a bathing beach as defined in 105 CMR 445.000, or a cold-water fishery as defined in 310 CMR 10.04.

Drainage Bylaw –Section 5.8 of the Zoning Bylaw, as amended from time to time.

Drainage Review Permit (DRP) - A permit issued by the appropriate Permitting Authority applying the standards and requirements set forth in these Regulations.

Impaired Water – A water is impaired if it does not meet one or more of its designated use(s). For purposes of these Regulations, Impaired Waters are those classified as categories 4 and 5 of the five-part categorization approach used for classifying the water quality standards attainment status for water segments under the U.S. EPA Total Maximum Daily Load (TMDL) program.

Impervious Cover - Any surface that prevents or significantly impedes the infiltration of water into the underlying soil. This may include but is not limited to: roads, driveways, parking areas and other areas created using non-porous material; buildings, rooftops, structures, artificial turf and compacted gravel or soil.

Infeasible – Not technologically possible, or not economically practicable and achievable in light of best industry practices.

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

Larger Plan of Development – A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. For example, if a developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the future, this would be considered a larger common plan of development or sale. If the land is parceled off or sold, and construction occurs on plots that are less than one acre by separate, independent builders, this activity still would be subject to stormwater permitting requirements if the smaller plots were included on the original site plan.

Low-Impact Development (LID) – Systems and practices that use or mimic natural processes resulting in the infiltration, evapotranspiration or use of stormwater. LID includes (1) environmentally sensitive site design approaches such as minimizing impervious surfaces, fitting the development to the terrain, preserving and capitalizing on natural drainage systems, and reproducing pre-development hydrologic conditions, and (2) stormwater management systems modeled after natural hydrologic features to manage rainfall at the source using decentralized micro-scale controls, such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements.

Massachusetts Stormwater Management Standards – The Stormwater Management Standards and accompanying Stormwater Handbook issued by the Department of Environmental Protection (as amended), aimed at encouraging recharge and preventing stormwater discharges from causing or contributing to the pollution of the surface waters and groundwaters of the Commonwealth.

New Development - Construction activities or land alteration on an area that has not been previously developed to include Impervious Cover.

Permittee – Any person to whom a DRP has been issued.

Permitting Authority – The board or individuals authorized by Section 5.8.E of the Drainage Bylaw to issue a particular Drainage Review Permit (the Zoning Board of Appeals, the Planning Board, the Wetlands Protection Committee, or the Inspector of Buildings and the Town Engineer).

Pollutant – Means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, and agricultural waste, and any other material that may cause or contribute to exceedance of water quality standards in the waters to which the storm drain system discharges.

Redevelopment - Construction, land alteration, or improvement of Impervious Cover that does not meet the definition of New Development.

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 earth disturbance activities are, were, or will be performed.

Stormwater – Any surface flow, runoff or drainage resulting entirely from any form of natural precipitation.

USGS HUC12 – Subwatershed with a unique 12-digit United States Geological Survey Hydrologic Unit Code.

Zoning Bylaw – The Town of Wellesley Zoning Bylaw, as amended from time to time.

3. Applicability

These Rules and Regulations apply to all activities which require a DRP in accordance with Section 5.8.C, *Applicability*, of the Drainage Bylaw. No activities which require a DRP may commence until a DRP is issued by the Permitting Authority, regardless of whether other local permits have been received.

4. Administration

These Regulations shall be administered by:

a) The Zoning Board of Appeals in combination with the Site Plan Review process under Zoning Bylaw Section 5.6.C.2 for Major Construction Projects and Projects of Significant Impact;

b) The Planning Board in combination with the Large House Review process for projects subject to Zoning Bylaw Section 5.9;

c) The Planning Board in combination with its permitting processes for projects subject to the Rules and Regulations Governing the Subdivision of Land in Wellesley Massachusetts adopted by the Planning Board as amended from time to time;

d) The Wetlands Protection Committee in combination with its permitting process for projects subject to the Wetlands Protection Act or the Wellesley Wetlands Protection Bylaw, Article 44 of the Town Bylaws, as amended from time to time; and

e) The Inspector of Buildings and the Town Engineer for any projects not subject to the permitting processes listed in Paragraphs (a)-(d) above.

5. Application Submission Requirements

Applicants for projects requiring a DRP shall submit the materials specified in this section and further detailed in Section 6. Once issued, a DRP shall be valid for a period of 3 years.

A. Required Materials: DRP applications shall include the following, to be submitted to the Permitting Authority. In the case of DRP applications submitted to the Inspector of Buildings, copies shall be submitted to the Town Engineer, the Wetlands Administrator, and the Planning Director.

1. Completed *Drainage Review Application* form (to be provided by the Permitting Authority);
2. Drainage Review application fee (see Section D below);
3. Drainage Review Checklist;
4. Plans and other materials, as identified in C. *Plan and Materials Specifications* below; and
5. Additional materials: the Permitting Authority may request that the applicant submit additional materials for consideration before issuing a decision.

B. Submission Requirements:

1. Plans shall be submitted in the form required by the Permitting Authority for the permit that the DRP is issued in combination with, or in guidelines set by the Town Engineer for DRP applications submitted to the Inspector of Buildings pursuant to Section 5.8.E.2 of the Drainage Bylaw.

C. Plan and Materials Specifications

1. A Construction Mitigation Plan as specified in the Drainage Bylaw, subject to the requirements in Section 6 of these Regulations.

2. A Grading and Drainage Plan, as specified in the Drainage Bylaw, subject to the requirements in Section 6 of these Regulations.

3. An Operation and Maintenance Plan as specified in the Drainage Bylaw, subject to the requirements in Section 6 of these Regulations.

D. Fees: An application fee shall be submitted with each application. The DRP application fee shall be set by each Permitting Authority, or by the Select Board for DRP applications submitted to the Inspector of Buildings.

E. Filing an application for a permit grants the Permitting Authority, the Inspector of Buildings and Zoning Enforcement Office, the Town Engineer, and their agents, permission to enter the site to verify the information in the application and (after a permit is granted) to inspect for compliance with permit conditions.

6. Plans and Standards

A. Construction Mitigation Plan

1. The Construction Mitigation Plan shall detail the design, location and type of erosion and sedimentation control measures and other pollution prevention measures to be employed on-site during site work and construction activities. A Stormwater Pollution Prevention Plan prepared to comply with the U.S. Environmental Protection Agency Construction General Permit may be used as the Construction Mitigation Plan only if it meets all of the requirements listed below.

2. The erosion and sedimentation control and pollution prevention measures set forth in the Construction Mitigation Plan shall be designed to meet Standard 8 of the Massachusetts Stormwater Standards (including BMPs appropriate for the conditions at the construction site), minimize the total area of disturbance, and properly manage construction and waste materials (including, but not limited to, discarded building materials, concrete truck washout, chemical, litter, and sanitary wastes).

3. Site plan. The Construction Mitigation Plan shall include a site plan, stamped and certified by a qualified Professional Engineer registered in Massachusetts or a Certified Professional in Erosion and Sediment Control, containing the following information:

    a. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;

    b. Title, date, north arrow, scale, legend, and locus map;

    c. Locations of watercourses and water bodies;

    d. Lines of existing utilities, buildings, driveways, sidewalks, and rights of way;

    e. Property lines showing the size of the entire parcel, and a delineation and number of square feet of the land area to be disturbed;

    f. Drainage patterns and approximate slopes anticipated after major grading activities (construction phase grading plans);

    g. Location and details of erosion and sediment control measures, including both structural and non-structural measures, interim grading, and material stockpiling areas;

    h. Location and description of an implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures; and

    i. Such other information as required by the Permitting Authority.

B. Grading and Drainage Plan

1. The Grading and Drainage Plan shall detail the stormwater management measures associated with the proposed project. It shall contain sufficient information for the Permitting Authority to evaluate the environmental impacts, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater post-construction, including Low Impact Development site planning and design strategies. The Grading and Drainage Plan shall fully describe the project in drawings and narrative.

2. The Grading and Drainage Plan shall identify all impaired waters to which stormwater from the site will discharge directly or indirectly.

3. For sites that will discharge stormwater (directly or indirectly) to impaired waters in which phosphorus has been identified as a source of impairment (including all sites within the Charles River watershed), the Grading and Drainage Plan shall specify structural Best Management Practices that are optimized for phosphorus removal and shall provide calculations of phosphorus loading and phosphorus removal.

4. For New Development, the stormwater management measures described in the Grading and Drainage Plan shall be designed to meet the following requirements:

    a. Standards 1 and 2 of the Massachusetts Stormwater Standards.

    b. Standard 3 of the Massachusetts Stormwater Management Standards, with the additional requirement that Low Impact Development site planning and design strategies (as defined in Section 3 of these Regulations) shall be incorporated unless infeasible in order to reduce the discharge of stormwater.

    c. Standard 4 of the Massachusetts Stormwater Management Standards, with the additional requirement that 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. Pollutant removal is calculated based on average annual loading and not on the basis of any individual storm event. Average annual pollutant removal requirements are achieved through one of the following methods:

        i. Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016)[1] 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 the Massachusetts Stormwater Handbook may be used to calculate BMP performance; or

        ii. 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

        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 (if allowed by the Permitting

[1] Available at https://www.epa.gov/npdes-permits/stormwater-tools-new-england under "Stormwater BMP Pollutant Removal Tools and Information."

Authority within its sole discretion, and with sufficient guarantees of proper long-term operation and maintenance).

d. Standard 5 of the Massachusetts Stormwater Management Standards, if the land use associated with the completed project will be a land use with higher potential pollutant loads, as defined by the Massachusetts Stormwater Management Standards.

e. Standard 6 of the Massachusetts Stormwater Management Standards, if stormwater discharges from the site, or from the MS4 downstream of the site's discharge to the MS4, are or will be within the Zone II or Interim Wellhead Protection Area of a public water supply, to any other critical area, or near any other critical area (as set forth in the Massachusetts Stormwater Management Standards).

5. For Redevelopment, the stormwater management measures described in the Grading and Drainage Plan shall be designed to meet all of the following requirements:

   a. The stormwater management system design shall meet Standard 7 of the Massachusetts Stormwater Management Standards.

   b. Low Impact Development site planning and design strategies (as defined in Section 3 of these Regulations) shall be incorporated unless infeasible in order to reduce the discharge of stormwater.

   c. 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 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. Average annual pollutant removal requirements are achieved through one of the following methods:

      i. 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 the Massachusetts Stormwater Handbook may be used to calculate BMP performance; or

      ii. 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

      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 (if allowed by the Permitting Authority within its sole discretion, and with sufficient guarantees of proper long-term operation and maintenance).

6. Site plan. The Grading and Drainage Plan shall include a site plan, stamped and certified by a qualified Professional Engineer registered in Massachusetts, containing the following information:
    a. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;
    b. Title, date, north arrow, scale, legend, and locus map;
    c. The site's existing and proposed topography with contours at two-foot intervals;
    d. The existing site hydrology, including any existing stormwater conveyances or impoundments;
    e. Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration, with verification of depth to groundwater provided by test pits;
    f. The existing and proposed vegetation and ground surfaces with runoff coefficient for each;
    g. A drainage area map showing pre- and post-construction watershed boundaries, drainage area, and stormwater flow paths;
    h. Identification of all critical areas and tributaries to critical areas within the geographic area shown on the plan;
    i. Drawings of all components of the proposed drainage system; and
    j. Such other information as is required by the Permitting Authority.

C. Operation and Maintenance Plan

1. An Operation and Maintenance Plan (O&M Plan) is required at the time of application for all projects. The O&M Plan shall be designed to ensure that all aspects of the On-Site Stormwater System operate as designed throughout the life of the system and that non-structural controls are carried out appropriately. The Permitting Authority shall make the final decision regarding what maintenance requirements are appropriate in a given situation. Each parcel must have its own O&M Plan. The O&M Plan shall remain on file with the Permitting Authority and the Town Engineer and shall be an ongoing requirement that runs with the land, enforceable against the owner of the parcel to which it applies.

2. The O&M Plan shall include:
    a. The name(s) of the owner(s) of the parcel for which the O&M Plan is being submitted;
    b. A schedule and detailed instructions for the activities constituting annual maintenance of the On-Site Stormwater System, including but not limited to cleaning of dry wells and catch basins (including the area around catch basins), sweeping of paved areas, visual inspection of drainage structures, and inspection and maintenance of BMPs, and a form or template for providing an annual report

of maintenance and inspections to the Permitting Authority and the Town Engineer;

c. A maintenance log to be provided to the Town Engineer;

d. Permission for a designee of the Permitting Authority or Town Engineer to enter the property to inspection the operation and maintenance of the On-Site Stormwater System; and

e. The signature(s) of the property owner(s).

3. In the case of stormwater BMPs that are serving more than one lot, the applicant shall include a mechanism for implementing and enforcing the O&M Plan. The applicant shall identify the lots or units that will be serviced by the proposed stormwater BMPs. The applicant shall also provide a copy of the legal instrument (deed, declaration of trust, articles of incorporation, etc.) that establishes the terms of and legal responsibility for the operation and maintenance of stormwater BMPs. In the event that the stormwater BMPs will be operated and maintained by an entity or person other than the sole owner of the lot upon which the BMPs are placed, the applicant shall provide a plan and easement deed that provides a right of access for the entity or person to be able to perform said operation and maintenance functions.

7. Permitting Process

A. If the Permitting Authority is the Zoning Board of Appeals, the Planning Board, or the Wetlands Protection Committee, procedures for abutter notification and public notice, public comment, review by the Permitting Authority, and issuance of a DRP shall be the same as those for the permit that the DRP is issued in combination with.

B. If the Permitting Authority is the Inspector of Buildings and the Town Engineer, the permitting procedure shall be that specified in Section 5.8.E.2 of the Drainage Bylaw. The Town Engineer shall make the permit applications available for public review and comment and shall post notice (on the Town website and/or with the Town Clerk) of applications under review.

C. A DRP shall contain appropriate conditions to ensure that the project will meet the objectives and requirements of the Drainage Bylaw and these Regulations. These shall include conditions that survive the approval of the final as-built plan and are sufficient to ensure adequate long-term operation and maintenance of stormwater control measures, including both structural and nonstructural controls. These may include, but are not limited to:
   1. A requirement to record notice of the Operation & Maintenance Plan with the Registry of Deeds (or the Land Court for registered land).
   2. A requirement to submit an annual certification documenting the work that has been done over the last 12 months to properly operate and maintain the stormwater control measures.
   3. A requirement to establish a dedicated source of funding for long-term operation and maintenance of stormwater control measures.

D. For all projects that receive a Drainage Review Permit, the permittee shall notify the Inspector of Buildings and the Town Engineer prior to commencement of earth moving, removal of vegetative cover, or construction (whichever comes first) of the anticipated start date of such site work or construction. Prior to commencement of any such site work or construction, the permittee shall submit a completed and signed Construction Site Checklist (using a form provided by the Town Engineer) to the Town Engineer, and the Town Engineer or a designated representative of the Town Engineer shall inspect the site to determine whether there is compliance with the Construction Mitigation Plan and shall notify the Inspector of Buildings of the inspection results.

E. All site work and construction shall be carried out in compliance with the Construction Mitigation Plan. The Town Engineer (or designee) or the Inspector of Buildings (or designee) may conduct a site inspection during the course of site work and construction to determine compliance with the Construction Mitigation Plan.

8. As-Built Plan

A. For all projects that receive a DRP, prior to a Certificate of Occupancy being issued or final building inspection being made, and within 60 days of the completion of construction of the project, the Permittee shall submit to the Town Engineer a record plan detailing the actual site drainage and On-Site Stormwater System as installed and noting any deviations from the approved plans (the "as-built plan"). The as-built plan shall be signed and stamped by a Massachusetts Registered Professional Engineer or Professional Land Surveyor. The as-built plan must depict all on-site controls, both structural and non-structural, designed to manage the stormwater associated with the completed site. The as-built plan shall also include a delineation of the drainage area for each point at which stormwater from the site discharges to the municipal storm drain system or a surface water body. Such plan shall be provided both in hard copy and as an electronic file. The electronic digital file shall comply with Level III of the current version of the MassGIS "Standard for Digital Plan Submission to Municipalities" (hereafter "the standard"), available at http://www.mass.gov/mgis. The vertical datum shall be the Town of Wellesley Vertical Datum.

B. An inspection shall be made by the Town Engineer or designated representative of the Town Engineer to determine whether there is compliance with the Grading and Drainage Plan. The Town Engineer shall notify the Permitting Authority and the Inspector of Buildings of the inspection results. If there is compliance, the Inspector of Buildings shall be so notified whereupon a Certificate of Occupancy may be issued or a final building inspection may be made. If there is not compliance, the Town Engineer or designee shall notify the applicant, the Inspector of Buildings and the Permitting Authority of the work remaining to be done. No Certificate of Occupancy shall be issued or final building inspection made until the Town Engineer or designee has determined that the Grading and Drainage Plan has been complied with and a final as-built plan has been accepted by the Town Engineer.

9. Operation and Maintenance

A. Changes to O&M Plans.

1. The owner(s) of the parcel to which an O&M Plan applies must notify the Permitting Authority of any changes in ownership of the parcel.
2. In the case of a stormwater BMP that serves more than one lot, the owners of the parcels served by the BMP must notify the Permitting Authority of any change to the entity or person operating or maintaining the BMP or the legal instrument that establishes terms and legal responsibility for the operation and maintenance of the BMP.
3. The O&M Plan may be amended to achieve the purposes of the Drainage Bylaw or these Regulations by mutual agreement of the Permitting Authority and the parcel owner(s). Amendments must be in writing and signed by all owners and the Permitting Authority.

10. Enforcement

These Regulations shall be enforced in accordance with Zoning Bylaw Section 6.1, *Enforcement and Penalties*.