

TOWN OF SWAMPSCOTT

STORMWATER MANAGEMENT APPLICATION CHECKLIST

This checklist is to be used in preparation of and submitted along with the Application for Stormwater Management Permit. Please check each box to indicate the you have included the information with your application and sign the statement following this list. For more detailed information refer to the Town of Swampscott's Rules and Regulations for Stormwater Management and Erosion Control.

Major Components*

Must submit 2 paper copies and 1 electronic copy (CAD & PDF) to kstevens@swampscottma.gov

- Permit Application
- Application Review Fee
- Existing Conditions Plan
- Proposed Conditions Plan
- Erosion and Sediment Control Plan
- Construction Detail Plan
- Stormwater Management Report
- Operation and Maintenance Plan

*More information may be required for proper evaluation of the Stormwater Management Plan.

- Summary of Non-Applicable Items – clearly identify and explain any items which are not applicable to the project. Applicant should cite references.

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- All plans must include title block:
 - o Name and address of development
 - o Name of owner
 - o Standard scale of map or plan (1"=20', 1"=40', or 1"=80')
 - o North arrow
 - o Legend
 - o Date of preparation and any revisions
 - o Signature and seal of Qualified Professional required for all drawings
 - Acknowledgement of requirement to keep records of all inspections, maintenance, and repairs as it relates to O&M for five (5) years. These records shall be made available to DPW during inspections and upon request. The Owner of the stormwater management system must notify DPW of changes in ownership as required in the Town's Rules & Regulations.
 - Acknowledgement of requirement to notify DPW at least 14 days prior to any land disturbance and in advance of construction critical componenets in accordance with the Town's Rules & Regulations.
 - Acknowledgement of requirement to notify DPW of any change or alternation in an approved Storwmater Management Plan before any change or alteration occurs.
 - Acknowledgement of requirement to submit electronic (CAD & PDF) and paper copies of As-built Plans in accordance with the Town's Rules & Regulations.

Detailed Components

Existing Conditions Plan

Shall contain all the necessary information to convey existing surface features and drainage patterns.

It shall contain a topographical survey plan prepared by a Surveyor, including the following:

- ❑ Name, seal, and signature of the Surveyor who performed the survey.
- ❑ Date(s) of the survey.
- ❑ Reference to all deeds, plans of record, and other information used to establish the existing property lines, the layout of all streets and ways, and easements, including deed references to the abutting lots.
- ❑ Locus Plan, prepared at a scale not smaller than 1" = 1200' and a minimum extent of one mile diameter. Major streets, buildings, brooks, streams, rivers, or other landmarks should be shown on the Locus Plan with sufficient clarity to be easily discernible.
- ❑ Existing property lines, easements, and road layouts with bearings and distances. All distances shall be in feet and decimals of a foot and all bearings shall be given to the nearest ten seconds. The error of closure shall not exceed one to ten thousand.
- ❑ Boundary of the entire parcel held in common ownership by the Applicant regardless of whether all or part is being developed at this time.
- ❑ Acreage of the parcel(s) to the nearest tenth of an acre.
- ❑ Existing monuments.
- ❑ Location and name of all abutters as they appear on the most recent tax list, including owners of the property on the opposite side of all streets abutting the property.
- ❑ Location, names, status (i.e., public or private), and present widths of streets and sidewalks bounding, approaching, or within reasonable proximity of the property, showing both roadway widths and right-of-way width.
- ❑ Location of all test pits, borings, percolation tests, or similar, in or adjacent to the development. Logs of observed groundwater elevations and other test data shall be included in the Stormwater Management Report.
- ❑ Location of all existing buildings and structures on the property and within reasonable proximity of the perimeter of the property.
- ❑ Location of all existing wells and septic systems that can be observed and/or are on file with the Health Department, on the property and within reasonable proximity of the perimeter of the property.
- ❑ Site features within and abutting the property, including but not limited to, waterways, water bodies, drainage ditches, streams, brooks, stone walls, fences, curbing, walkways and other paths (paved or unpaved), utility and light poles, buildings and other structures, ledge outcrops, wooded areas, public shade trees and all other trees greater than six inches in caliper, and historic sites.
- ❑ Location and identification of resource areas regulated under the Massachusetts Wetlands Protection Act, including areas located within the property and areas outside of the property with buffer zones or offsets that may intersect the property. This shall include wetlands and associated offsets and buffer zones, isolated lands subject to flooding (ILSF), bordering land subject to flooding (BLSF), and riverfront protection areas. If a currently valid delineation for the property does not exist, wetland boundaries shall be delineated in the field with numbered flags

by a qualified wetlands specialist, surveyed, and shown on the plan(s) with reference to the flag numbers. The date of any Resource Area Delineation, Determination of Applicability, Order of Conditions, or other applicable decision from the Swampscott Conservation Commission shall be indicated on the plans.

- ❑ Location of all existing above- and below-ground utilities and all associated appurtenances within and abutting the property. All utility pipe types, sizes, lengths, and slopes shall be provided, as well as utility structure information, including rim and invert elevations.
- ❑ Existing topography within the property and within reasonable proximity of the perimeter of the property. Topography shall be provided at a minimum one-foot contour intervals. The plan survey datum shall be the National American Vertical Datum 1988 (NAVD88), and this reference shall be identified on the plans.
- ❑ Stormwater flow direction.

Proposed Conditions Plan

Shall indicate all proposed site improvements, including but not limited to structures, buildings, sidewalks, handicap ramps, parking areas, curb type and limits, walls, fences, landscaped areas, and the proposed location of all utilities, as described below

- ❑ All applicable information from the Existing Conditions Plan. The proposed improvements shall be overlaid on the existing conditions and shown in a darker line weight.
- ❑ The boundaries of the site, the outline or footprint of all proposed buildings, structures, parking areas, walkways, loading facilities, or significant landscaping features shall be shown.
- ❑ All means of vehicular access for ingress and egress to and from the site onto the public streets. Plans should show the size and location of driveways and curb cuts.
- ❑ The location and type of all above-ground and below-ground utilities.
- ❑ The existing and proposed stormwater management system, with pipe sizes, lengths, slopes, and materials including conveyances, catch basins, manholes, culverts, headwalls, detention and/or retention basins, treatment units, infiltration systems, and outlet pipes/structures. Rim and invert elevations shall be provided for all structures and other appurtenant features.
- ❑ Proposed contours indicating the finished grades of all proposed construction in the property. The plan shall show how the proposed grades will tie in to the existing grades within and outside of the property. The grades should be provided at a minimum one-foot contour intervals. Walls, curbing and any other features creating a break in grade shall be shown, including proposed top and bottom grades.
- ❑ Stormwater flow direction.

Erosion and Sediment Control Plan

Shall contain sufficient information to demonstrate that erosion will be minimized and sediment contained as part of a land disturbance activity. This includes means by which control of wastes, including but not limited to discarded building materials, concrete truck washout, chemicals, litter and sanitary waste, will be achieved. Information shall include the following:

- ❑ All applicable information from both the Existing and Proposed Conditions Plans. The proposed development information shall be shown in a darker line weight.

- ❑ Location of the proposed limit of work, to be lined by a row of hay bales and silt fencing in downgradient areas and along all resource areas.
- ❑ Location of anti-tracking area at each construction entrance.
- ❑ Hay bale and silt fence protection and/or silt sacks at all existing and proposed drainage structures.
- ❑ Seeding, sodding, or revegetation plans and specifications for all unprotected or unvegetated areas.
- ❑ Location and design of all structural erosion and sediment control measures, such as grade stabilization structures, temporary drainage swales, and temporary sedimentation basins.
- ❑ Location of all proposed construction stockpiling areas with appropriate erosion and sediment control measures.
- ❑ Location of all proposed controls for other wastes
- ❑ Notes detailing the proposed operation, maintenance, and inspection schedule for all erosion and sedimentation control measures, including proposed schedule for street sweeping of adjacent roadways and paved areas.
- ❑ Where a project is proposed to be constructed in phases, requires demolition, includes significant cuts and fills, or requires excavation of contaminated soils, the Department of Public Works may require that the Erosion and Sediment Control Plan be separated into phases targeted to each activity.
- ❑ Where a site is located in whole or in part within the floodplain, a Floodplain Contingency Plan shall be included with the Erosion and Sediment Control Plan. The Floodplain Contingency Plan shall describe the steps necessary to stabilize the site during construction in the event of a possible flood.
- ❑ Where a project is also subject to coverage under a National Pollutant Discharge Elimination System (NPDES) Discharge Permit issued by the EPA, submission of the Stormwater Pollution Prevention Plan (SWPPP) shall be required prior to commencement of land disturbance activities.

Construction Detail Plan

Shall provide information regarding the component parts of the construction, illustrating how they fit together. The plan shall show the following:

- ❑ Typical construction details of all proposed stormwater management system devices, including but not limited to conveyances, catch basins, manholes, headwalls, sub-drains, detention and retention systems, and other stormwater management system structures.
- ❑ Landscaping details including, but not limited to, tree plantings, shrubs, perennials, fences, walls, guard rails, street furniture, and other specialty items, if applicable.
- ❑ Construction details for all hard surfaces, including but not limited to, roadways, sidewalks, driveways, loading docks, handicap ramps, permeable pavers, and curbing.
- ❑ Erosion and sediment control details that implement the Erosion & Sediment Control Plan.
- ❑ Where site constraints or differing conditions require work that deviates from “typical details,” specific construction details shall be provided.

Stormwater Management Report

A separate Stormwater Management Report shall be submitted with the Stormwater Management Permit Application. It shall be prepared and stamped by an Engineer, and shall contain the following information:

- ❑ Narrative describing existing and proposed soil conditions (including Hydrologic Soils Group [HSG] classification published by the National Resources Conservation Service [NRCS]), land use, surface cover, estimated high groundwater elevations, design points, drainage patterns, and proposed stormwater management practices.
- ❑ Narrative describing the proposed stormwater management system, including all proposed LID techniques and BMPs incorporated in the project design.
- ❑ Description of all soil testing conducted in the study area, including sieve analyses, tests for saturated hydraulic conductivity, test pits, or soil borings. Soils information shall be based on field investigations by a Soil Evaluator approved by the Commonwealth of Massachusetts, or by an Engineer. Testing shall be performed in accordance with Volume 3 of the Massachusetts Stormwater Handbook (dated February 2008, as amended) and these Rules and Regulations. Raw test data shall be provided in an appendix to the report.
- ❑ Narrative describing the methodology used to conduct the hydrologic and hydraulic analyses of the site, estimates of the existing and proposed stormwater runoff peak rates and volumes, and the design of the proposed stormwater management system.
- ❑ Tables comparing existing and proposed impervious areas, peak stormwater runoff rates, and total stormwater runoff volumes for each design point and for the 2-, 10-, 25-, and 100-year design storms.
- ❑ Narrative and calculations demonstrating compliance with the Massachusetts Stormwater Management Standards and Federal NPDES Permit, including:
 - Estimates of annual required recharge volume and recharge volume provided.
 - Estimates of average annual Total Suspended Solids (TSS) removal.
 - Narrative describing the Erosion and Sediment Control Plan, including a detailed construction sequence plan, source control and pollution prevention measures, description of BMPs provided to address soil erosion and sedimentation, stabilization measures, inspection and maintenance requirements, and record keeping.
 - Narrative describing the Operations and Maintenance Plan, as described in Section 7.6 of the Town's Rules and Regulations for Stormwater Management and Erosion Control.
- ❑ Description of any impacts to the floodplain and floodway and a summary of compensatory flood storage calculations, if appropriate.
- ❑ Description of existing and proposed groundwater recharge on the site, including quantitative summary of existing and proposed recharge volumes, and summary of groundwater mounding analysis, if applicable.
- ❑ Map(s) showing pre- and post-development drainage areas, including any off-site contributions, and time of concentration travel flow-paths. Study design points should be indicated on the plan.
- ❑ If applicable, a map showing the location of the site overlaid on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) for the Town of Swampscott,

or other appropriate information pertaining to location of the floodplain and floodway boundaries in relation to the site.

- Appendix containing all drainage calculations for existing and proposed conditions, including hydrologic analysis of the site, hydraulic analysis of the proposed drainage system, and calculations supporting the design of all BMPs that will control stormwater runoff peak rates and total volumes.

Operation and Maintenance Plan

An Operation and Maintenance (O&M) Plan, in accordance with the Massachusetts Stormwater Management Standards and Federal NPDES Permit Requirements, shall be included with the Stormwater Management Plan. The purpose of the plan is to identify the actions necessary to ensure that stormwater management systems and BMPs function as designed, in perpetuity. At a minimum, the O&M Plan shall contain:

- A plan that is prepared to scale and shows the location of all stormwater management system components and all discharge points.
- A description of all BMPs, including proper operating parameters and how the Owner will determine if a BMP is not functioning properly.
- A description of long-term source control and pollution prevention measures.
- An inspection log and a description of all inspection and maintenance procedures, responsibilities, and frequencies.
- Snow storage procedures and locations in accordance with the MassDEP Snow Disposal Guidance, dated March 8, 2001, as amended.
- The name(s) of the Owner of all components of the system, and the name(s) and address(es) of the Responsible Party for O&M of each component, if different from the Owner.
- A list of easements held to access any BMPs.
- A copy of the As-built Plan prepared in accordance with Section 11.0 of the Town's Rules and Regulations for Stormwater Management and Erosion Control, upon project completion.
- An estimated O&M budget.

Signature

I hereby certify, under the pains and penalties of perjury, that I have read and understand the requirements and conditions of the Town of Swampscott Stormwater Management and Erosion Control Bylaws and Rules and Regulations and that the contents of this application and all supporting documents are true and complete. I understand that if any of the items required are found to be missing from the submittal, the Stormwater Management Plan will not be acceptable for review and will be returned as incomplete. The applicant is aware of these criteria and will accept all responsibility for delays due to incomplete submittals.

SIGNATURE OF APPLICANT

PRINT NAME

DATE