



**MAJOR STORMWATER MANAGEMENT PERMIT APPLICATION CHECKLIST**

#	Complete		
	Yes	No	
<b>General Application Requirements for Minor &amp; Major Projects Pursuant to 6NYCRR 646-4.13(a)</b>			
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) A complete application on such form as may be prescribed.
2	<input type="checkbox"/>	<input type="checkbox"/>	(2) The appropriate application fee.
3	<input type="checkbox"/>	<input type="checkbox"/>	(3) When a project requires a permit from any other agency, a list of all such permits which are required, a statement of the status of each such permit application, and a statement of the SEQR status of the action.
4	<input type="checkbox"/>	<input type="checkbox"/>	(4) Copies of applications for all required wastewater management permits, subdivision approvals, site plan review or special use permits and Adirondack Park Agency permits.
5	<input type="checkbox"/>	<input type="checkbox"/>	(5) The real property tax map section, block and lot number of each lot included in the proposed project.
6	<input type="checkbox"/>	<input type="checkbox"/>	(6) The names and legal mailing addresses of all landowners within five hundred (500) feet of the project site.
7	<input type="checkbox"/>	<input type="checkbox"/>	(7) A detailed plot plan which shows the site topography, the location and dimensions of all existing and proposed structures and impervious surfaces, water bodies, septic systems, wells, and stormwater control devices on the site and within one hundred (100) feet of the site.
8	<input type="checkbox"/>	<input type="checkbox"/>	(8) A general location map suitable to direct officials reviewing the application to the project site.
<b>Additional Application Requirements for Major Projects Pursuant to 6NYCRR 646-4.13(c)</b>			
9	<input type="checkbox"/>	<input type="checkbox"/>	(1) A Stormwater Control Report (SCR) shall be submitted which evaluates the quantity and quality of stormwater runoff resulting from the proposed project for all phases, both present and future.
10	<input type="checkbox"/>	<input type="checkbox"/>	(2) The SCR shall be prepared by an Engineer or Architect or Exempt Land Surveyor licensed to practice under the laws of the State of New York, who shall be employed by the applicant or developer to design and supervise the installation of all stormwater management facilities.
<b>Contents of a Stormwater Control Report Required for Major Projects Pursuant to 6NYCRR 646-4.13(d)</b>			
11	<input type="checkbox"/>	<input type="checkbox"/>	(1) A description of the project site and surrounding area within five hundred (500) feet as it exists prior to the commencement of the project; a location map; description of the watershed of the subcatchment and its relation to the project site; soil types and descriptions on the site and surrounding area; topography of the project site and surrounding area; surface characteristics including percent cover; current land use including all structures, and characteristics of the shoreline and its development, if applicable; drainage patterns including streams, ponds, culverts, ditches, and wetlands; and locations of utilities, roads, and easements.

- 12   (2) A detailed description of the proposed project including surface characteristics; proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading; and construction cost estimates of stormwater management structures.
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- 13   (3) Hydrologic and hydraulic computations of stormwater volume and flow for existing and proposed conditions shall be performed. Such computations shall include (i) description of the design storm frequency, intensity and duration, (ii) time of concentration, (iii) soil curve numbers or runoff coefficients, (iv) peak runoff rates and total runoff volumes for each watershed area or subcatchment area, (v) infiltration rates, (vi) culvert capacities, (vii) flow velocities, (viii) data on the increase in rate and volume of runoff for the 10-year storm and on the change in the rate of runoff for the 2, 10, 50 and 100 year storms, (ix) documentation of sources for all computation methods and field test results, and (x) sufficient information to demonstrate that the proposed development, with its necessary stormwater controls, has been designed to preserve and maintain the base flow in all streams passing through, adjoining or receiving runoff from the site.
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- 14   (4) A description of how the stormwater control measures for the project will provide the best available pollutant removal technology.
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- 15   (5) A detailed description of and plans of, stormwater and erosion control measures including (i) proposed containment facilities and structures, (ii) calculations of infiltration area required, (iii) calculation of retention and/or detention/retention storage requirements and storage volume provided, (iv) calculation or documentation of infiltration rate, (v) calculation for release rate controls (orifice or pipe size), (vi) description of pollution control measures such as filter strips, sand filters, infiltration, (vii) provision for emergency overflow, and (viii) measures taken to obviate or reduce the need for runoff control such as use of porous pavement... or the minimization of land clearing or paving.
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- 16   (6) Drainage maps at a scale specified by the Commission showing existing and proposed conditions and contours, including the watershed area and subcatchment boundaries, acreage, inlet and outlet points of streams, culverts and drainage ditches, surface features, existing and proposed structures, buildings, pavement, flow directions, existing and proposed storm sewers, streams and other drainage channels, water quantity and quality control structure including retention basins and infiltration trenches, and a location map showing the entire watershed area and indicating the project site.
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- 17   (7) A certification that the stormwater control measures as designed and presented in the SCR will function adequately, will not adversely affect adjacent or downstream waters or properties, and have been designed in accordance with these regulations and the provisions of ECL Section 43-0112. The report and Plans shall bear the stamp and signature of the licensed professional engineer or architect or exempt land surveyor executing the above certification.
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- 18   (8) A project schedule which shall indicate the proposed starting and completion dates for all major work phases including, but not limited to, clearing and grading, road construction, utility placement, septic systems, stormwater control measures, wharf construction, pouring or laying of footings and foundations, building construction, and interim and permanent revegetation. Particular emphasis shall be placed on those elements of the schedule relating to stormwater runoff and erosion control. In general, the stormwater control measures shall be installed first in the construction stages of a project to minimize the impacts associated with construction. Further, the project schedule shall take into account appropriate seasonal limitations for temperature and weather sensitive operations. Special measures or procedures may be required to undertake land disturbance activities occurring between October 15 and April 15.
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- 19   (9) A maintenance schedule which includes (i) the construction costs related to stormwater control, (ii) the proposed stormwater control maintenance program and annual costs of implementing such, (iii) identification of the party or parties responsible for maintenance of the system over the life of the project, (iv) a copy of any maintenance agreement, (v) identification of the party or parties responsible for correcting failures or inadequate function of stormwater control measures and responsible for assuming control of the measures in the event of failure to properly maintain the system.

<b>Additional Design Requirements and Performance Standards for Major Projects</b>	
<b>Pursuant to 6NYCRR 646-4.14(b)</b>	

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| 20 | <input type="checkbox"/> <input type="checkbox"/> | (1) Methodologies for Determination of Runoff Volume. Stormwater volumes and rates of flow shall be calculated using the following methods: (i) for small watershed areas (up to 20 acres), any widely accepted method including the Rational Method may be used, (ii) for larger watershed areas any widely accepted method other than the Rational Method may be used.  |
| 21 | <input type="checkbox"/> <input type="checkbox"/> | (2)(i) Erosion control shall be provided for all disturbed areas in accordance with Sections 3, 4, 5, 6 and 7 of the "New York Guidelines for Urban Erosion and Sediment Control" which is a publication of the Empire State Chapter of the Soil and Water Conservation Society, P.O. Box 1686, Syracuse, N. Y. 13201-1686 and dated April 1997. This document is available for public inspection and copying at the office of the Lake George Park Commission, Fort George Road, Lake George, New York and is available through the New York State Department of State, Office of Information Services, 41 State Street, Albany, New York. The temporary erosion control measures shall be maintained continuously until permanent control measures are in service. Infiltration devices shall be protected from siltation during the period of construction and until the site is successfully revegetated by use of silt screens, inlet protection devices, sediment detention ponds or other suitable erosion control measures. |
| 22 | <input type="checkbox"/> <input type="checkbox"/> | (2)(ii) Staging of construction to facilitate erosion control shall be required. Only those areas where construction is actively occurring shall remain open and unvegetated. All areas that are not within an active construction area shall be mulched and stabilized or shall be mulched and revegetated. An active construction area is defined as one that has seen substantial construction within the past seven (7) calendar days. Mulching or revegetation for erosion control shall be completed within ten (10) days following the last substantial construction activity.   |
| 23 | <input type="checkbox"/> <input type="checkbox"/> | (3)(i) Stormwater control measures shall be designed so that there will be no increase in runoff volume from a ten-year frequency/twenty-four hour duration storm event following development over the predevelopment volume.   |
| 24 | <input type="checkbox"/> <input type="checkbox"/> | (3)(ii) For storm events exceeding the 10-year design storm, the stormwater control measures shall function to attenuate peak runoff flow rates for a 25-year frequency storm to be equal to or less than predevelopment flow rates. For development greater than five (5) acres, consistent with New York State Guidelines, stormwater control measures shall function to attenuate peak runoff flow rates for a 100-year, storm to be equal to or less than predevelopment flow rates. Attenuation of the 100-year storm is intended to reduce the rate of runoff from development to prevent expansion of the 100-year flood plain so as to alleviate flooding of improved properties and roadways. The minimum requirement for peak flow attenuation can be waived for the 100-year storm event where it can be proven that downstream flooding is not a concern, such as where excess stormwater runoff is discharged to Lake George or to a regional stormwater facility designed to handle additional volume and             |

peak discharge. The cumulative effect of all proposed development projects within the watershed should be considered in making this determination.

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25   (3)(iii) Infiltration devices shall be designed such that the bottom of the system will be a minimum of two feet above the seasonal high groundwater level to be realized following development. Where compliance with this requirement would prevent compliance with subparagraph (b) (3) (vi) of this Section, compliance with this requirement may be waived. This provision shall not apply to wet ponds and similar stormwater control measures which are designed to be built in the saturated soil zone.

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26   (3)(iv) Infiltration devices for major projects shall be located a minimum of one hundred (100) feet from Lake George and any downgradient drinking water supply, lake, river, protected stream, waterwell, pond, wetland; a separation of more than one hundred (100) feet may be required in cases where contamination of the water supply is possible due to highly permeable soils, shallow groundwater and similar situations. The separation distance shall be a minimum of fifty (50) feet from upgradient water supplies. Designs shall mitigate the possible adverse effects that groundwater recharge will have on adjacent wells, water supplies, wastewater treatment systems, buildings, roadways, properties and stormwater control measures. Stormwater recharge areas shall be located a minimum of one hundred (100) feet from the subsurface treatment system of a wastewater treatment system unless it is demonstrated that a lesser separation will not adversely affect the functioning of such leach fields.

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27   (3)(v) Infiltration devices shall be designed to extend a minimum of ten percent of the infiltration surface area below the prevailing frost depth or four feet (whichever is greater) in order to provide infiltration during winter months.

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28   (3)(vi) The design of all infiltration devices shall depend on the infiltration capacity of the soils present at the project site. The design infiltration rate shall be based on the results of hydrogeologic studies performed by the applicant during preparation of the Stormwater Control Report. The studies shall include test pits or borings located to present a clear picture of geologic and hydrologic conditions existing at the site and the areas, both on and off the site, affecting, or to be affected by, the development. A minimum of three subsurface excavations shall be conducted and the results shall be included in the SCR. Interpretive logs of all excavations shall be submitted with the report. Hydrogeologic interpretations and conclusions shall be developed by qualified persons only... Subsurface investigations to confirm soil and groundwater conditions [are] required in the areas proposed for infiltration devices.

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29   (4)(ii) All stormwater control facilities shall be designed to completely drain or return to design levels in accordance with the following: infiltration basin 5 days; infiltration trench 15 days; dry well 15 days; porous pavement 2 days; vegetated depression 1 day.

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30   (4)(iii) Pretreatment devices such as sediment traps, detention/stilling basins, filter strips, grassy swales, or oil/water separators shall be provided for runoff from paved areas or other areas subject to human-induced pollution including grease and oils, fertilizers, chemicals, road salt, sediments, organic materials and settleable solids, which shall be sufficient to remove pollutants from the runoff.

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31   (4)(iv) Stormwater control measures shall, at a minimum, incorporate the best available pollutant removal technology, which shall mean that which constitutes appropriate and cost effective means for removing pollutants from runoff so that the resulting treated stormwater will not degrade the water quality of any water body.

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32   (4)(v) Stormwater control measures shall be designed to preserve and maintain the base flow in all streams passing through, adjoining or receiving runoff from the site.

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- 33   (4)(vi) For development or redevelopment occurring on a site where development has previously occurred, the applicant shall be required to prepare concept plans and to develop construction cost estimates for stormwater control measures to control existing stormwater discharges from the site in accordance with the standards of this Subpart to the maximum extent practicable. At a minimum the control measures shall include those reasonable and necessary to infiltrate the runoff from the first one-half inch of precipitation from any storm event for all areas within the site which have previously been developed. The phased implementation of such controls for previously developed areas may be authorized.

<p><b>General Requirements for Clearing<sup>a</sup> &amp; Maintenance<sup>b</sup> for Minor &amp; Major Projects</b>  <b>Pursuant to 6NYCRR 646-4.15<sup>a</sup> and 646-4.16<sup>b</sup></b></p>
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| 34 | <input type="checkbox"/> <input type="checkbox"/> | <p><sup>a</sup>(b) Within five hundred feet of the mean high water mark of any lake, pond, river, stream, or wetland, no land area, including areas stockpiled with earthen materials, which has been cleared may be made or left devoid of growing vegetation for more than twenty-four (24) hours without a protective covering securely placed over the entire area and/or erosion control devices properly installed to prevent sediments from entering the water body.</p> |
| 35 | <input type="checkbox"/> <input type="checkbox"/> | <p>(c) Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be revegetated within ten (10) days from the substantial completion of such clearing and construction.</p>   |
| 36 | <input type="checkbox"/> <input type="checkbox"/> | <p><sup>b</sup>(3) Include [cost estimates]... for [construction of stormwater control measures and] necessary maintenance and repair functions over the life of the project.</p>   |
| 37 | <input type="checkbox"/> <input type="checkbox"/> | <p>(4) ... [Identify necessary] maintenance and repair activities [and schedules for all stormwater control measures]...</p>  |