

ADOPTED: APRIL 16, 2024

APPROVED: [Signature]
MAYOR

DATE: 4-16-2024

ATTEST: [Signature]
MUNICIPAL CLERK

Adopted: April 16, 2024

**ORDINANCE NO. 7-2024
OF THE GOVERNING BODY
OF THE BOROUGH OF BLOOMINGDALE**

AN ORDINANCE OF THE BOROUGH OF BLOOMINGDALE, IN THE COUNTY OF PASSAIC AND STATE OF NEW JERSEY, AMENDING CHAPTER 31A "STORMWATER CONTROL REQUIREMENTS" OF THE CODE OF THE BOROUGH OF BLOOMINGDALE

WHEREAS, the Borough Code contains regulations and definitions associated with the control of stormwater throughout the Borough; and

WHEREAS, the New Jersey Department of Environmental Protection ("NJ DEP") has adopted amendments to the Stormwater Management regulations found at N.J.A.C. 7:8; and

WHEREAS, as a result of the amendments, the NJ DEP has developed a model ordinance to ensure municipalities have adopted ordinances which are consistent with the NJ DEP's stormwater management statutes and regulations as amended; and

WHEREAS, a review of the Code determined that the Borough should amend the Code to incorporate the NJ DEP's model ordinance changes; and

WHEREAS, the Borough Engineer and Ordinance Review Committee have reviewed and recommended that the Code be amended; and

WHEREAS, the Borough Council has reviewed and approved of the recommended amendment.

NOW, THEREFORE, BE IT ORDAINED by the Borough Council of the Borough of Bloomingdale, County of Passaic, State of New Jersey, as follows:

SECTION 1. Chapter 31A "Stormwater Control Requirements", Section 31A-1.2 "Applicability" shall be amended to read as follows:

§ 31A-1.2 Applicability.

- a. This chapter shall be applicable to the following major developments:
 - 1. Nonresidential major developments; and
 - 2. Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.

b. This chapter shall also be applicable to all major developments undertaken by the Borough of Bloomingdale.

c. An application required by ordinance pursuant to b above that has been submitted prior to **April 16, 2024**, shall be subject to the stormwater management requirements in effect on **April 15, 2024**.

d. An application required by ordinance for approval pursuant to (b)1 above that has been submitted on or after March 2, 2021, but prior to **April 16, 2024**, shall be subject to the stormwater management requirements in effect on April 15, 2024.

e. Notwithstanding any rule to the contrary, a major development for any public roadway or railroad project conducted by a public transportation entity that has determined a preferred alternative or reached an equivalent milestone before July 17, 2023, shall be subject to the stormwater management requirements in effect prior to July 17, 2023.

Any and all portions of this Section not addressed herein remain as is, with no amendments or changes.

SECTION 2. Chapter 31A “Stormwater Control Requirements”, Section 31A-2 “Definitions” shall be amended to add two new definitions to read as follows:

PUBLIC ROADWAY OR RAILROAD

A pathway for use by motor vehicles or trains that is intended for public use and is constructed by, or on behalf of, a public transportation entity. A public roadway or railroad does not include a roadway or railroad constructed as part of a private development, regardless of whether the roadway or railroad is ultimately to be dedicated to and/or maintained by a governmental entity.

PUBLIC TRANSPORTATION ENTITY

A Federal, State, county, or municipal government, an independent State authority, or a statutorily authorized public-private partnership program pursuant to P.L. 2018, c. 90 (N.J.S.A. 40A:11-52 et seq.), that performs a public roadway or railroad project that includes new construction, expansion, reconstruction, or improvement of a public roadway or railroad.

Any and all portions of this Section not addressed herein remain as is, with no amendments or changes.

SECTION 3. Chapter 31A “Stormwater Control Requirements”, Section 31A-4 “Stormwater Management Requirements for Major Developments”, subsection e shall be amended to read as follows:

e. Tables 1 through 3 below summarize the ability of stormwater best management practices identified and described in the New Jersey Stormwater Best Management Practices Manual to satisfy the green infrastructure, groundwater recharge,

stormwater runoff quality and stormwater runoff quantity standards specified in § 31A-4o, p, q and r. When designed in accordance with the most current version of the New Jersey Stormwater Best Management Practices Manual, the stormwater management measures found at N.J.A.C. 7:8-5.2(f) Tables 5-1, 5-2 and 5-3 and listed below in Tables 1, 2 and 3 are presumed to be capable of providing stormwater controls for the design and performance standards as outlined in the tables below. Upon amendments of the New Jersey Stormwater Best Management Practices to reflect additions or deletions of BMPs meeting these standards, or changes in the presumed performance of BMPs designed in accordance with the New Jersey Stormwater BMP Manual, the Department shall publish in the New Jersey Registers a notice of administrative change revising the applicable table. The most current version of the BMP Manual can be found on the Department's website at <https://dep.nj.gov/stormwater/bmp-manual/>.

Any and all portions of this Subsection not addressed herein remain as is, with no amendments or changes.

SECTION 4. Chapter 31A "Stormwater Control Requirements", Section 31A-4 "Stormwater Management Requirements for Major Developments", subsection p shall be amended to read as follows:

- p. Groundwater Recharge Standards.
 - 1. This subsection contains the minimum design and performance standards for groundwater recharge as follows:
 - 2. The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at § 31A-5, either:
 - (a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100% of the average annual pre-construction groundwater recharge volume for the site; or
 - (b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the projected two-year storm, as defined and determined by this ordinance, is infiltrated.
 - 3. This groundwater recharge requirement does not apply to projects within the "urban redevelopment area," or to projects subject to Subsection p4 below.
 - 4. The following types of stormwater shall not be recharged:
 - (a) Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than "reportable quantities" as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan approved pursuant to the Administrative Requirements for the

Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or Department landfill closure plan and areas; and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and

- (b) Industrial stormwater exposed to source material. "Source material" means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

Any and all portions of this Subsection not addressed herein remain as is, with no amendments or changes.

SECTION 5. Chapter 31A "Stormwater Control Requirements", Section 31A-4 "Stormwater Management Requirements for Major Developments", subsection r shall be amended to read as follows:

- r. Stormwater Runoff Quantity Standards.
 - 1. This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.
 - 2. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at § 31A-5, complete one of the following:
 - (a) Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the current and projected 2-, 10-, and 100-year storm events, as defined and determined in Section V.C and D, respectively, of this ordinance, do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
 - (b) Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the current and projected 2-, 10-, and 100-year storm events, as defined and determined pursuant to Section V.C and D, respectively, of this ordinance, and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full

development under existing zoning and land use ordinances in the drainage area;

- (c) Design stormwater management measures so that the post-construction peak runoff rates for the current and projected 2-, 10-, and 100-year storm events, as defined and determined in Section V.C and D, respectively, of this ordinance, are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed; or
3. The stormwater runoff quantity standards shall be applied at the site's boundary to each abutting lot, roadway, watercourse, or receiving storm sewer system.

Any and all portions of this Subsection not addressed herein remain as is, with no amendments or changes.

SECTION 6. Chapter 31A "Stormwater Control Requirements", Section 31A-5 "Calculation of Stormwater Runoff and Groundwater Discharge" shall be amended to read as follows:

a. Stormwater runoff shall be calculated in accordance with the following:

1. The design engineer shall calculate runoff using the following method:

The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15 and 16 Part 630, Hydrology National Engineering Handbook, incorporated herein by reference as amended and supplemented. This methodology is additionally described in Technical Release 55 - Urban Hydrology for Small Watersheds (TR-55), dated June 1986, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at:
<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422>
or at United States Department of Agriculture Natural Resources Conservation Service, 220 Davison Avenue, Somerset, New Jersey 08873

2. For the purpose of calculating curve numbers and groundwater recharge, there is a presumption that the pre-construction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term "curve number" applies to the NRCS methodology above at Section V.A.1. A curve number or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five

years without interruption prior to the time of application. If more than one land cover has existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).

3. In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.
 4. In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS Technical Release 55 - Urban Hydrology for Small Watersheds or other methods may be employed.
 5. If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.
- b. Groundwater recharge may be calculated in accordance with the following:
1. The New Jersey Geological Survey Report GSR-32: A Method for Evaluating Groundwater Recharge Areas in New Jersey, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at the New Jersey Geological Survey website at: <https://www.nj.gov/dep/njgs/pricelst/greport/gsr32.pdf> or at New Jersey Geological and Water Survey, 29 Arctic Parkway, PO Box 420 Mail Code 29-01, Trenton, New Jersey 08625-0420.
 2. The precipitation depths of the current two-, 10-, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 1 and 2 below:
 - (a) The applicant shall utilize the National Oceanographic and Atmospheric Administration (NOAA), National Weather Service's Atlas 14 Point Precipitation Frequency Estimates: NJ, in accordance with the location(s) of the drainage area(s) of the site. This data is available at:

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nj; and

- (b) The applicant shall utilize Table 5: Current Precipitation Adjustment Factors below, which sets forth the applicable multiplier for the drainage area(s) of the site, in accordance with the county or counties where the drainage area(s) of the site is located. Where the major development lies in more than one county, the precipitation values shall be adjusted according to the percentage of the drainage area in each county. Alternately, separate rainfall totals can be developed for each county using the values in the table below.

Table 5: Current Precipitation Adjustment Factors

County	Current Precipitation Adjustment Factors		
	2-year Design Storm	10-year Design Storm	100-year Design Storm
<u>Atlantic</u>	<u>1.01</u>	<u>1.02</u>	<u>1.03</u>
<u>Bergen</u>	<u>1.01</u>	<u>1.03</u>	<u>1.06</u>
<u>Burlington</u>	<u>0.99</u>	<u>1.01</u>	<u>1.04</u>
<u>Camden</u>	<u>1.03</u>	<u>1.04</u>	<u>1.05</u>
<u>Cape May</u>	<u>1.03</u>	<u>1.03</u>	<u>1.04</u>
<u>Cumberland</u>	<u>1.03</u>	<u>1.03</u>	<u>1.01</u>
<u>Essex</u>	<u>1.01</u>	<u>1.03</u>	<u>1.06</u>
<u>Gloucester</u>	<u>1.05</u>	<u>1.06</u>	<u>1.06</u>
<u>Hudson</u>	<u>1.03</u>	<u>1.05</u>	<u>1.09</u>
<u>Hunterdon</u>	<u>1.02</u>	<u>1.05</u>	<u>1.13</u>
<u>Mercer</u>	<u>1.01</u>	<u>1.02</u>	<u>1.04</u>
<u>Middlesex</u>	<u>1.00</u>	<u>1.01</u>	<u>1.03</u>
<u>Monmouth</u>	<u>1.00</u>	<u>1.01</u>	<u>1.02</u>
<u>Morris</u>	<u>1.01</u>	<u>1.03</u>	<u>1.06</u>
<u>Ocean</u>	<u>1.00</u>	<u>1.01</u>	<u>1.03</u>
<u>Passaic</u>	<u>1.00</u>	<u>1.02</u>	<u>1.05</u>
<u>Salem</u>	<u>1.02</u>	<u>1.03</u>	<u>1.03</u>
<u>Somerset</u>	<u>1.00</u>	<u>1.03</u>	<u>1.09</u>
<u>Sussex</u>	<u>1.03</u>	<u>1.04</u>	<u>1.07</u>
<u>Union</u>	<u>1.01</u>	<u>1.03</u>	<u>1.06</u>
<u>Warren</u>	<u>1.02</u>	<u>1.07</u>	<u>1.15</u>

3. Table 6: Future Precipitation Change Factors provided below sets forth the

change factors to be used in determining the projected two-, 10-, and 100-year storm events for use in this chapter, which are organized alphabetically by county. The precipitation depth of the projected two-, 10-, and 100-year storm events of a site shall be determined by multiplying the precipitation depth of the two-, 10-, and 100-year storm events determined from the National Weather Service's Atlas 14 Point Precipitation Frequency Estimates pursuant to (c)1 above, by the change factor in the table below, in accordance with the county or counties where the drainage area(s) of the site is located. Where the major development and/or its drainage area lies in more than one county, the precipitation values shall be adjusted according to the percentage of the drainage area in each county. Alternately, separate rainfall totals can be developed for each county using the values in the table below.

Table 6: Future Precipitation Change Factors

County	Future Precipitation Change Factors		
	2-year Design Storm	10-year Design Storm	10-year Design Storm
<u>Atlantic</u>	<u>1.22</u>	<u>1.24</u>	<u>1.39</u>
<u>Bergen</u>	<u>1.20</u>	<u>1.23</u>	<u>1.37</u>
<u>Burlington</u>	<u>1.17</u>	<u>1.18</u>	<u>1.32</u>
<u>Camden</u>	<u>1.18</u>	<u>1.22</u>	<u>1.39</u>
<u>Cape May</u>	<u>1.21</u>	<u>1.24</u>	<u>1.32</u>
<u>Cumberland</u>	<u>1.20</u>	<u>1.21</u>	<u>1.39</u>
<u>Essex</u>	<u>1.19</u>	<u>1.22</u>	<u>1.33</u>
<u>Gloucester</u>	<u>1.19</u>	<u>1.23</u>	<u>1.41</u>
<u>Hudson</u>	<u>1.19</u>	<u>1.19</u>	<u>1.23</u>
<u>Hunterdon</u>	<u>1.19</u>	<u>1.23</u>	<u>1.42</u>
<u>Mercer</u>	<u>1.16</u>	<u>1.17</u>	<u>1.36</u>
<u>Middlesex</u>	<u>1.19</u>	<u>1.21</u>	<u>1.33</u>
<u>Monmouth</u>	<u>1.19</u>	<u>1.19</u>	<u>1.26</u>
<u>Morris</u>	<u>1.23</u>	<u>1.28</u>	<u>1.46</u>
<u>Ocean</u>	<u>1.18</u>	<u>1.19</u>	<u>1.24</u>
<u>Passaic</u>	<u>1.21</u>	<u>1.27</u>	<u>1.50</u>
<u>Salem</u>	<u>1.20</u>	<u>1.23</u>	<u>1.32</u>
<u>Somerset</u>	<u>1.19</u>	<u>1.24</u>	<u>1.48</u>
<u>Sussex</u>	<u>1.24</u>	<u>1.29</u>	<u>1.50</u>
<u>Union</u>	<u>1.20</u>	<u>1.23</u>	<u>1.35</u>

<u>Warren</u>	<u>1.20</u>	<u>1.25</u>	<u>1.37</u>
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Any and all portions of this Section not addressed herein remain as is, with no amendments or changes.

SECTION 7. Chapter 31A "Stormwater Control Requirements", Section 31A-6 "Sources for Technical Guidance" shall be amended to read as follows:

- A. Technical guidance for stormwater management measures can be found in the documents listed below, which are available to download from the Department's website at:

<https://dep.nj.gov/stormwater/bmp-manual/>.

1. Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended and supplemented. Information is provided on stormwater management measures such as, but not limited to, those listed in Tables 1, 2, and 3.
2. Additional maintenance guidance is available on the Department's website at:

<https://dep.nj.gov/stormwater/maintenance-guidance/>.

- B. Submissions required for review by the Department should be mailed to:

The Division of Watershed Protection and Restoration, New Jersey
Department of Environmental Protection, Mail Code 501-02A, PO Box
420, Trenton, New Jersey 08625-0420.

Any and all portions of this Section not addressed herein remain as is, with no amendments or changes.

SECTION 8. Chapter 31A "Stormwater Control Requirements", Section 31A-8 "Safety Standards for Stormwater Management Basins", subsection c shall be amended to read as follows:

- c. Requirements for Trash Racks, Overflow Grates and Escape Provisions.
1. A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the Stormwater management BMP to ensure proper functioning of the BMP outlets in accordance with the following:
 - (a) The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;

- (b) The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;
 - (c) The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack; and
 - (d) The trash rack shall be constructed of rigid, durable, and corrosion-resistant material and designed to withstand a perpendicular live loading of 300 pounds per square foot.
2. An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:
- (a) The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
 - (b) The overflow grate spacing shall be no greater than two inches across the smallest dimension.
 - (c) The overflow grate shall be constructed and installed to be rigid, durable, and corrosion-resistant, and shall be designed to withstand a perpendicular live loading of 300 pounds per square foot.
3. Stormwater management BMPs shall include escape provisions as follows:
- (a) If a stormwater management BMP has an outlet structure, escape provisions shall be incorporated in or on the structure. Escape provisions include the installation of permanent ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management BMPs. With the prior approval of the municipality pursuant to § 31A-8c, a freestanding outlet structure may be exempted from this requirement;
 - (b) Safety ledges shall be constructed on the slopes of all new stormwater management BMPs having a permanent pool of water deeper than 2 1/2 feet. Safety ledges shall be comprised of two steps. Each step shall be four to six feet in width. One step shall be located approximately 2 1/2 feet below the permanent water surface, and the second step shall be located one to 1 1/2 feet above the permanent water surface. See § 31A-8e for an illustration of safety ledges in a stormwater management BMP; and
 - (c) In new stormwater management BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical.

Any and all portions of this Subsection not addressed herein remain as is, with no amendments or changes.

SECTION 9. This Ordinance may be renumbered for codification purposes.

SECTION 10. All ordinances or parts of ordinances of the Borough of Bloomingdale inconsistent herewith are repealed to the extent of such inconsistency.


SECTION 11. If any section, subsection, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid by any court or competent jurisdiction, such decision shall not affect the remaining portion of this Ordinance.

SECTION 12. This Ordinance shall take effect immediately upon final passage, approval and publication as required by law.

BOROUGH OF BLOOMINGDALE
COUNTY OF PASSAIC
STATE OF NEW JERSEY

ATTEST:


Breeanna Smith, Clerk

By: 
John D'Amato, Mayor

PUBLIC NOTICE

**ORDINANCE NO. 7-2024
OF THE GOVERNING BODY
OF THE BOROUGH OF BLOOMINGDALE**

AN ORDINANCE OF THE BOROUGH OF BLOOMINGDALE, IN THE COUNTY OF PASSAIC AND STATE OF NEW JERSEY, AMENDING CHAPTER 31A "STORMWATER CONTROL REQUIREMENTS" OF THE CODE OF THE BOROUGH OF BLOOMINGDALE

NOTICE IS HEREBY GIVEN, that the above Ordinance was introduced and passed on first reading at an Official Meeting of the Governing Body of the Borough of Bloomingdale, County of Passaic, State of New Jersey held in the Municipal Building on April 2, 2024, and the same shall come up for final passage at an Official Meeting of the Governing Body to be held on April 16, 2024 at 7PM, at which time any persons interested shall be given the opportunity to be heard concerning said Ordinance. Copies of this Ordinance are available in the Clerk's Office located at 101 Hamburg Turnpike, Bloomingdale, New Jersey.

Purpose/Summary of Ordinance No. 7-2024:

WHEREAS, the New Jersey Department of Environmental Protection ("NJ DEP") has adopted amendments to the Stormwater Management regulations found at N.J.A.C. 7:8. As a result of the amendments, the NJ DEP has developed a model ordinance to ensure municipalities have adopted ordinances which are consistent with the NJ DEP's stormwater management statutes and regulations. The Borough Engineer and Ordinance Review Committee have reviewed and recommended that the Code be amended. The recommendation includes amending Chapter 31A "Stormwater Control Requirements".


Breeanna Smith, RMC
Municipal Clerk