



# BOROUGH OF RIVERDALE NEW JERSEY



## ORDINANCE NO. 02-2024

### AN ORDINANCE AMENDING CHAPTER 146A OF THE CODE OF THE BOROUGH OF RIVERDALE AND REVISING STORMWATER MANAGEMENT REGULATIONS

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**BE IT ORDAINED** by the Borough Council of the Borough of Riverdale, in the County of Morris and State of New Jersey, as follows:

**Section 1.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-1 entitled “Scope and Purpose”, shall be amended by the following additions to Subsection C (“Applicability”) which additions shall read, in their entirety, as follows:

3. An application required by ordinance pursuant to (b)1 above that has been submitted prior to the adoption date of this ordinance, shall be subject to the stormwater management requirements in effect one day prior to the adoption date of this ordinance.
4. 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 the adoption date of this ordinance, shall be subject to the stormwater management requirements in effect one day prior to the adoption date of this ordinance.
5. 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.

**Section 2.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-2 entitled “Definitions”, shall be amended by the following additional definitions:

“Public roadway or railroad” – means 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” – means 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.

**Section 3.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-4 entitled “Stormwater Management Requirements for Major Development”, shall be amended by updating the URL at the end of Subsection E to [https://njstormwater.org/bmp\\_manual/](https://njstormwater.org/bmp_manual/) and by the following amendments to Subsections P (“Groundwater Recharge Standards”) and R (Stormwater Runoff Quality Standards”) which shall read inclusive of the additions, in their entirety, as follows:



# BOROUGH OF RIVERDALE NEW JERSEY



P(2)(b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the projected 2-year storm, as defined and determined pursuant to Chapter 146A-5 D. of this ordinance, is infiltrated.

P(4)(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

R.(2)(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 Subsections 146A-5 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

R.(2)(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 Subsections 146A-5 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;

R.(2)(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 Subsections 146A-5 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.

**Section 4.** Chapter 146A, "Stormwater Management", of the Revised General Ordinances of the Borough of Riverdale, Section 146A-5 entitled "Calculation of Stormwater Runoff and Groundwater Discharge" shall be amended by the following amendments to Subsections A(1)(a) and A(1)(b) which shall read, in their entirety, as follows:

A.(1)(a) The design engineer shall calculate runoff using the following method:

The United States Department of Agriculture 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/22162.wba>

or at United States Department of Agriculture Natural Resources Conservation Service, 220 Davison Avenue, Somerset, New Jersey 08873.



# BOROUGH OF RIVERDALE NEW JERSEY



A.(1)(b) 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 wooded land use with good hydrologic condition. The term “curve number” applies to the NRCS methodology above. 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).

**Section 5.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-5 entitled “Calculation of Stormwater Runoff and Groundwater Discharge” shall be amended by the addition of the following Subsections C and D which shall read, in its entirety, as follows:

C. 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:

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

2. The applicant shall utilize the Current Precipitation Adjustment Factors below, which sets forth the applicable multiplier for the drainage area(s) of the site:

- 2-year Design Storm – 1.01
- 10-year Design Storm – 1.03
- 100-year Design Storm – 1.06

D. 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 factors below:

- 2-year Design Storm – 1.23
- 10-year Design Storm – 1.28
- 100-year Design Storm – 1.46

**Section 6.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-6 entitled “Sources for Technical Guidance” shall be amended by the correction of the URL to <https://dep.nj.gov/stormwater/bmp-manual/> and <https://dep.nj.gov/stormwater/maintenance-guidance/> and the following amendment to Subsection B which shall read as follows:

B. Submissions required to be reviewed by the Department should be mailed to:

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

**Section 7.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-8 entitled “Safety standards for stormwater management basins” shall be amended to read, in its entirety, as follows:



# BOROUGH OF RIVERDALE NEW JERSEY



C.(2)(b) The overflow grate spacing shall be no greater than two inches across the smallest dimension.

**Section 8.** Chapter 146A, “Stormwater Management”, of the Revised General Ordinances of the Borough of Riverdale, Section 146A-17 entitled “Violations and Penalties” shall be amended to read, in its entirety, as follows:

### 146A-17 Violations and Penalties

Any person(s) who erects, constructs, alters, repairs, converts, maintains, or uses any building, structure or land in violation of this ordinance shall be subject to a fine of up to \$500.00 for each violation.

**Section 9.** If any section or provision of this Ordinance shall be held invalid in any Court of competent jurisdiction, the same shall not affect the other sections or provisions of this Ordinance, except so far as the section or provision so declared invalid shall be inseparable from the remainder or any portion thereof.

**Section 10.** All Ordinances or parts of Ordinances which are inconsistent herewith are hereby repealed to the extent of such inconsistency.

**Section 11.** This Ordinance shall take effect immediately after final passage and publication in the manner provided by law.

Adopted this \_\_\_\_ day of \_\_\_\_\_, 2024

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Abubakar Jalloh, Borough Clerk

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Paul M. Carelli, Mayor

### NOTICE OF PENDING ORDINANCE

The ordinance published herewith was introduced and passed upon first reading at a meeting of the governing body of the Borough of Riverdale, a municipal corporation of the State of New Jersey, held on March 13, 2024. It will be further considered for final passage, after public hearing thereon, at a meeting of the governing body to be held at Borough Hall, in the Borough on April 10, 2024 at 7:30 o’clock p.m., and during the week prior to and up to and including the date of such meeting, copies of said ordinance will be made available at the Clerk’s office to the members of the general public who shall request the same.

Abubakar Jalloh, Borough Clerk