

TOWNSHIP OF CLINTON  
COUNTY OF HUNTERDON  
STATE OF NEW JERSEY

**ORDINANCE # 1197-2024**

**AN ORDINANCE OF THE TOWNSHIP OF CLINTON IN HUNTERDON COUNTY,  
NEW JERSEY, MODIFYING THE STORMWATER MANAGEMENT REQUIREMENTS  
FOR MAJOR DEVELOPMENTS AND AMENDING CHAPTER 165 (LAND USE  
REGULATIONS) OF THE “CODE OF THE TOWNSHIP OF CLINTON”**

**WHEREAS**, the New Jersey Department of Environmental Protection (DEP) has adopted updates to its Stormwater and Flood Hazard Area regulations as part of the Inland Flood Protection Rule; and

**WHEREAS**, municipalities are required to amend their stormwater regulations in accordance with the DEP’s updated new regulations by July 18, 2024;

**NOW THEREFORE, BE IT ORDAINED** the Mayor and Council of the Township of Clinton, County of Hunterdon, State of New Jersey, as follows:

**SECTION 1.** Preamble incorporated. The statements and findings set forth in the preamble above are hereby incorporated as if fully restated herein.

**SECTION 2.** Scope and purpose of surface water management requirements supplemented. Section 165-223 in Chapter 165, “Land Use Regulations,” Part 8, “Flood Hazard Areas and Surface Water Management,” Article XXXV, “Surface Water Management” of the “Code of the Township of Clinton” (“Code” or “Township Code”) is hereby amended and supplemented to read as follows (new text is underlined thus; deleted text is in brackets [thus]):

**Article XXXV Surface Water Management**

**§ 165-223. Scope, Purpose, and General Intent.**

A. Policy Statement.

- (1) The general intent of this article is to manage the increase rate and velocity of surface water runoff created by alterations in the ground cover and natural runoff patterns.
- (2) Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure Best Management Practices (GI BMPs) and nonstructural stormwater management strategies. GI BMPs and low impact development (LID) should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution. GI BMPs and LID should be developed based upon physical site conditions and the origin, nature and the anticipated quantity, or amount, of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose. The purpose of this article is to establish minimum stormwater management requirements and controls for “major development,” as defined below in [S]section 165-224. To protect the public health, safety and welfare of the citizens of Clinton Township and the surrounding communities, this section is deemed necessary and essential in order to:

- (1) Maintain the adequacy of natural stream channels and prevent accelerated bank erosion by controlling the rate and velocity of runoff discharge to these watercourses so as to avoid increasing the frequency of the bank-full stage.
- (2) Prevent degradation of the stream biota caused by excessive flushing and sedimentation.

- (3) Prevent degradation of stream water quality due to impairment of the stream's biological function.
- (4) Enhance the quality of nonpoint runoff by water retention measures.
- (5) Reduce public expenditures for replacement or repair of public facilities resulting from artificially induced flood peaks.
- (6) Prevent damage to life and property from flooding resulting from excessive rates, quantities and velocities of runoff.
- (7) Prevent the degradation of property by enhancing the environmental character of the streams of the Township.

#### C. Applicability

- (1) This article shall be applicable to the following major developments:
  - (a) Non-residential major developments; and
  - (b) Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.
- (2) This article shall also be applicable to all major developments undertaken by the Township of Clinton.
- (3) An application required by ordinance pursuant to subsection C(1) above that has been submitted prior to the date of adoption of this ordinance shall be subject to the stormwater management requirements in effect one day prior to the date of this ordinance.
- (4) An application required by ordinance for approval pursuant to C(1) above that has been submitted on or after March 2, 2021, but prior to the date of adoption of this ordinance shall be subject to the stormwater

management requirements in effect one day prior to the date of adoption 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.

D. Compatibility with other permit and ordinance requirements

- (1) Development approvals issued pursuant to this article are to be considered an integral part of development approvals and do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. In their interpretation and application, the provisions of this article shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.
- (2) This article is not intended to interfere with, abrogate, or annul any other ordinances, rule or regulation, statute, or other provision of law except that, where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

E. No person shall obstruct or otherwise interfere with any drainageway, surface water, surface water runoff, or watercourse in such a manner as to cause or result in surface water runoff damage.

**SECTION 2. New definitions added.** Section 165-224, “Definitions” of the Township Code is hereby amended and supplemented by adding thereto the following new definitions “public roadway or railroad” and “public transportation entity”:

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.

**SECTION 3. Stormwater management requirements for major developments**

**amended.** Section 165-230 of the Township Code is hereby amended and supplemented to read as follows (new text is underlined thus; deleted text is in brackets [thus]):

**§ 165-230. Stormwater Management Requirements for Major Development.**

*(Subsections A through D no changes)*

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 [S]sections 165-230.O, 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://njstormwater.org/bmp\\_manual2.htm](https://njstormwater.org/bmp_manual2.htm). ]

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

*(Subsections F through O no changes)*

#### 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 [S]section 165-231, either:
  - (a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent 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 2-year storm, as defined and determined pursuant to section 231D of this article, is infiltrated.
- (3) This groundwater recharge requirement does not apply to projects within the "urban redevelopment area," or to projects subject to [Section 165-230.P.4] section 165-230P(4) 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 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.

*(Subsection Q no changes)*

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 [S]section 165-231, 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 sections 231.C and 231.D, respectively, of this article, 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 in sections 231.C and 231.D, respectively, of this article, 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 sections 231.C and 231.D, respectively, of this article, 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

(d) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with [Sections 165-230.R.2.i, ii and iii] sections 165-213R(2)(a), (b) and (c) above is required unless the design engineer demonstrates through hydrologic and hydraulic analysis that the increased volume, change in timing, or increased rate of the stormwater runoff, or any combination of the three will not result in additional flood damage below the point of discharge of the major development. No analysis is required if the stormwater is discharged directly into any ocean, bay, inlet, or the reach of any watercourse between its confluence with an ocean, bay, or inlet and downstream of the first water control structure.

(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.

#### **SECTION 4. Calculations of stormwater runoff and groundwater recharge**

**amended.** Section 165-231 of the Township Code is hereby amended and supplemented to read as follows (new text is underlined thus; deleted text is in brackets [thus]):

##### **§ 165-231. Calculation of Stormwater Runoff and Groundwater Recharge.**

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

(1) The design engineer shall calculate runoff using [one of] the following method[s]:

[(a)] 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://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1044171.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf)]

<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] New Jersey State Office.; or

(b) The Rational Method for peak flow and the Modified Rational Method for hydrograph computations. The rational and modified rational methods are described in "Appendix A-9 Modified Rational Method" in the Standards for Soil Erosion and Sediment Control in New Jersey, January 2014. This document is available from the State Soil Conservation Committee or any of the Soil Conservation Districts listed at N.J.A.C. 2:90-1.3(a)3. The location, address, and telephone number for each Soil Conservation District is available from the State Soil Conservation Committee, PO Box 330, Trenton, New Jersey 08625. The document is also available at:

[http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf.](http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf) ]

- (2) For the purpose of calculating [runoff coefficients] 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 “[runoff coefficient] curve number” applies to [both] the NRCS methodology above at [section 165-231.A1.i] section 165-231A(1)(a) [and the Rational and Modified Rational Methods at Section 165-231.A.1.ii]. A [runoff coefficient] 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] have 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 have 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:

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/gsreport/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.

- 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 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 where the drainage area(s) of the site is located (i.e., Hunterdon County). 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 in accordance with the values set forth below and in N.J.A.C. 7:8-5.7(c).

**Table 5: Current Precipitation Adjustment Factors**

<u>County</u>	<u>Current Precipitation Adjustment Factors</u>		
	<u>2-year Design Storm</u>	<u>10-year Design Storm</u>	<u>100-year Design Storm</u>
<u>Hunterdon</u>	<u>1.02</u>	<u>1.05</u>	<u>1.13</u>

D. 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 for Hunterdon 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 in accordance with the values set forth below and in N.J.A.C. 7:8-5.7(c).

**Table 6: Future Precipitation Change Factors**

<u>County</u>	<u>Future Precipitation Change Factors</u>		
	<u>2-year Design Storm</u>	<u>10-year Design Storm</u>	<u>100-year Design Storm</u>
<u>Hunterdon</u>	<u>1.19</u>	<u>1.23</u>	<u>1.42</u>

**SECTION 5. Provisions regarding sources of guidance amended.** Section

165-232 of the Township Code is hereby amended and supplemented to read as

follows (new text is underlined thus; deleted text is in brackets [thus]):

**§ 165-232. Sources for Technical Guidance.**

- 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:

[[http://www.nj.gov/dep/stormwater/bmp\\_manual2.htm](http://www.nj.gov/dep/stormwater/bmp_manual2.htm) ]

<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://www.njstormwater.org/maintenance\\_guidance.htm](https://www.njstormwater.org/maintenance_guidance.htm)]

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

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

[The Division of Water Quality, New Jersey Department of Environmental Protection, Mail Code 401-02B, PO Box 420, Trenton, New Jersey 08625-0420.]

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.

**SECTION 6. Provisions regarding safety standards for stormwater**

**management basins amended.** Section 165-234 of the Township Code is hereby amended to read as follows (new text is underlined thus; deleted text is in brackets [thus]):

**§ 165-234. Safety Standards for Stormwater Management Basins.**

*(Subsections A and B no changes)*

C. Requirements for Trash Racks, Overflow Grates and Escape Provisions

*(Subsection (1) no changes)*

(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 [less] 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.

*(Remainder of section 165-234 no changes)*

**SECTION 7. Referral to Planning Board.** Pursuant to the Municipal Land Use Law, N.J.S.A. 40:55D-64, the Acting Clerk shall cause a copy of this ordinance to be

referred to the Clinton Township Planning Board for review prior to its second reading and adoption.

**SECTION 8. Effective Date.** This ordinance shall take effect 20 days after its final passage by the Mayor and Council and the filing of same with the Hunterdon County Planning Board, all in accordance with law.

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Lindsay Heller, Acting Township Clerk

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Hon. Brian Mulla, Mayor

Introduced: April 24, 2024  
Public hearing: May 22, 2024  
Adopted: \_\_\_\_\_, 2024

The foregoing ordinance was introduced on first reading at the April 24, 2024 meeting of the Mayor and Council of the Township of Clinton. It will be further considered for final passage following a public hearing thereon to be held on **May 22, 2024, at 7:00 p.m.**, on the third floor of the Clinton Township Public Safety Building, 1370 Route 31 North, Annandale, NJ 08801, at which time and place anyone from the public wishing to be heard will be permitted to ask questions or offer comments regarding the ordinance. During the week prior to and up to and including the date of such meeting and public hearing, copies of the full ordinance will be available at no cost during regular business hours in the Office of the Township Clerk for members of the public who shall request a copy of same. The ordinance will also be available on the Township's website at <https://clintontwpnj.gov>.

The purpose of the ordinance is to amend the Township's stormwater management requirements pertaining to major developments, in accordance with updates made by the New Jersey Department of Environmental Protection (DEP) to its Stormwater and Flood Hazard Area regulations, as part of the DEP's Inland Flood Protection Rules.