TOWNSHIP OF BYRAM Sussex County, New Jersey

ORDINANCE No. 015-2024

AN ORDINANCE TO AMEND AND SUPPLEMENT CHAPTER 211 ENTITLED "STORMWATER CONTROL" OF THE CODE OF THE TOWNSHIP OF BYRAM

Purpose Statement: The purpose of this Ordinance is to amend Chapter 211, the existing Stormwater Control chapter of the Code to comply with the requirements of the New Jersey Department of Environmental Protection ("NJDEP").

WHEREAS, the New Jersey Department of Environmental Protection requires that all Tier A municipalities update their stormwater control ordinance to reflect amendments to the Stormwater Management rules defined in N.J.A.C. 7:8, adopted March 2, 2020 and July 17, 2023. In order to comply with the requirements of the Township of Byram's Municipal Stormwater General Permit, the Township Council wishes to amend the revised general ordinances to incorporate the amendments of the rules.

NOW, THEREFORE, BE IT ORDAINED by the Byram Township Council that certain sections within Chapter 211, Stormwater Control of the Code of the Township of Byram be amended as follows:

SECTION 1. Chapter 211, Article II Definitions, Section 211-5, *Word usage; terms defined* is amended to include the following definitions:

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 2. Chapter 211, Article III Design & Performance Standards, Section 211-7, Stormwater Management Requirements for Major Development is amended as follows:

The last sentence of Item E shall be deleted and replaced with:

The most current version of the BMP Manual can be found on the Department's website at: https://dep.nj.gov/stormwater/bmp-manual/.

SECTION 3. Chapter 211, Article III Design & Performance Standards, Section 211-9, *Groundwater Recharge Standards* is amended as follows:

Section 211-9A.(2) shall be deleted and replaced with:

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 is infiltrated.

Section 211-9B.(1) shall be deleted and replaced with:

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

SECTION 4. Chapter 211, Article III Design & Performance Standards, Section 211-11, Stormwater Runoff Quantity Standards is amended as follows:

The following text shall be revised in Section 211-11A.(1), A.(2) and A.(3):

Delete the phrase: the two-, ten- and 100 year storm events

Replace with: the current and projected two-, ten- and 100 year storm events

SECTION 5. Chapter 211, Article III Design & Performance Standards, Section 211-12, *Calculation of Stormwater Runoff and Groundwater Recharge* is deleted in its entirety and replaced to include the following:

- 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, New Jersey State Office.

- (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. 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:

The New Jersey Geological Survey Report <u>GSR-32</u>: A <u>Method for Evaluating Groundwater-Recharge Areas in New Jersey</u>, incorporated herein by reference as a mended 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; 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 or counties where the drainage area(s) of the site is located.

Table 5: Current Precipitation Adjustment Factors

	Current Precipitation Adjustment Factors			
	2-year Design Storm	10-year Design Storm	100-year Design Storm	
Sussex	1.03	1.04	1.07	

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, 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.

Table 6: Future Precipitation Change Factors

	Future Precipitation Change Factors			
County	2-year Design Storm	10-year Design Storm	100-year Design Storm	
Sussex	1.24	1.29	1.50	

SECTION 6. Chapter 211, Article III Design & Performance Standards, Section 211-13, *Sources for Technical Guidance* is deleted in its entirety and replaced to include the following:

- 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.

SECTION 7. Chapter 211, Article III Design & Performance Standards, Section 211-15, *Safety Standards for Stormwater Management Basins* is amended as follows:

Section 211-15C.(2)(b) shall be deleted and replaced with:

The overflow grate spacing shall be no greater than two inches across the smallest dimension

SECTION 8. Chapter 211, Article V Private Storm Drain Inlet Retrofitting, Section 211-18, *Purpose* is eliminated and replaced in its entirety with the following:

The purpose of this section is to require the retrofitting of existing storm drain inlets which are in direct contact with repaving, repairing, reconstruction, or resurfacing or alterations of facilities on private property, to prevent the discharge of solids and floatables (such as plastic bottles, cans, food wrappers and other litter) to the municipal separate storm sewer system operated by Byram Township to protect the environment, public health, safety and welfare, and to prescribe penalties for failure to comply. Installation of all new storm drain inlets must include a catch basin or other BMP designed for solids collection in areas which drain to surface waters and that do not have any other downstream BMPS prior to the surface water discharge.

SECTION 9. Chapter 211, Article V Private Storm Drain Inlet Retrofitting, Section 211-19, *Definitions* is eliminated and replaced in its entirety with the following:

For the purpose of this ordinance, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When consistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that is owned or operated by Byram Township or other public body, and is designed and used for collecting and conveying stormwater.

PERSON - Any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

STORM DRAIN INLET - The point of entry into the storm sewer system.

SECTION 10. Chapter 211, Article V Private Storm Drain Inlet Retrofitting, Section 211-20, *Prohibited Conduct* is eliminated and replaced in its entirety with the Section 211-20, *Design Standards* as follows:

- A. No person in control of private property (except a residential lot with one single family house) shall authorize the repairing, repairing (excluding the repair of individual potholes), resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), reconstructing or altering any surface that is in direct contact with an existing storm drain inlet on that property unless the storm drain inlet either:
 - (1) Already meets the design standard below to control passage of solid and floatable materials; or

- (2) Is retrofitted or replaced to meet the standard in Section IV below prior to the completion of the project.
- B. The below design standard applies to the following types of storm drain inlet retrofit projects unless a more stringent standard is specified by the municipality's Stormwater Control Ordinance:
 - (1) Privately-owned or operated storm drain inlets (e.g., condominium association) must be retrofitted where the storm drains are:
 - a. In direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or
 - b. In direct contact with any reconstruction or alteration of facilities. This does not include single family homes.
- C. Grates in pavement or other ground surfaces shall meet either of the following standards:
 - (1) The New Jersey Department of Transportation (NJDOT) bicycle safe grate standards described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (see www.state.nj.us/transportation/about/publicat/pdf/BikeComp/introtofac.pd f); or
 - (2) A grate where each individual clear space in that grate has an area of no more than seven (7.0) square inches or is not greater than 0.5 inches across the smallest dimension. Note that the Residential Site Improvement Standards at N.J.A.C. 5:21 include requirements for bicycle safe grates.
 - a. Examples of grates subject to this standard include grates in grate inlets; the grate portion (noncurb opening portion) of combination inlets; grates on storm sewer manholes; ditch grates; trench grates; and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads, (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater basin floors used to collect stormwater from the surface into a storm drain or surface water body.
 - b. For curb-openings inlets, including curb-opening inlets in combination inlets, the clear space in the curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches or be no greater than two (2.0) inches across the smallest dimension.

SECTION 11. Chapter 211, Article V Private Storm Drain Inlet Retrofitting, Section 211-21, *Design Standards* is eliminated and replaced in its entirety with the Section 211-21, *Exemptions* as follows:

The following exemptions from the design standard apply:

- A. Where each individual clear space in the curb opening in existing curb-opening inlets does not have an area of more than nine (9.0) square inches;
- B. Where the review agency determines that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;
- C. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:
 - (1) A rectangular space four and five-eighths inches long and one and one-half inches wide; or
 - (2) A bar screen having a bar spacing of 0.5 inches; Note that these exemptions do not authorize any infringement of requirements in the Residential Site Improvement Standards for bicycle safe grates in new residential development (N.J.A.C. 5:21-4.18(b)2 and 7.4(b)1).
- D. Where flows are conveyed through a trash rack that has parallel bars with one inch (1") spacing between the bars, to the elevation of the water quality design storm as specified in N.J.A.C. 7:8; or
- E. Where the Department determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet the standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

SECTION 12. Severability. If any part of this Ordinance is for any reason held to be invalid such decision shall not affect the validity of the remaining portion of the Ordinance. Any ordinance or portion thereof that may be inconsistent with the ordinance is hereby repealed to the extent of the inconsistency.

SECTION 13. Repealer.

All existing Ordinances and/or parts thereof which are inconsistent with the terms of this Ordinance are, to the extent of such inconsistency, repealed.

SECTION 14. Effective date:

This ordinance shall take effect 20 days after final adoption and publication.

Introduced: September 3, 2024

Adopted: September 17,

Cynthia Church, RMC

ander Rubenstein

Township Clerk

BYRAM TOWNSHIP COUNCIL

	Councilwoman Franco	Councilman Gallagher	Councilman Proctor	Councilman Roseff	Mayor Rubenstein
Motion	Trailed	Gunugner	1100101	1100011	7140071617
2nd			1		
Yes	1				
No					
Abstain					
Absent					

NOTICE OF ADOPTION

NOTICE is hereby given that Ordinance 015-2024 was introduced and passed first reading at a meeting of the Township Council of the Township of Byram, held at the Byram Township Municipal Building, Mansfield Drive, Byram Township, New Jersey, on the 3rd day of September 2024. The said ordinance was further considered for final adoption at a meeting of the Township Council of The Township of Byram, held at the Byram Municipal Building, 10 Mansfield Drive, Byram Township, New Jersey, on the 17th day of September at 7:30 p.m. at which time all persons were given the opportunity to be heard. It was finally passed and adopted and will be in full force in the Township according to law.

Cynthia Church, RMC

Township Clerk