

**TOWNSHIP OF HOPEWELL
MERCER COUNTY, NEW JERSEY**

ORDINANCE NO. 21-xxxx

**ORDINANCE OF THE TOWNSHIP OF HOPEWELL AMENDING CHAPTER 17,
ARTICLE VI (DESIGN STANDARDS) OF THE CODE OF THE TOWNSHIP OF
HOPEWELL**

WHEREAS, the Township of Hopewell (“Hopewell”) recognizes the importance of proper stormwater management to maintain the integrity of the waters of the State of New Jersey; and

WHEREAS, Hopewell recognizes that regulating and mitigating stormwater impacts from development within the municipality advances public health, safety and welfare and benefits the entire community; and

WHEREAS, on March 2, 2020, the New Jersey Department of Environmental Protection (“NJDEP”) adopted new Stormwater Management Rules, N.J.A.C. 7-8, that now require major developments to incorporate nonstructural stormwater management strategies to the “maximum extent practicable” to meet groundwater recharge standards, stormwater runoff quantity standards, and stormwater runoff quality standards, with a requirement that green infrastructure be utilized to meet the required standards; and

WHEREAS, the NJDEP adopted an updated Best Management Practices (“BMPs”) Manual to guide the design, construction and maintenance of stormwater management strategies and green infrastructure measures; and

WHEREAS, the new rules require local municipalities to revise their existing stormwater management ordinances to meet the new NJDEP standards and requirements; and

WHEREAS, the new rules establish the minimum standards and requirements that local municipalities must incorporate into their local ordinances; and

WHEREAS, the Hopewell has, in consultation with its staff and professionals, the Hopewell Township Environmental Commission, and local conservation groups, created new local stormwater management requirements that are fair, practical and in the best interests of the public.

NOW, THEREFORE, BE IT ORDAINED AND ESTABLISHED by the Township Committee of the Township of Hopewell, County of Mercer, State of New Jersey that Section 17-82, entitled Drainage, Detention, and Stormwater Management, contained within Article VI of the Design Standards in Chapter 17 (Land Use and Development) of the Code of the Township of Hopewell hereby be repealed and replaced with the revised ordinance section as follows:

SECTION I.

Repeal and replace Section 17-82 (Drainage, Detention and Stormwater Management) with the following Section:

17-82 Stormwater Control

17-82.1 – Scope and Purpose.

- a. Policy Statement: 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 or nonstructural techniques 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 low impact techniques 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 section is to establish minimum stormwater management requirements and controls for both “major and minor development”, as defined herein, and to reduce the amount of non-point source pollution entering surface groundwater. These requirements proactively guide new development to minimize harmful impacts to natural resources to:
 1. Reduce flood damage, protecting public health, life and property;
 2. Minimize increased stormwater runoff rates and volumes;
 3. Minimize the deterioration of existing structures that would result from increased rates of stormwater runoff;
 4. Increase water recharge into the ground wherever suitable infiltration, soil permeability, and favorable geological conditions exist;
 5. Prevent an increase in non-point source pollution;
 6. Maintain the integrity and stability of stream channels and buffers for their ecological functions, as well as for drainage, and the conveyance of floodwaters;
 7. Control and minimize soil erosion and the transport of sediment;
 8. Minimize public safety hazards at any stormwater detention facility constructed pursuant to a subdivision or site plan approval;
 9. Maintain adequate base-flow and natural flow regimes in all streams and other surface water bodies to protect the aquatic ecosystem;
 10. Protect all surface water resources from degradation; and
 11. Protect groundwater resources from degradation and diminution.
- c. All development projects, as defined herein, shall meet the requirements of this section for the minimum requirements and controls to manage stormwater.

- d. Applicability: Stormwater Control Standards established within this subsection shall be applicable to the following developments meeting the criteria defined under “major development” as specified herein:
 - 1. Non-residential (commercial) developments; and
 - 2. Aspects of residential developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.
 - 3. All projects undertaken by Hopewell Township, meeting the definition contained herein for a major development, and do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq.
 - 4. Any development that does not require municipal subdivision or site plan approval but meets the definition contained herein for a major development.
- e. Compatibility with Other Permit and Ordinance Requirements: Development approvals issued pursuant to this ordinance 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 ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. This chapter shall be construed to assure consistency with the requirements of New Jersey laws and acts amendatory thereof or supplementary thereto, applicable implementing regulations, and any existing or future municipal NJPDES permits and any amendments or revisions thereto or reissuance thereof. This chapter 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 chapter 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.

17-82.2 Exemptions

- a. The following linear development projects are exempt from the Groundwater Recharge, Stormwater Runoff Quantity, and Stormwater Runoff Quality requirements of this Subsection:
 - 1. The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
 - 2. The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
 - 3. The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.

17-82.3 Definitions

- a. The definitions of the words or terms specified in the Stormwater Management Rules at N.J.A.C. 7:8-1.2 shall apply except as defined herein.
 - 1. Major Development - shall mean an individual “development” as well as multiple developments that individually or collectively result in:

- (a) The disturbance of one or more acres of land since February 2, 2004;
- (b) The creation of one-quarter acre or more of “regulated impervious surface” since February 2, 2004;
- (c) The creation of one-quarter acre or more of “regulated motor vehicle surface” since March 2, 2021 ; or
- (d) A combination of 2 and 3 above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of conditions 1 (a) through (d) above. Projects undertaken by any government agency that otherwise meet the definition of “major development” but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered “major development”

2. Minor Development – shall mean all development that does not meet the definition of a Major Development and meets one or more of the following criteria:
 - (a) Any development that requires a “C” variance pursuant to N.J.S.A.:55D-70c to exceed the maximum lot coverage permitted within the applicable Zoning District.
 - (b) Any development that requires a “D” variance pursuant to N.J.S.A. 40:55D-70d to exceed the maximum lot coverage permitted within the applicable Zoning District.
 - (c) Any development that results in an increase in “Regulated Motor Vehicle Surface” of greater than 250 square feet for residential development or 1,000 square feet for commercial development.
 - (d) Increases in Regulated Motor Vehicle Surface in excess of the limits established under item (c) above shall be applicable to all development, including those that are compliant with the total lot coverage permitted within the applicable Zoning District.
3. Regulated Motor Vehicle Surface – shall mean any of the following, alone or in combination:
 - (a) A new increase in “motor vehicle surface”, as defined under N.J.A.C. 7:8 et seq.; and/or
 - (b) The total area of existing motor vehicle surface or other impervious surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure.
 - (c) Any conversion of Motor Vehicle Surface from a pervious or semi-pervious surface, such as gravel, to an impervious surface, such as asphalt, concrete or pavers.

4. Stormwater Management BMP – shall mean all green infrastructure BMPs approved by the NJDEP, outlined in the BMP Manual, or other stormwater management measure, device or facility approved by the Township Engineer.

17-82.4 General Design and Performance Standards

- a. Stormwater management measures for major development shall be developed to meet:
 1. Erosion Control Standards;
 2. Groundwater Recharge Standards;
 3. Stormwater Runoff Quantity Standards; and
 4. Stormwater Runoff Quality Standards.
- b. To the maximum extent practicable, these general design and performance standards for major development shall be met by incorporating nonstructural and green infrastructure stormwater management strategies into the design. If these strategies alone are not sufficient to meet these standards, structural stormwater management measures necessary to meet these standards shall be incorporated into the design.

17-82.5 Minor Development Design Standards

- a. All construction meeting the definition of “Minor Development” shall comply with the requirements specified herein.
- b. All construction meeting the definition of “Minor Development” shall be required to provide groundwater recharge within the same property as the proposed construction.
- c. Soil erosion and sediment control measures shall be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey.
- d. The minimum volume of stormwater required to be recharged shall be calculated as three (3) inches per each square foot of surface area calculated as follows:
 1. For all development that complies with the total lot coverage for the applicable Zoning District but exceeds the limits for Regulated Motor Vehicle Surface, the recharge requirements shall be applied to the surface area in excess of the limits established for Minor Development (i.e. >250 SF for residential development, and >1,000 SF for commercial development).
 2. For all development that requires a variance for total lot coverage, pursuant to N.J.S.A. 40:55D-70c or d, the recharge requirements shall be applied to a surface area equal to 120% (1.2 times) the area in excess of the maximum total lot coverage permitted by the applicable Zoning District.
- e. The stormwater recharge requirements shall be met using any one or combination of methods permitted in the Best Management Practices Manual for Green Infrastructure BMPs.
- f. Any alternate methods for achieving the stormwater recharge requirements, not contained within the Best Management Practices Manual, shall be required to provide a detailed design, prepared by a New Jersey State Licensed Professional Engineer.

17-82.6 Major Development Design Standards

- a. All construction meeting the definition of “Major Development” shall comply with the requirements specified herein.
- b. All construction meeting the definition of “Major Development” shall be required to include stormwater management measures designed in accordance with the Residential Site Improvement Standards (RSIS, N.J.A.C. 5:21), and the NJDEP Stormwater Rule (N.J.A.C. 7:8).
- c. Stormwater management measures utilized on major development shall comply with the requirements of N.J.A.C. 7:8-5.2.
- d. The standards included herein by reference shall apply to all residential and nonresidential projects; township projects; Board of Education projects; and other public agency projects meeting the definition of major development and subject to review by the township.

17-82.7 Sources for Technical Guidance

- a. Technical guidance for stormwater management measures can be found in the documents listed below, which are available from Maps and Publications, New Jersey Department of Environmental Protection, 428 East State Street, P.O. Box 420, Trenton, New Jersey, 08625; (609) 777-1038 and available to download from the Department’s website at:
http://www.nj.gov/dep/stormwater/bmp_manual2.htm
 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, bio-retention systems, constructed stormwater wetlands, dry wells, extended detention basins, infiltration structures, manufactured treatment devices, pervious paving, sand filters, vegetative filter strips, and wet ponds.
 2. The New Jersey Department of Environmental Protection Stormwater Management Facilities Maintenance Manual, as amended.
- b. Additional technical guidance for stormwater management measures can be obtained from the following:
 1. The "Standards for Soil Erosion and Sediment Control in New Jersey" promulgated by the State Soil Conservation Committee and incorporated into N.J.A.C. 2:90. Copies of these standards may be obtained by contacting the State Soil Conservation Committee or any of the Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey, 08625; (609) 292-5540.
 2. The Rutgers Cooperative Extension Service, (732) 932-9306; and
 3. The Mercer County Soil Conservation District listed in N.J.A.C. 2:90-1.3(a)4 as follows: 508 Hughes Drive, Hamilton Square, NJ 08690 (609)-586-9603. The location, address, and telephone number of each Soil Conservation District may

also be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey, 08625, (609) 292-5540.

- c. Additional maintenance guidance is available at the NJDEP website at:

https://www.njstormwater.org/maintenance_guidance.htm

17-82.8 Maintenance and Repair of Stormwater Management Measures

- a. All Major Development projects requiring stormwater management shall comply with the requirements of this section.
- b. The design engineer shall prepare an operation, maintenance and repair plan (often referred to as Operations and Maintenance Manual or O&M Manual) for the stormwater management measures/facilities incorporated into the design of a development project. The Operation, Maintenance and Repair Plan (Maintenance Plan) shall contain all of the following:
1. Specific maintenance tasks, maintenance schedules for each stormwater facility, inspection guidance, repairs and replacement of components, required permits, erosion control, vegetation management, as well as any tasks specific to the type of BMP needed to maintain the functional parameters of the facility as contained in the BMP Manual; and
 2. Cost estimates, including estimated costs of routine inspections, maintenance (e.g. sediment, debris, trash removal), costs to repair structures, costs to replace structures, estimated life span of various cost planning, labor, equipment, materials, and other information related to perpetual upkeep of the stormwater facility; and
 3. The name, address, and telephone number, and any other relevant contact information of the persons responsible for preventative and corrective maintenance (including replacement) and any persons to which the stormwater facilities will be dedicated. If the responsible maintenance party is different than the owner, the owner's information shall be indicated as well; and
 4. Facility location, including block and lot numbers, and (NJ State Plane) coordinates; and
 5. Accurate and comprehensive as-built drawings of the site's stormwater management measures and applicable details; and
 6. Copies of the inspection log forms and maintenance reporting sheets.
- c. If the party responsible for maintenance is not Hopewell Township or another public agency, the stormwater management facilities/measures shall be considered "private facilities".
- d. For all private facilities, the Maintenance Plan, and any future revisions of the Maintenance Plan, shall be recorded upon the deed of record for each property on which the maintenance described in the Maintenance Plan must be undertaken following approval by the Township Engineer and Township Attorney.

- e. The party responsible for maintenance of all private facilities, regardless whether the stormwater facility existed before or is created after the adoption of this ordinance, shall perform the following requirements:
1. Maintain a detailed log of all preventative and corrective maintenance for the stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work; and
 2. Evaluate the effectiveness of the Maintenance Plan at least once per year and adjust the plan and deed as deemed; and
 3. Document the changes to the Maintenance and Plan and deed and provide copies to the Township Engineer; and
 4. Submit Inspection and Maintenance Logs to the Hopewell Township Engineer's Office annually by March 1st of the following calendar year for any stormwater measure or BMP in accordance with the NJ Pollution Discharge Elimination System requirements of N.J.A.C. 7:14A.
- f. In the event that a privately-owned stormwater management facility becomes a danger to public safety or public health, is in need of maintenance and repair, and/or is not functioning properly in the opinion of the Township Engineer, the Township Engineer shall so notify the responsible party in writing. Upon receipt of notice from the Township Engineer, the responsible party shall have fourteen (14) calendar days to effectuate maintenance and repair of the facility in a manner that is approved by the Township Engineer. In the case of an emergency where repairs and/or corrective action must take place sooner, the Township Engineer may specify a shorter time frame to correct the eminent safety concern. The Township Engineer may also extend the time allowed for effecting maintenance and repair for good cause.
1. If the responsible party fails or refuses to perform such maintenance and repair, Hopewell Township may immediately proceed to complete the required emergency repairs with its own forces and equipment, and/or through contracted companies. The Township Engineer will decide the appropriate measure for corrective action up to, and including, placing the stormwater facility back to its as-designed and/or as-built accepted condition.
 2. The costs and expenses of such maintenance and repair by Hopewell Township shall be billed to the responsible person or owner. Nonpayment by the responsible party or owner may result in placement of a lien on the property.
 3. If the stormwater facility continues to malfunction, the responsible party will be notified in writing and will be given a reasonable timeframe in which to submit a plan to bring the stormwater facility into compliance with the originally accepted design. If the original design is not available or determined to be appropriate to address the failing condition, the responsible party shall provide an alternate design, prepared by a NJ State Licensed Professional Engineer, to meet current standards. The costs for the design and construction of the corrective measures shall be borne by the owner or responsible party.

- g. Stormwater management facilities cannot be removed or modified without the approval of the Township Engineer, and if applicable, the appropriate Land Use Board of the Township of Hopewell having jurisdiction over the development.
- h. Nothing in this subsection of the ordinance shall preclude Hopewell Township from requiring the posting of guarantees in accordance with N.J.S.A. 40:55D-53.

17-82.9 Safety Standards for Stormwater Management Basins

- a. Stormwater Management Basins shall comply with the minimum requirements set forth herein for proper design and operation to protect public safety.
- b. All newly constructed stormwater management basins shall comply with the requirements of N.J.A.C. 7:8-6.2.
- c. Any existing stormwater management basin modified or altered as part of a major development shall include retrofitting of the following components of the basin to meet the following criteria:
 - 1. The trash rack shall be replaced if it cannot be demonstrated that the existing device does not adversely affect the hydraulic performance of the outlet pipe or structure.
 - 2. Any existing overflow grates on the outlet structure shall be modified as necessary to meet the following criteria:
 - (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; and
 - (c) The overflow grate shall be constructed of rigid, durable, and corrosion resistant material and designed to withstand a perpendicular live load of 300 lbs./sq. foot.
 - 3. Any existing outlet structure within the basin shall be modified or reconstructed as required to include escape provisions in or on the structure. Escape provisions can include the installation of permanent ladders, steps, rungs, or other features that provide an easily accessible means of egress from the stormwater management basin.
- d. For the purpose of this section, modification or alteration of an existing stormwater management basin shall include:
 - 1. Any change to grading or shaping of the basin that would result in a change to the storage capacity of the basin.
 - 2. Any change to the stormwater collection systems or contributing drainage areas for the basin that result in an increase in the volume of stormwater discharged to the basin.

17-82.10 Ownership of Stormwater Management Facilities

- a. For stormwater facilities not dedicated to or not accepted by Hopewell Township:

1. If the Maintenance Plan identifies a party other than the property owner as having the responsibility for maintenance, the plan shall include documentation of such party's or entity's agreement to assume maintenance of this responsibility, or the owner's obligation to dedicate a stormwater management facility to such party. Evidence of the dedication shall be provided to the Township Engineer.
2. Responsibility for the maintenance of community stormwater management facilities shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project.
3. Responsibility for the maintenance of individual stormwater management facilities may be assigned or transferred to the owner or tenant of an individual property/lot in a residential development if all of the following conditions are met:
 - (a) The individual stormwater facilities are situated and fully contained on the residential lot; and
 - (b) The stormwater facilities are only designed to handle runoff from a structure or improvement on the residential lot where the facility is located or will be constructed; and
 - (c) The facilities do not control runoff from a public street; and
 - (d) The maintenance of the individual stormwater management facilities on residential lots are to remain as the lot owners' responsibility. Ownership or maintenance may not be transferred to Hopewell Township.
 - (e) The area of the stormwater facility shall be recorded on the deed in metes and bounds. The maintenance obligation shall be recorded as a deed restriction.
 - (f) No such facility shall be modified or eliminated following issuance of the initial certificate of occupancy unless the Township of Hopewell permits such modification or elimination through formal action by the Township Committee or Township land use board having jurisdiction over the matter.
 - (g) Any existing community stormwater management facility where maintenance or ownership was transferred to an individual residential property owner or required by agreement in accordance with the rules permitted at that time shall remain the responsibility of the owner.
- b. Stormwater management facilities for nonresidential (commercial) developments. Whenever a stormwater management facility is required for a nonresidential development, the stormwater management facility shall be a part of an individual lot owned and maintained by the property owner, or in the case of a business park or other similar complex, part of the common open space owned by a business association. Provisions for long term maintenance of the facility shall be established. No responsibility, maintenance or otherwise, shall be transferred to Hopewell Township.
- c. Stormwater management facilities for multi-family (e.g. apartments or townhouses) developments. Whenever a stormwater management facility is required for a development approval for a multi-family building, the stormwater management facility shall be a part of

the individual lot owned and maintained by the property owner of the development consisting of rental units or a part of the common open space owned by a homeowners' association of a development of for-sale units, and provisions for long term maintenance of the stormwater facility shall be established. No responsibility, maintenance or otherwise, shall be transferred to Hopewell Township.

- d. Stormwater management facilities for conventional, non-clustered development of single-family detached dwellings. Whenever a stormwater management facility is required in connection with a development approval for any conventional, non-clustered development of single-family detached dwellings, the stormwater facility shall be owned and maintained by a homeowners' association.

17-82.11 Deed Records and Dedications

- a. Any stormwater management measure authorized under the municipal stormwater management plan or this Chapter and any revisions thereof shall be reflected in a deed notice recorded in the Mercer County Clerk's office. A form of deed notice shall be submitted to the Township Engineer and Township Attorney for approval prior to filing. The deed notice shall contain a description of the stormwater management measure(s) used to meet the Green Infrastructure, Groundwater Recharge, Stormwater Runoff Quality, and Stormwater Runoff Quantity Standards and shall identify the location of the stormwater management measure(s) in NAD 1983 State Plane New Jersey FIPS 2900 US Feet or Latitude and Longitude in decimal degrees. The deed notice shall also include the Maintenance Plan also required to be recorded upon the deed. Furthermore, access easements shall be provided to Hopewell Township to provide the Township the right, but not obligation, to access the facility. Prior to signing the site plan, subdivision plan, or approving a permit, proof that the above required deed notice has been filed shall be submitted to the municipality. Proof that the required information has been recorded on the deed shall be in the form of a complete electronic or original recorded copy of the document.
- b. A stormwater management measure approved under the municipal stormwater management plan or ordinance may be altered or replaced with the approval of the Township Engineer, if the Township Engineer determines that the proposed alteration or replacement meets the design and performance standards pursuant to this subsection and provides the same level of stormwater management as the previously approved stormwater management measure that is being altered or replaced. If an alteration or replacement is approved, a revised deed notice shall be submitted to the Township Attorney and Township Engineer for review and approval, and subsequently recorded with the Mercer County Clerk's office. The instrument shall contain a description and location of the stormwater management measure, as well as include the maintenance plan, as noted above. Prior to signing the site plan, subdivision plan, or approving a permit, proof that the required information has been recorded on the deed in the form of a complete electronic or original recorded copy of the document shall be provided.
- c. The approving board may require dedication of easements or deed restrictions along drainage ways, natural water courses, stream corridors, steep slopes and other unique botanical, historical, geological and paleontological areas located therein or adjacent to a proposed development. The easement or deed restriction shall be indicated on the plan and

shall be marked on the land by concrete monuments at angle points and or property corners at sufficient locations to enable the dedicated area to be surveyed. In such cases, the approving Board shall consult with the Township Planner and Township Engineer in determining the required shape and size of the easement. The easement or deed restriction shall be in a form approved by the Township Attorney and shall include provisions assuring the following:

1. Preservation of the channel and flood plain of the watercourse, including the right to clean, de-s snag and all such work necessary to maintain the shape, slope and water flow of the watercourse.
2. Prohibition of any removal of trees and other cleaning and grading not directly related to the preservation of the channel of a watercourse.
3. Grant of a right to the Township to install and maintain any drainage facilities necessary for the health and safety of the public, if applicable.
4. Right-of-entry to the Township to install and maintain any drainage facilities therein, if applicable.

17-82.12 Design of Runoff Collection System.

- a. The design of the stormwater runoff collection system for all residential and commercial construction shall conform to N.J.A.C. 5:21-7.3 except as follows:
 1. Minimum pipe size in the surface water drainage system shall be 15 inches in diameter.
 2. High density polyethylene pipe (HDPE) shall not be used in rights-of- way to be dedicated to Hopewell Township, for driveway culverts, or in locations that do not have adequate cover.
 3. Inlet or manhole spacing shall not exceed 400 feet unless otherwise approved by the Township Engineer.
 4. Drainage inlets shall be located on both sides of street at all intersections. Surface runoff in streets shall not exceed six cubic feet per second at the drainage inlet and surface runoff in parking, loading, and walkway areas shall not exceed three cubic feet per second. Access manholes shall be placed at maximum 500 foot intervals throughout the system and at pipe junctions where there are no drainage inlets. Inlets shall be placed at intervals not exceeding 400 feet.
 5. Storm drain pipes shall be constructed longitudinally along streets and shall cross streets perpendicular to the centerline thereof. Pipe shall be located under or behind the curb line with the installation of inlet or manhole structures. Curvilinear alignments, i.e. curved pipe, pipe bends, or tees, wyes, etc. shall not be permitted.
 6. Storm drain pipes shall be the size specified and laid to the exact lines and grades approved by the township engineer. Specifications for construction of manholes, inlets, and storm drains shall conform with the New Jersey Department of Transportation 2019 N.J.D.O.T. Standard Specifications for Road and Bridge Construction, as amended or supplemented.

7. Land designated as a flood hazard area shall not be designed for any occupancy nor for any other purpose which may endanger life or property or aggravate the flood hazard. Such land may be considered for yard areas, or other similar uses and shall be preserved by a conservation easement.
8. Any underground drainage conveyance system outside a street or other public right-of-way shall be accompanied by a 15 foot wide (minimum) drainage easement dedicated to the township and conforming with the lines of such system. Sufficient width shall be provided so as to accommodate maintenance vehicle access.
9. Stream corridors shall be preserved by a conservation easement. Stream corridors extend 50 feet from each bank of permanently flowing streams as these streams are shown on Soil Conservation Service (SCS) maps. If the natural floodplain is greater, the corridor shall extend to the limits of the floodplain. Stream corridors shall also be extended to include contiguous wetlands and slopes over 12 percent where the toe of the slope is within 20 feet of the wet soils. Within the stream corridor and 20 feet of its edge, natural coverage shall be maintained, no alteration of the natural terrain shall occur, and no structures or impervious surfaces shall be constructed. All roads and utilities, including septic systems, shall be at least 100 feet from stream corridors.
 - (a) Stream corridors as defined in Section 17-181 shall be preserved by a conservation easement, which shall specify the prohibited uses and contain the customary provisions for a conservation easement as required by the township committee.
10. In such cases in which an easement extends into a lot for a distance wider than that which is restricted against building by the required yard space regulations of this chapter, the planning board may require the lot to be enlarged to the degree necessary to provide additional building area.
11. Manhole frames and covers shall be of American-made cast iron conforming to ASTM Specification A-48 Class 30 and be suitable for H-20 loading capacity. All manhole covers in remote areas or areas subject to flooding shall require a locking device. "HOPEWELL TOWNSHIP STORM SEWER" shall be cast integrally in the cover.
12. All discharge pipes shall terminate with a precast or cast-in-place concrete headwall with or without wingwalls as conditions require. In normal circumstances, a cast-in-place concrete headwall is preferred. Use of other types shall be justified by the designer and approved by the Township Engineer.

17-82.13 Penalties.

- a. Any person(s) who erects, constructs, alters, repairs, converts, maintains, or uses any building, structure or land in violation of this Subsection shall be subject to penalties stipulated in Subsection §3-1.

SECTION II. RELATED UPDATES

Amend the following sections and/or subsections throughout the Hopewell Township Code to be compatible with the updated Ordinance Section 17-82 as reflected herein in this Ordinance.

1. Repeal and replace Subsection 3-25.4 (Design Standard) under Section 3-25 (Private Storm Drain Inlet Retrofitting) with the following amended text [~~strickthrough~~ denotes text deletion and underlined text denotes addition]

§ 3-25.4 DESIGN STANDARD.

Storm drain inlets identified in subsection 3-25.3 above shall comply with the following standard to control passage of solid and floatable materials through storm drain inlets. For purposes of this paragraph, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids. For exemptions to this standard see subsection 3-25.4c below.

- a. Design engineers shall use either of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:
 1. The New Jersey Department of Transportation (NJDOT) bicycle safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996); or
 2. A different grate, if each individual clear space in that grate has an area of no more than seven square inches, or is no greater than 0.5 inches across the smallest dimension.

Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-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~~ system floors used to collect stormwater from the surface into a storm drain or surface water body.

3. For curb-opening inlets, including curb-opening inlets in combination inlets, the clear space in that 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.
- b. ~~Whenever design engineers use a curb opening inlet, the clear space in that 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 square inches, or be no greater than two inches across the smallest dimension.~~
- c. This standard does not apply:
 1. Where each individual clear space in the curb opening in existing curb-opening inlet does not have an area of more than nine (9.0) square inches;

2. Where the municipal engineer agrees that this standard would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets that meet these standards;
3. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., end of pipe netting facility, 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:
 - (a) A rectangular space four and five-eighths (4.625) inches ~~along~~ long and 1 1/2 inches wide (this option does not apply for outfall netting facilities); or
 - (b) 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).

4. Where flows are conveyed through a trash rack that has parallel bars with one-inch spacing between the bars to the elevation of the Water Quality Design Storm as specified in N.J.A.C. 7:8; or
5. Where the New Jersey Department of Environmental Protection determines, pursuant to the New Jersey Register of Historic Places at N.J.A.C. 7:4-7.2(c), that action to meet this standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

2. Repeal and replace Section 17-77 (Bikeways) with the following amended text [~~strike through~~ denotes text deletion and underlined text denotes addition]

§17-77 BIKEWAYS

Bikeways shall be required at the planning board's discretion in any new development depending on the development's location in relation to schools, recreation areas, shopping facilities and other populated areas, or its location with respect to any overall bike route plan adopted by the planning board. Bicycle traffic shall be separated from motor vehicle and pedestrian traffic as much as possible. Bikeways shall comply with the design criteria of the Americans with Disabilities Act and New Jersey Department of Transportation and shall be a minimum of six feet wide. Bikeways shall have a minimum four inch base of crushed stone and a two inch compacted thickness surface course. Permeable paving materials shall be used where appropriate and stormwater management and related drainage controls shall comply with section ~~17-82a16~~ 17-82. Where bike paths located outside street rights-of-way intersect a street, the curbing shall be ramped for bicycle access to the street grade.

3. Repeal and replace the second paragraph in Section 17-104 (Sidewalks) with the following amended text [~~strikethrough~~ denotes text deletion and underlined text denotes addition]

§17-104 SIDEWALKS

Sidewalks shall be designed to comply with the design criteria of the Americans with Disabilities Act and New Jersey Department of Transportation. Permeable paving materials shall be used where appropriate and stormwater management and related drainage controls shall comply with section ~~17-82a16~~ 17-82.

4. Repeal and replace the noted subsection in Section 17-108 (Streets) with the following amended text [~~strikethrough~~ denotes text deletion and underlined text denotes addition]

§17-108 STREETS

Section p. (Streets, Construction Details.); paragraph 4:

4. Streets shall be designed to comply with the design criteria of the Americans Association of State Highway and Transportation Officials and the New Jersey Department of Transportation. Stormwater management and related drainage controls shall comply with section ~~17-82a16~~ 17-82.

5. Repeal and replace the specific items contained within Section 17-181 (Words Defined) as noted below with the following:

§17-181 WORDS DEFINED

Replace the definition/description under the term “Stormwater Management Facility” with the following:

STORMWATER MANAGEMENT FACILITY

See definition for Stormwater Management Measure under Section 17-82.3.

SECTION III. SEVERABILITY

If any section, subsection, paragraph, sentence or other part of this Ordinance is adjudged unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of this Ordinance, but shall be confined in its effect to the section, subsection, paragraph, sentence or other part of this Ordinance directly involved in the controversy in which said judgment shall have been rendered and all other provisions of this Ordinance shall remain in full force and effect.

SECTION IV. INCONSISTENT ORDINANCES REPEALED.

All Ordinances or parts of Ordinances which are inconsistent with the provisions of this Ordinance are hereby repealed, but only to the extent of such inconsistencies.

SECTION V. EFFECTIVE DATE.

This Ordinance shall take effect immediately upon final adoption and publication in the manner prescribed by law and the filing of same with the Mercer County Planning Board pursuant to N.J.S.A. 40:55d- 16.

Date Introduced:
Date Advertised:
Date Adopted:

Julie Blake
Mayor

Attest:

Laurie E. Gompf
Municipal Clerk

I hereby certify the foregoing to be a true copy of an ordinance adopted by the Hopewell Township Committee at a meeting held on the xxth day of _____, 2021.

Laurie E. Gompf
Municipal Clerk