

BOROUGH OF RIDGEFIELD

A G E N D A

Work Session, Executive Session and Regular Meeting of the Mayor and Council

Date: February 22, 2021

Open Public Meetings Statement by Mayor Suarez

Work Session: 6:00 P.M. C.T.O.: Adjourn:

- D. Testa -Discuss Improvement of Virgil Avenue Paper Street

Mayor Suarez – Adjournment into closed Executive Session in accordance with the “Open Public Meetings Act”

Executive Session: 6:30 P.M. C.T.O.: Adjourn:

Public Session: 7:00 P.M. C.T.O.: Adjourn:

Pledge of Allegiance

Invocation

Citizens Comment on Agenda:

Correspondence:

**ROLL CALL-WORK SESSION**

|              | <b>PRESENT</b> | <b>ABSENT</b> |
|--------------|----------------|---------------|
| Mayor Suarez |                |               |
| Castelli     |                |               |
| Penabad      |                |               |
| Shim         |                |               |
| Jimenez      |                |               |
| Kontolios    |                |               |
| Larkin       |                |               |

**ROLL CALL-EXEC. SESSION**

|              | <b>PRESENT</b> | <b>ABSENT</b> |
|--------------|----------------|---------------|
| Mayor Suarez |                |               |
| Castelli     |                |               |
| Penabad      |                |               |
| Shim         |                |               |
| Jimenez      |                |               |
| Kontolios    |                |               |
| Larkin       |                |               |

**ROLL CALL-PUBLIC SESSION**

|              | <b>PRESENT</b> | <b>ABSENT</b> |
|--------------|----------------|---------------|
| Mayor Suarez |                |               |
| Castelli     |                |               |
| Penabad      |                |               |
| Shim         |                |               |
| Jimenez      |                |               |
| Kontolios    |                |               |
| Larkin       |                |               |

As advertised, hearing will be held on Ordinance No. 2403 entitled, “AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 390 OF THE BOROUGH CODE TO IMPLEMENT AFFORDABLE HOUSING”

Entertain motion to declare the time for the public hearing to be declared open

Public Hearing

Entertain motion to declare the time for the public hearing to be declared closed

Final Reading of Ordinance

Roll Call

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Introduction of Ordinance No. 2405 entitled, "AN ORDINANCE AMENDING SECTION 390-137.1 STORMWATER MANAGEMENT OF THE CODE OF THE BOROUGH OF RIDGEFIELD"

First Reading of Ordinance

Roll Call

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**CONSENT AGENDA:**

All items listed are considered to be routine and non-controversial by the Borough Council and will be approved by one motion. There will be no separate discussion on these items unless a Council member(s) so request it, in which case the item(s) will be removed from the Consent Agenda and considered in its normal sequence on the agenda. The one motion signifies the adoption of all resolutions and approval of applications and minutes.

|          |                      |   |
|----------|----------------------|---|
| 99-2021  | Councilman Jimenez   | Overpayment of Taxes – Block 2804, Lot 16         |
| 100-2021 | Councilman Jimenez   | Munidex Electronic Payment Agreement              |
| 101-2021 | Councilman Kontolios | Unified Communication Services-New Era Technology |

**Coin Toss Request:**

Project Graduation

Saturday, April 10, 2021

Saturday, May 22, 2021

**Ridgefield Fire Department Membership:**

GeremiaDeMartino

687 Clark Avenue

Company # 3

**COUNCIL VOTE**

|              | <b>YES</b> | <b>NO</b> | <b>ABSTAIN</b> | <b>ABSENT</b> |
|--------------|------------|-----------|----------------|---------------|
| Castelli     |            |           |                |               |
| Penabad      |            |           |                |               |
| Shim         |            |           |                |               |
| Jimenez      |            |           |                |               |
| Kontolios    |            |           |                |               |
| Larkin       |            |           |                |               |
| Mayor Suarez |            |           |                |               |

RESOLUTIONS:

|          |                    |                                       |
|----------|--------------------|---------------------------------------|
| 102-2021 | Mayor Suarez       | Appointment to Planning Board-Freitag |
| 103-2021 | Councilman Jimenez | Transfer of Appropriation Reserves    |
| 104-2021 | Councilman Jimenez | Warrants                              |

COMMENTS BY MAYOR:

COMMENTS BY COUNCIL:

COMMENTS BY ADMINISTRATOR:

COMMENTS BY CITIZENS: (All speakers are limited to five minutes maximum per meeting)

Agenda subject to change as a result of matters not known at time of printing with the consent of the Mayor and Council.

Respectfully submitted,

Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Mayor Suarez

BE IT RESOLVED, that the regular public meeting be adjourned, and that the Mayor and Council of the Borough of Ridgefield shall meet in a closed Executive Session following a five minute recess at the termination of this meeting. The purpose of the Executive Session shall be to discuss the following matters:

- \_\_\_\_\_ Personnel matters in various departments of the Borough.
- \_\_\_\_\_ Pending and Potential Litigation
- \_\_\_\_\_ Tax Court Litigation.
- \_\_\_\_\_ Potential real estate transactions in which the Borough may engage.

| COUNCIL VOTE |     |    |         |        |
|--------------|-----|----|---------|--------|
|              | YES | NO | ABSTAIN | ABSENT |
| Castelli     |     |    |         |        |
| Penabad      |     |    |         |        |
| Shim         |     |    |         |        |
| Jimenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

BE IT FURTHER RESOLVED, that as soon as practicable discussion concerning

- \_\_\_\_\_ Personnel matters
- \_\_\_\_\_ Potential real estate transactions shall be disclosed to the public.
- \_\_\_\_\_ And that discussions with the Borough Attorney concerning litigation shall be disclosed when said litigation is terminated.

Adjournment to Closed Session. The Mayor and Council reserve the right to reconvene into Public Session, if necessary, to take action on Closed Session items.

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Castelli

ORDINANCE NO. 2403

BE IT ORDAINED by the Borough Council of the Mayor and Council of the Borough of Ridgefield that an Ordinance entitled,

“AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 390 OF THE  
BOROUGH CODE TO IMPLEMENT AFFORDABLE HOUSING”

introduced on the 25<sup>th</sup> day of January, 2021, do now pass a final reading and be adopted, and that the Borough Clerk be and she is authorized and directed to publish once, the aforesaid title, together with a notice of the date of its passage on final reading and approval thereof in The Record, a newspaper circulating in the Borough of Ridgefield.

**COUNCIL VOTE**

|              | <b>YES</b> | <b>NO</b> | <b>ABSTAIN</b> | <b>ABSENT</b> |
|--------------|------------|-----------|----------------|---------------|
| Castelli     |            |           |                |               |
| Penabad      |            |           |                |               |
| Shim         |            |           |                |               |
| Jimenez      |            |           |                |               |
| Kontolios    |            |           |                |               |
| Larkin       |            |           |                |               |
| Mayor Suarez |            |           |                |               |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting January 25, 2021

Presented by Councilman Castelli

ORDINANCE NO. 2403

“AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 390 OF THE  
BOROUGH CODE TO IMPLEMENT AFFORDABLE HOUSING”

WHEREAS, pursuant to *N.J.S.A. 40:55D-62b*, the Mayor and Council of the Borough of Ridgefield are authorized and empowered to adopt and amend the zoning ordinance of the Borough of Ridgefield; and

WHEREAS, the Borough further recognizes the continuing need for and its responsibility to maintain its efforts in creating affordable housing within the Borough consistent with the “Fair Housing Act”, P.L. 1985, c 222 (C-52:27D-301 et seq.); and

WHEREAS, the Borough’s settlement of its affordable housing litigation requires that it amend its zoning ordinance in conformity with the terms and provisions of that settlement agreement; and

WHEREAS, the within ordinance is consistent with the Borough’s obligations under that settlement; and

WHEREAS, the Mayor and Council deem it in the best interests of the Borough to amend the zoning ordinance and adopt the regulations set forth herein to address such efforts;

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the Borough of Ridgefield as follows:

Section I.

The existing language of §390-39.3 of the Code of the Borough of Ridgefield be, and hereby is, deleted in its entirety and replaced with the following:

**§390-39.3. C Commercial Zone.**

**Section 1. Objectives.**

A. Objectives. It is the purpose of the C Commercial Zone to provide for the development and redevelopment needs of the one-lot-deep strip commercial areas so zoned in such a manner as to encourage containment and curb the further extension of strip commercial uses and to facilitate the construction of affordable housing.

## **Section 2. Applicability.**

A. This zoning amendment is applicable to all the lots zoned as C Commercial District in the Borough of Ridgefield.

B. All developments with a residential component are subject to the Borough's Affordable Housing Ordinance, §115-1, et seq., regarding affirmative marketing, bedroom distribution, accessibility requirements, maximum rents and sales prices, occupancy standards, deed restrictions, and phasing.

C. To the greatest extent possible, affordable housing units being provided within inclusionary developments shall be disbursed throughout inclusionary developments and shall be located within buildings designed to be architecturally indistinguishable from the market-rate units otherwise being constructed within the development. To that end, the scale, massing, roof pitch and architectural detailing (such as the selection of exterior materials, doors, windows, etc.) of the buildings containing the affordable housing units shall be similar to and compatible with that of the market-rate units.

## **Section 3. Uses.**

A. Permitted Uses. In the C Commercial Zone District, no building or premises shall be used and no building or part of a building shall be erected, constructed or altered which shall be arranged, intended or designed to be used for any purpose other than the following uses:

1. Professional, business and governmental offices.
2. Banks, savings-and-loan institutions, mortgage company offices, brokerage houses and other investment-related offices.
3. Stores, shops, and similar commercial uses for retail merchandising.
4. Restaurants. Restaurants and other eating and drinking establishments wherein food and drink are consumed within the principal building. Such uses shall not be interpreted to include and are hereby defined to exclude drive-in restaurants or refreshment stands, commonly called "fast-food" establishments, including but not limited to snack bars, dairy bars, hamburger stands or hot dog stands or similar uses where customers and patrons are served food, soft drinks or ice cream primarily for their immediate consumption outside the confines of the building or structure in which the business is conducted.
5. Barbershops, beauty parlors and similar service establishments.
6. Multistory garage structures.
7. Multi-Family residential uses above the first story with a minimum 20% affordable housing set-aside.

B. Conditionally Permitted Uses. None.

C. Permitted Accessory Uses.

1. Accessory uses and structures customarily incidental to the principal permitted use.
2. Signs.
3. Parking decks and garages to house delivery trucks or other commercial vehicles when accessory to a permitted nonresidential use.

D. Prohibited Uses.

1. Fabricating, assembling or manufacturing.
  2. Wholesaling or warehousing.
  3. Residential uses.
  4. Poolrooms, billiard rooms or parlors as defined in Ordinance No. 723, adopted on May 21, 1963, [2] and so-called “teenage” lounges, dance halls, establishments and/or clubs for minors, operated for commercial gain or profit.
- [2] Editor’s Note: See Ch. 306, Poolrooms.
5. Fast-food establishments, including but not limited to drive-in restaurants, snack bars, dairy bars, hamburger, hot dog, root beer or ice cream stands; and diners and lunch wagons.
  6. Used or new car dealerships.

**Section 4. Bulk Regulations:**

1. Minimum Lot Area: 5,000 SF
2. Minimum Lot Width: 50’
3. Minimum Lot Depth: 100’
4. Minimum Front Yard: 20’
5. Minimum Side Yard abutting single- or two-family: 20’
6. Minimum Side Yard, other: 10’
7. Minimum Rear Yard abutting single- or two-family: 20’
8. Minimum Rear Yard, other: 5’
9. Maximum Building Coverage: 80%
10. Maximum Impervious Coverage: 90%
11. Maximum Building Height: 3 residential stories/35’



- a. Parking levels used exclusively for the storage of motor vehicles shall not be counted as part of the number of stories permitted, not to exceed one story of parking.
12. Density:           30 du/ac for properties abutting Bergen Boulevard  
                          25 du/ac for those properties abutting Grand Avenue  
                          25 du/ac for those properties abutting Broad Avenue
  13. Minimum Landscaped Area: 10%

**Section 5.     Parking Requirements.**

**A.     Off-Street Parking Requirements.**

1. Commercial or Personal Service Establishments.
  - a. Food markets and supermarkets shall have one space per 150 square feet of gross floor area.
  - b. Delicatessens and bakeries shall have one space per 250 square feet of gross floor area.
  - c. Barbershops and beauty shops shall have three spaces for each beautician and barber or one space for each 150 square feet of gross floor area, whichever is greater.
  - d. Other commercial or personal service uses not specifically listed elsewhere in this section shall have one space for each 200 square feet of gross first-floor area, plus one space for each 300 square feet of additional gross floor area.
2. Mortuary or Funeral Home. At least one parking space for each five seats in the chapel, one additional space for each residential family residing on premises and one additional space for each funeral vehicle.
3. Offices.
  - a. Business and governmental offices shall have one space for each 300 square feet of net office space.
  - b. Medical or dental practitioner's office. Each office shall provide at least five spaces for each professional person occupying or using each office, plus an additional space for each employee on site.
  - c. Other professional offices shall have one space for each employee, plus one space for each 250 square feet of net office space or part thereof.
4. Restaurants, taverns and inns shall have one space for each three seats, plus one space for each two employees.
5. Private clubs shall have at least one space for 100 square feet of gross floor space.
6. Publicly owned or operated buildings and uses, such as a library, museum or post office, shall have at least one space for eaach100 square feet of gross floor space for each three seats whichever is greater.
7. Residential Uses: RSIS standards.

8. For uses not listed above, required parking spaces shall be according to the category which most nearly approximates each particular use as determined by the Planning Board.
9. The parking requirements for professional or other office uses shall be met within 100 feet of the site. The Planning Board shall review all off-street parking plans as provided in the Site Plan Review Ordinance, [3] but in no case shall off-street parking be provided off site without Planning Board approval, nor shall parking standards be less than those specified in the off-street parking requirements of the Borough of Ridgefield.

#### **Section 6. Loading Requirements.**

A. Off-Street Loading Requirements. For any building erected hereafter in the C Commercial Zone, off-street loading spaces shall be provided in such amount and manner that all loading and unloading operations will be conducted entirely within the boundaries of the lot concerned, and no vehicle or conveyance shall in any manner use public streets, sidewalks or rights-of-way for loading or unloading operations, other than for ingress and egress to the lot. Every office structure in excess of 20,000 square feet or gross floor area shall provide, at the side or rear of the structure, a minimum of one off-street loading space, 15 feet by 30 feet, subject to Planning Board approval. There shall be no loading or unloading from the street in the C Commercial Zone District.

B. Screening of Parking and Loading Areas. In the C Commercial Zone, all parking areas and loading and unloading areas in conjunction with an office or business use shall be screened from adjacent residential districts and parks by a hedge, fence or wall at least six feet in height or other protective device as approved by the Planning Board.

#### **Section 7. Signs.**

A. All signs in the C Commercial Zone District shall be in full compliance with the requirements of §390-18, this section and all other sign ordinances of the Borough of Ridgefield; however, the sign requirements shall be read together and the requirements shall be construed in the most restrictive manner.

B. Billboards or off-site advertising signs shall be prohibited in the C Commercial Zone. For purposes of this section, a “billboard” shall be defined as a commercial advertising sign or structure which advertises a business, product or service not on or offered on the premises on which the subject is located.

C. No site plan shall be approved where a preexisting billboard is to remain after redevelopment.

D. Where a building is set back from the street line a distance of 20 feet or more, not more than one freestanding ground sign containing a total surface display area of not more than 18 square feet may be erected. Such ground signs shall not be more than 12 feet above the center-line grade elevation of the nearest street and shall only be located in the front yard.

## **Section 8. Supplemental Regulations.**

A. Landscaped Open Space Area. In order to provide for much needed pervious areas for drainage purpose in the C Commercial Zone District, a minimum of 10% of total lot areas shall be maintained in lawns, gardens or buffer strips, subject to site plan approval.

B. Planted Buffer Strip. Where a lot in a C Commercial Zone District abuts a lot in any residential district, there shall be provided along such lot lines on such business lot a planted buffer strip at least 10 feet wide, and said strip shall not be utilized for roadway or parking and shall be landscaped and planted so as to create an effective evergreen visual screen.

C. Sight Rights.

1. Visibility at Intersections. On a corner lot in any C Commercial Zone District, nothing shall be erected, placed, planted or allowed to grow in such a manner as to materially impede vision between a height of 2 ½ feet and 10 feet above the center-line grades of the intersecting streets in the area bounded by the street lines of such corner lots and a line joining points along said line 30 feet from the point of intersection, nor shall a principal structure be located less than 20 feet from the side street line. All sight rights, where applicable, shall be subject to County of Bergen and Department of Transportation approvals.

D. Site Plan Approval. Site development plan approval in accordance with Part 4, Site Plan Review, of this Chapter shall be required prior to the issuance of building permits for the erection of all permitted and conditionally permitted uses and structures. Such approval shall also be required prior to the issuance of a certificate of occupancy for a change of use of a permitted or conditionally permitted use.

## **Section 9. Regulations Regarding Certain Uses.**

A. Gun Shops. Businesses which offer for sale or rental guns, rifles, ammunition for guns and rifles and other weaponry must meet the following conditions and standards:

1. Said businesses may not be located within 100 feet of the property of any public or private school.
2. Such businesses may not be located within 100 feet of the property of any church, synagogue or other house of worship.
3. If the business is located within 1,000 feet of a public or private school, church, synagogue or other house of worship, or within 1,000 feet of residential zone, then said business may not display pictures or other depictions of guns, rifles, ammunition or other weaponry so as to be visible to pedestrians or passersby from the street, sidewalk or other public way adjacent to the premises.

4. The guns, rifles, ammunition and other weaponry are stored and maintained in cases, containers, or display cases that are locked and secured by devices that are suitable for same.
5. Site plan approval is received from the Planning Board.

Section II. Other Provisions Superseded.

In the event of any inconsistency between the provisions of this section and any other section of Chapter 390, the provisions of this section shall prevail.

Section III. Planning Board Review.

Upon approval of this Ordinance upon First Reading by the Mayor and Council of the Borough of Ridgefield, this Ordinance shall be transmitted to the Planning Board for its review and recommendation.

Section IV. Severability.

If any provisions or portion of a provision of this ordinance is held to be unconstitutional, preempted by Federal or State Law, or otherwise invalid by any court or competent jurisdiction, the remaining provisions of the ordinance shall not be invalidated and shall remain in full force and effect.

Section V. Effective Date.

This ordinance shall take effect immediately upon passage and publication according to law.

Section VI. Repeal of Inconsistent Ordinances.

All ordinances or parts of ordinances inconsistent or in conflict with this Ordinance are hereby repealed as to said inconsistencies and conflicts.

Approved:

Attest:

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Anthony R. Suarez, Mayor

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Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Castelli

ORDINANCE NO. 2405

BE IT ORDAINED by the Borough Council of the Mayor and Council of the Borough of Ridgefield that an Ordinance entitled,

“AN ORDINANCE AMENDING SECTION 390-137.1 STORMWATER MANAGEMENT OF THE CODE OF THE BOROUGH OF RIDGEFIELD”

introduced on the 22<sup>nd</sup> day of February, 2021, do now pass a first reading and that said Ordinance be further considered for final passage at a regular meeting to be held on the 22<sup>nd</sup> day of March, 2021 at 7:00 PM or as soon thereafter as the matter may be reached at the regular meeting of the Borough Council to be held by Zoom.us via computer <https://us02web.zoom.us/j/84107778874> or via phone 1-929-205-6099 US (New York), Meeting ID: 841 0777 8874 and that at such time and place, all persons interested be given an opportunity to be heard concerning the same, that the Borough Clerk be and she is hereby authorized and directed to publish in The Record, a newspaper circulating in the Borough of Ridgefield said Ordinance according to law, with a notice of its introduction and passage on first reading, and of the time and place when and where said Ordinance will be further considered for final passage.

**COUNCIL VOTE**

|              | YES | NO | ABSTAIN | ABSENT |
|--------------|-----|----|---------|--------|
| Castelli     |     |    |         |        |
| Penabad      |     |    |         |        |
| Shim         |     |    |         |        |
| Jimenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Castelli

ORDINANCE NO. 2405

“AN ORDINANCE AMENDING SECTION 390-137.1 STORMWATER MANAGEMENT OF  
THE CODE OF THE BOROUGH OF RIDGEFIELD”

BE IT ORDAINED by the Mayor and Council of the Borough of Ridgefield as follows:

**§390-137.1 – Stormwater Control**

**A. Scope and Purpose:**

1. 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 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.

2. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls for “major development,” as defined below in **Subsection B**.

3. Applicability

a) This ordinance shall be applicable to the following major developments:

- 1) Non-residential major developments; and
- 2) Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.

b) This ordinance shall also be applicable to all major developments undertaken by Borough of Ridgefield.

#### 4. 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 ordinance 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 ordinance 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.

#### **B. Definitions:**

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 not inconsistent 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. The definitions below are the same as or based on the corresponding definitions in the Stormwater Management Rules at N.J.A.C. 7:8-1.2.

“CAFRA Centers, Cores or Nodes” means those areas with boundaries incorporated by reference or revised by the Department in accordance with N.J.A.C. 7:7-13.16.

“CAFRA Planning Map” means the map used by the Department to identify the location of Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes. The CAFRA Planning Map is available on the Department's Geographic Information System (GIS).

“Community basin” means an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond, established in accordance with N.J.A.C. 7:8-4.2(c)14, that is designed and constructed in accordance with the New Jersey Stormwater Best Management Practices Manual, or an alternate design, approved in accordance with N.J.A.C. 7:8-5.2(g), for an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond and that complies with the requirements of this chapter.

“Compaction” means the increase in soil bulk density.

“Contributory drainage area” means the area from which stormwater runoff drains to a stormwater management measure, not including the area of the stormwater management measure itself.

“Core” means a pedestrian-oriented area of commercial and civic uses serving the surrounding municipality, generally including housing and access to public transportation.

“County review agency” means an agency designated by the County Commissioners to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be:

1. A county planning agency or
2. A county water resource association created under N.J.S.A 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

“Department” means the Department of Environmental Protection.

“Designated Center” means a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

“Design engineer” means a person professionally qualified and duly licensed in New Jersey to perform engineering services that may include, but not necessarily be limited to, development of project requirements, creation and development of project design and preparation of drawings and specifications.

“Development” means the division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlarge-enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 *et seq.*

In the case of development of agricultural land, development means: any activity that requires a State permit, any activity reviewed by the County Agricultural Board (CAB) and the State Agricultural Development Committee (SADC), and municipal review of any activity not exempted by the Right to Farm Act , N.J.S.A 4:1C-1 *et seq.*



“Disturbance” means the placement or reconstruction of impervious surface or motor vehicle surface, or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Milling and repaving is not considered disturbance for the purposes of this definition.

“Drainage area” means a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody.

“Environmentally constrained area” means the following areas where the physical alteration of the land is in some way restricted, either through regulation, easement, deed restriction or ownership such as: wetlands, floodplains, threatened and endangered species sites or designated habitats, and parks and preserves. Habitats of endangered or threatened species are identified using the Department's Landscape Project as approved by the Department's Endangered and Nongame Species Program.

“Environmentally critical area” means an area or feature which is of significant environmental value, including but not limited to: stream corridors, natural heritage priority sites, habitats of endangered or threatened species, large areas of contiguous open space or upland forest, steep slopes, and well head protection and groundwater recharge areas. Habitats of endangered or threatened species are identified using the Department’s Landscape Project as approved by the Department’s Endangered and Nongame Species Program.

“Empowerment Neighborhoods” means neighborhoods designated by the Urban Coordinating Council “in consultation and conjunction with” the New Jersey Redevelopment Authority pursuant to N.J.S.A 55:19-69.

“Erosion” means the detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

“Green infrastructure” means a stormwater management measure that manages stormwater close to its source by:

1. Treating stormwater runoff through infiltration into subsoil;
2. Treating stormwater runoff through filtration by vegetation or soil; or
3. Storing stormwater runoff for reuse.

"HUC 14" or "hydrologic unit code 14" means an area within which water drains to a particular receiving surface water body, also known as a subwatershed, which is identified by a 14-digit hydrologic unit boundary designation, delineated within New Jersey by the United States Geological Survey.

“Impervious surface” means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

“Infiltration” is the process by which water seeps into the soil from precipitation.

“Lead planning agency” means one or more public entities having stormwater management planning authority designated by the regional stormwater management planning committee pursuant to N.J.A.C. 7:8-3.2, that serves as the primary representative of the committee.

“Major development” means an individual “development,” as well as multiple developments that individually or collectively result in the disturbance of one or more acres of land since February 2, 2004.

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 paragraphs 1, 2, 3, or 4 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.”

“Motor vehicle” means land vehicles propelled other than by muscular power, such as automobiles, motorcycles, autocycles, and low speed vehicles. For the purposes of this definition, motor vehicle does not include farm equipment, snowmobiles, all-terrain vehicles, motorized wheelchairs, go-carts, gas buggies, golf carts, ski-slope grooming machines, or vehicles that run only on rails or tracks.

“Motor vehicle surface” means any pervious or impervious surface that is intended to be used by “motor vehicles” and/or aircraft, and is directly exposed to precipitation including, but not limited to, driveways, parking areas, parking garages, roads, racetracks, and runways.

“Municipality” means any city, borough, town, township, or village.

“New Jersey Stormwater Best Management Practices (BMP) Manual” or “BMP Manual” means the manual maintained by the Department providing, in part, design specifications, removal rates, calculation methods, and soil testing procedures approved by the Department as being capable of contributing to the achievement of the stormwater management standards specified in this chapter. The BMP Manual is periodically amended by the Department as necessary to provide design specifications on additional best management practices and new information on already included practices reflecting the best available current information regarding the particular practice and the Department’s

determination as to the ability of that best management practice to contribute to compliance with the standards contained in this chapter. Alternative stormwater management measures, removal rates, or calculation methods may be utilized, subject to any limitations specified in this chapter, provided the design engineer demonstrates to the municipality, in accordance with **Subsection D(6)** of this ordinance and N.J.A.C. 7:8-5.2(g), that the proposed measure and its design will contribute to achievement of the design and performance standards established by this chapter.

“Node” means an area designated by the State Planning Commission concentrating facilities and activities which are not organized in a compact form.

“Nutrient” means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.

“Person” means any individual, corporation, company, partnership, firm, association, political subdivision of this State and any state, interstate or Federal agency.

“Pollutant” means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2011 *et seq.*)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, agricultural, and construction waste or runoff, or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. “Pollutant” includes both hazardous and nonhazardous pollutants.

“Recharge” means the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.

“Regulated impervious surface” means any of the following, alone or in combination:

1. A net increase of impervious surface;
2. The total area of impervious surface collected by a new stormwater conveyance system (for the purpose of this definition, a “new stormwater conveyance system” is a stormwater conveyance system that is constructed where one did not exist immediately prior to its construction or an existing system for which a new discharge location is created);
3. The total area of impervious surface proposed to be newly collected by an existing stormwater conveyance system; and/or

4. The total area of impervious surface collected by an existing stormwater conveyance system where the capacity of that conveyance system is increased.

“Regulated motor vehicle surface” means any of the following, alone or in combination:

1. The total area of motor vehicle surface that is currently receiving water;
2. A net increase in motor vehicle surface; and/or quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant, where the water quality treatment will be modified or removed.

“Sediment” means solid material, mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water or gravity as a product of erosion.

“Site” means the lot or lots upon which a major development is to occur or has occurred.

“Soil” means all unconsolidated mineral and organic material of any origin.

“State Development and Redevelopment Plan Metropolitan Planning Area (PA1)” means an area delineated on the State Plan Policy Map and adopted by the State Planning Commission that is intended to be the focus for much of the State’s future redevelopment and revitalization efforts.

“State Plan Policy Map” is defined as the geographic application of the State Development and Redevelopment Plan’s goals and statewide policies, and the official map of these goals and policies.

“Stormwater” means water resulting from precipitation (including rain and snow) that runs off the land’s surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewage or drainage facilities, or conveyed by snow removal equipment.

“Stormwater management BMP” means an excavation or embankment and related areas designed to retain stormwater runoff. A stormwater management BMP may either be normally dry (that is, a detention basin or infiltration system), retain water in a permanent pool (a retention basin), or be planted mainly with wetland vegetation (most constructed stormwater wetlands).

“Stormwater management measure” means any practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or groundwater

recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

“Stormwater runoff” means water flow on the surface of the ground or in storm sewers, resulting from precipitation.

“Stormwater management planning agency” means a public body authorized by legislation to prepare stormwater management plans.

“Stormwater management planning area” means the geographic area for which a stormwater management planning agency is authorized to prepare stormwater management plans, or a specific portion of that area identified in a stormwater management plan prepared by that agency.

“Tidal Flood Hazard Area” means a flood hazard area in which the flood elevation resulting from the two-, 10-, or 100-year storm, as applicable, is governed by tidal flooding from the Atlantic Ocean. Flooding in a tidal flood hazard area may be contributed to, or influenced by, stormwater runoff from inland areas, but the depth of flooding generated by the tidal rise and fall of the Atlantic Ocean is greater than flooding from any fluvial sources. In some situations, depending upon the extent of the storm surge from a particular storm event, a flood hazard area may be tidal in the 100-year storm, but fluvial in more frequent storm events.

“Urban Coordinating Council Empowerment Neighborhood” means a neighborhood given priority access to State resources through the New Jersey Redevelopment Authority.

“Urban Enterprise Zones” means a zone designated by the New Jersey Enterprise Zone Authority pursuant to the New Jersey Urban Enterprise Zones Act, N.J.S.A. 52:27H-60 et. seq.

“Urban Redevelopment Area” is defined as previously developed portions of areas:

1. Delineated on the State Plan Policy Map (SPPM) as the Metropolitan Planning Area (PA1), Designated Centers, Cores or Nodes;
2. Designated as CAFRA Centers, Cores or Nodes;
3. Designated as Urban Enterprise Zones; and
4. Designated as Urban Coordinating Council Empowerment Neighborhoods.

“Water control structure” means a structure within, or adjacent to, a water, which intentionally or coincidentally alters the hydraulic capacity, the flood elevation resulting from the two-, 10-, or 100-year storm, flood hazard area limit, and/or floodway limit of the water. Examples of a water control structure

may include a bridge, culvert, dam, embankment, ford (if above grade), retaining wall, and weir.

“Waters of the State” means the ocean and its estuaries, all springs, streams, wetlands, and bodies of surface or groundwater, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

“Wetlands” or “wetland” means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

### **C. Design and Performance Standards for Stormwater Management Measures**

1. Stormwater management measures for major development shall be designed to provide erosion control, groundwater recharge, stormwater runoff quantity control, and stormwater runoff quality treatment as follows:
  - a) The minimum standards for erosion control are those established under the Soil and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules at N.J.A.C. 2:90.
  - b) The minimum standards for groundwater recharge, stormwater quality, and stormwater runoff quantity shall be met by incorporating green infrastructure.
2. The standards in this ordinance apply only to new major development and are intended to minimize the impact of stormwater runoff on water quality and water quantity in receiving water bodies and maintain groundwater recharge. The standards do not apply to new major development to the extent that alternative design and performance standards are applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department rules.

### **D. Stormwater Management Requirements for Major Development**

1. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a major development in accordance with **Subsection J**.
2. Stormwater management measures shall avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Department’s Landscape Project or Natural Heritage Database established under

- N.J.S.A. 13:1B-15.147 through 15.150, particularly *Heloniasbullata* (swamp pink) and/or *Clemmysmuhlnebergi* (bog turtle).
3. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of **Subsection D(16), (17) and (18)**:
    - a) The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
    - b) The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
    - c) 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.
  4. A waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of **Subsection D(15), (16), (17) and (18)** may be obtained for the enlargement of an existing public roadway or railroad; or the construction or enlargement of a public pedestrian access, provided that the following conditions are met:
    - a) The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;
    - b) The applicant demonstrates through an alternatives analysis, that through the use of stormwater management measures, the option selected complies with the requirements of **Subsection D(15), (16), (17) and (18)** to the maximum extent practicable;
    - c) The applicant demonstrates that, in order to meet the requirements of **Subsection D(15), (16), (17) and (18)**, existing structures currently in use, such as homes and buildings, would need to be condemned; and
    - d) The applicant demonstrates that it does not own or have other rights to areas, including the potential to obtain through condemnation lands not falling under **D(4)(c)** above within the upstream drainage area of the receiving stream, that would provide additional opportunities to mitigate the requirements of **Subsection D(15), (16), (17) and (18)** that were not achievable onsite.
  5. 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 **Subsection D(15), (16), (17) and (18)**. 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).

- Where the BMP tables in the NJ Stormwater Management Rule are different due to updates or amendments with the tables in this ordinance the BMP Tables in the Stormwater Management rule at N.J.A.C. 7:8-5.2(f) shall take precedence.

| <u><b>Table 1</b></u><br><u><b>Green Infrastructure BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity</b></u> |  |  |  |  |
|---|--|--|--|--|
| <u><b>Best Management Practice</b></u>  | <u><b>Stormwater Runoff Quality TSS Removal Rate (percent)</b></u> | <u><b>Stormwater Runoff Quantity</b></u> | <u><b>Groundwater Recharge</b></u>             | <u><b>Minimum Separation from Seasonal High Water Table (feet)</b></u> |
| <u>Cistern</u>  | <u>0</u>   | <u>Yes</u>                               | <u>No</u>                                      | <u>--</u>  |
| <u>Dry Well<sup>(a)</sup></u>   | <u>0</u>   | <u>No</u>                                | <u>Yes</u>                                     | <u>2</u>   |
| <u>Grass Swale</u>  | <u>50 or less</u>  | <u>No</u>                                | <u>No</u>                                      | <u><math>\frac{2^{(e)}}{1^{(f)}}</math></u>                            |
| <u>Green Roof</u>   | <u>0</u>   | <u>Yes</u>                               | <u>No</u>                                      | <u>--</u>  |
| <u>Manufactured Treatment Device<sup>(a) (g)</sup></u>  | <u>50 or 80</u>  | <u>No</u>                                | <u>No</u>                                      | <u>Dependent upon the device</u>                                       |
| <u>Pervious Paving System<sup>(a)</sup></u>   | <u>80</u>  | <u>Yes</u>                               | <u><math>\frac{Yes^{(b)}}{No^{(c)}}</math></u> | <u><math>\frac{2^{(b)}}{1^{(c)}}</math></u>                            |
| <u>Small-Scale Bioretention Basin<sup>(a)</sup></u>   | <u>80 or 90</u>  | <u>Yes</u>                               | <u><math>\frac{Yes^{(b)}}{No^{(c)}}</math></u> | <u><math>\frac{2^{(b)}}{1^{(c)}}</math></u>                            |
| <u>Small-Scale Infiltration Basin<sup>(a)</sup></u>   | <u>80</u>  | <u>Yes</u>                               | <u>Yes</u>                                     | <u>2</u>   |



|   |                       |                     |                     |                   |
|---|-----------------------|---------------------|---------------------|-------------------|
| <a href="#">Small-Scale Sand Filter</a> | <a href="#">80</a>    | <a href="#">Yes</a> | <a href="#">Yes</a> | <a href="#">2</a> |
| <a href="#">Vegetative Filter Strip</a> | <a href="#">60-80</a> | <a href="#">No</a>  | <a href="#">No</a>  | <a href="#">-</a> |

(Notes corresponding to annotations <sup>(a)</sup> through <sup>(g)</sup> are found below Table 3)

| <b><u>Table 2</u></b><br><b><u>Green Infrastructure BMPs for Stormwater Runoff Quantity</u></b><br><b><u>(or for Groundwater Recharge and/or Stormwater Runoff Quality</u></b><br><b><u>with a Waiver or Variance from N.J.A.C. 7:8-5.3)</u></b> |  |  |   |  |
|--|--|--|---|--|
| <b><u>Best Management Practice</u></b>   | <b><u>Stormwater Runoff Quality TSS Removal Rate (percent)</u></b> | <b><u>Stormwater Runoff Quantity</u></b> | <b><u>Groundwater Recharge</u></b>                                    | <b><u>Minimum Separation from Seasonal High Water Table (feet)</u></b> |
| <a href="#">Bioretention System</a>  | <a href="#">80 or 90</a>   | <a href="#">Yes</a>                      | <a href="#">Yes<sup>(b)</sup></a><br><a href="#">No<sup>(c)</sup></a> | <a href="#">2<sup>(b)</sup></a><br><a href="#">1<sup>(c)</sup></a>     |
| <a href="#">Infiltration Basin</a>   | <a href="#">80</a>   | <a href="#">Yes</a>                      | <a href="#">Yes</a>   | <a href="#">2</a>  |
| <a href="#">Sand Filter<sup>(b)</sup></a>  | <a href="#">80</a>   | <a href="#">Yes</a>                      | <a href="#">Yes</a>   | <a href="#">2</a>  |
| <a href="#">Standard Constructed Wetland</a>   | <a href="#">90</a>   | <a href="#">Yes</a>                      | <a href="#">No</a>  | <a href="#">N/A</a>  |
| <a href="#">Wet Pond<sup>(d)</sup></a>   | <a href="#">50-90</a>  | <a href="#">Yes</a>                      | <a href="#">No</a>  | <a href="#">N/A</a>  |

(Notes corresponding to annotations <sup>(b)</sup> through <sup>(d)</sup> are found below Table 3)

| <p align="center"><b>Table 3</b><br/> <b><u>BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or</u></b><br/> <b><u>Stormwater Runoff Quantity</u></b><br/> <b><u>only with a Waiver or Variance from N.J.A.C. 7:8-5.3</u></b></p> |  |  |                                    |  |
|--|--|--|------------------------------------|--|
| <b><u>Best Management Practice</u></b>   | <b><u>Stormwater Runoff Quality TSS Removal Rate (percent)</u></b> | <b><u>Stormwater Runoff Quantity</u></b> | <b><u>Groundwater Recharge</u></b> | <b><u>Minimum Separation from Seasonal High Water Table (feet)</u></b> |
| Blue Roof  | <u>0</u>   | <u>Yes</u>                               | <u>No</u>                          | <u>N/A</u>   |
| <u>Extended Detention Basin</u>  | <u>40-60</u>   | <u>Yes</u>                               | <u>No</u>                          | <u>1</u>   |
| <u>Manufactured Treatment Device<sup>(h)</sup></u>   | <u>50 or 80</u>  | <u>No</u>                                | <u>No</u>                          | <u>Dependent upon the device</u>                                       |
| Sand Filter <sup>(c)</sup>   | <u>80</u>  | <u>Yes</u>                               | <u>No</u>                          | <u>1</u>   |
| <u>Subsurface Gravel Wetland</u>   | <u>90</u>  | <u>No</u>                                | <u>No</u>                          | <u>1</u>   |
| Wet Pond   | <u>50-90</u>   | <u>Yes</u>                               | <u>No</u>                          | <u>N/A</u>   |

Notes to Tables 1, 2, and 3:

- (a) subject to the applicable contributory drainage area limitation specified at **Subsection D(15)(b)**;
- (b) designed to infiltrate into the subsoil;
- (c) designed with underdrains;
- (d) designed to maintain at least a 10-foot wide area of native vegetation along at least 50 percent of the shoreline and to include a stormwater runoff

retention component designed to capture stormwater runoff for beneficial reuse, such as irrigation;

- (e) designed with a slope of less than two percent;
- (f) designed with a slope of equal to or greater than two percent;
- (g) manufactured treatment devices that meet the definition of green infrastructure at **Subsection B**;
- (h) manufactured treatment devices that do not meet the definition of green infrastructure at **Subsection B**.

7. An alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate may be used if the design engineer demonstrates the capability of the proposed alternative stormwater management measure and/or the validity of the alternative rate or method to the municipality. A copy of any approved alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate shall be provided to the Department in accordance with **Subsection F(2)**. Alternative stormwater management measures may be used to satisfy the requirements at **Subsection D(15)** only if the measures meet the definition of green infrastructure at **Subsection B**. Alternative stormwater management measures that function in a similar manner to a BMP listed at **Subsection D(15)(b)** are subject to the contributory drainage area limitation specified at **Subsection D(15)(b)** for that similarly functioning BMP. Alternative stormwater management measures approved in accordance with this subsection that do not function in a similar manner to any BMP listed at **Subsection D(15)(b)** shall have a contributory drainage area less than or equal to 2.5 acres, except for alternative stormwater management measures that function similarly to cisterns, grass swales, green roofs, standard constructed wetlands, vegetative filter strips, and wet ponds, which are not subject to a contributory drainage area limitation. Alternative measures that function similarly to standard constructed wetlands or wet ponds shall not be used for compliance with the stormwater runoff quality standard unless a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with **Subsection D(4)** is granted from **Subsection D(15)**.
8. Whenever the stormwater management design includes one or more BMPs that will infiltrate stormwater into subsoil, the design engineer shall assess the hydraulic impact on the groundwater table and design the site, so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to, exacerbating a naturally or seasonally high water table, so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems or other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself.
9. Design standards for stormwater management measures are as follows:
  - a) Stormwater management measures shall be designed to take into account the existing site conditions, including, but not limited to, environmentally critical areas; wetlands; flood-prone areas; slopes; depth to seasonal high water table; soil type, permeability, and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone);
  - b) Stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning. Trash racks shall be installed at the intake to the outlet structure, as appropriate, and shall have parallel bars with one-inch spacing

between the bars to the elevation of the water quality design storm. For elevations higher than the water quality design storm, the parallel bars at the outlet structure shall be spaced no greater than one-third the width of the diameter of the orifice or one-third the width of the weir, with a minimum spacing between bars of one inch and a maximum spacing between bars of six inches. In addition, the design of trash racks must comply with the requirements of **Subsection H(3)**;

- c) Stormwater management measures shall be designed, constructed, and installed to be strong, durable, and corrosion resistant. Measures that are consistent with the relevant portions of the Residential Site Improvement Standards at N.J.A.C. 5:21-7.3, 7.4, and 7.5 shall be deemed to meet this requirement;
  - d) Stormwater management BMPs shall be designed to meet the minimum safety standards for stormwater management BMPs at **Subsection H**; and
  - e) The size of the orifice at the intake to the outlet from the stormwater management BMP shall be a minimum of two and one-half inches in diameter.
10. Manufactured treatment devices may be used to meet the requirements of this subchapter, provided the pollutant removal rates are verified by the New Jersey Corporation for Advanced Technology and certified by the Department. Manufactured treatment devices that do not meet the definition of green infrastructure at **Subsection B** may be used only under the circumstances described at **Subsection D(15)(d)**.
11. Any application for a new agricultural development that meets the definition of major development at **Subsection B** shall be submitted to the Soil Conservation District for review and approval in accordance with the requirements at **Subsection D(15), (16), (17) and (18)** and any applicable Soil Conservation District guidelines for stormwater runoff quantity and erosion control. For purposes of this subsection, "agricultural development" means land uses normally associated with the production of food, fiber, and livestock for sale. Such uses do not include the development of land for the processing or sale of food and the manufacture of agriculturally related products.
12. If there is more than one drainage area, the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at **Subsection D(16), (17) and (18)** shall be met in each drainage area, unless the runoff from the drainage areas converge onsite and no adverse environmental impact would occur as a result of compliance with any one or more of the individual standards being determined utilizing a weighted average of the results achieved for that individual standard across the affected drainage areas.
13. Any stormwater management measure authorized under the municipal stormwater management plan or ordinance shall be reflected in a deed notice recorded in the Office of the Bergen County Clerk. A form of deed notice shall

be submitted to the municipality 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 at **Subsection D(15), (16), (17) and (18)** 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 reference the maintenance plan required to be recorded upon the deed pursuant to **Subsection J(2)(e)**. Prior to the commencement of construction, 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 either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the municipality is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the municipality within 180 calendar days of the authorization granted by the municipality.

14. A stormwater management measure approved under the municipal stormwater management plan or ordinance may be altered or replaced with the approval of the municipality, if the municipality determines that the proposed alteration or replacement meets the design and performance standards pursuant to **Subsection D** of this ordinance 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 municipality for approval and subsequently recorded with the Office of the Bergen County Clerk and shall contain a description and location of the stormwater management measure, as well as reference to the maintenance plan, in accordance with **(13)** above. Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the municipality in accordance with **(13)** above.

#### 15. Green Infrastructure Standards

- a) This subsection specifies the types of green infrastructure BMPs that may be used to satisfy the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards.
- b) To satisfy the groundwater recharge and stormwater runoff quality standards at **Subsection D(16) and (17)**, the design engineer shall utilize green infrastructure BMPs identified in Table 1 at **Subsection D(6)**. and/or an alternative stormwater management measure approved in accordance with **Subsection D(7)**. The following green infrastructure BMPs are subject to the following maximum contributory drainage area limitations:

c)

| <u>Best Management Practice</u>         | <u>Maximum Contributory Drainage Area</u>   |
|---|---|
| <u>Dry Well</u>                         | <u>1 acre</u>   |
| <u>Manufactured Treatment Device</u>    | <u>2.5 acres</u>  |
| <u>Pervious Pavement Systems</u>        | <u>Area of additional inflow cannot exceed three times the area occupied by the BMP</u> |
| <u>Small-scale Bioretention Systems</u> | <u>2.5 acres</u>  |
| <u>Small-scale Infiltration Basin</u>   | <u>2.5 acres</u>  |
| <u>Small-scale Sand Filter</u>          | <u>2.5 acres</u>  |

- d) To satisfy the stormwater runoff quantity standards at **Subsection D(18)**, the design engineer shall utilize BMPs from Table 1 or from Table 2 and/or an alternative stormwater management measure approved in accordance with **Subsection D(7)**.
- e) If a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with **Subsection D(4)** is granted from the requirements of this subsection, then BMPs from Table 1, 2, or 3, and/or an alternative stormwater management measure approved in accordance with **Subsection D(7)** may be used to meet the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at **Subsection D(16), (17) and (18)**.
- f) For separate or combined storm sewer improvement projects, such as sewer separation, undertaken by a government agency or public utility (for example, a sewerage company), the requirements of this subsection shall only apply to areas owned in fee simple by the government agency or utility, and areas within a right-of-way or easement held or controlled by the government agency or utility; the entity shall not be required to obtain additional property or property rights to fully satisfy the requirements of this subsection. Regardless of the amount of area of a separate or combined storm sewer improvement project subject to the green infrastructure requirements of this subsection, each project shall fully comply with the applicable groundwater recharge, stormwater runoff quality control, and stormwater runoff quantity standards at **Subsection D(16), (17) and (18)**, unless the project is granted a waiver from strict compliance in accordance with **Subsection D(4)**.

## 16. Groundwater Recharge Standards

- a) This subsection contains the minimum design and performance standards for groundwater recharge as follows:
- b) The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at **Subsection E**, either:
  - 1) 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
  - 2) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated.
- c) This groundwater recharge requirement does not apply to projects within the “urban redevelopment area,” or to projects subject to **(d)** below.
- d) The following types of stormwater shall not be recharged:
  - 1) 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 or landfill closure plan and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and
  - 2) 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.

## 17. Stormwater Runoff Quality Standards

- a) This subsection contains the minimum design and performance standards to control stormwater runoff quality impacts of major development. Stormwater runoff quality standards are applicable when the major development results in an increase of one-quarter acre or more of regulated motor vehicle surface.



- b) Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm as follows:
  - 1) Eighty percent TSS removal of the anticipated load, expressed as an annual average shall be achieved for the stormwater runoff from the net increase of motor vehicle surface.
  - 2) If the surface is considered regulated motor vehicle surface because the water quality treatment for an area of motor vehicle surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant is to be modified or removed, the project shall maintain or increase the existing TSS removal of the anticipated load expressed as an annual average.
- c) The requirement to reduce TSS does not apply to any stormwater runoff in a discharge regulated under a numeric effluent limitation for TSS imposed under the New Jersey Pollutant Discharge Elimination System (NJPDES) rules, N.J.A.C. 7:14A, or in a discharge specifically exempt under a NJPDES permit from this requirement. Every major development, including any that discharge into a combined sewer system, shall comply with **(b)** above, unless the major development is itself subject to a NJPDES permit with a numeric effluent limitation for TSS or the NJPDES permit to which the major development is subject exempts the development from a numeric effluent limitation for TSS.
- d) The water quality design storm is 1.25 inches of rainfall in two hours. Water quality calculations shall take into account the distribution of rain from the water quality design storm, as reflected in Table 4, below. The calculation of the volume of runoff may take into account the implementation of stormwater management measures.

**Table 4 - Water Quality Design Storm**

| <b>Distribution</b>       |   |                           |   |                           |   |
|---------------------------|---|---------------------------|---|---------------------------|---|
| <b>Time<br/>(Minutes)</b> | <b>Cumulative<br/>Rainfall<br/>(Inches)</b> | <b>Time<br/>(Minutes)</b> | <b>Cumulative<br/>Rainfall<br/>(Inches)</b> | <b>Time<br/>(Minutes)</b> | <b>Cumulative<br/>Rainfall<br/>(Inches)</b> |
| 1                         | 0.00166                                     | 41                        | 0.1728                                      | 81                        | 1.0906                                      |
| 2                         | 0.00332                                     | 42                        | 0.1796                                      | 82                        | 1.0972                                      |
| 3                         | 0.00498                                     | 43                        | 0.1864                                      | 83                        | 1.1038                                      |
| 4                         | 0.00664                                     | 44                        | 0.1932                                      | 84                        | 1.1104                                      |
| 5                         | 0.00830                                     | 45                        | 0.2000                                      | 85                        | 1.1170                                      |
| 6                         | 0.00996                                     | 46                        | 0.2117                                      | 86                        | 1.1236                                      |
| 7                         | 0.01162                                     | 47                        | 0.2233                                      | 87                        | 1.1302                                      |
| 8                         | 0.01328                                     | 48                        | 0.2350                                      | 88                        | 1.1368                                      |
| 9                         | 0.01494                                     | 49                        | 0.2466                                      | 89                        | 1.1434                                      |
| 10                        | 0.01660                                     | 50                        | 0.2583                                      | 90                        | 1.1500                                      |
| 11                        | 0.01828                                     | 51                        | 0.2783                                      | 91                        | 1.1550                                      |
| 12                        | 0.01996                                     | 52                        | 0.2983                                      | 92                        | 1.1600                                      |
| 13                        | 0.02164                                     | 53                        | 0.3183                                      | 93                        | 1.1650                                      |
| 14                        | 0.02332                                     | 54                        | 0.3383                                      | 94                        | 1.1700                                      |
| 15                        | 0.02500                                     | 55                        | 0.3583                                      | 95                        | 1.1750                                      |
| 16                        | 0.03000                                     | 56                        | 0.4116                                      | 96                        | 1.1800                                      |
| 17                        | 0.03500                                     | 57                        | 0.4650                                      | 97                        | 1.1850                                      |
| 18                        | 0.04000                                     | 58                        | 0.5183                                      | 98                        | 1.1900                                      |
| 19                        | 0.04500                                     | 59                        | 0.5717                                      | 99                        | 1.1950                                      |
| 20                        | 0.05000                                     | 60                        | 0.6250                                      | 100                       | 1.2000                                      |
| 21                        | 0.05500                                     | 61                        | 0.6783                                      | 101                       | 1.2050                                      |
| 22                        | 0.06000                                     | 62                        | 0.7317                                      | 102                       | 1.2100                                      |
| 23                        | 0.06500                                     | 63                        | 0.7850                                      | 103                       | 1.2150                                      |
| 24                        | 0.07000                                     | 64                        | 0.8384                                      | 104                       | 1.2200                                      |
| 25                        | 0.07500                                     | 65                        | 0.8917                                      | 105                       | 1.2250                                      |
| 26                        | 0.08000                                     | 66                        | 0.9117                                      | 106                       | 1.2267                                      |
| 27                        | 0.08500                                     | 67                        | 0.9317                                      | 107                       | 1.2284                                      |
| 28                        | 0.09000                                     | 68                        | 0.9517                                      | 108                       | 1.2300                                      |
| 29                        | 0.09500                                     | 69                        | 0.9717                                      | 109                       | 1.2317                                      |
| 30                        | 0.10000                                     | 70                        | 0.9917                                      | 110                       | 1.2334                                      |
| 31                        | 0.10660                                     | 71                        | 1.0034                                      | 111                       | 1.2351                                      |
| 32                        | 0.11320                                     | 72                        | 1.0150                                      | 112                       | 1.2367                                      |
| 33                        | 0.11980                                     | 73                        | 1.0267                                      | 113                       | 1.2384                                      |
| 34                        | 0.12640                                     | 74                        | 1.0383                                      | 114                       | 1.2400                                      |
| 35                        | 0.13300                                     | 75                        | 1.0500                                      | 115                       | 1.2417                                      |
| 36                        | 0.13960                                     | 76                        | 1.0568                                      | 116                       | 1.2434                                      |
| 37                        | 0.14620                                     | 77                        | 1.0636                                      | 117                       | 1.2450                                      |
| 38                        | 0.15280                                     | 78                        | 1.0704                                      | 118                       | 1.2467                                      |
| 39                        | 0.15940                                     | 79                        | 1.0772                                      | 119                       | 1.2483                                      |
| 40                        | 0.16600                                     | 80                        | 1.0840                                      | 120                       | 1.2500                                      |

- e) If more than one BMP in series is necessary to achieve the required 80 percent TSS reduction for a site, the applicant shall utilize the following formula to calculate TSS reduction:

$$R = A + B - (A \times B) / 100,$$

Where

R = total TSS Percent Load Removal from application of both BMPs, and  
A = the TSS Percent Removal Rate applicable to the first BMP  
B = the TSS Percent Removal Rate applicable to the second BMP.

- f) Stormwater management measures shall also be designed to reduce, to the maximum extent feasible, the post-construction nutrient load of the anticipated load from the developed site in stormwater runoff generated from the water quality design storm. In achieving reduction of nutrients to the maximum extent feasible, the design of the site shall include green infrastructure BMPs that optimize nutrient removal while still achieving the performance standards in **Subsection D(16), (17) and (18)**.
- g) In accordance with the definition of FW1 at N.J.A.C. 7:9B-1.4, stormwater management measures shall be designed to prevent any increase in stormwater runoff to waters classified as FW1.
- h) The Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1 establish 300-foot riparian zones along Category One waters, as designated in the Surface Water Quality Standards at N.J.A.C. 7:9B, and certain upstream tributaries to Category One waters. A person shall not undertake a major development that is located within or discharges into a 300-foot riparian zone without prior authorization from the Department under N.J.A.C. 7:13.
- i) Pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(j)3.i, runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated in accordance with this subsection to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average.
- j) This stormwater runoff quality standards do not apply to the construction of one individual single-family dwelling, provided that it is not part of a larger development or subdivision that has received preliminary or final site plan approval prior to December 3, 2018, and that the motor vehicle surfaces are made of permeable material(s) such as gravel, dirt, and/or shells.

## 18. Stormwater Runoff Quantity Standards

- a) This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.

b) In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at **Subsection E**, complete one of the following:

- 1) Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the 2-, 10-, and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
- 2) 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 2-, 10- and 100-year storm events 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;
- 3) Design stormwater management measures so that the post-construction peak runoff rates for the 2-, 10- and 100-year storm events 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
- 4) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with **(b)[1], [2], and [3]** 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.

c) The stormwater runoff quantity standards shall be applied at the site's boundary to each abutting lot, roadway, watercourse, or receiving storm sewer system.

#### **E. Calculation of Stormwater Runoff and Groundwater Recharge:**

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

a) The design engineer shall calculate runoff using one of the following methods:

- 1) 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)

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

- 2) 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>.

- b) For the purpose of calculating runoff coefficients 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" applies to both the NRCS methodology above at **Subsection E(1)(a)[1]** and the Rational and Modified Rational Methods at **Subsection E(1)(a)[2]**. A runoff coefficient 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 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).

- c) 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.
  - d) 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.
  - e) 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.
2. 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/greport/gsr32.pdf>

or at New Jersey Geological and Water Survey, 29 Arctic Parkway, PO Box 420 Mail Code 29-01, Trenton, New Jersey 08625-0420.

#### **F. Sources for Technical Guidance:**

1. 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).

- a) 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.
- b) 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).

2. 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.

**G. Solids and Floatable Materials Control Standards:**

1. Site design features identified under **Subsection D(6)** above, or alternative designs in accordance with **Subsection D(7)** above, to prevent discharge of trash and debris from drainage systems 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 G(1)(b)** below.

- a) Design engineers shall use one 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; or
- 2) A different grate, if each individual clear space in that grate has an area of no more than seven (7.0) 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 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) The standard in **(1)(a)** above 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 municipality agrees that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;
- 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 long and one and one-half (1.5) 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 (1 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 Rules 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.

#### **H. Safety Standards for Stormwater Management Basins:**

1. This section sets forth requirements to protect public safety through the proper design and operation of stormwater management BMPs. This section applies to any new stormwater management BMP.
2. The provisions of this section are not intended to preempt more stringent municipal or county safety requirements for new or existing stormwater management BMPs. Municipal and county stormwater management plans and ordinances may, pursuant to their authority, require existing stormwater management BMPs to be retrofitted to meet one or more of the safety standards in **Subsection H(3)(a), H(3)(b) and H(3)(c)** for trash racks, overflow grates, and escape provisions at outlet structures.



### 3. Requirements for Trash Racks, Overflow Grates and Escape Provisions

- a) A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the Stormwater management BMP to ensure proper functioning of the BMP outlets in accordance with the following:
  - 1) The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;
  - 2) The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;
  - 3) The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack; and
  - 4) The trash rack shall be constructed of rigid, durable, and corrosion resistant material and designed to withstand a perpendicular live loading of 300 pounds per square foot.
  
- b) 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:
  - 1) The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
  - 2) The overflow grate spacing shall be no less than two inches across the smallest dimension
  - 3) 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.
  
- c) Stormwater management BMPs shall include escape provisions as follows:
  - 1) If a stormwatermanagement BMP has an outlet structure, escape provisions shall be incorporated in or on the structure. Escape provisions include the installation of permanent ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management BMPs. With the prior approval of the municipality pursuant to **H(3)**, a free-standing outlet structure may be exempted from this requirement;
  - 2) Safety ledges shall be constructed on the slopes of all new stormwater management BMPs having a permanent pool of water deeper than two and one-half feet. Safety ledges shall be comprised of two steps. Each step shall be four to six feet in width. One step shall be located approximately two and one-half feet below the permanent water

surface, and the second step shall be located one to one and one-half feet above the permanent water surface. See **H(5)** for an illustration of safety ledges in a stormwater management BMP; and

- 3) In new stormwater management BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical.

#### 4. Variance or Exemption from Safety Standard

A variance or exemption from the safety standards for stormwater management BMPs may be granted only upon a written finding by the municipality that the variance or exemption will not constitute a threat to public safety.

#### 5. Safety Ledge Illustration

Elevation View –Basin Safety Ledge Configuration

### **I. Requirements for a Site Development Stormwater Plan:**

#### 1. Submission of Site Development Stormwater Plan

- a) Whenever an applicant seeks municipal approval of a development subject to this ordinance, the applicant shall submit all of the required components of the Checklist for the Site Development Stormwater Plan at **Subsection I(3)** below as part of the submission of the application for approval.
- b) The applicant shall demonstrate that the project meets the standards set forth in this ordinance.
- c) The applicant shall submit 14 copies of the materials listed in the checklist for site development stormwater plans in accordance with **Subsection I(3)** of this ordinance.

## 2. Site Development Stormwater Plan Approval

The applicant's Site Development project shall be reviewed as a part of the review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the municipality's review engineer to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this ordinance.

## 3. Submission of Site Development Stormwater Plan

The following information shall be required:

### a) Topographic Base Map

The reviewing engineer may require upstream tributary drainage system information as necessary. It is recommended that the topographic base map of the site be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1"=200' or greater, showing 2-foot contour intervals. The map as appropriate may indicate the following: existing surface water drainage, shorelines, steep slopes, soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category One waters, wetlands and flood plains along with their appropriate buffer strips, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearing and distances of property lines, and significant natural and manmade features not otherwise shown.

### b) Environmental Site Analysis

A written and graphic description of the natural and man-made features of the site and its surroundings should be submitted. This description should include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally sensitive features and to those that provide particular opportunities or constraints for development.

### c) Project Description and Site Plans

A map (or maps) at the scale of the topographical base map indicating the location of existing and proposed buildings roads, parking areas, utilities, structural facilities for stormwater management and sediment control, and other permanent structures. The map(s) shall also clearly show areas where alterations will occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high groundwater elevations. A written

description of the site plan and justification for proposed changes in natural conditions shall also be provided.

d) Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of **Subsections C** through **E** are being met. The focus of this plan shall be to describe how the site is being developed to meet the objective of controlling groundwater recharge, stormwater quality and stormwater quantity problems at the source by land management and source controls whenever possible.

e) Stormwater Management Facilities Map

The following information, illustrated on a map of the same scale as the topographic base map, shall be included:

- 1) Total area to be disturbed, paved or built upon, proposed surface contours, land area to be occupied by the stormwater management facilities and the type of vegetation thereon, and details of the proposed plan to control and dispose of stormwater.
- 2) Details of all stormwater management facility designs, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway.

f) Calculations

- 1) Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in **Subsection D** of this ordinance.
- 2) When the proposed stormwater management control measures depend on the hydrologic properties of soils or require certain separation from the seasonal high water table, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soils present at the location of the control measure.

g) Maintenance and Repair Plan

The design and planning of the stormwater management facility shall meet the maintenance requirements of **Subsection J**.

h) Waiver from Submission Requirements

The municipal official or board reviewing an application under this ordinance may, in consultation with the municipality's review engineer, waive submission of any of the requirements in **Subsection I(3)(a)** through **I(3)(f)** of this ordinance when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.

## **J. Maintenance and Repair:**

### 1. Applicability

Projects subject to review as in **Subsection A(3)** of this ordinance shall comply with the requirements of **Subsection J(2)** and **J(3)**.

### 2. General Maintenance

- a) The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development.
- b) The maintenance plan shall contain specific preventative maintenance tasks and schedules; cost estimates, including estimated cost of sediment, debris, or trash removal; and the name, address, and telephone number of the person or persons responsible for preventative and corrective maintenance (including replacement). The plan shall contain information on BMP location, design, ownership, maintenance tasks and frequencies, and other details as specified in Chapter 8 of the NJ BMP Manual, as well as the tasks specific to the type of BMP, as described in the applicable chapter containing design specifics.
- c) If the maintenance plan identifies a person other than the property owner (for example, a developer, a public agency or homeowners' association) as having the responsibility for maintenance, the plan shall include documentation of such person's or entity's agreement to assume this responsibility, or of the owner's obligation to dedicate a stormwater management facility to such person under an applicable ordinance or regulation.
- d) Responsibility for maintenance 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. The individual property owner may be assigned incidental tasks, such as weeding of a green infrastructure BMP, provided the individual agrees to assume these tasks; however, the individual cannot be legally responsible for all of the maintenance required.

- e) If the party responsible for maintenance identified under **Subsection J(2)(c)** above is not a public agency, the maintenance plan and any future revisions based on **Subsection J(2)(g)** below shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken.
- f) Preventative and corrective maintenance shall be performed to maintain the functional parameters (storage volume, infiltration rates, inflow/outflow capacity, etc.) of the stormwater management measure, including, but not limited to, repairs or replacement to the structure; removal of sediment, debris, or trash; restoration of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of non-vegetated linings.
- g) The party responsible for maintenance identified under **Subsection J(2)(c)** above shall perform all of the following requirements:
  - 1) maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work orders;
  - 2) evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed; and
  - 3) retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, the maintenance plan and the documentation required by **Subsection J(2)(f)** and **(2)(g)** above.
- h) The requirements of **Subsection J(2)(c)** and **(2)(d)** do not apply to stormwater management facilities that are dedicated to and accepted by the municipality or another governmental agency, subject to all applicable municipal stormwater general permit conditions, as issued by the Department.
- i) In the event that the stormwater management facility becomes a danger to public safety or public health, or if it is in need of maintenance or repair, the municipality shall so notify the responsible person in writing. Upon receipt of that notice, the responsible person shall have fourteen (14) days to effect maintenance and repair of the facility in a manner that is approved by the municipal engineer or his designee. The municipality, in its discretion, may extend the time allowed for effecting maintenance and repair for good cause. If the responsible person fails or refuses to perform such maintenance and repair, the municipality or County may immediately proceed to do so and shall bill the cost thereof to the responsible person. Nonpayment of such bill may result in a lien on the property.

3. Nothing in this subsection shall preclude the municipality in which the major development is located from requiring the posting of a performance or maintenance guarantee in accordance with N.J.S.A. 40:55D-53

**K. Severability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**L. Effective Date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as required by law.

Approved:

Attest:

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Anthony R. Suarez, Mayor

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Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Jimenez

RESOLUTION NO. 99-2021

WHEREAS, an overpayment of taxes in the Borough of Ridgefield was received for the first quarter of 2021 due to the title agency sending payment and Lereta, LLC submitting payment through ACH on Block 2804 Lot 19, further known as 460 Van Renssalaer Court.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Borough of Ridgefield that a refund in the amount of \$3,145.00 for the first quarter be issued to Select Portfolio Servicing, Inc.;

BE IT FURTHER RESOLVED that the Chief Financial Officer be and he is hereby authorized to issue a check in the total amount of \$3,145.00 made payable to Select Portfolio Servicing, Inc. and mailed to Lereta, LLC 901 Corporate Center Drive, Pomona, CA 91768.

COUNCIL VOTE

|              | YES | NO | ABSTAIN | ABSENT |
|--------------|-----|----|---------|--------|
| Castelli     |     |    |         |        |
| Penabad      |     |    |         |        |
| Shim         |     |    |         |        |
| Jimenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk



BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Jimenez

RESOLUTION NO. 100-2021

BE IT RESOLVED that the Mayor and Council of the Borough of Ridgefield hereby authorize the Chief Financial Officer to execute an agreement with Munidex, Inc together with Trustly, Inc. powered by ZenGov Payment Portal in order for the Borough to accept electronic tax payments.

COUNCIL VOTE

|              | YES | NO | ABSTAIN | ABSENT |
|--------------|-----|----|---------|--------|
| Castelli     |     |    |         |        |
| Penabad      |     |    |         |        |
| Shim         |     |    |         |        |
| Jimenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Kontolios

RESOLUTION NO. 101-2021

WHEREAS, the Borough of Ridgefield is in need of Unified Communication Services to be performed for the period March 1, 2021 through February 29, 2024; and

WHEREAS, quotes were received in February 2021 to provide Unified Communication Services for the period March 1, 2021 through February 29, 2024; and

WHEREAS, quote from New Era Technology of 11 Melanie Lane, Suite 9, East Hanover, NJ 07936 in the amount of \$9,580.32 a year or \$28,740.96 for the entirety of the agreement was lowest responsible quote complying with the terms and specifications on file and is hereby accepted; and

WHEREAS, funds in the amount of \$9,580.32 for the year 2021 are available in the 2021 Budget under the account Telecommunications 01-2010-31-4402-111.

NOW, THEREFORE, BE IT RESOLVED that the Mayor and Council authorize the Agreement with New Era Technology for Unified Communication Services; and

BE IT FURTHER RESOLVED that the Chief Financial Officer is hereby authorized to execute the Agreement with New Era Technology.

Approved:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

Attest:

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

| <b>COUNCIL VOTE</b> |            |           |                |               |
|---------------------|------------|-----------|----------------|---------------|
|                     | <b>YES</b> | <b>NO</b> | <b>ABSTAIN</b> | <b>ABSENT</b> |
| Castelli            |            |           |                |               |
| Penabad             |            |           |                |               |
| Shim                |            |           |                |               |
| Jimenez             |            |           |                |               |
| Kontolios           |            |           |                |               |
| Larkin              |            |           |                |               |
| Mayor Suarez        |            |           |                |               |

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Mayor Suarez

RESOLUTION NO. 102-2021

BE IT RESOLVED that the Mayor appoints

JOHN FREITAG

to the Planning Board as Alternate 1 to fill the unexpired term of Tom Kim through December 31, 2021.

COUNCIL VOTE

|              | YES | NO | ABSTAIN | ABSENT |
|--------------|-----|----|---------|--------|
| Castelli     |     |    |         |        |
| Penabaz      |     |    |         |        |
| Shinn        |     |    |         |        |
| Jinenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

**MAYOR'S APPOINTMENT -  
NO COUNCIL VOTE NEEDED**

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Jimenez

RESOLUTION NO. 103-2021

WHEREAS, N.J.S.A. 40A:4-59 provides that if, during the first three months of any fiscal year, the amount of any appropriation reserve for the immediately preceding fiscal year is insufficient to pay the claims authorized or incurred during said preceding year which were chargeable to said appropriation, and there shall be an excess in any appropriation reserves over and above the amount deemed necessary to fulfill its purpose, the governing body may, by resolution adopted by not less than 2/3 vote of the full membership thereof, transfer the amount of such excess to an appropriation reserve or any appropriation in the prior budget deemed to be insufficient to fulfill its purpose or for which no reserve was provided.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Council of the Borough of Ridgefield that the Chief Financial Officer is herewith directed to execute the following transfers in the calendar year 2020 budget appropriation reserves:

| <u>CURRENT FUND</u>            | <u>FROM</u>      | <u>TO</u>        |
|--------------------------------|------------------|------------------|
| Fire Protection O/E            | 13,000.00        |                  |
| Maint Boro Vehicles Fire       |                  | 13,000.00        |
| Parks & Recreation O/E         | 5,000.00         |                  |
| Construction Code Official O/E |                  | 5,000.00         |
|                                |                  |                  |
|                                | <u>18,000.00</u> | <u>18,000.00</u> |

**COUNCIL VOTE**

|              | <b>YES</b> | <b>NO</b> | <b>ABSTAIN</b> | <b>ABSENT</b> |
|--------------|------------|-----------|----------------|---------------|
| Castelli     |            |           |                |               |
| Penabad      |            |           |                |               |
| Shim         |            |           |                |               |
| Jimenez      |            |           |                |               |
| Kontolios    |            |           |                |               |
| Larkin       |            |           |                |               |
| Mayor Suarez |            |           |                |               |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk

The undersigned, being the Chief Financial Officer of the Borough of Ridgefield, County of Bergen, New Jersey, and the person charged with the responsibility of maintaining financial records of said Borough in accordance with N.J.S.A. 40:4-57 and the rules of the Local Finance Board of the State of New Jersey adopted thereunder, does hereby certify that there are adequate funds available for the payment of the attached list of invoices, duly adopted by said Borough, and which said list indicates the specific line item of said budget to which expenditures shall be charged.

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Francis J. Elenio,  
Chief Financial Officer

BOROUGH OF RIDGEFIELD  
Bergen County, New Jersey

Meeting February 22, 2021

Presented by Councilman Jimenez

RESOLUTION NO. 104-2021

BE IT RESOLVED, that warrants totaling **\$2,605,554.89**  
be drawn on the following accounts:

|              |                       |
|--------------|-----------------------|
| CURRENT      | \$2,497,658.26        |
| TRUST        | \$98,583.64           |
| CAPITAL      | \$7,515.25            |
| POOL         | \$1,793.54            |
| DOG LICENSE  | \$4.20                |
| <b>TOTAL</b> | <b>\$2,605,554.89</b> |

COUNCIL VOTE

|              | YES | NO | ABSTAIN | ABSENT |
|--------------|-----|----|---------|--------|
| Castelli     |     |    |         |        |
| Penabad      |     |    |         |        |
| Shim         |     |    |         |        |
| Jimenez      |     |    |         |        |
| Kontolios    |     |    |         |        |
| Larkin       |     |    |         |        |
| Mayor Suarez |     |    |         |        |

Approved:

Attest:

\_\_\_\_\_  
Anthony R. Suarez, Mayor

\_\_\_\_\_  
Linda M. Silvestri,  
Borough Clerk