Stormwater Pollution Prevention Plan

Berlin Borough

Camden County

NJPDES # NJG 0141852

July 21, 2021

SPPP Table of Contents

SPPP Form 1 – SPPP Team Members

All records must be available upon request by NJDEP.

Stormwater Program Coordinator (SPC)	
Print/Type Name and Title	John Allsebook, Director of Public Works
Office Phone # and eMail	856-767-7777 x 316
Signature/Date	
Individual(s) Responsible for Major Development Project Stormwater Management Review	
Print/Type Name and Title	Pam Pellegrini, Planning Board Engineer
Print/Type Name and Title	
Print/Type Name and Title	
Print/Type Name and Title	
Print/Type Name and Title	
Other SPPP Team Members	
Print/Type Name and Title	Michaela Bosler, RMC - Clerk
Print/Type Name and Title	Debbie Simone, Planning and Zoning Secretary
Print/Type Name and Title	Hugh Dougherty, Borough Engineer
Print/Type Name and Title	Howard Long, Solicitor

SPPP Form 2 – Revision History

All records must be available upon request by NJDEP.

	Revision Date	SPC Initials	SPPP Form Changed	Reason for Revision
1.	4/2018		All	Updated to Comply with new Tier A permit
2.	7/2021		All	Updated to Comply with new Tier A permit
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SPPP Form 3 – Public Involvement and Participation Including Public Notice

All records must be available upon request by NJDEP.

1. Website URL where the Stormwater Pollution Prevention Plan (SPPP) is posted online:	https://www.berlinnj.org/departments/department_of_public_works/stormwater_management.php
2. Date of most current SPPP:	Jul 21, 2021
3. Website URL where the Municipal Stormwater Management Plan (MSWMP) is posted online:	https://www.berlinnj.org/departments/department_of_public_works/stormwater_management.php
4. Date of most current MSWMP:	Apr 18, 2007
5. Physical location and/or website URL where associated municipal records of public notices, meeting dates, minutes, etc. are kept:	https://www.berlinnj.org/government/board_agendas___minutes/index.php

6. Describe how the permittee complies with applicable state and local public notice requirements when providing for public participation in the development and implementation of a MS4 stormwater program:

For meetings where public notice is required under the Open Public Meetings Act, N.J.S.A. 10:4-6, et seq., Berlin Borough provides public notice in a manner that complies with the requirements of N.J.S.A. 40:49-1 et seq., Berlin Borough complies with those requirements. In all respects, those statutes require written notice of the activity to be taken by the Borough be published in a newspaper of general circulation in the community.

SPPP Form 4 – Public Education and Outreach

All records must be available upon request by NJDEP.

1. Describe how public education and outreach events are advertised. Include specific websites and/or physical locations where materials are available.

For our annual distribution, we distribute a concise, three-page, colored paper packet to our residents and businesses through hand delivery. It includes information on the trash collection procedures, grass clippings, illicit connections, littering, and pet waste. The brochure is also available in the municipal building.

Our annual event is in conjunction with the Fall Festival, advertised on the Borough's website. The Department of Public Works sets up a booth dedicated to stormwater management issues. DEP booklets, including "What's a Watershed", are available at the booth.

2. Describe how businesses and the general public within the municipality are educated about the hazards associated with illicit connections and improper disposal of waste.

Education materials are provided through the annual distribution of the brochure, stormwater displays at Borough Hall, signs/posters at Franklin Avenue Field, and the Borough's stormwater website.

3. Indicate where public education and outreach records are maintained.

All public education and outreach materials are kept with the SPPP at the Public Works Department.

NJDEP Brochures for Annual Distribution

olutions to Stormwater Pollution

Easy Things You Can Do Every Day To Protect Our Water

A Guide to Healthy Habits for Cleaner Water

Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the ocean and lakes our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings: You name it and it ends up in our water.

Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that's why we're all doing something about it.

By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it's dirty.

As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.

As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.

Limit your use of fertilizers and pesticides

- Do a soil test to see if you need a fertilizer.
- Do not apply fertilizers if heavy rain is predicted.
- Look into alternatives for pesticides.
- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it.

Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.

- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.
- Use natural or less toxic alternatives when possible.
- Recycle used motor oil.
- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

Keep pollution out of storm drains

- Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.
- Do not let sewage or other wastes flow into a stormwater system.

Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.
- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.
- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:
  - Use newspaper, bags or pooper-scoopers to pick up wastes.
  - Dispose of the wrapped pet waste in the trash or un-wrapped in a toilet.
  - Never discard pet waste in a storm drain.

Don't feed wildlife

- Do not feed wildlife, such as ducks and geese, in public areas.
- Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

Don't litter

- Place litter in trash receptacles.
- Recycle. Recycle. Recycle.
- Participate in community cleanups.

Dispose of yard waste properly

- Keep leaves and grass out of storm drains.
- If your municipality or agency has yard waste collection rules, follow them.
- Use leaves and grass clippings as a resource for compost.
- Use a mulching mower that recycles grass clippings into the lawn.

Contact information

For more information on stormwater related topics, visit www.njstormwater.org or www.nonpointsource.org

Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
(609) 633-7021

April 2004

Pet Waste Pollutes Our Waters

What You Can Do To Help Protect Our Water

Clean and plentiful water is important to our families, our environment, our economy and our quality of life.

Did you know that animal waste from pets can pollute our waters? When left on the ground, pet waste is washed by rain and melting snow and ice into storm drains that carry it to our rivers, lakes, the ocean and drinking water.

Animal waste contains a high concentration of nutrients as well as bacteria and disease-causing microorganisms that can cause problems.

What you can do

Pet owners or anyone who takes your pet for walks must properly dispose of the waste by picking it up, wrapping it and either placing it in the trash or flushing it unwrapped down the toilet.

Your municipality is required to adopt and enforce local pet-waste laws. At a minimum, your community must require that pet owners or their keepers **immediately** and **properly** dispose of their pet's solid waste deposited on **any public or private property not owned or possessed by that person.** People with assistance animals such as Seeing Eye dogs are exempt.

Make sure you know what your municipality requires – and follow it.

Thank you for doing your part to keep New Jersey's waters clean.

For more information, please contact the following:

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
(609) 633-7021

Visit www.njstormwater.org or www.nonpointsource.org

Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

SPPP Form 5 – Post-Construction Stormwater Management in New Development and Redevelopment Program

All records must be available upon request by NJDEP.

1. How does the municipality define 'major development'?
Major development is defined in the Stormwater Management Ordinance (attached) as an "individual development, as well as multiple developments that individually or collectively result in: 1) The disturbance or one or more acres of land since February 2, 2004; 2) The creation of one-quarter acre or more of regulated impervious surface since February 2, 2004; 3) The creation of one-quarter acre or more of "regulated motor vehicle surface" since March 2, 2021; or 4) A combination of 2 and 3 above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more."
2. Does the municipality approach residential projects differently than it does for non-residential projects? If so, how?
Our Planning and Zoning Boards presently assure that all new residential development and redevelopment projects that are subject to the RSIS for stormwater management, including the NJDEP Stormwater Management rules, N.J.A.C 7:8, referenced in those standards) are in compliance with those standards before issuing preliminary and final subdivision or site plan approvals under the Municipal Land Use Law. Stormwater from non-residential and redevelopment projects is controlled by our Planning and Zoning Boards and code enforcement officer, through administration of our ordinances. Where it is necessary to implement the municipal stormwater management plan, the approve ordinance also controls aspects of residential development and redevelopment projects that are not subject to the RSIS.
3. What process is in place to ensure that municipal projects meet the Stormwater Control Ordinance?
Berlin Borough assures adequate long-term operation and maintenance of BMP's for any new development or redevelopment projects constructed on municipal property by requiring a project maintenance plan similar to the maintenance plan described in our ordinance, and by requiring and funding the implementation of that plan. Berlin Borough will assure adequate long-term operation as well as preventative and corrective maintenance (including replacement) of BMP's. We require any storm drain inlets that we install to comply with the design standards in Attachment C of our permit.

4. Describe the process for reviewing major development project applications for compliance with the Stormwater Control Ordinance (SCO) and Residential Site Improvement Standards (RSIS). Attach a flow chart if available.	
1) Applicant submits project to Borough Board who in turn gives it to the Board Engineer. 2) Board Engineer reviews it and provides comments to the designer. 3) Designer makes revisions and resubmits and repeats as necessary. 4) After final revisions are made, then the project will be approved. 5) After approval, Borough Engineer inspects installation of improvements to ensure they conform with the approved plan.	
5. Does the Municipal Stormwater Management Plan include a mitigation plan?	Yes
6. What is the physical location of approved applications for major development projects, Major Development Summary Sheets (permit att. D), and mitigation plans?	Borough Hall - Planning and Zoning Office

SPPP Form 6 – Ordinances

All records must be available upon request by NJDEP.

Ordinance permit cite IV.B.1.b.iii	Date of Adoption	Website URL	Was the DEP model ordinance adopted without change?	Entity responsible for enforcement
1. Pet Waste permit cite IV.B.5.a.i	04/07/05	https://ecode360.com/8946979		Code Enforcement
2. Wildlife Feeding permit cite IV.B5.a.ii	04/07/05	https://ecode360.com/8946992		Code Enforcement
3. Litter Control permit cite IV.B5.a.iii	10/09/81	https://ecode360.com/8948006		Code Enforcement
4. Improper Disposal of Waste permit cite IV.B.5.a.iv	04/07/05	https://ecode360.com/8948738		Code Enforcement
5. Containerized Yard Waste/ Yard Waste Collection Program permit cite IV.B.5.a.v	04/07/2005	https://ecode360.com/8948685		Code Enforcement
6. Private Storm Drain Inlet Retrofitting permit cite IV.B.5.a.vi	11/02/2009	https://ecode360.com/14227767		Code Enforcement
7. Stormwater Control Ordinance permit cite IV.B.4.g and IV.B.5.a.vii	03/11/2021	https://ecode360.com/documents/BE0276/public/592613208.pdf		Code Enforcement
8. Illicit Connection Ordinance permit cite IV.B.5.a.vii and IV.B.6.d	04/07/2005	https://ecode360.com/8948723		Code Enforcement
9. Optional: Refuse Container/ Dumpster Ordinance permit cite IV.E.2	11/02/2009	https://ecode360.com/14227748		Code Enforcement

Indicate the location of records associated with ordinances and related enforcement actions:

Code Enforcement Office

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 89. Animals

Article VI. Pet Waste

[Adopted 4-7-2005 by Ord. No. 2005-5]

§ 89-27. Purpose.

An article to establish requirements for the proper disposal of pet solid waste in the Borough of Berlin, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

§ 89-28. Definitions.

For the purpose of this article, 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.

IMMEDIATE
Shall mean that the pet solid waste is removed at once, without delay.

OWNER/KEEPER
Any person who shall possess, maintain, house or harbor any pet or otherwise have custody of any pet, whether or not the owner of such pet.

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

PET
A domesticated animal (other than a disability assistance animal) kept for amusement or companionship.

PET SOLID WASTE
Waste matter expelled from the bowels of the pet; excrement.

PROPER DISPOSAL
Placement in a designated waste receptacle, or other suitable container, and discarded in a refuse container which is regularly emptied by the municipality or some other refuse collector, or disposal into a system designed to convey domestic sewage for proper treatment and disposal.

§ 89-29. Requirement for disposal.

All pet owners and keepers are required to immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person.

§ 89-30. Exemptions.

Any owner or keeper who requires the use of a disability assistance animal shall be exempt from the provisions of this article while such animal is being used for that purpose.

§ 89-31. Enforcement.

This article shall be enforced by the Police Department and/or other municipal officials of the Borough of Berlin.

§ 89-32. Violations and penalties.

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 89. Animals

Article VII. Wildlife Feeding

[Adopted 4-7-2005 by Ord. No. 2005-6]

§ 89-33. Purpose.

An article to prohibit the feeding of unconfined wildlife in any public park or on any other property owned or operated by the Borough of Berlin, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

§ 89-34. Definitions.

For the purpose of this article, 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.

FEED
: To give, place, expose, deposit, distribute or scatter any edible material with the intention of feeding, attracting or enticing wildlife. Feeding does not include baiting in the legal taking of fish and/or game.

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

WILDLIFE
: All animals that are not domesticated.

§ 89-35. Prohibited conduct.

No person shall feed, in any public park or on any public street or any other property owned or operated by the Borough of Berlin, any wildlife, excluding confined wildlife, such as wildlife confined in rehabilitation centers or environmental education centers.

§ 89-36. Enforcement.

This article shall be enforced by the Police Department and/or other municipal officials of the Borough of Berlin.

§ 89-37. Violations and penalties.

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 207. Littering

[HISTORY: Adopted by the Mayor and Borough Council of the Borough of Berlin 10-9-1981 by Ord. No. 81-14. Amendments noted where applicable.]

GENERAL REFERENCES
Brush, weeds and obnoxious debris — See Ch. **101**.
Solid waste — See Ch. **278**.

§ 207-1. Short title.

This chapter shall be known and may be cited and referred to as the "Anti-Litter Ordinance of the Borough of Berlin."

§ 207-2. Definitions.

The following definitions shall apply in the interpretation of this chapter:

AIRCRAFT
Any contrivance now known or hereafter invented, used or designed for navigation or for flight in the air. The word "aircraft" shall include helicopters and lighter-than-air dirigibles and balloons.

COMMERCIAL HANDBILL
Any printed or written matter, any sample or device, dodger, circular, leaflet, pamphlet, paper, booklet or any other printed or otherwise reproduced original or copies of any matter of literature which:

A. Advertises for sale any merchandise, product, commodity or service.

B. Directs attention to any business or mercantile or commercial establishment or other activity for the purpose of, either directly or indirectly, promoting the interest thereof by sales.

C. Directs attention to or advertises any meeting, theatrical performance, exhibition or event of any kind for which an admission fee is charged for the purpose of private gain or profit, but the terms of this subsection shall not apply where an admission fee is charged or a collection is taken up for the purpose of defraying the expenses incidental to any meeting, theatrical performance, exhibition or event of any kind.

HANDBILL
Any printed or written matter, any sample or device, dodger, circular, leaflet, pamphlet, paper, booklet or any other printed or otherwise reproduced original or copies of any matter of literature. The word "handbill," as utilized throughout this chapter, shall be deemed to include any commercial handbill.

LITTER
Garbage, trash and refuse as defined in Chapter **278** of the Code of the Borough of Berlin, and including, in addition, building and construction debris and any other matter or material which, if thrown or deposited as herein prohibited, tends to create a danger to public health, safety and welfare.

NEWSPAPER
Any newspaper of general circulation, whether same be paid or free or whether it is primarily designed to report the news or as a form of commercial advertising, which is either delivered locally or through malls. It is intended that this definition of newspaper be given a broad interpretation to cover all local, regional, state-wide or national newspapers.

PARK
Any park, playground, recreation center or any other public place in the Borough, owned or used by the Borough and devoted to active or passive recreation.

PERSON
Any natural person, firm, partnership, association, corporation, company, public utility or organization of any kind.

PRIVATE PREMISES
Any dwelling, house, building or other structure designed or used, either wholly or in part, for private residential purposes, whether inhabited or temporarily or continuously uninhabited or vacant, and shall include any yard, grounds, walk, driveway, porch, steps, vestibule or mailbox belonging or appurtenant to such dwelling, house, building or other structure.

PRIVATE PROPERTY
Any privately owned or occupied lands or premises, including property owned or occupied by any public utility.

PRIVATE RECEPTACLE
A litter storage and collection receptacle or system as required and authorized in Chapter **278**, Garbage, Rubbish and Refuse, of the Code of the Borough of Berlin.

PUBLIC PLACE
Any and all streets, sidewalks, alleys or other public ways and any and all public parks, squares, spaces, grounds and buildings.

§ 207-3. Litter in public places.

No person shall leave, throw, store or deposit litter in or upon any street, sidewalk or other public place within the Borough except in public receptacles or in authorized private receptacles for collection.

§ 207-4. Placement of litter in receptacles so as to prevent scattering.

Persons placing litter in public receptacles or in authorized private receptacles shall do so in such a manner as to prevent it from being carried or deposited by the elements upon any street, sidewalk or other public place or upon private property.

§ 207-5. Sweeping litter into gutters or other public places restricted.

No person shall sweep into or deposit in any gutter, street or other public place within the Borough the accumulation of litter from any building or lot or from any public or private sidewalk or driveway, except that the occupants may rake fallen leaves into the gutter for purposes of collection during the normal collection period as specified by the Borough Council.

§ 207-6. Maintenance of business properties.

[Amended 9-11-1987 by Ord. No. 87-19]
No person owning or occupying a place of business shall sweep into or deposit in any gutter, street or other public place within the Borough the accumulation of litter from any building or lot or from any public or private sidewalk or driveway. Persons owning or occupying places of business within the Borough shall keep the sidewalk in and around the business premises free of litter and shall keep all of the environs of said business, including parking lots and other places to which the public is invited, free of litter.

§ 207-7. Truckloads and/or other vehicles causing litter.

No person shall drive or move any truck or other vehicle within the Borough, unless such vehicle is so constructed or loaded as to prevent any load, contents or litter from being blown or deposited upon any street, alley or other public place. No person shall drive or move any vehicle or truck within the Borough, the wheels or tires of which carry onto or which deposit in any street, alley or other public place mud, dirt, sticky substances, litter or foreign matter of any kind.

§ 207-8. Litter in parks.

No person shall throw or deposit litter in any park within the Borough except in public receptacles and in such a manner that the litter will be prevented from being carried or deposited by the elements upon any part of the park or upon any street or other public place. Where public receptacles are not provided, all sorts of litter shall be carried away from the park by the person responsible for its presence and properly disposed of elsewhere as provided herein.

§ 207-9. Throwing and/or distribution of handbills in public places.

No person shall throw or deposit any handbill in or upon any sidewalk, street or other public place within the Borough. This provision shall not be construed as prohibiting the distribution of handbills to persons willing to accept the same.

§ 207-10. Depositing handbills on uninhabited or vacant premises prohibited.

No person shall throw or deposit any handbill in or upon any private premises which are temporarily or continuously uninhabited or vacant.

§ 207-11. Distribution of handbills on posted property prohibited.

No person shall throw, deposit or distribute any handbill upon any private premises if requested by anyone thereon not to do so or if there is posted on said premises in a conspicuous place near the entrance thereof a sign bearing the words: "No Trespassing," "No Peddlers or Agents," "No Advertisement" or any similar notice indicating in any manner that the occupants of said premises do not desire to have their right of privacy disturbed or to have any such handbills left upon the premises.

§ 207-12. Distribution of handbills on inhabited private property.

Handbills shall be distributed to inhabited private premises which are not posted as provided in this chapter, provided that said handbills are placed or deposited in such a manner as to secure or prevent such handbill from being blown or drifted about the premises, sidewalks, streets or other public places, and except to the extent that mailboxes may not be so used when prohibited by federal postal law or regulations. The provisions of this section shall not apply to the distribution of mail by the United States Postal Service nor to newspapers; provided, however, that newspapers shall be placed on private property in such a manner so as to prevent their being carried or deposited by the elements upon any street, sidewalk or other public place or upon private property.

§ 207-13. Litter from aircraft.

No person in an aircraft shall throw out, drop or deposit within the Borough any litter, handbill or other object.

§ 207-14. Posting of notices on public property or structures restricted.

No person shall post or affix any notice, poster or other paper or device calculated to attract the attention of the public to any lamppost, public utility pole, shade tree or upon any public structure or building except as may be authorized or required by law.

§ 207-15. Litter on private property.

No person shall throw or deposit litter on any private property within the Borough, whether owned by such person or not, except that the owner or person in control of private property may maintain authorized private receptacles for collection in such a manner that litter will be prevented from being carried or deposited by the elements upon any street, sidewalk or other public place or upon any private property.

§ 207-16. Maintenance of private property.

The owner or person in control of any private property shall at all times maintain the premises free of litter. This section shall not prohibit the storage of litter in authorized private receptacles for collection.

§ 207-17. Litter on vacant lots.

No person shall throw or deposit litter on any open or vacant private property within the Borough, whether owned by such person or not.

§ 207-18. Commercial handbill distribution: license; application; revocation; fees.

A. Any person, firm or corporation engaged in the distribution of commercial handbills within the Borough of Berlin shall make application to and obtain from the Borough Clerk a commercial handbill distribution license. Said application shall be in writing on a form or forms to be supplied by the Borough Clerk. Such forms shall contain, among other things, the name, business address and brief description of the nature of the business to be conducted by the applicant, the total number of employees to be so engaged and the length of time for which the license is required.

B. Any person, firm or corporation obtaining a commercial handbill distribution license shall be permitted to distribute handbills pursuant to the provisions of this chapter between the hours of 9:00 a.m. and 5:00 p.m.

C. Without excluding other just grounds for revocation, the Borough Council may revoke any license obtained under an application containing a false or fraudulent statement knowingly made by the applicant with intent to obtain a license by means of false or fraudulent representations or for violation of this chapter on repeated occasions or any other grounds specified by law. No license issued under this chapter shall be transferable, and no part of the fee for said license shall be returnable should the license be surrendered by the licensee or revoked by the governing body of the Borough for cause.

D. Fees.

(1) License fees for a commercial handbill distribution license shall be as follows:

(a) For the period of one year: $25.

(b) For the period of three months: $10.

(c) For a period of one week: $5.

(d) For a period of one day: $3.

(2) The yearly license shall be for a calendar year or the portion thereof remaining at the time of issuance.

§ 207-19. Violations and penalties.

Any person in violation of any of the provisions of this chapter shall be fined in an amount not exceeding $200 for each offense or be imprisoned for a period not exceeding 60 days, or be both so fined and imprisoned. Each day that such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such hereunder.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 284. Storm Sewers

Article II. Improper Disposal of Waste

[Adopted 4-7-2005 by Ord. No. 2005-8]

§ 284-6. Purpose.

An article to prohibit the spilling, dumping, or disposal of materials other than stormwater to the municipal separate storm sewer system (MS4) operated by the Borough of Berlin, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

§ 284-7. Definitions.

For the purpose of this article, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this article 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.

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

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

STORMWATER
: Water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal or equipment.

§ 284-8. Prohibited conduct.

The spilling, dumping, or disposal of materials other than stormwater, to the municipal separate storm sewer system operated by the Borough of Berlin is prohibited. The spilling, dumping, or disposal of materials other than stormwater in such a manner as to cause the discharge of pollutants to the municipal separate storm sewer system is also prohibited.

§ 284-9. Exceptions to prohibition.

A. Waterline flushing and discharges from potable water sources.

B. Uncontaminated groundwater (e.g., infiltration, crawl space or basement sump pumps, foundation or footing drains, rising groundwaters).

C. Air conditioning condensate (excluding contact and noncontact cooling water).

D. Irrigation water (including landscape and lawn watering runoff).

E. Flows from springs, riparian habitats and wetlands, water reservoir discharges and diverted stream flows.

F. Residential car washing water, and residential swimming pool discharges.

G. Sidewalk, driveway and street wash water.

H. Flows from fire-fighting activities.

I. Flows from rinsing of the following equipment with clean water:

(1) Beach maintenance equipment immediately following its use for its intended purposes; and

(2) Equipment used in the application of salt and deicing materials immediately following salt and deicing material applications. Prior to rinsing with clean water, all residual salt and deicing materials must be removed from equipment and vehicles to the maximum extent practicable using dry cleaning methods (e.g., shoveling and sweeping). Recovered materials are to be returned to storage for reuse or properly discarded. Rinsing of equipment, as noted in the above situation, is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.

§ 284-10. Enforcement.

This article shall be enforced by the Police Department and/or other municipal officials of the Borough of Berlin.

§ 284-11. Violations and penalties.

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 278. Solid Waste

Article IV. Containerized Yard Waste

[Adopted 4-7-2005 by Ord. No. 2005-7]

§ 278-19. Purpose.

An article to establish requirements for the proper handling and disposal of yard waste in the Borough of Berlin, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

§ 278-20. Definitions.

For the purpose of this article, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this article 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.

CONTAINERIZED
: The placement of yard waste in a trash can, bucket, bag or other vessel, such as to prevent the yard waste from spilling or blowing out into the street and coming into contact with stormwater.

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

STREET
: Any street, avenue, boulevard, road, parkway, viaduct, drive, or other way which is an existing state, county, or municipal roadway and includes the land between the street lines, whether improved or unimproved, and may comprise of pavement, shoulders, gutters, curbs, sidewalks, parking areas, and other areas within the street lines.

YARD WASTE
: Leaves and grass clippings.

§ 278-21. Prohibited conduct.

The owner or occupant of any property, or any employee or contractor of such owner or occupant engaged to provide lawn care or landscaping services, shall not sweep, rake, blow or otherwise place yard waste, unless the yard waste is containerized, in the street. If yard waste that is not containerized is placed in the street, the party responsible for placement of yard waste must remove said yard waste from the street or said party shall be deemed in violation of this article.

§ 278-22. Enforcement.

This article shall be enforced by the Police Department and/or other municipal officials of the Borough of Berlin.

§ 278-23. Violations and penalties.

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 285. Stormwater Management

Article II. Retrofitting of Storm Drain Inlets

[Adopted 11-2-2009 by Ord. No. 2009-19]

§ 285-7. Purpose.

An ordinance requiring the retrofitting of existing storm drain inlets which are in direct contact with repaving, repairing, reconstruction, or resurfacing or alterations of facilities on private property, to prevent the discharge of solids and floatables (such as plastic bottles, cans, food wrappers and other litter) to the municipal separate storm sewer system(s) operated by the Borough of Berlin so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

§ 285-8. Definitions.

For the purpose of this article, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this article 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.

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

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

STORM DRAIN INLET
: An opening in a storm drain used to collect stormwater runoff and includes, but is not limited to, a grate inlet, curb-opening inlet, slotted inlet, and combination inlet.

WATERS OF THE STATE
: The ocean and its estuaries, all springs, streams and bodies of surface water or groundwater, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

§ 285-9. Prohibited conduct.

No person in control of private property (except a residential lot with one single-family house) shall authorize the repaving, repairing (excluding the repair of individual potholes), resurfacing (including top

coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), reconstructing or altering any surface that is in direct contact with an existing storm drain inlet on that property unless the storm drain inlet either:

A. Already meets the design standard below to control passage of solid and floatable materials; or

B. Is retrofitted or replaced to meet the standard in § **285-10** below prior to the completion of the project.

§ 285-10. Design standard.

Storm drain inlets identified in § **285-9** above shall comply with the following standard to control passage of solid and floatable materials through storm drain inlets. For purposes of this paragraph, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids. For exceptions to this standard, see § **285-10C** below:

A. Grates.

(1) Design engineers shall use either of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:

(a) The New Jersey Department of Transportation (NJDOT) bicycle-safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996); or

(b) A different grate, if each individual clear space in that grate has an area of no more than seven square inches or is no greater than 0.5 inch across the smallest dimension.

(2) Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-opening portion) of combination inlets, grates on storm sewer manholes, ditch grates, trench grates, and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater basin floors.

B. Whenever design engineers use a curb-opening inlet, the clear space in that curb opening (or each individual clear space, if the curb opening has two or more clear spaces) shall have an area of no more than seven square inches or be no greater than two inches across the smallest dimension.

C. This standard does not apply:

(1) Where the Municipal Engineer agrees that this standard would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets that meet these standards;

(2) Where flows 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 4 5/8 inches long and 1 1/2 inches wide (this option does not apply for outfall netting facilities); or

(b) A bar screen having a bar spacing of 0.5 inch.

(3) Where flows are conveyed through a trash rack that has parallel bars with one-inch spacing between the bars; or

(4) 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.

§ 285-11. Enforcement.

This article shall be enforced by the Berlin Police Department and/or other municipal officials of the Borough of Berlin.

§ 285-12. Violations and penalties.

Any person(s) who is found to be in violation of the provisions of this article shall be subject to a fine not to exceed $500 for each storm drain inlet that is not retrofitted to meet the design standard.

BOROUGH OF BERLIN
COUNTY OF CAMDEN

ORDINANCE 2021-02

AN ORDINANCE CREATING NEW CHAPTER 336 OF THE CODE OF THE BOROUGH OF BERLIN ENTITLED "BERLIN BOROUGH STORMWATER CONTROL ORDINANCE"

BE IT ORDAINED by the Governing Body of the Borough of Berlin, in the County of Camden, State of New Jersey that, Chapter 336, of the Code of the Borough of Berlin is hereby adopted to include the following:

Ordinance #336 – Stormwater Control

§336-1. Scope and Purpose:

A. Policy Statement

Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure Best Management Practices (GI BMPs) and nonstructural stormwater management strategies. GI BMPs and low impact development (LID) should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution. GI BMPs and LID should be developed based upon physical site conditions and the origin, nature and the anticipated quantity, or amount, of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls for "major development," as defined below in §336-2.

C. Applicability

1. This ordinance shall be applicable to the following major developments:
    a. Non-residential major developments; and
    b. Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.
2. This ordinance shall also be applicable to all major developments undertaken by the Borough of Berlin.

D. 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 anyother ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

§336-2. 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 Camden 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 Camden 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:

1. The disturbance of one or more acres of land since February 2, 2004;
2. The creation of one-quarter acre or more of “regulated impervious surface” since February 2, 2004.
3. The creation of one-quarter acre or more of “regulated motor vehicle surface” since March 2, 2021 {*or the effective date of this ordinance, whichever is earlier*}; or
4. A combination of 2 and 3 above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of 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 §336-4.F. 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.

§336- 3. Design and Performance Standards for Stormwater Management Measures

A. 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:

1. 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.
2. The minimum standards for groundwater recharge, stormwater quality, and stormwater runoff quantity shall be met by incorporating green infrastructure.

B. 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.

§336- 4. Stormwater Management Requirements for Major Development

A. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a major development in accordance with §336- 10.

B. 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 *Helonias bullata* (swamp pink) and/or *Clemmys muhlnebergi* (bog turtle).

C. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of §336- 4.P, Q and R:

1. The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
2. The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
3. The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.

D. A waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of §336- 4.O, P, Q and R 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:

1. The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;
2. The applicant demonstrates through an alternatives analysis, that through the use of stormwater management measures, the option selected complies with the requirements of §336-4.O, P, Q and R to the maximum extent practicable;
3. The applicant demonstrates that, in order to meet the requirements of §336-4.O, P, Q and R, existing structures currently in use, such as homes and buildings, would need to be condemned; and
4. 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 4.D.3 above within the upstream drainage area of the receiving stream, that would provide additional opportunities to mitigate the requirements of §336-4.O, P, Q and R that were not achievable onsite.

E. Tables 1 through 3 below summarize the ability of stormwater best management practices identified and described in the New Jersey Stormwater Best Management

Practices Manual to satisfy the green infrastructure, groundwater recharge, stormwater runoff quality and stormwater runoff quantity standards specified in §336-4.O, P, Q and R. When designed in accordance with the most current version of the New Jersey Stormwater Best Management Practices Manual, the stormwater management measures found at N.J.A.C. 7:8-5.2 (f) Tables 5-1, 5-2 and 5-3 and listed below in Tables 1, 2 and 3 are presumed to be capable of providing stormwater controls for the design and performance standards as outlined in the tables below. Upon amendments of the New Jersey Stormwater Best Management Practices to reflect additions or deletions of BMPs meeting these standards, or changes in the presumed performance of BMPs designed in accordance with the New Jersey Stormwater BMP

Manual, the Department shall publish in the New Jersey Registers a notice of administrative change revising the applicable table. The most current version of the BMP Manual can be found on the Department's website at:

https://njstormwater.org/bmp_manual2.htm.

F. 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.

Table 1
Green Infrastructure BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity

Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Stormwater Runoff Quantity	Groundwater Recharge	Minimum Separation from Seasonal High Water Table (feet)
Cistern	0	Yes	No	--
Dry Well[a]	0	No	Yes	2
Grass Swale	50 or less	No	No	2[e] 1[f]
Green Roof	0	Yes	No	--
Manufactured Treatment Device[a] [g]	50 or 80	No	No	Dependent upon the device
Pervious Paving System[a]	80	Yes	Yes[b] No[c]	2[b] 1[c]
Small-Scale Bioretention Basin[a]	80 or 90	Yes	Yes[b] No[c]	2[b] 1[c]
Small-Scale Infiltration Basin[a]	80	Yes	Yes	2
Small-Scale Sand Filter	80	Yes	Yes	2
Vegetative Filter Strip	60-80	No	No	--

Notes to Tables 1, 2, and 3:

(a) subject to the applicable contributory drainage area limitation specified at §336-4.O.2;
(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 §336-2;
(h) manufactured treatment devices that do not meet the definition of green infrastructure at §336-2.

Table 2
Green Infrastructure BMPs for Stormwater Runoff Quantity
(or for Groundwater Recharge and/or Stormwater Runoff Quality with a Waiver or Variance from N.J.A.C. 7:8-5.3)

Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Stormwater Runoff Quantity	Groundwater Recharge	Minimum Separation from Seasonal High Water Table (feet)
Bioretention System	80 or 90	Yes	Yes[(b)] No[(c)]	2[(b)] 1[(c)]
Infiltration Basin	80	Yes	Yes	2
Sand Filter[(b)]	80	Yes	Yes	2
Standard Constructed Wetland	90	Yes	No	N/A
Wet Pond[(d)]	50-90	Yes	No	N/A

Notes to Tables 1, 2, and 3:
(a) subject to the applicable contributory drainage area limitation specified at §336-4.O.2;
(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 §336-2;

(h) manufactured treatment devices that do not meet the definition of green infrastructure at §336-2.

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

Notes to Tables 1, 2, and 3:

(a) subject to the applicable contributory drainage area limitation specified at §336-4.O.2;
(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 §336-2;
(h) manufactured treatment devices that do not meet the definition of green infrastructure at §336-2.

G. 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 §336-4.B. Alternative stormwater management measures may be used to satisfy the requirements at §336-4.O only if the measures meet the definition of green infrastructure at §336-2. Alternative stormwater management measures that function in a similar manner to a BMP listed at §336-O.2 are subject to the contributory drainage area limitation specified at §336-O.2 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 §336-O.2 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 §336-4.D is granted from §336-4.O.

H. 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.

I. Design standards for stormwater management measures are as follows:

1. 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);
2. 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 §336-8.C;

3. 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;
4. Stormwater management BMPs shall be designed to meet the minimum safety standards for stormwater management BMPs at §336-8; and
5. 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.
6. Every detention basin shall be thoroughly landscaped. However, the street side of the basin shall be landscaped with low-lying vegetation as required for sight triangle easements as set forth in §335-62 and §335-66. It is intended that the street side of the basin be visible for security purposes.
7. No consideration shall be given to groundwater recharge for reducing the size of the basin, and total recharge (total infiltration) basins shall not be allowed, except as may be permitted or required in the Pinelands Area.
8. Access roads to basins shall be a minimum of 10 feet wide and a minimum of six inches of DGA on well prepared subgrade suitable for a ten-ton truck.
9. Detention basins shall be constructed on a lot solely utilized for the purpose of the basin or on a lot dedicated for the purpose of open space. If the basin is to be constructed on its own lot, the lot may vary from the bulk requirements of the zone in which it is located; however, a minimum 20 feet of lot frontage on an improved street shall be provided. The lot shall be of sufficient size to contain the basin and all outfall structures entirely within a minimum twenty-five-foot distance from the top of the slope to any property line in any direction.
10. Nonresidential developments. Detention basins shall be constructed so as to take advantage of natural features to the greatest extent possible. Maintenance access shall be provided to the basin from either the surrounding right-of-way or from within the site driveway or parking areas. If access is provided from within the site, appropriate easement(s) shall be provided. Basins shall not be screened from view from the developed portions of the site.

J. 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 §336-2 may be used only under the circumstances described at §336-4.O.4.

K. Any application for a new agricultural development that meets the definition of major development at §336-2 shall be submitted to the Soil Conservation District for review and approval in accordance with the requirements at §336-4.O, P, Q and R 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.

L. If there is more than one drainage area, the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at §336-4.P, Q and R 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.

M. 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 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 §336-4.O, P, Q and R 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 §336-10.B.5. 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.

N. 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 §336-4 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 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 M 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 M above.

O. Green Infrastructure Standards

1. 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.

2. To satisfy the groundwater recharge and stormwater runoff quality standards at §336-4.P and Q, the design engineer shall utilize green infrastructure BMPs

identified in Table 1 at §336-4.F. and/or an alternative stormwater management measure approved in accordance with §336-4.G. The following green infrastructure BMPs are subject to the following maximum contributory drainage area limitations:

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

3. To satisfy the stormwater runoff quantity standards at §336-4.R, the design engineer shall utilize BMPs from Table 1 or from Table 2 and/or an alternative stormwater management measure approved in accordance with §336-4.G.

4. If a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with §336-4.D 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 §336-4.G may be used to meet the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at §336-4.P, Q and R.

5. 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 §336-4.P, Q and R, unless the project is granted a waiver from strict compliance in accordance with §336-4.D.

P. Groundwater Recharge Standards

1. This subsection contains the minimum design and performance standards for groundwater recharge as follows:
2. The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at §336-5, either:

a. Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or
b. Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated.

3. This groundwater recharge requirement does not apply to projects within the "urban redevelopment area," or to projects subject to 4 below.
4. The following types of stormwater shall not be recharged:

   a. Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than "reportable quantities" as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan or landfill closure plan and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and
   b. Industrial stormwater exposed to "source material." "Source material" means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

Q. Stormwater Runoff Quality Standards

1. 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.
2. 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:

   a. 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.

   b. 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.

3. 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 2 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.
4. 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 Distribution

Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)
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

(continued on the next page)

5. 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.

6. 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 §336-4.P, Q and R.
7. 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.
8. 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.
9. 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.
10. 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.

R. Stormwater Runoff Quantity Standards

1. This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.
2. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at §336-5, complete one of the following:

   a. 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;

b. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the 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;

c. 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

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

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

§336-5. Calculation of Stormwater Runoff and Groundwater Recharge:

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

1. The design engineer shall calculate runoff using one of the following methods:

a. The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15 and 16 Part 630, Hydrology National Engineering Handbook, incorporated herein by reference as amended and supplemented. This methodology is additionally described in *Technical Release 55 - Urban Hydrology for Small Watersheds* (TR-55), dated June 1986, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at:

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf

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

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

http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf.

2. 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 §336-5.A.1.i and the Rational and Modified Rational Methods at §336-5.A.1.ii. 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).

3. In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.

4. In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS *Technical Release 55 – Urban Hydrology for Small Watersheds* or other methods may be employed.

5. If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. Groundwater recharge may be calculated in accordance with the following:

The New Jersey Geological Survey Report GSR-32, A Method for Evaluating Groundwater-Recharge Areas in New Jersey, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at the New Jersey Geological Survey website at:

https://www.nj.gov/dep/njgs/pricelst/gsreport/gsr32.pdf

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

§336-6. Sources for Technical Guidance:

A. Technical guidance for stormwater management measures can be found in the documents listed below, which are available to download from the Department's website at:

http://www.nj.gov/dep/stormwater/bmp_manual2.htm.

1. Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended and supplemented. Information is provided on stormwater management measures such as, but not limited to, those listed in Tables 1, 2, and 3.

2. Additional maintenance guidance is available on the Department's website at:

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

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

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

§336-7. Solids and Floatable Materials Control Standards:

A. Site design features identified under §336-4.F above, or alternative designs in accordance with §336-4.G 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 §336-7.A.2 below.

1. 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:

   a. 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

b. 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.

c. 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.

2. The standard in A.1. above does not apply:

a. 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;
b. 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;
c. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., 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:

i. 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
ii. A bar screen having a bar spacing of 0.5 inches.

Note that these exemptions do not authorize any infringement of requirements in the Residential Site Improvement Standards for bicycle safe grates in new residential development (N.J.A.C. 5:21-4.18(b)2 and 7.4(b)1).

d. Where flows are conveyed through a trash rack that has parallel bars with one-inch (1 inch) spacing between the bars, to the elevation of the Water Quality Design Storm as specified in N.J.A.C. 7:8; or

e. Where the 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.

§336-8. Safety Standards for Stormwater Management Basins:

A. 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.

B. 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 §336-8.C.1, 8.C.2, and 8.C.3 for trash racks, overflow grates, and escape provisions at outlet structures.

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

1. 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:

    a. The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;
    b. The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;

    c. 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
    d. 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.

2. An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:

    a. The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
    b. The overflow grate spacing shall be no less than two inches across the smallest dimension
    c. The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 pounds per square foot.

3. Stormwater management BMPs shall include escape provisions as follows:

    a. If a stormwater management 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 8.C, a free-standing outlet structure may be exempted from this requirement;

b. 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 VIII.E for an illustration of safety ledges in a stormwater management BMP; and

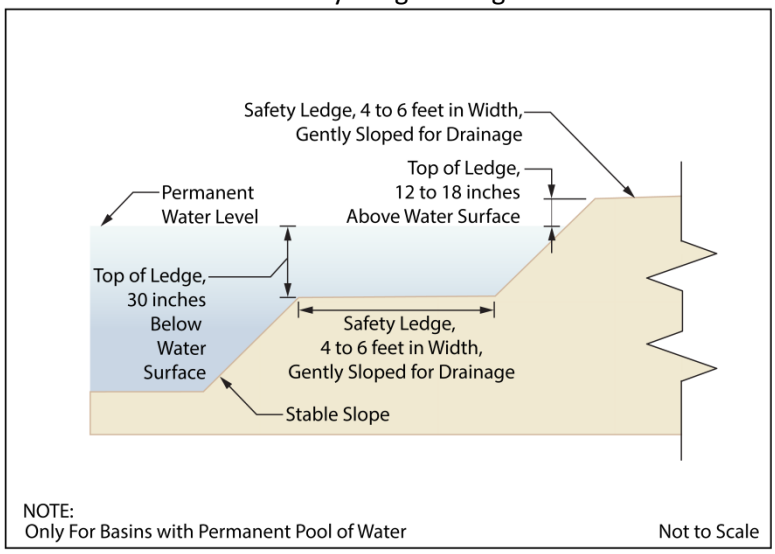
c. In new stormwater management BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical.

D. 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.

E. Safety Ledge Illustration

Elevation View –Basin Safety Ledge Configuration



§336-9. Requirements for a Site Development Stormwater Plan:

A. Submission of Site Development Stormwater Plan

1. 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 §336-9.C below as part of the submission of the application for approval.

2. The applicant shall demonstrate that the project meets the standards set forth in this ordinance.

3. The applicant shall submit 14 copies of the materials listed in the checklist for site development stormwater plans in accordance with §336-9.C of this ordinance.

B. 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.

C. Submission of Site Development Stormwater Plan

The following information shall be required:

1. 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.

2. 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.

3. 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.

4. Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of Sections III through V 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.

5. Stormwater Management Facilities Map

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

   a. 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.
   b. 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.

6. Calculations

   a. Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in §336-4 of this ordinance.
   b. 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.

7. Maintenance and Repair Plan

   The design and planning of the stormwater management facility shall meet the maintenance requirements of §336-10.

8. 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 §336-9.C.1 through 9.C.6 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.

§336-10. Maintenance and Repair:

A. Applicability

Projects subject to review as in §336-1.C of this ordinance shall comply with the requirements of §336-10.B and 10.C.

B. General Maintenance

1. The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development.

2. 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.

3. 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.

   a. Residential development without a homeowner's association. A developer may petition Borough Council for a waiver from the requirements of establishing a homeowner's association. Any such petition for waiver shall be in writing to the Borough Clerk prior to the approving authority granting or denying final site plan or subdivision approval. The Borough Council shall grant or deny any such request for waiver within 45 days from the date the Borough Clerk receives the written petition for waiver supported by the developer's maintenance plan, including estimated costs. Failure on the part of the Borough Council to take action on the request within the said forty-five-day period shall be deemed a denial of the request unless the developer shall have granted an extension of time, in writing. Detention basins shall be constructed on a separate lot and the developer shall submit a proposal for the continued maintenance of the detention basin for a period of 20 years assuming the expenditure of the principal and interest. Such proposal shall be submitted to the attorney and engineer for the approving authority for review and approval. If approved, the developer shall pay the approved amount into a Borough detention basin escrow fund, and the Borough shall thereafter be responsible for the maintenance of the basin and shall use the funds to maintain the basin.

   b. Nonresidential detention basins. All nonresidential detention basins shall be maintained by the property owner. In the event that the basin also controls stormwater from off-site runoff from Borough-owned property, rights-of-way and/or easements, the owner of the property may request that the Borough

maintain the basin only if a prorated cash contribution has been deposited with the Borough for the maintenance over a period of at least 20 years.

4. 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.

5. If the party responsible for maintenance identified under §336-10.B.3 above is not a public agency, the maintenance plan and any future revisions based on §336-10.B.7 below shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken.

6. 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.

7. The party responsible for maintenance identified under §336-10.B.3 above shall perform all of the following requirements:

    a. 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;
    b. evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed; and
    c. 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 §336-10.B.6 and B.7 above.

8. The requirements of §336-10.B.3 and B.4 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.

9. 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.

C. 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

§336-11. Pinelands Area:

A. Notwithstanding any other provisions of this section, in the Pinelands Area the following provisions shall apply:

1. The total runoff generated from any net increase in impervious surfaces by a ten-year storm of twenty-four-hour duration shall be retained and infiltrated on site. Runoff volumes shall be calculated in accordance with the United States Soil Conservation Service Technical Release No. 55 or the SCS National Engineering Handbook, Section 4.

2. The rates of runoff generated from the parcel by a two-year, ten-year, and one-hundred-year storm, each of a twenty-four-hour duration, shall not increase as a result of the proposed development. Runoff rates shall be calculated in accordance with the United States Soil Conservation Service Technical Release No. 55 or the SCS National Engineering Handbook, Section 4.

3. Surface water runoff shall not be directed in such a way as to increase the volume and rate of discharge into any surface water body from that which existed prior to development of the parcel.

4. Excessively and somewhat excessively drained soils, as defined by the Soil Conservation Service, should be avoided for recharge of runoff wherever practical.

5. A minimum separation of two feet between the elevation of the lowest point of the bottom of the infiltration or detention facility and the seasonal high-water table shall be met or a lesser separation when it is demonstrated that the separation, either due to soil conditions or when considered in combination with other stormwater management techniques, is adequate to protect groundwater quality.

(continued on the next page)

6. A four-year maintenance guaranty shall be provided for the entire stormwater management system by the applicant. In addition, the applicant shall fund or otherwise guarantee an inspection and maintenance program for a period of not less than 10 years. The program shall identify the entity charged with the responsibility for annual inspections and the completion of any necessary maintenance and the method to finance said program.

B. See Section 335-70 Stormwater Control Ordinance for Pinelands Area for further details.

§336-12. Penalties:

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

§336-13. Severability:

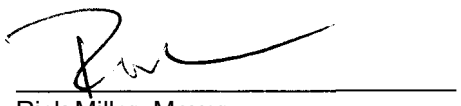
Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not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

§336-14. Effective Date:

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

ALL OF WHICH IS ADOPTED THIS 11th day of March 2021, by the Governing Body of the Borough of Berlin.

Mayor Signature



Rick Miller, Mayor

Introduction:

Moved by: Councilwoman Cummings; **Seconded by**: Councilman Pearce
Vote: Motion carried by roll call vote (summary: Yes = 6 No= 0 Absent=0).
Yes: Councilmembers: Badolato, Cummings Simone, Hohing, Miller, Pearce
No: None
Abstain: None
Absent: None

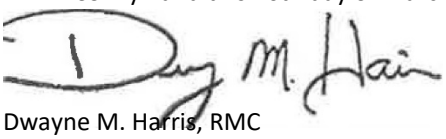
Having been properly introduced, this Ordinance will have a second reading, public hearing and possible adoption will be on March 11, 2021.

I, Dwayne M. Harris, RMC, Municipal Clerk of the Borough of Berlin, hereby certifies the foregoing to be the true and correct actions by the Governing Body at its meeting on Thursday, February 11, 2021.

Adoption:

Moved by: Councilmember Miller; **Seconded by**: Councilmember Badolato
Vote: Motion carried by roll call vote (summary: Yes = 6; Absent = 0).
Yes: Council members, Badolato, Cummings, Hohing, Miller, Simone, Pearce
No: None
Abstain: None
Absent: None

I, Dwayne M. Harris, RMC, Municipal Clerk of the Borough of Berlin, hereby certifies the foregoing to be a true action of the Governing Body at its Meeting of Thursday, March 11, 2021.
WITNESS my hand this 16th day of March 2021.



Dwayne M. Harris, RMC

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 284. Storm Sewers

Article I. Illicit Connections

[Adopted 4-7-2005 by Ord. No. 2005-4]

§ 284-1. Purpose.

An article to prohibit illicit connections to the municipal separate storm sewer system (MS4) operated by the Borough of Berlin, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

§ 284-2. Definitions.

For the purpose of this article, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this article 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.

DOMESTIC SEWAGE
Waste and wastewater from humans or household operations.

ILLICIT CONNECTION
Any physical or nonphysical connection that discharges domestic sewage, noncontact cooling water, processed wastewater, or other industrial waste (other than stormwater) to the municipal separate storm sewer system operated by the Borough of Berlin, unless that discharge is authorized under a NJPDES permit other than the Tier A Municipal Stormwater General Permit (NJPDES Permit Number NJ0141852). Nonphysical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system.

INDUSTRIAL WASTE
Nondomestic waste, including but not limited to those pollutants regulated under Section 307(a), (b), or (c) of the Federal Clean Water Act [33 U.S.C. § 1317(a), (b), or (c)].

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

NJPDES PERMIT
A permit issued by the New Jersey Department of Environmental Protection to implement the New Jersey Pollutant Discharge Elimination System (NJPDES) rules at N.J.A.C. 7:14A et seq.

NONCONTACT COOLING WATER

Water used to reduce temperature for the purpose of cooling. Such waters do not come into direct contact with any raw material, intermediate product (other than heat) or finished product. Noncontact cooling water may, however, contain algaecides, or biocides to control fouling of equipment such as heat exchangers, and/or corrosion inhibitors.

PERSON

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

PROCESSED WASTEWATER

Any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Processed wastewater includes, but is not limited to, leachate and cooling water other than noncontact cooling water.

STORMWATER

Water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal or equipment.

§ 284-3. Prohibited conduct.

[Amended 7-16-2015 by Ord. No. 2015-14]

A. The spilling, dumping or disposal of materials other than stormwater to the municipal separate storm sewer system operated by the Township is prohibited. The spilling, dumping or disposal of materials other than stormwater, including, but not limited to, uncontaminated groundwater (e.g., infiltration, crawl space or basement sump pumps, foundation or footing drains, rising groundwater and air-conditioning condensate), in such a manner as to cause the discharge of pollutants to the municipal storm system is also prohibited.

B. Exceptions to prohibition:

(1) Water line flushing and discharges from potable water sources.

(2) Irrigation water (including landscape and lawn watering runoff).

(3) Flows from springs, riparian habitats and wetlands, water reservoir discharges and diverted stream flows.

(4) Residential car washing water and residential swimming pool discharges.

(5) Sidewalk, driveway and street wash water.

(6) Flows from firefighting activities.

(7) Flows from rinsing of the following equipment with clean water:

(a) Equipment used in the application of salt and deicing materials immediately following salt and deicing applications. Prior to rinsing with clean water, all residual salt and deicing materials must be removed from equipment and vehicles to the maximum extent practicable using dry cleaning methods (e.g., shoveling and sweeping). Recovered materials are to be returned to storage for reuse or properly discarded.

(b) Rinsing of equipment as noted in the above situation is limited to exterior, undercarriage and exposed parts and does not apply to engines or other machinery.

§ 284-4. Enforcement.

This article shall be enforced by the Police Department and/or other municipal officials of the Borough of Berlin.

§ 284-5. Violations and penalties.

Any person, entity or corporation who shall violate any of the provisions of this article shall, upon conviction thereof, before the Municipal Court of the Borough of Berlin, be subject to a fine not exceeding $500 or imprisonment in the county jail for a term not exceeding 90 days, or both, in the discretion of the Municipal Court Judge before whom such defendant shall be convicted. A separate offense may be deemed committed on each day that a violation occurs or continues.

Borough of Berlin, NJ
Friday, September 24, 2021

Chapter 285. Stormwater Management

Article I. Dumpsters and Refuse Containers

[Adopted 11-2-2009 by Ord. No. 2009-18]

§ 285-1. Purpose.

Requirements of the New Jersey Pollutant Discharge Elimination System, Tier "A" MS4 permit requiring dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times and prohibits the spilling, dumping, leaking, or otherwise discharge of liquids, semiliquids or solids from the containers to the municipal separate storm sewer system(s) operated by the Borough of Berlin and/or the waters of the state so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

§ 285-2. Definitions.

The following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this article 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.

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

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

REFUSE CONTAINER
Any waste container that a person controls, whether owned, leased, or operated, including dumpsters, trash cans, garbage pails, and plastic trash bags.

STORMWATER
Water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal equipment.

WATERS OF THE STATE
The ocean and its estuaries, all springs, streams and bodies of surface water or groundwater, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

§ 285-3. Prohibited conduct.

A. Any person who controls, whether owned, leased, or operated, a refuse container or dumpster must ensure that such container or dumpster is covered at all times and shall prevent refuse from spilling out or overflowing.

B. Any person who owns, leases or otherwise uses a refuse container or dumpster must ensure that such container or dumpster does not leak or otherwise discharge liquids, semiliquids or solids to the municipal separate storm sewer system(s) operated by the Borough of Berlin.

§ 285-4. Exceptions to prohibition.

The following is a list of exceptions to the prohibition. They are as follows:

A. Permitted temporary demolition containers.

B. Municipal-owned litter receptacles (other than dumpsters or other bulk containers).

C. Individual homeowner trash and recycling containers.

D. Refuse containers at facilities authorized to discharge stormwater under a valid NJPDES permit.

E. Large bulky items (e.g., furniture, bound carpet and padding, white goods placed curbside for pickup).

§ 285-5. Enforcement.

This article shall be enforced by the Berlin Police Department and/or other municipal officials of the Borough of Berlin.

§ 285-6. Violations and penalties.

Any person(s) who is found to be in violation of the provisions of this article shall be subject to a fine not to exceed $500.

SPPP Form 7 – Street Sweeping

All records must be available upon request by NJDEP.

1. Provide a written description or attach a map indicating which streets are swept as required by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.

Berlin Borough currently maintains a street sweeping program. The Borough is divided into groups that are assigned different sweeping schedules.

Attached is the street sweeping log and map.

2. Provide a written description or attach a map indicating which streets are swept that are NOT required to be swept by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.

Berlin Borough sweeps all required streets as needed and partners with another entity through a shared service arrangement.

3. Does the municipality provide street sweeping services for other municipalities? If so, please describe the arrangements.

No

4. Indicate the location of records, including sweeping dates, areas swept, number of miles swept and total amount of wet tons collected each month. Note which records correspond to sweeping activities beyond what is required by the NJPDES permit, i.e., sweepings of streets within the municipality that are not required by permit to be swept or sweepings of streets outside of the municipality.

A daily log of all maintenance is kept at the Department of Public Works. The log will be used to record the date and area swept, as well as the amount of materials collected.

BOROUGH OF BERLIN
STREET SWEEPING MAP

ZONING LEGEND

R-1 / PR-1 – Low Density Residential
R-1a – Medium Density Residential
R-2 / PR-2 – High Density Residential
R-3 – Garden Apartment District
R-AR – Residential Age Restricted
PARC – Planned Adult Residential Community

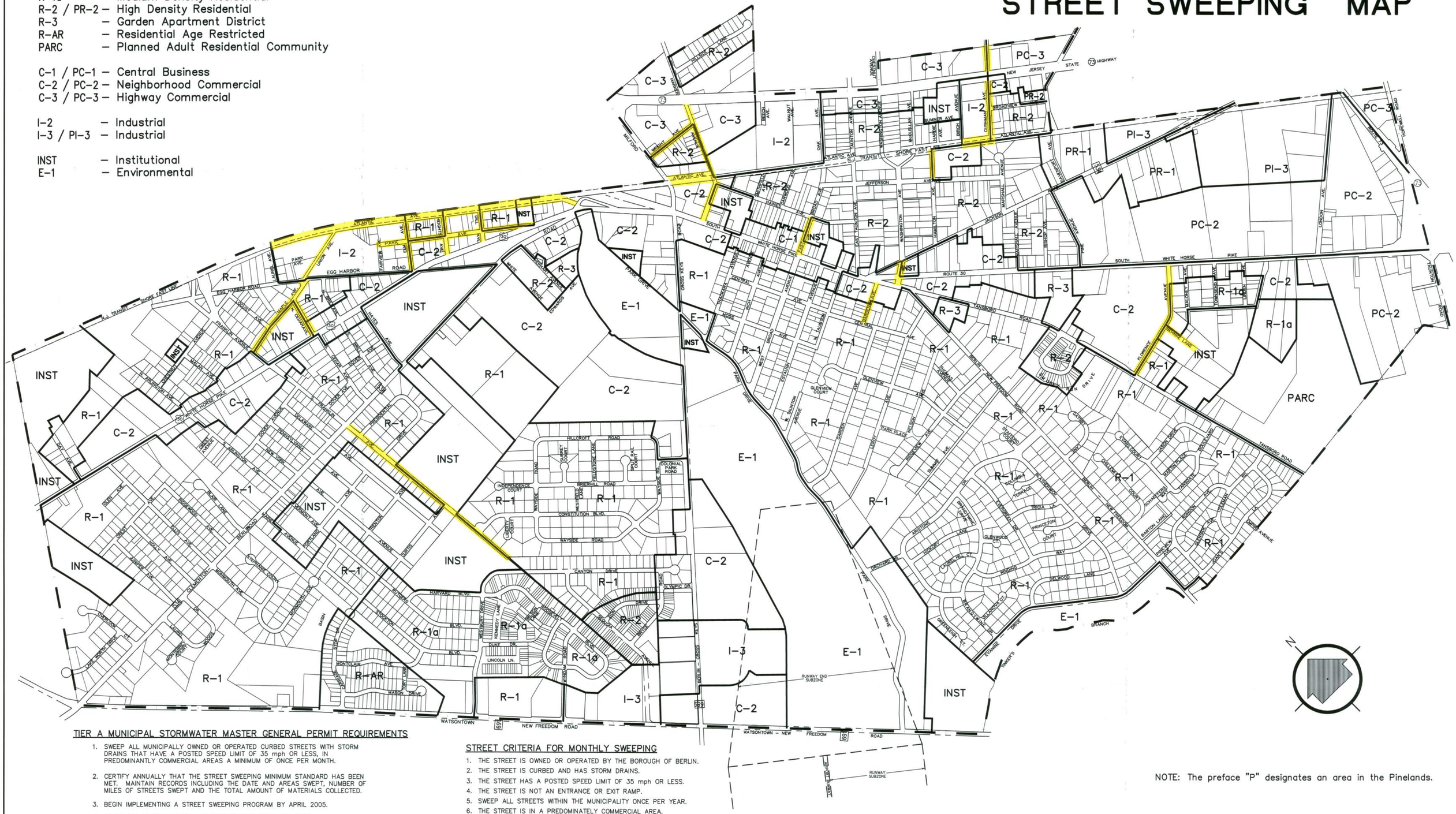
C-1 / PC-1 – Central Business
C-2 / PC-2 – Neighborhood Commercial
C-3 / PC-3 – Highway Commercial

I-2 – Industrial
I-3 / PI-3 – Industrial

INST – Institutional
E-1 – Environmental

SWEEPING LEGEND

– SWEEP ONCE EVERY MONTH



TIER A MUNICIPAL STORMWATER MASTER GENERAL PERMIT REQUIREMENTS

1. SWEEP ALL MUNICIPALLY OWNED OR OPERATED CURBED STREETS WITH STORM DRAINS THAT HAVE A POSTED SPEED LIMIT OF 35 mph OR LESS, IN PREDOMINANTLY COMMERCIAL AREAS A MINIMUM OF ONCE PER MONTH.
2. CERTIFY ANNUALLY THAT THE STREET SWEEPING MINIMUM STANDARD HAS BEEN MET. MAINTAIN RECORDS INCLUDING THE DATE AND AREAS SWEPT, NUMBER OF MILES OF STREETS SWEPT AND THE TOTAL AMOUNT OF MATERIALS COLLECTED.
3. BEGIN IMPLEMENTING A STREET SWEEPING PROGRAM BY APRIL 2005.
4. SWEEP ALL STREETS WITHIN THE MUNICIPALITY ONCE PER YEAR.

STREET CRITERIA FOR MONTHLY SWEEPING

1. THE STREET IS OWNED OR OPERATED BY THE BOROUGH OF BERLIN.
2. THE STREET IS CURBED AND HAS STORM DRAINS.
3. THE STREET HAS A POSTED SPEED LIMIT OF 35 mph OR LESS.
4. THE STREET IS NOT AN ENTRANCE OR EXIT RAMP.
5. SWEEP ALL STREETS WITHIN THE MUNICIPALITY ONCE PER YEAR.
6. THE STREET IS IN A PREDOMINATELY COMMERCIAL AREA.

PREDOMINATELY COMMERCIAL GENERALLY MEANS THOSE AREAS WITH BUSINESSES INVOLVING THE SALE OF GOODS OR SERVICES. AREAS THAT ARE PRIMARILY RESIDENTIAL, INDUSTRIAL OR AGRICULTURAL ARE NOT REQUIRED TO BE SWEPT MONTHLY.

NOTE: The preface "P" designates an area in the Pinelands.

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)

Pennoni Associates Inc.
CONSULTING ENGINEERS & PROFESSIONAL LAND SURVEYORS
515 Grove Street
Haddon Heights, New Jersey 08035

DRAWN	C.W.S./FEN
APPRVD	KJS
DATE	12/20/04
SHEET	1 of 1

Street Sweeping Log

Borough of Berlin Street Sweeping Log

Street	Scheduled Sweeping	Miles Swept	Materials Collected
Park Ave.			
Dill Ave.			
Heights Ave.			
Atlantic Ave. (between Heights and Laurel)			
Union Ave.			
N. Cedar Ave.			
Maple Ave.			
Franklin (from Clementon Rd. to School)			
Harker Ave. (from Rt. 30 to Rt. 73)			
Atlantic Ave. (between Harker and Cross Keys)			
Wright Ave.			
East Broad (from Rt. 30 to Haines Ave.)			
Atlantic (between Birch and Cushman)			
Cushman (between Atlantic and Rt. 73)			
Cushman (from Rt. 73 to Township Line)			
Hamilton (between Jefferson and Railroad)			
Washington (from Jackson Rd. to Tansboro Rd.)			
Florence Ave.			
Behnke Lane			
Gardens Ave. (between Central and Tansboro Rd.)			

SPPP Form 8 – Catch Basins and Storm Drain Inlets

All records must be available upon request by NJDEP.

1. Describe the schedule for catch basin and storm drain inlet inspection, cleaning, and maintenance.
The Borough has an annual catch basin cleaning program to maintain function and efficiency. All catch basins will be inspected annually.The catch basin will be cleaned if there is sediment, trash or other debris observed. At the time of inspection, the catch basin will be inspected for proper function. Maintenance will be scheduled for those in need of repair and the Borough will respond to "clogging" reports on a case-buy-case basis and clean out debris where identified.
2. List the locations of catch basins and storm drain inlets with recurring problems, i.e., flooding, accumulated debris, etc.
N/A
3. Describe what measures are taken to address issues for catch basins and storm drain inlets with recurring problems and how they are prioritized.
The Department of Public Works cleans the basins and inlets as needed to maintain flow.
4. Describe the inspection schedule and maintenance plan for storm drain inlet labels on storm drains that do not have permanent wording cast into the design.
During the annual catch basin cleaning program, the label condition is checked to ensure that they are still visible, and are corrected if they are not.
5. Indicate the location of records of catch basin and storm drain inlet inspections and the wet tons of materials collected during catch basin and storm drain inlet cleanings.
A log of maintenance is kept at the Department of Public Works.

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
1	2	Ellis Avenue and West White Horse Pike				
2	2	11 Ellis Avenue				
3	8	Ellis Avenue and Crest Avenue				
4	2	118 Holly Avenue				
5	2	113 Juniper Avenue				
6	1	121 Juniper Avenue				
7	2	Overlook Court				
8	2	Lakeworth Drive				
9	3	Lakeworth Drive				
10	4	13 Laurel Woods Drive				
11	2	5 Laurel Woods Drive				
12	1	6 Monmouth Avenue				
13	3	8 Monmouth Avenue				
14	1	16 Monmouth Avenue				
15	1	19 Monmouth Avenue				
16	3	21 Monmouth Avenue				
17	1	18 Monmouth Avenue				
18	1	27 Monmouth Avenue				
19	1	Dead End of Monmouth Avenue at Pump Station				
20	1	Stephanie Court side of 12 Monmouth Avenue				
21	1	9 Stephanie Court				
22	3	13 Stephanie Court				
23	2	Clementon-Berlin Road at Blair Lane				
24		Blair Lane Basin				
25	2	Franklin Avenue and Presidential Drive				
26	2	23 Presidential Drive				
27	3	19 Presidential Drive				
28	2	5 Presidential Drive				
29	2	7 Presidential Drive				
30	2	8 and 10 Presidential Drive				
31	2	4 Presidential Drive				
32	2	Presidential Drive Basins				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
33	2	Dead End of Franklin Avenue				
34	4	Soccer Parking Lot				
35	1	Sidewalk Next To Soccer Parking Lot				
36	4	Soccer Fields				
37	1	25 N. Arlington Avenue				
38	1	26 N. Arlington Avenue				
39	2	Manholes in Drainage Easement Next to 27 N. Arlington Avenue				
40		Clean Outfall End of Drainage Easement Rear of 27 N. Arlington Avenue				
41	2	Maple Avenue and Egg Harbor Road				
42	2	Maple Avenue and N. Cedar Avenue				
43	1	Union Avenue Across From Concrete Plant				
44	2	Atlantic Avenue Behind Concrete Plant				
45	1	91 Atlantic Avenue				
46	3	Elm Avenue and Atlantic Avenue				
47	1	Elm Avenue Between Atlantic Avenue and Park Avenue				
48	1	12 Elm Avenue				
49	2	Elm Avenue and Egg Harbor Road				
50	3	West White Horse Pike and Heights Avenue				
51	1	Dead End of Atlantic Avenue by Jughandle				
52	1	Dead End of Atlantic Avenue to the Left of Jughandle Behind Curb				
53	3	Wayside Road and Colonial Park Road				
54	2	12 Hillcroft Road				
55	1	18 Hillcroft Road				
56	1	27 Hillcroft Road				
57	1	38 Hillcroft Road				
58	1	Corner of Hillcroft Road and Brierhill Road				
59	2	Independence Road and Wayside Road				
60	2	Wayside Road between Constitution Boulevard and Brierhill Road				
61	3	Constitution Boulevard and Brierhill Road				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
62	2	Liberty Court and Constitution Boulevard on Liberty Court				
63	1	On Constitution Boulevard across From Liberty Court				
64	2	Dead End of Constitution Boulevard				
65	2	56 Wayside Road by Hydrant Both Sides				
66	2	64 Wayside Road Both Sides				
67	4	Wayside Road and Constitution Boulevard				
68	2	18 Constitution Boulevard Both Ends of Property				
69	1	19 Constitution Boulevard				
70	2	12 Constitution Boulevard				
71	2	Wayside Road and Brierhill Road				
72	2	74 Wayside Road Both Sides				
73	2	Brierhill Road and Splitrail Court				
74	2	Brierhill Road and Fieldstone Lane				
75	3	Brierhill Road and Westfield Lane				
76	3	Brierhill Road and Surrey Court				
77		Cross Keys Road Basin				
78	2	Olympic Drive				
79	3	Olympic Drive at Bryce Road				
80	2	Canyon Drive at Bryce Road				
81	2	33 Canyon Drive				
82	3	25 Canyon Drive				
83	3	Canyon Drive at Sequoia Avenue				
84	2	Sequoia Avenue at Wyndham Road				
85	4	Sequoia Avenue at Bryce Road				
86	3	Sequoia Avenue at Apartments				
87	2	Sequoia Avenue near Watsontown-New Freedom Road				
88	1	Sequoia Avenue at Watsontow-New Freedom Road				
89	3	Bryce Road at Basin				
90	3	Bryce Road at Zion Drive				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
91	?	Zion Drive (under construction)				
92	?	Zion Drive (under construction)				
93	2	Westbury Drive and Watsontown-New Freedom Road				
94	4	Westbury Drive Between Watsontown-New Freedom Rd. and Lincoln Ln.				
95	2	Westbury Drive and Lincoln Lane				
96	4	Westbury Drive and Duke Drive				
97	2	Westbury Drive and Rutgers Boulevard				
98	1	Across from 102 Lincoln Lane				
99	1	Across from 105 Lincoln Lane				
100	1	Across from 103 Kennedy Lane				
101	1	Across from 104 Kennedy Lane				
102	1	Kennedy Lane and Duke Drive				
103	2	Duke Drive and Wilson Lane				
104	3	Wilson Lane and Roosevelt Boulevard				
105	2	55 Roosevelt Boulevard				
106	3	Roosevelt Boulevard and Wyndam Road				
107	1	78 Roosevelt Boulevard				
108	1	75 Roosevelt Boulevard				
109	2	Roosevelt Boulevard by Hydrant at Apartments				
110	4	Roosevelt Boulevard at Wyndam Road				
111	2	Wyndam Road and Watsontown-New Freedom Road				
112	2	Wyndam Road at Basin				
113	2	Wyndam Road Near Roosevelt Boulevard				
114	2	214 Roosevelt Boulevard				
115	1	232 Roosevelt Boulevard				
116	1	233 Roosevelt Boulevard				
117	2	19 Roosevelt Boulevard				
118	1	20 Roosevelt Boulevard				
119	1	105 Harvard Boulevard				
120	2	109 Harvard Boulevard				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
121	2	115 Harvard Boulevard				
122	2	Harvard Boulevard and Rutgers Boulevard				
123	1	120 Rutgers Boulevard				
124	1	116 Rutgers Boulevard				
125	1	119 Rutgers Boulevard				
126	1	113 Rutgers Boulevard				
127	1	110 Rutgers Boulevard				
128	1	109 Rutgers Boulevard				
129	1	108 Stockton Boulevard				
130	1	109 Stockton Boulevard				
131	1	113 Stockton Boulevard				
132	1	116 Stockton Boulevard				
133	1	201 Stockton Boulevard				
134	1	206 Stockton Boulevard				
135	1	221 Stockton Boulevard				
136	1	222 Stockton Boulevard				
137	1	Stockton Boulevard and Carriage Stop Drive				
138	1	302 Stockton Boulevard				
139	2	308 Stockton Boulevard				
140	1	309 Stockton Boulevard				
141	2	317 Stockton Boulevard				
142	4	Rutgers Boulevard and Stockton Boulevard				
143	1	308 Rutgers Boulevard				
144	1	309 Rutgers Boulevard				
145	5	Rutgers Boulevard and Carriage Stop Drive				
146	1	206 Rutgers Boulevard				
147	1	207 Rutgers Boulevard				
148	1	125 Rutgers Boulevard				
149	2	Carriage Stop Drive and Watsontown-New				
150	3	Carriage Stop Drive and Mason Drive				
151	1	Across From 17 Carriage Stop Drive				
152	1	19 Carriage Stop Drive				
153	1	20 Carriage Stop Drive				
154	1	33 Carriage Stop Drive				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
155	2	34 Carriage Stop Drive				
156	2	Montclair Avenue and Carriage Stop Drive				
157	1	6 Montclair Avenue				
158	1	11 Montclair Avenue				
159	1	13 Montclair Avenue				
160	1	19 Montclair Avenue				
161	1	20 Montclair Avenue				
162	1	Across From 28 Montclair Avenue				
163	2	Tory Lane and Mason Drive				
164	1	24 Mason Drive				
165	1	15 Mason Drive				
166	1	6 Mason Drive				
167	2	DWP - Park Drive and Cross Keys Road				
168	2	Park Drive and Thackara Avenue				
169	5	Thackara Avenue and Central Avenue				
170	4	Rich Avenue and Central Avenue				
171	1	Rich Avenue and Park Avenue				
172	2	Broad Avenue and Central Avenue				
173	2	Estaugh Avenue and Central Avenue				
174	1	Estaugh Avenue and Park Drive				
175	3	W. Taunton Avenue off Park Drive				
176	1	Manhole on Wilkinson's Property				
177	6	Gardens Avenue off Park Drive				
178	1	11 Glenview Avenue				
179	7	Leroy Avenue Between Glenview Avenue and Dead End of Leroy Avenue				
180	3	Leroy Avenue and Glenview Avenue				
181		Vonertann's Ditch - 2 Pipes				
182	1	Ridgeview Avenue and Thomas Avenue				
183		Dead End of Thomas Avenue Open Pipe				
184	4	25 Ridgeview Avenue				
185	1	Dead End of Ridgeview Avenue				
186	2	28 Summit Avenue				
187		Gatsby Lane Ditch				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
188	2	1 Gatsby Lane				
189	2	8 Gatsby Lane				
190	5	Chillemi Court				
191	3	Evanine Drive at Blatherwick Drive				
192	2	16 Evanine Drive				
193	4	Brandywine Drive and Evanine Drive				
194	1	28 Brandywine Drive				
195	1	Brandywine Drive at Aristone Drive				
196	2	Brandywine Drive at Winding Way				
197	3	Orchard Drive at Aristone Drive				
198	1	Orchard Drive at Park Drive				
199	2	Greenleigh Court				
200	1	5 Blatherwick Drive				
201	1	6 Blatherwick Drive				
202	1	13 Blatherwick Drive				
203	1	15Blatherwick Drive				
204	2	Blatherwick Drive and Tricia Lane				
205	1	19 Blatherwick Drive				
206	1	Princeton Court and Blatherwick Drive				
207	2	Princeton Court				
208	2	Between 4 and 6 Winding Way				
209	1	Between 6 and 8 Winding Way				
210	1	9 Winding Way				
211	1	Winding Way and Evergreen Drive				
212	2	16 Evergreen Drive				
213	2	Brandywine Drive and Winding Way				
214	1	Brandywine Drive and Aristone Drive				
215	1	28 Brandywine Drive				
216	4	Brandywine Drive and Evanine Drive				
217	2	16 Evanine Drive				
218	2	10 Evanine Drive				
219	2	Greenleigh Court				
220	3	Pineview Avenue and Rondon Avenue				
221	2	Coleman Road and Joans Lane				

Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
222	3	Joans Lane and Rondon Avenue				
223	2	Coleman Road and Glenside Avenue				
224	1	Tansgate Boulevard and Martin Place				
225	2	Between 6 and 8 Martin Place				
226	2	Tansgate Boulevard and Martin Place				
227		Tansgate Boulevard Basin				
228	5	Tannsgate Boulevard and Schaffer Way				
229	2	Between 11 and 13 Tansgate Boulevard				
230	2	Between 4 and 6 Jason Drive				
231	1	14 Jason Drive				
232	3	Jason Drive and Evans Court				
233	2	Florence Avenue Behind Acme				
234	2	Florence Avenue Near K-Mart				
235	2	Smokey Run Drive and Tansboro Road (Horseshoe)				
236	2	63 Smokey Run Drive				
237	2	10 Smokey Run Drive				
238	2	Smokey Run Drive and Tansboro Road (Horseshoe)				
239	2	3 Maloney Avenue				
240	2	9 Townsend Avenue				
241	4	Washington Avenue and Jackson Road				
242	2	Marshall Court				
243	2	55 Jefferson Avenue				
244	1	58 Jefferson Avenue				
245	1	54 Jefferson Avenue				
246	1	53 Jefferson Avenue				
247	1	Jefferson Avenue at Lumber Yard				
248	2	7 Hamilton Avenue				
249	2	Jefferson Avenue Before Washington Avenue				
250	2	Corner of Washington Avenue and Jefferson Avenue				
251	3	Washington Avenue and McClellan Avenue				
252	2	McClellan Avenue Across Railroad				

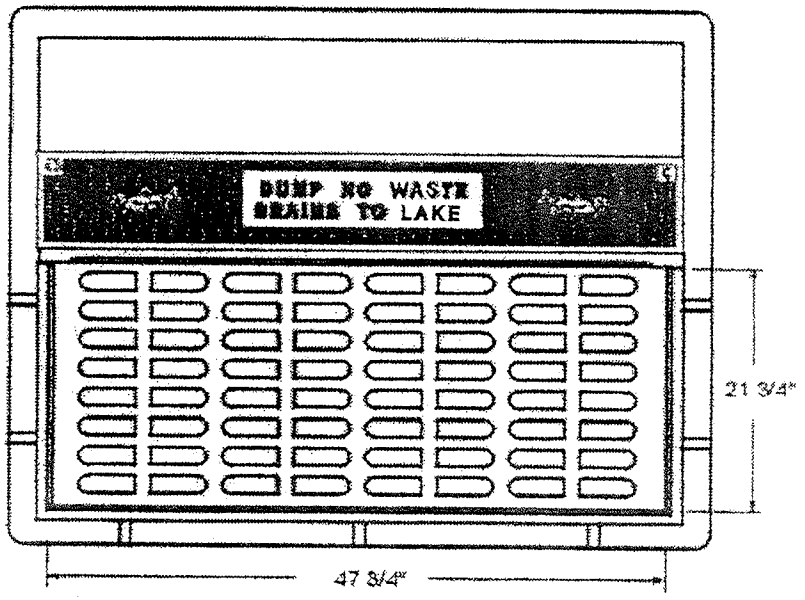
Borough of Berlin - Stormwater Facility Maintenance - S.P.P.P. Form 13 - Inlet Checklist						
ITEM #	QUANTITY	LOCATION	Date of Inspection	Date of Cleaning	Initial	Comments/ Repairs
253	2	McClellan Avenue 2nd Pole From Railroad				
254	1	14 McClellan Avenue				
255	1	15 McClellan Avenue				
256	2	Washington Avenue at Route 73				
257	2	121 Washington Avenue				
258	1	120 Washington Avenue				
259	1	107 Washington Avenue				
260	1	108 Washington Avenue				
261	2	Washington Avenue at Railroad				
262	2	12 E. Taunton Avenue				
263	2	E. Taunton Avenue and Jefferson Avenue				
264	2	E. Taunton Avenue Before Railroad				
265	1	E. Taunton Avenue Across Railroad				
266	2	64 E. Taunton Avenue				
267	1	70 E. Taunton Avenue				
268	1	E. Taunton Avenue and Route 73				
269	2	2 Jefferson Avenue				
270	2	Haines Avenue at Post Office				
271	1	Next to Garage at Town Hall				
272	1	Rear of Hotel				
273	2	Harker Avenue Rear of Gas Station				
274	1	7 Harker Avenue				
275	1	Harker Avenue Across Tracks (Front of McAllisters)				
276	1	Harker Avenue at Auto Parts				
277	1	60 Harker Avenue				
278	2	Harker Avenue Next to Hillside Basin				
279	1	Hillside Lane at Basin				
280	1	5 Hillside Lane				
281	1	8 Hillside Lane				
282	1	13 Hillside Lane				
283	1	16 Hillside Lane				
TOTAL	515					

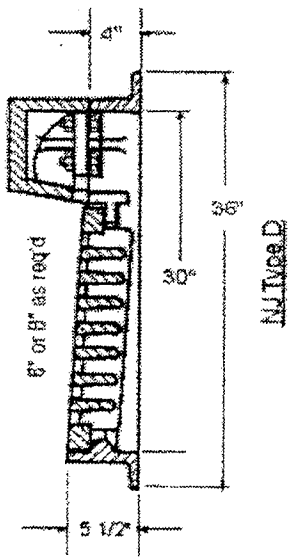
SPPP Form 9 – Storm Drain Inlet Retrofitting

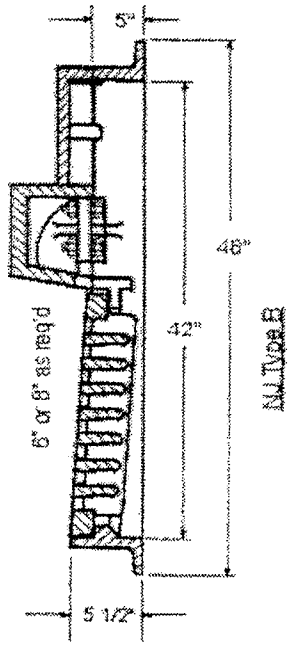
All records must be available upon request by NJDEP.

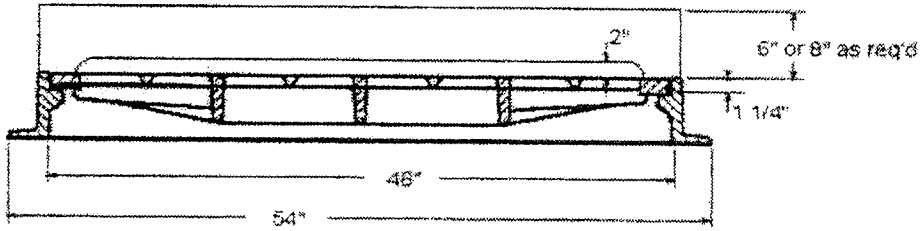
1. Describe the procedure for ensuring that municipally owned storm drain inlets are retrofitted.
Inlets are inspected during the design phase of capital roadway improvement projects and evaluated for compliance with the regulations. Deficiencies are noted and included as part of the capital project scope.
2. Describe the inspection process to verify that appropriate retrofits are completed on municipally owned storm drain inlets.
Inlets are inspected during construction and prior to final payment.
3. Describe the procedure for ensuring that privately owned storm drain inlets are retrofitted.
The Borough's ordinance requires that all private storm drains be retrofitted with any repaving. The Planning Board ensures inlets are retrofitted when reviewing plans for any work on private sites. The Borough will enforce non-compliance issues through its current property maintenance ordinances.
4. Describe the inspection process to verify that appropriate retrofits are completed on privately owned storm drain inlets.
The Borough Engineer inspects all private improvements for which the Planning Board has approved.

Inlet Details









DRAINS TO BAY
DRAINS TO RIVER
DRAINS TO LAKE
DRAINS TO OCEAN
DRAINS TO WATERWAYS

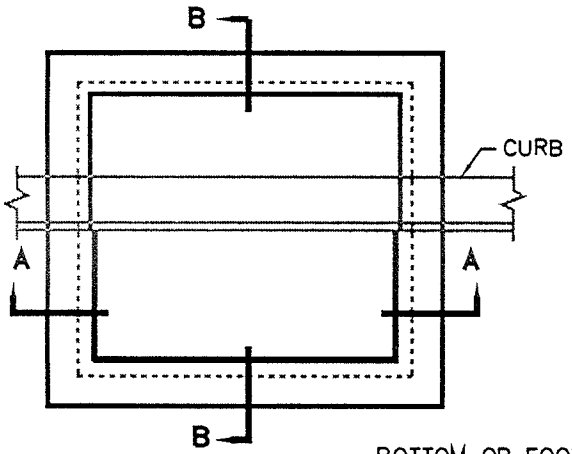
NAME PLATE OPTIONS

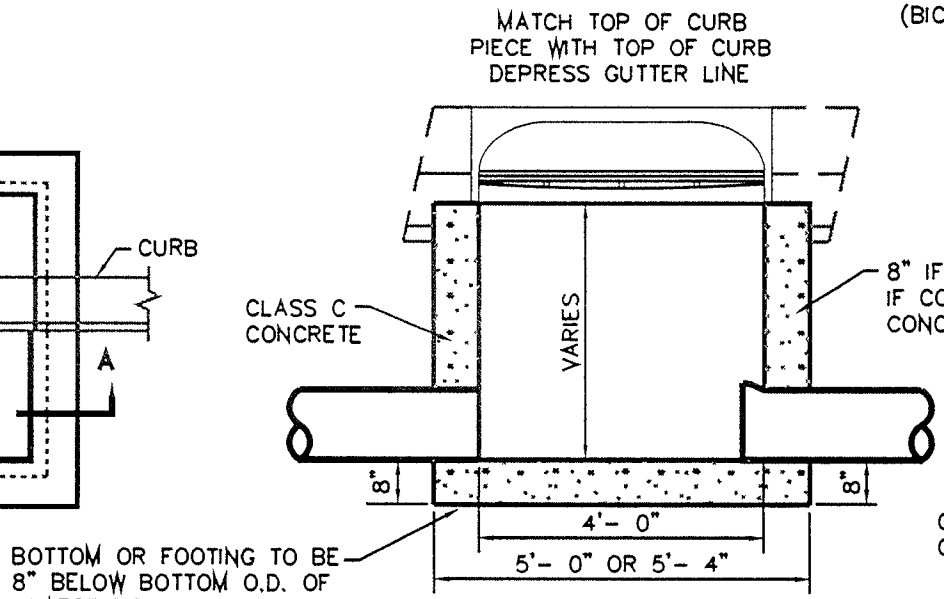
3D BROOK TROUT DESIGN

TYPE P2 – ECO CURB PIECE WITH BICYCLE SAFE GRATE

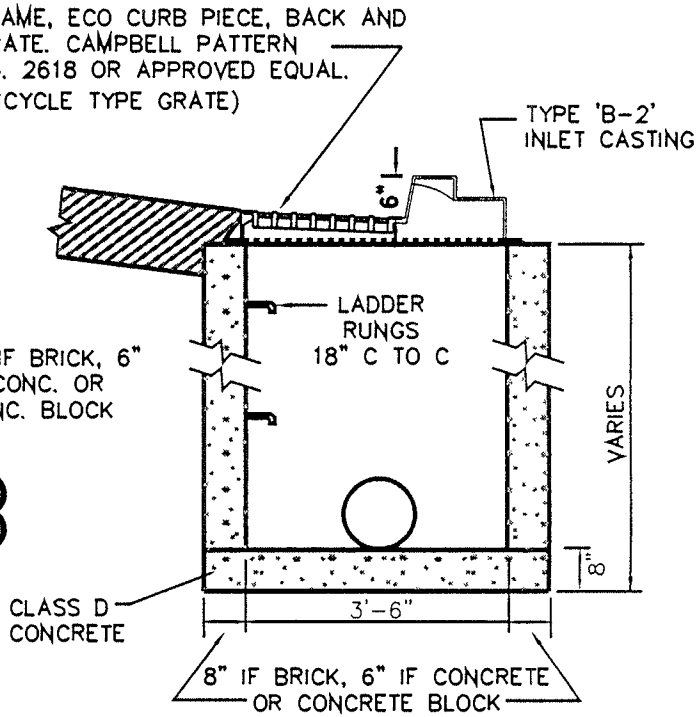
N.T.S.

NOTE:
THE CURB PIECE SHALL BE 6" UNLESS SPECIFIED OTHERWISE.





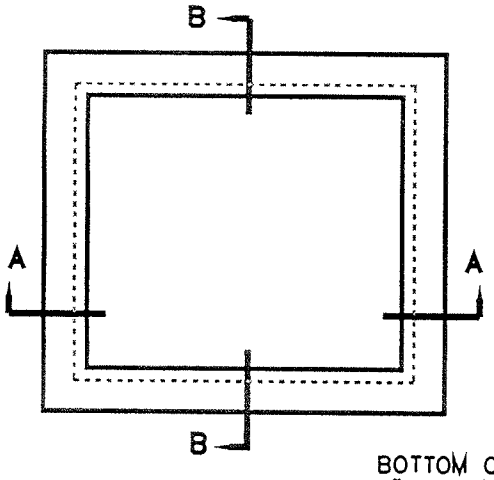
SECTION A-A



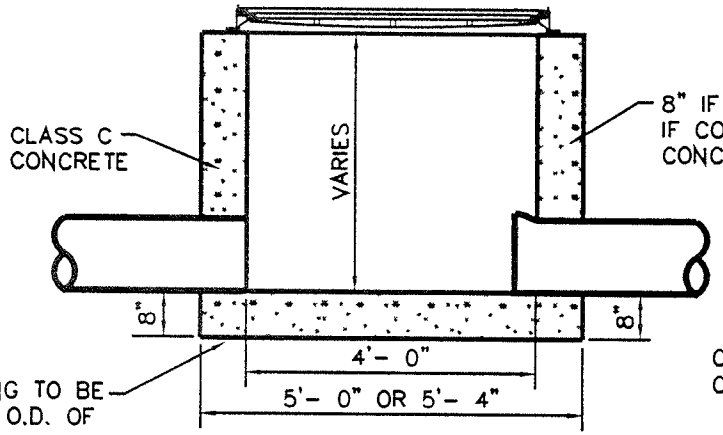
SECTION B-B

TYPE 'B' INLET DETAIL

N.T.S.

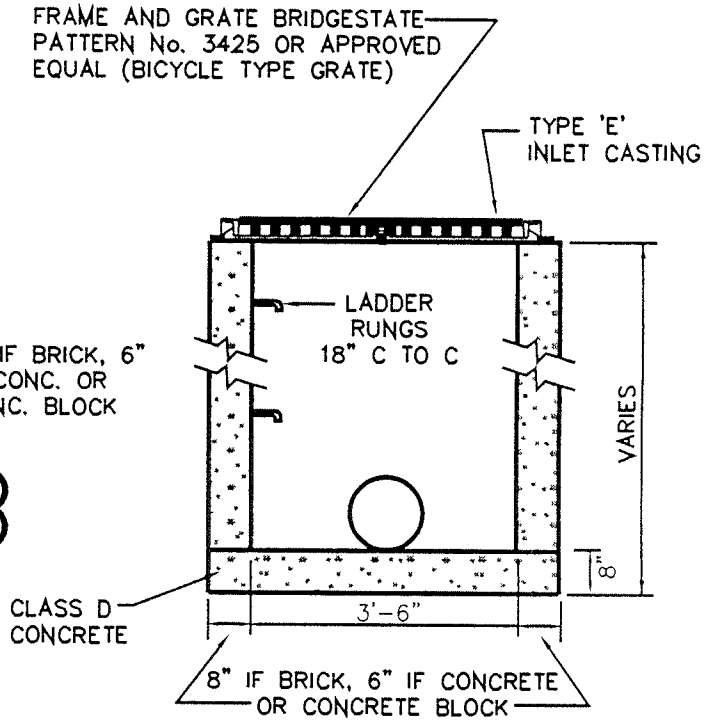


INSTALL POURED CONCRETE INVERT CHANNEL, EXCEPT AT TERMINAL INLETS, WHERE THE BOTTOM WILL BE DISHED AND SLOPED TOWARD THE OUTLET PIPE AT A RATE OF 2" PER FOOT.



BOTTOM OR FOOTING TO BE 8" BELOW BOTTOM O.D. OF LOWEST PIPE.

SECTION A-A



SECTION B-B

TYPE 'E' INLET DETAIL

N.T.S.

Inlet Labeling Information

STORM DRAIN MARKERS

2004 PRICE LIST 9005 SERIES

PRICES EFFECTIVE MARCH 1, 2004

- Fast Delivery
- Satisfaction guaranteed
- Customer Support

ITEM NO.	PRODUCTS	100-499	500-999	1000-1999
SDENA	Natural Embossed - Aluminum, Warranty for 12 yrs.	$ 1.49	$ 1.09	$ 0.99
SDEPA	Pre-painted Embossed - Alum., Warranty for 15 yrs.	$ 1.84	$ 1.44	$ 1.34
SDESS	Natural Embossed-Stainless, Warranty for 30 yrs.	$ 2.49	$ 2.19	$ 1.99
SDEB	Natural Embossed- Brass, Warranty for 30yrs.	$ 3.24	$ 2.94	$ 2.74
SDVD1	Screen Printed, Vinyl Domed- 1 color	$ 2.35	$ 2.05	$ 1.85
SDVD2	Screen Printed, Vinyl Domed - 2 colors	$ 2.65	$ 2.35	$ 2.15
SDVD3	Screen Printed, Vinyl Domed - 3 colors	$ 2.95	$ 2.65	$ 2.45
SDP1	Screen Printed, Polycarbonate - 1 color	$ 1.29	$ 0.89	$ 0.79
SDP2	Screen Printed, Polycarbonate - 2 colors	$ 1.45	$ 1.05	$ 0.95
SDP3	Screen Printed, Polycarbonate - 3 colors	$ 1.59	$ 1.19	$ 1.09
SDUE2-4	3-D Engraved - UV-HDPE, 4" Dia.- 2 colors	$ 3.79	$ 3.69	$ 3.49
SDUE3-4	3-D Engraved - UV-HDPE, 4" Dia.-3 colors	$ 4.49	$ 4.39	$ 4.19
SDCT	Ceramic Tiles - 4" x 4", add .99 per 2nd color	$ 3.89	$ 3.79	$ 3.59
SDAT1	Aluminum Tiles -4 1/4" x 4 1/4" with Dome, 1 color	$ 2.59	$ 2.29	$ 2.05
SDAT2	Aluminum Tiles -4 1/4" x 4 1/4" with Dome, 2 colors	$ 2.95	$ 2.59	$ 2.39
SDAT3	Aluminum Tiles -4 1/4" x 4 1/4" with Dome, 3 colors	$ 3.25	$ 2.95	$ 2.69
SDDG-4x4	3M Refl., Diamond Gr., Extrusion, 4"x4"-3 colors, "U"post	$ 3.65	$ 3.45	$ 3.25
SDDG-4x12	3M Refl., Diamond Gr., Extrusion, 4"x12"-3 colors,"U"post	$ 8.59	$ 8.39	$ 8.19
SDEG-2x12DEL	3M Refl. Engineering Gr., .025" 2"x12", D-Lineator B/Y	$ 1.19	$ 1.09	$ 0.99
SDSI-10x14	Stencil, inside - 10" x 14"	$ 7.95 ea.		
SDSI-14x24	Stencil, inside - 14" x 24"	$ 9.95 ea.		
SDSI-17.5x24	Stencil, inside - 17.5" x 24"	$19.95 ea.		
SDSO-35x38	Stencil ,Outside Frame - 35" x 38"	$18.25 ea.		

Barcodes are available

ADHESIVES:

SIKS-ADH-SIKABOND 10.1 Fl. oz., Caulk Tube $ 7.25 ea.
DCG - Dripless Caulking Gun $ 4.95 ea.

TOOLS:

SWB-1 - Steel wire brush with wood handle $ 2.25 ea.
BBRUSH-1 - Bristle Brush $ 2.25 ea.

EXTRA:

HWIPES- Hand wipes, antibacterial towelette $ 0.35 ea.

NOTICE: Prices are subject to change without notice.

STANDARD LEGENDS

NO DUMPING
DRAINS TO- RIVER, BAY, CREEK, LAKE, WETLANDS, POND, STREAM, OCEAN, WATERWAYS

FOR CUSTOM MARKERS & LARGER QUANTITIES CONSULT FACTORY.

Serialized numbers are available.

If You Identify With Quality, You Identify with Us.™

800-248-2080
www.drainmarkers.com

908-850-9700
908-850-9618 Fax

Almetek Industries, Inc.
2 Joy Drive
Hackettstown, NJ 07840

ALMETEK

SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

Complete separate forms for each municipal yard or ancillary operation location.

Address of municipal yard or ancillary operation:
Trash & Recycling Facility - 373 Watsontown-New Freedom Rd, Berlin, NJ 08009

List all materials and machinery located at this location that are exposed to stormwater which could be a source of pollutant in a stormwater discharge:

Raw materials – Soil

Intermediate products –

Final products –

Waste materials – Yard Waste, Cardboard

By-products –

Machinery – Trucks

Fuel –

Lubricants –

Solvents –

Detergents related to municipal maintenance yard or ancillary operations –

Other –

SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

Complete separate forms for each municipal yard or ancillary operation location.

Address of municipal yard or ancillary operation:
Main Office - 118 Cross Keys Rd., Berlin, NJ 08009

List all materials and machinery located at this location that are exposed to stormwater which could be a source of pollutant in a stormwater discharge:

Raw materials –

Intermediate products –

Final products –

Waste materials –

By-products –

Machinery – Trucks

Fuel – Fueling Facility

Lubricants –

Solvents –

Detergents related to municipal maintenance yard or ancillary operations –

Other –

For each category below, describe the best management practices in place to ensure compliance with all requirements in permit Attachment E. If the activity in the category is not applicable for this location, indicate where it occurs.

Indicate the location of inspection logs and tracking forms associated with this municipal yard or ancillary operation, including documentation of conditions requiring attention and remedial actions that have been taken or have been planned.

1. Fueling Operations

Inspections for the fuel tanks occur weekly in accordance with the Berlin Borough Spill Prevention Control & Countermeasure Plan.

2. Vehicle Maintenance

See attached

3. On-Site Equipment and Vehicle Washing

See permit attachment E for certification and log forms for Underground Storage Tanks.

Drains to oil separator and discharges to sanitary sewer.

4. Discharge of Stormwater from Secondary Containment

N/A

5. Salt and De-Icing Material Storage and Handling
Berlin Borough has constructed a permanent salt storage dome. Area is inspected for spilled material after loading and unloading activities.
6. Aggregate Material and Construction Debris Storage
Sand for municipal use is stored a minimum of 50 feet away from waterbodies. Area is inspected foe spilled material after loading and unloading activities.
7. Street Sweepings, Catch Basin Clean Out and Other Material Storage
Block containment bins to keep material on concrete pad
8. Yard Trimmings and Wood Waste Management Sites
Located at high point of the site to prevent stormwater from flowing through.
9. Roadside Vegetation Management
No herbicides are utilized.

Fueling Operations:
All fueling for police, fire, and public works vehicles is done at Plant #1 (Cross Keys Road and Park Drive).

Fuel for municipal vehicles is stored in an above ground, compartmentalized, double wall Ecovault Tank. The pump is located at Plant #1. It is a twin pump with one side for Diesel and the other Gasoline, which is stationed on a concrete apron surrounded by an asphalt parking lot (1,600 gal Gasoline/ 400 gal Diesel).

Plant #2 has a backup generator with an above ground 1,000 gallon tank for Diesel fuel. It is inspected monthly or when filled, except during winter months (December – February).

Records are kept on a monthly basis of fuel and gasoline deliveries/ usage (see attached).

Every vehicle has an assigned key for pump operation to track usage.

Qualified personnel perform inspections every time fuel tanks are filled (approximately once/week).

Personnel ensure that the catch basin located downgrade is covered prior to unloading. The cover shall not be removed until unloading is completed and any spillage has been contained and removed.

If any spill occurs during the filling process, stop filling and immediately follow the requirements of the Spill Containment Plan.

Spill Containment

The following procedures cover discharges under various scenarios.

Discharge at an Aboveground Storage Tank (AST)

In the event of a discharge from an AST, the following procedures should be employed by the environmental inspector.

- Immediately stop the sources of the discharge. If the source is due to a transfer, the transfer must be shut down and all valves on the tank must be closed.
- Make sure that the source of the discharge has been stopped.
- Notify all of the appropriate agencies and identified responders and contracted clean-up personnel.
- Make sure the discharge is contained, and if not, take necessary actions to contain it by the use of containment equipment and/or earthen barriers to prevent the spread of the discharge.
- Observe the situation for any changes that would require additional action.

- When the appropriate clean-up personnel have arrived on site, direct their efforts so the discharge is effectively cleaned up.

Pipe Rupture

In the event of a pipeline rupture, the facility personnel discovering the rupture must do the following:

- Stop any flow through the pipeline by shutting down any pumps or closing any valves that are supplying, or could supply, a flow of oil to the rupture.
- If necessary and possible, re-route any flow upstream from the rupture.
- Notify the inspector on duty of the situation.
- If possible, use any temporary containment equipment available around the discharge until the clean-up contractors arrive.

The environmental inspector on duty will do the following:

- Notify all appropriate agencies, identified responders, and contracted clean-up contractors.
- Assess the situation and, if needed, deploy any available containment equipment.
- Monitor the situation and react accordingly to any changing conditions.

Management will do the following:

- File an Environmental Incident Report within 30 days of the event.

Tank Truck Discharge

In the event of a spill and discharge at a loading rack, the operator on scene at the time or the operator discovering the discharge will take the following actions:

- Stop any flow to the area by shutting down the appropriate pumps and closing the necessary valves.
- Stop all traffic into the loading rack area.
- Notify the inspector on duty of the situation.
- Provide temporary containment material available to contain the discharge, if needed until the designated clean-up contractors arrive.

The inspector will do the following:

- Notify the appropriate agencies, identified responders, and the contracted clean-up contractors.
- Monitor the situation and react to changes that may affect the containment and/or the clean-up.

Management will do the following:

- File an Environmental Incident Report within 30 days of the event.
- Keep the area secure from traffic until such time that the discharge has been cleaned up and the area is available for normal loading activities.

Piping Leak or Other Small Discharge

An operator on duty that discovers a pipeline or any other small discharge will do the following:

- Determine the source of the discharge.
- Stop the source of the discharge.
- Contain the discharged materials using available containment.
- Notify the inspector on duty.

The supervisor will do the following:

- Determine the extent of the discharge.
- Notify all the appropriate agencies and identified responders and contracted clean-up personnel that are thought to be needed for the situation.

Management will do the following:

- File an Environmental Incident Report within 30 days of the event.

Explosion and/or Fire

If as a result of a fire or an explosion, a discharge occurs, the inspector on duty will do the following:

- Notify all appropriate agencies and notify identified responders and contracted clean-up personnel.
- Deploy any spill containment equipment on site.

Management will do the following:

- Coordinate the efforts with the fire-fighting officials.
- File an Environmental Incident Report within 30 days of the event.

Vehicle Maintenance:
All vehicles are inspected daily by the individual who is to be operating it.

Each and every vehicle has its own clipboard containing keys and a daily vehicle checklist.

Any repairs needed are written down on forms and forwarded to the mechanic the day it is noticed.

We have an onsite, certified mechanic, and also an assistant mechanic, who perform any repairs that are needed.

Good Housekeeping:
Storage garage is swept and organized on a weekly basis.

Water plants are swept and mopped every weekend.

All buildings are painted every two/ three years or as needed.

All liquids flammable, non-flammable, corrosive, non-corrosive, etc., are stored on shelves in cabinets and labeled.

Hand operated and small mechanical machines are stored inside.

Inventory List

Materials and Machinery Stored in the Municipal Maintenance Yard

Item Description (Estimated Date of Purchase)

Ford Pick-up #1 (1999)
Ford Pick-up #2 (1999)
Ford Pick-up #4 (1996)
Ford Dump (1985)
Ford Pick-up #5 (1988)
Ford Back Hoe (1990)
Dodge Pick-up #10 (1989)
Ford Pick-up #11 (1982)
Dodge Utility #12 (1989)
Ford Dump #14 (2005)
Ford Dump #15 (1991)
Ford Dump #16 (1997)
Sterling Packer #18 (2004)
Ford Dump #19 (1997)
Sterling Packer #20 (1999)
Peterbilt Packer #21 (2002)
Peterbilt Packer #22 (2002)
Freightliner #24 (2001)
Ford Stake Body #25 (2002)
Ford Pick-up #3 (2004)
Ford Bronco #6 (1986)

WEEKLY FACILITY INSPECTION CHECKLIST

Date: _____

Time: _____

Inspector: _____

X=Satisfactory
NA=Not Applicable
0=Repair or Adjustment Required
C=See comment under Remarks/Recommendations

Drainage

_____ Any noticeable oil sheen on runoff.

_____ Containment area drainage valves are closed and locked.

_____ Oil/water separator systems working properly.

_____ Effluent from oil/water separator inspected.

_____ No visible oil sheen in containment area.

_____ No standing water in containment area.

ASTs

_____ Tank surfaces checked for signs of leakage.

_____ Tank condition good (no rusting, corrosion, pitting).

_____ Bolts, rivets, or seams are not damaged.

_____ Tank foundation intact.

_____ Level gauges and alarms working properly.

_____ Vents are not obstructed.

_____ Valves, flanges, and gaskets are free from leaks.

_____ Containment walls are intact.

Pipelines

_____ No signs of corrosion damage to pipelines or supports.

_____ Buried pipelines are not exposed.

_____ Out-of-service pipes capped.

_____ Signs/barriers to protect pipelines from vehicles are in place.

_____ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

_____ No standing water in rack area.

_____ Warning signs posted.

_____ No leaks in hoses.

_____ Drip pans not overflowing.

_____ Catch basins free of contamination.

_____ Containment curbing or trenches intact.

_____ Connections are capped or blank-flanged.

Security

_____ Fence and gates intact.

_____ Gates have locks.

_____ ASTs locked when not in use.

_____ Starter controls for pumps locked when not in use.

_____ Lighting is working properly.

Training

_____ Spill prevention briefing held.

_____ Training records are in order.

Remarks/Recommendations:

DAILY VEHICLE CHECK LIST

DRIVER _____ DATE _____

TRUCK _____

OIL (5 QTS.) _____ LIGHTS _____

TIRES _____ LENSES _____

BATTERY _____ TRANSMISSION _____

REPAIRS NEEDED _____

_____

_____

_____

TTI ENVIRONMENTAL, INC.

Corporate Office
9 East Stow Road • Marlton, New Jersey 08053-3159
TEL (856) 985-8800 • FAX (856) 985-9200

EXTERNAL VISUAL INSPECTION REPORT

of:

2,000 Gallon Aboveground Storage Tank

located at:

118 Cross Keys Road
Berlin, New Jersey

for:

BOROUGH OF BERLIN
59 South White Horse Pike
Berlin, New Jersey 08009

Attention: Mr. Mat Siedlecki

TTI Project No. 02-889

December 6, 2002

Prepared by:

Michael T. Miles
Sr. Project Manager
API 653 Certification No. 6242
ASNT SNT-TC-1A Level II

Reviewed by:

William B. Stafford
Director Tank Management Services
API 653 Certification No. 6041
ASNT SNT-TC-1A Level II

TTI

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

TTI Environmental, Inc. (TTI) was contracted by Borough of Berlin to conduct an External Visual Inspection of one (1) 2,000 gallon aboveground storage tank (AST). The Inspection consisted of completion of an Inspection Checklist and a comprehensive visual inspection of the exterior of the AST. The inspection of the tank was conducted on November 18, 2002 by Mr. Scott Nowicki, API 653 Certification No. 23939.

The tank is described as a doublewall, horizontal, raised, compartmentalized (1,600 gasoline/ 400 diesel) storage tank. The tank is an Ecovault Tank, which is UL listed, insulated aboveground tank for flammable liquids protected type, manufactured by Recovault Inc. The tank has exterior measurements of 80 inches in diameter and 116 inches in length. The tank was manufactured in October, 1996.

TTI performed the inspection of the tank in accordance with applicable sections of API 653, API 575 and ASME Sections V and IX.

2.0 METHODOLOGY

Visual Inspection & Inspection Checklist

A comprehensive visual inspection of the exterior surface of the tank was performed, which included evaluation for leaks, shell distortions, signs of overflow, settlement, corrosion and pitting and the condition of the tanks foundation, paint coatings, piping, ancillary equipment and appurtenances. Also included in the visual inspection was the completion of an Inspection Checklist.

3.0 FINDINGS

Visual Inspection & Inspection Checklist

A comprehensive visual inspection of the exterior was performed that included completion of the Inspection Checklist.

The inspection revealed that approximately one-half (1/2) inch of water is present in the interstitial space. In addition, approximately 6-inches of diesel fuel is present in the overspill bucket.

No additional areas of concern were revealed during the completion of the Visual Inspection and the Inspection Checklist. The checklist is presented in Appendix A of this report.

4.0 RECOMMENDATIONS

TTI recommends that the water be removed from the interstitial space as this will hinder in determining if the tank has leaked during monthly inspections conducted by Borough of Berlin personnel. In addition, water in the interstitial space may accelerate corrosion on the inner tank. TTI also recommends that overfill product captured by the spill bucket be emptied after every overspill as not emptying the bucket will reduce the capacity of the bucket.

No additional areas of concern were identified during the completion of the External Visual Inspection.

Based on the results of this inspection, TTI recommends an External Visual Inspection be conducted by November 18, 2007.

This inspection interval is based on the tank remaining in similar service.

TTI

APPENDIX A:

Inspection Checklist

ABOVEGROUND STORAGE TANK INSPECTION CHECKLIST

TTI Project No: 02-889

Tank No.: Facility No.: 2K

DEP No.:

Facility Name: BOROUGH OF BERLIN

Test Date: 11-18-02

Facility Location: 118 CROSS KEYS RD BERLIN, NJ

Facility Contact: MAT SIEDLECKI

Year Tank Manufactured: 10/1996

Original Design Standard: UL

Inspector: SCOTT NOWICKI

Product Stored: GASOLINE (1600) / DIESEL (400)

Specific Gravity:

Name Plate Present: ____ No

X Yes (include all name plate information) (OVER ALSO)

RECOVAULT INCORPORATED

UNDERWRITERS LABORATORIES, INC. LISTED INSULATED ABOVEGROUND TANK FOR FLAMMABLE LIQUIDS PROTECTED TYPE

No. A 441306 MODEL 2000-D4 CAPACITY 1600/400 MONTH/YR 10/96

PLANT SHAFTSBURY VT

THIS TANK REQ EMERG RELIEF VENTING FOR CAPACITY NOTLESS THAN 145,950 cu/ft Hr

Tank Capacity (Gallons): GAS 1600 / DIESEL 400 (COMPARTMENTAL)

Orientation:
____ Vertical
X Horizontal
X Raised

Dimensions (feet):

Length/Height: 116" (EXTERIOR) (INT. SUBTRACT 24")

Diameter: 80" (EXTERIOR) INT. DIA - ?

Circumference: ____

Construction:
X Carbon Steel
____ Stainless Steel
____ Fiberglass
____ Poly
____ Singlewall
X Doublewall w/ CONCRETE JACKET

External Inspection Dates 11-18-02

Internal Inspection Dates N/A

Emergency Containment:

____ No

X Yes

Size ____

Type DOUBLE WALL

TANK EXTERIOR – Page 1

ITEM	SATISFACTORY	UNSATISFACTORY	NOT APPLICABLE
SHELL PLATES ☐ LAP WELDED SEAMS ☐ BUTT WELDED SEAMS ☐ TACK WELDED SEAMS ☐ RIVETED SEAMS ☒ OTHER UNKNOWN - CONC. JACKET	☐	☐	☒
COATING THICKNESS: INCHES COLOR: TYPE: ☐ PAINT ☐ EPOXY ☐ OTHER:	☐	☐	☒
INSULATION SYSTEM TYPE: ☐ FIBERGLASS ☐ FOAM ☒ OTHER: (CONCRETE) JACKET: ☐ METAL ☐ PLASTIC	☐	☐	☒
SADDLES QTY: ☒ TWO ☐ THREE ☐ FOUR ☐ FIVE TYPE: ☐ STEEL ☒ CONCRETE ☐ OTHER:	☒	☐	☐
LEGS QTY: ☐ TWO ☐ THREE ☐ FOUR ☐ FIVE TYPE: ☐ STEEL ☐ CONCRETE ☐ OTHER:	☐	☐	☒
APPURTENANCES	☒	☐	☐
EXTERNAL HEATING SYSTEM TYPE: ☐ STEAM PADS ☐ ELECTRIC PADS ☐ ELECTRIC HEAT TRACED ☐ OTHER:	☐	☐	☒
PRIMARY VENTING	☒	☐	☐
EMERGENCY VENTING	☒	☐	☐
ROOF PLATES/END HEADS ☐ LAP WELDED SEAMS ☐ FLAT ☐ BUTT WELDED SEAMS ☐ CONICAL ☐ TACK WELDED SEAMS ☐ DOMED ☐ RIVETED SEAMS ☐ NO SEAMS (1-PIECE STAMPED HEAD) ☒ OTHER UNKNOWN - CONC. JACKET	☐	☐	☒
INVENTORY CONTROLS ☒ MECHANICAL ☐ ELECTRONIC MANUFACTURER MORRISON BROS. (CLOCK GAUGE) ☐ MANUAL ☐ OTHER	☒	☐	☐

TANK EXTERIOR – Page 2

ITEM	SATISFACTORY	UNSATISFACTORY	NOT APPLICABLE
OVERFILL PROTECTION ☐ MECHANICAL ☐ ELECTRICAL ☐ NONE ☒ OTHER SPILL BUCKETS MANUFACTURER _____	☒	☐	
MIXER SUPPORTS ☐ ROOF MOUNTED ☐ SHELL MOUNTED ☐ OTHER	☐	☐	☒
LADDERS	☑	☐	☐
STAIRS	☒	☐	☐
PLATFORMS	☒	☐	☐
INLET PIPING DIAMETER 2 INCHES SCHEDULE _____ ☒ STEEL ☐ BLACK IRON ☐ GALVANIZED ☐ STAINLESS STEEL ☐ FIBERGLASS ☐ OTHER	☒	☐	☐
DISCHARGE PIPING DIAMETER 2 INCHES SCHEDULE _____ ☒ STEEL ☐ BLACK IRON ☐ GALVANIZED ☐ STAINLESS STEEL ☐ FIBERGLASS ☐ OTHER	☒	☐	☐
PIPE SUPPORTS ☐ HANGERS ☐ STANCHIONS ☒ STRAPS ☐ OTHER MAX. SPAN BETWEEN SUPPORTS: 8 FEET	☒	☐	☐
PUMPS ☐ SUBMERSIBLE ☒ SUCTION (DISPENSER) ☐ AIR DIAPHRAGM ☐ OTHER	☒	☐	☐
FOUNDATION ☐ EARTHEN ☒ CONCRETE ☐ CONCRETE PEDESTAL ☐ CONCRETE RINGWALL ☐ OTHER	☒	☐	☐

~ 1/2" WATER IN INTERSTITIAL SPACE

~ 6" DIESEL IN SPILL BUCKET

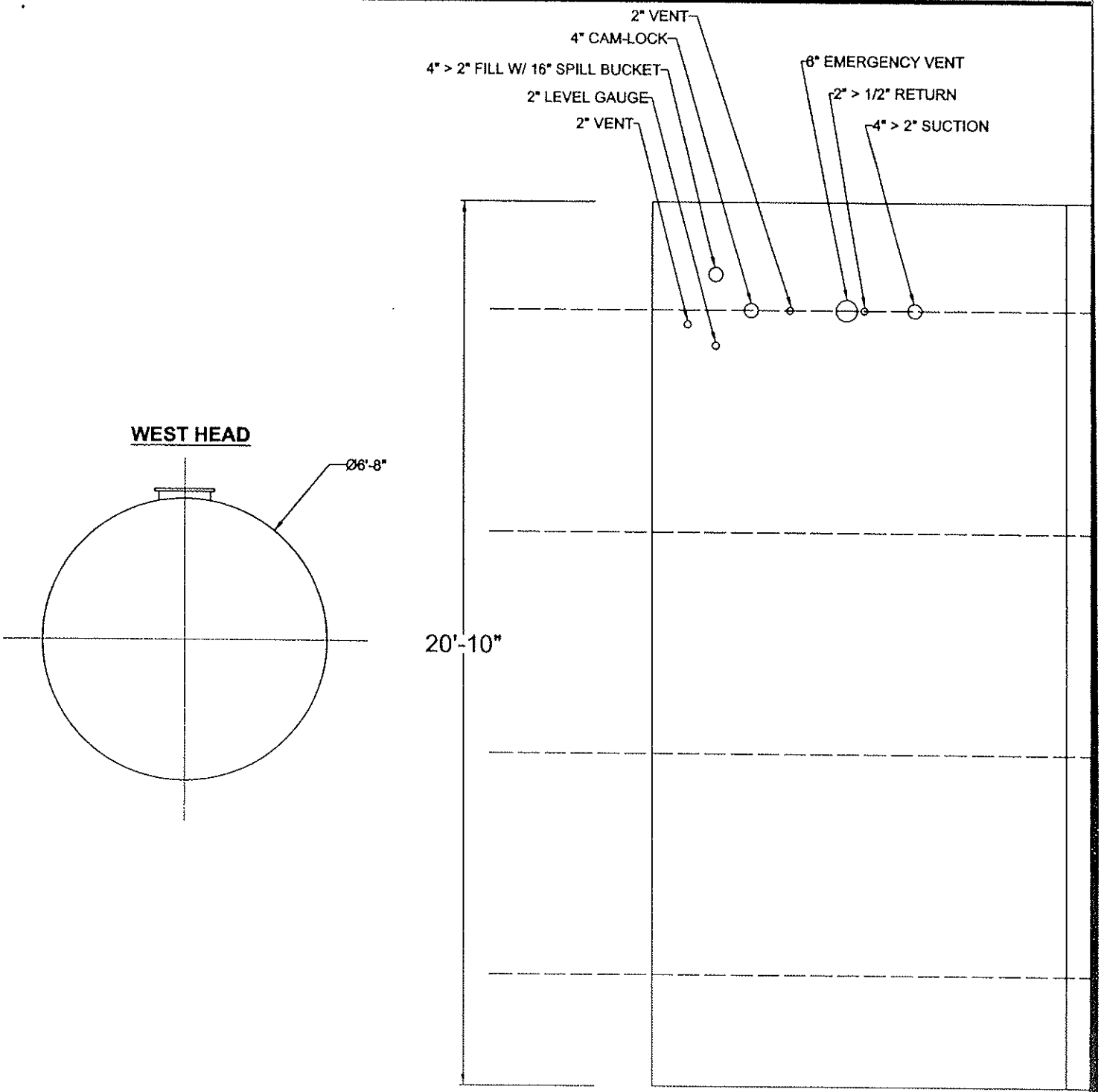
TANK MFG BY RECOVAULT → EXTERIOR SAYS: ECO VAULT
1-800-ECOVAULT

- OWNER HAS NO ~~ORIG.~~ DRAWINGS OF SPECS.

TTI

APPENDIX B:

Tank Layout Diagram



WEST HEAD

TTI ENVIROMENTAL, INC.

9 EAST STOW ROAD
MARLTON, NJ 08053
PHONE: 856-985-8800
FAX: 856-985-9200

DRAWING TITLE:

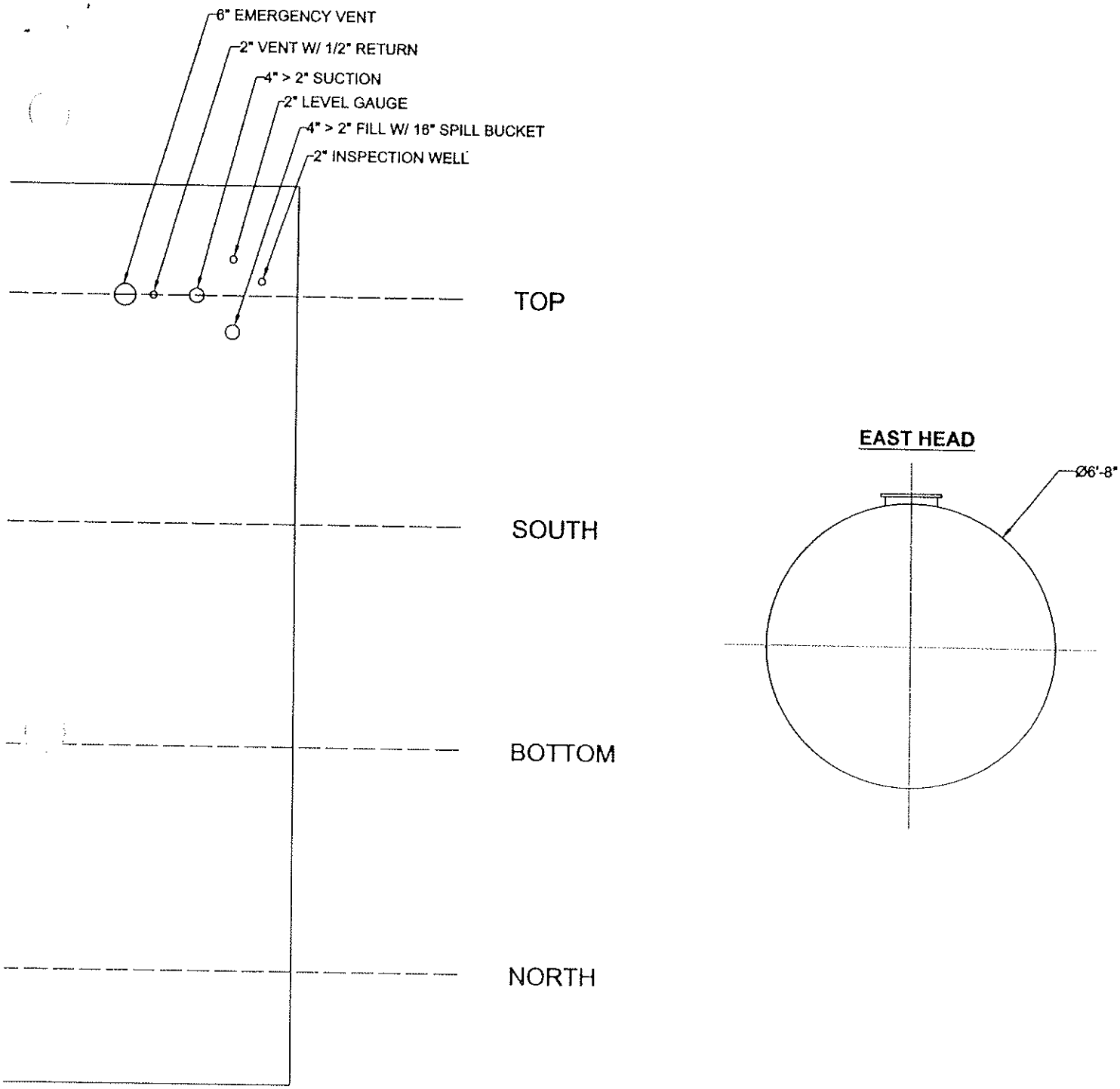
DIESEL/GASOLINE TANK (2000 GALLON)

TANK LAYOUT DIAGRAM

PROJECT LO

BOR

1



ION:	DATE: 12/04/02	SCALE: NTS
	TTI PROJECT NO. 02-889	INSPECTOR: SN
UGH OF BERLIN CROSS KEYS RD. ERLIN, NJ 08009	DRAWN BY: MRK	REVIEWED BY: MTM
	INSPECTION DATES: 11/18/02	
	FILE: BERLIN, BOROUGH OF\AST INFO\CROSS KEYS\DIESEL_GASOLINE TANK (2000 GAL)	

NOTES:

1. .250 = THICKNESS MEASUREMENT LOCATION

SPPP Form 11 – Employee Training

All records must be available upon request by NJDEP.

A. **Municipal Employee Training:** Stormwater Program Coordinator (SPC) must ensure appropriate staff receive training on topics in the chart below as required due to job duties assigned within three months of commencement of duties and again on the frequency below. Indicate the location of associated training sign in sheets, dates, and agendas or description for each topic.

Topic	Frequency	Title of trainer or office to conduct training
1. Maintenance Yard Operations (including Ancillary Operations)	Every year	Department Heads
2. Stormwater Facility Maintenance	Every year	Department Heads
3. SPPP Training & Recordkeeping	Every year	Department Heads
4. Yard Waste Collection Program	Every 2 years	Department Heads
5. Street Sweeping	Every 2 years	Department Heads
6. Illicit Connection Elimination and Outfall Pipe Mapping	Every 2 years	Department Heads
7. Outfall Pipe Stream Scouring Detection and Control	Every 2 years	Department Heads
8. Waste Disposal Education	Every 2 years	Department Heads
9. Municipal Ordinances	Every 2 years	Department Heads
10. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment	Every 2 years	Department Heads

B. **Municipal Board and Governing Body Members Training:** Required for individuals who review and approve applications for development and redevelopment projects in the municipality. This includes members of the planning and zoning boards, town council, and anyone else who votes on such projects. Training is in the form of online videos, posted at www.nj.gov/dep/stormwater/training.htm.

Within 6 months of commencing duties, watch *Asking the Right Questions in Stormwater Review Training Tool*. Once per term thereafter, watch at least one of the online DEP videos in the series available under Post-Construction Stormwater Management. Indicate the location of records documenting the names, video titles, and dates completed for each board and governing body member.

C. **Stormwater Management Design Reviewer Training:** All design engineers, municipal engineers, and others who review the stormwater management design for development and redevelopment projects on behalf of the municipality must attend the first available class upon assignment as a reviewer and every five years thereafter. The course is a free, two-day training conducted by DEP staff. Training dates and locations are posted at www.nj.gov/dep/stormwater/training.htm. Indicate the location of the DEP certificate of completion for each reviewer.

Borough of Berlin Public Works Training List

Name

Calvin Brittingham

Mark Mauger

Charles Seitzinger

Stephen Erich

Christopher Eggert

Anthony Seternus

Tracey Miller

Stephen Marx

Ronald Odegaard

Douglas Gerhard

John Allsebrook

Joseph Lubrano

Mark Schiendelman

Kenneth Declement

Raymond Jaconski

Robert Haas

Edmund Tann

SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

1. **Mapping:** Attach an image or provide a link to the most current outfall pipe map. Maps shall be updated at the end of each calendar year.

   Note that ALL maps must be electronic by 21 Dec 2020 via the DEP's designated electronic submission service. For details, see http://www.nj.gov/dep/dwq/msrp_map_aid.htm.

2. **Inspections:** Describe the outfall pipe inspection schedule and indicate the location of records of dates, locations, and findings.

Inspections are performed at least once every five years. A log of all maintenance is kept at the Department of Public Works. Information regarding site inspections, maintenance and repairs will be kept with the SPPP.

3. **Stream Scouring:** Describe the program in place to detect, investigate and control localized stream scouring from stormwater outfall pipes. Indicate the location of records related to cases of localized stream scouring. Such records must include the contributing source(s) of stormwater, recommended corrective action, and a prioritized list and schedule to remediate scouring cases.

The Borough for stream scouring in conjunction with the outfall pipe inspections. Records of any scouring will be kept with the SPPP.

4. **Illicit Discharges:** Describe the program in place for conducting visual dry weather inspections of municipally owned or operated outfall pipes. Record cases of illicit discharges using the DEP's Illicit Connection Inspection Report Form (www.nj.gov/dep/dwq/tier_a_forms.htm) and indicate the location of these forms and related illicit discharge records.

   Note that Illicit Connection Inspection Report Forms shall be included in the SPPP and submitted to DEP with the annual report.

The Borough implements and enforces this Illicit Connection Elimination Program and has adopted an illicit connection ordinance.

The DEP Illicit Connection Report Forms are used to conduct these inspections and each of the forms are kept with the SPPP records.The Borough will conduct visual dry weather inspections of outfall pipes owned/operated by the Borough at least once every 5 years for signs of dry weather flow. Outfall pipes that are found to have a dry weather flow or other evidence of an intermittent non-stormwater flow will be reinspected within 3 months of a complaint/report in order to determine the source of potential illicit connection(s). If the source of the illicit connection is able to be determined (and the connection is within Berlin Borough) the responsible party will be cited for being in violation of the Borough's Illicit Connection Ordinance, and the illicit connection will be eliminated as soon as possible. If, after the appropriate amount of investigation, the source of the illicit connection is unable to be determined, a Closeout Investigation Form will be submitted with the Borough's Annual Inspection and Recertification. If an illicit connection is found to originate from another public entity, Berlin Borough will report the illicit connection to the entity and to the DEP.

There will be a phone number available, used for reporting spills and illegal dumping, to report any illicit connections.

Dry weather flows believed to be an immediate threat to human health or the environment shall be reported immediately
to the Department's Action Hotline at 1-877-WARNDEP (1-877-927-6337).

We will respond to resident complaints/reports of illicit connections by conducting field investigations of the suspected illicit connection. Investigations will be conducted in accordance with Attachment B of the permit.
Public works employees will report suspected illicit connections to the DPW Director and/or General Supervisor for follow up investigation in accordance
with Attachment B of the permit.

Stormwater Pollution Prevention Plan

Illicit Connection Forms

Illicit Connection Inspection Report Form

Municipality Information

Municipality: *Berlin Borough* County *Camden*

NJPDES # : *NJG 0141852* PI ID #: *50577*

Team Member: *John Allsebrook, Director of Public Works*

Date ____ Effective Date of Permit Authorization (EDPA): *4/1/04*

Outfall #: ____ Location: ____

Receiving Waterbody: ____

1. Is there a dry weather flow? Y (☐) N (☐)
2. If "YES", what is the outfall flow estimate? ____ gpm
   (flow sample should be kept for further testing, and this form will need to be submitted with the Annual Report and Certification)
3. Are there any indications of an intermittent flow? Y (☐) N (☐)
4. If you answered "**NO**" to BOTH questions #1 and #3, there is probably not an illicit connection and you can skip to question #7.
   (NOTE: This form **does not** need to be submitted to the Department, but should be kept with your SPPP.)

   If you answered "**YES**" to either question, please continue on to question #5.
   (NOTE: This form will need to be submitted to the Department with the Annual Report and Certification.)

5. **PHYSICAL OBSERVATIONS**:

(a) **ODOR**: none ____

(b) **COLOR**: none ____

(c) **TURBIDITY**: none

(d) **FLOATABLES**: none ____

(e) **DEPOSITS/STAINS**: none ____

(f) **VEGETATION CONDITIONS**: normal

(g) **DAMAGE TO OUTFALL STRUCTURES**:

IDENTIFY STRUCTURE: ____

DAMAGE: none ____

6. **ANALYSES OF OUTFALL FLOW SAMPLE:**
   * field calibrate instruments in accordance with manufacturer's instructions prior to testing.

(a) **DETERGENTS**: ____mg/L

(if sample is greater than 0.06 mg/L, the sample is contaminated with detergents [which may be from sanitary wastewater or other sources]. Further testing is required and this outfall should be given the highest priority.)

(if the sample is not greater than 0.06 mg/L and it does not show physical characteristics of sanitary wastewater [e.g., odor, floatables, and/or color] it is unlikely that it is from sanitary wastewater sources, yet there may still be an illicit connection of industrial wastewater, rinse water, backwash or cooling water. Skip to question #6c.)

(b) **AMMONIA (as N) TO POTASSIUM RATIO**: _____

(if the Ammonia to Potassium Ratio is greater than 0.6:1, then it is likely that the pollutant is sanitary sewage)

(if the Ammonia to Potassium Ratio is less than or equal to 0.6:1, then the pollutant is from another washwater source.)

(c) **FLUORIDE**: _____mg/L

(if the fluoride levels are between 1.0 and 2.5 mg/L, then the flow is most likely from fluoride treated potable water.)

(if the sample tests below a detection limit of 0.1 mg/L for fluoride, it is likely to be from groundwater infiltration, springs or streams. In some cases, however, it is possible that the discharge could originate from an onsite well used for industrial cooling water, which will test non-detect for both detergents and fluoride. To differentiate between these cooling water discharges and groundwater infiltration, you will have to rely on temperature.)

(d) **TEMPERATURE**: _____°F

(if the temperature of the sample is over 70°F, it is most likely cooling water)

(if the temperature of the sample is under 70°F, it is most likely from ground water infiltration)

7. Is there a suspected illicit connection? Y (☐) N (☐)

   If "**YES**", what is the suspected source? _____

   If "**NO**", skip to signature block on the bottom of this form.

8. Has the investigation of the suspected illicit connection been completed? Y (☐) N (☐)

   If "**YES**", proceed to question #9.
   If "**NO**", skip to signature block on the bottom of this form.

9. Was the source of the illicit connection found? Y (☐) N (☐)

   If "**YES**", identify the source. _____

   What plan of action will follow to eliminate the illicit connection?

   Resolution:

   If "**NO**", complete the Closeout Investigation Form and attach it to this Illicit Connection Inspection Report Form.

Inspector's Name: _____

Title: _____

Signature: _____

Date: _____

If there is a dry weather flow or evidence of an intermittent flow, be sure to include this form with your Annual Report and Certification.

If there is not a dry weather flow or evidence of an intermittent flow, this form should be retained with your SPPP.

Closeout Investigation Form

Municipality Information

Municipality: *Berlin Borough* County *Camden*

NJPDES # : **NJG***0141852* PI ID #: *50577*

Team Member / Title: *John Allsebrook, Director of Public Works*

Outfall #: ____ Location: ____

Receiving Waterbody: ____

Basis for Submittal:

(☐) A non-stormwater discharge was found, but no source was located within six months.

(☐) An intermittent non-stormwater discharge was observed, and three unsuccessful investigations were conducted to investigate the discharge while it was flowing.

Describe each phase of your investigation, including dates. Attach additional pages as necessary:

Inspector's Name: ____

Title: ____

Signature: _____

Date: ____

Complete and attach this form to the appropriate Illicit Connection Inspection Report Form and submit with the Annual Report and Certification.

SPPP Form 13 – Stormwater Facilities Maintenance

All records must be available upon request by NJDEP.

1. Detail the program in place for the long-term cleaning, operation and maintenance of each stormwater facility owned or operated by the municipality.

The stormwater facilities that are owned by the Borough are inspected on an annual basis to ensure they are functioning properly. Preventative maintenance and repairs are performed on all stormwater facilities to ensure proper function. If facilities are found to not be functioning properly and repairs are not made, then the necessary repairs will be documented, prioritized, and scheduled for repairs.

2. Detail the program in place for ensuring the long-term cleaning, operation and maintenance of each stormwater facility NOT owned or operated by the municipality.

Owners/operators will be required to report annually on their operations and maintenance plans, the status of their stormwater facilities and provide their inspection/maintenance logs.

The Borough will inspect each private facility annually and notify the property owner of any required maintenance through the Code Enforcement Office.

3. Indicate the location(s) of the Stormwater Facilities Inspection and Maintenance Logs listing the type of stormwater facilities inspected, location information, inspection dates, inspector name(s), findings, preventative and corrective maintenance performed.

A log of maintenance is kept at the Department of Public Works.

Note that maintenance activities must be reported in the annual report and records must be available upon request. DEP maintenance log templates are available at http://www.nj.gov/dep/stormwater/maintenance_guidance.htm (select specific logs from choices listed in the Field Manuals section).

Additional Resources: The NJ Hydrologic Modeling Database contains information and maps of stormwater management basins. To view the database map, see https://hydro.rutgers.edu. To download data in an Excel format, see https://hydro.rutgers.edu/public_data/.

SPPP Form 14 – Total Maximum Daily Load Information

All records must be available upon request by NJDEP.

1. Using the Total Maximum Daily Load (TMDL) reports provided on www.nj.gov/dep/dwq/msrp-tmdl-rh.htm, list adopted TMDLs for the municipality, parameters addressed, and the affected water bodies that impact the municipality's MS4 program.

Fecal/Total Coliform - Big Timer Creek N Br.; Great Egg Harbor River-A; Great Egg Harbor-C; Mullica Middle-A; Mullica Upper-A

Mercury - Big Timber Creek NB (above Laurel Rd)

PCB's - Big Timber Creek NB (above Laurel Rd)

Total Phosphorus - New Brooklyn Lake

2. Describe how the permittee uses TMDL information to prioritize stormwater facilities maintenance projects and to address specific sources of stormwater pollutants.

Th Borough will use the TMDL informaion to prioritize any stormwater facility maintenance that is required based on the area in which the facilities are located.

The Borough may address the Fecal Coliform TMDL by developing the following BMP's:
- Establish a goose management BMP
- Enforce riparian/lake and "No Mow" buffer restoration.

The Borough may address the Mercury TMDL by regulating the common source of mercury pollutants such as factory smoke, solid/medical waste incineration, and some manufacturing processes.

The Borough may address the PCB TMDL by collecting PMP reports from all applicable discharge points and ensure that the PMP reports are updated annually.

The Borough may address the Total Phosphorus TMDL by continuing to raise awareness concerning fertilizer use through public education.

SPPP Form 15 – Optional Measures

All records must be available upon request by NJDEP.

1. Describe any Best Management Practice(s) the permittee has developed that extend beyond the requirements of the Tier A MS4 NJPDES permit that prevents or reduces water pollution.
2. Has the permittee adopted a Refuse Container/Dumpster Ordinance?
Yes

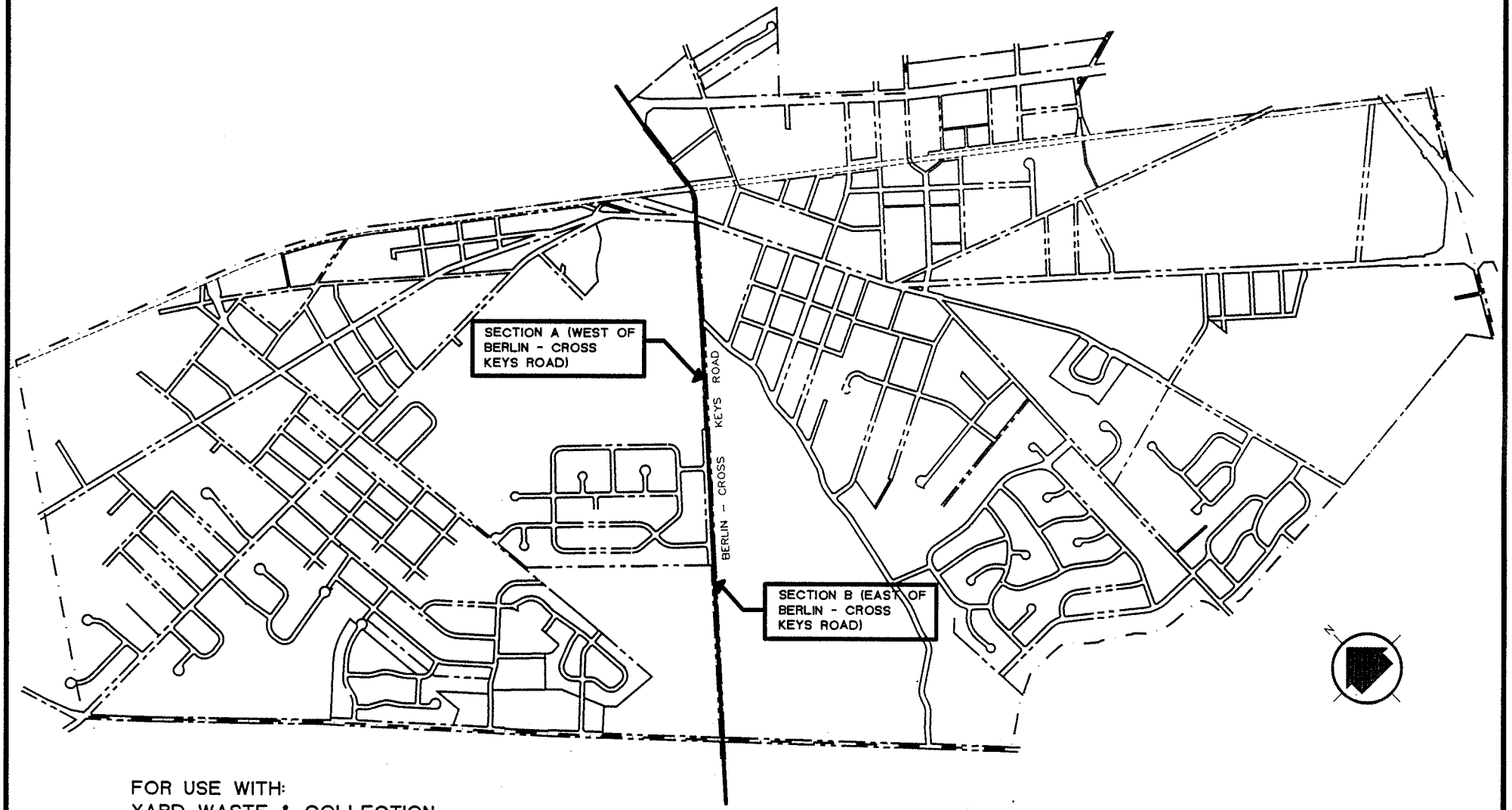
Stormwater Pollution Prevention Plan

Annual Report
(Kept on file at DPW)

Stormwater Pollution Prevention Plan

Maps

BOROUGH OF BERLIN



FOR USE WITH:
YARD WASTE & COLLECTION
STORM DRAIN INLET LABELING
MS4 OUTFALL PIPE MAPPING

BOROUGH OF BERLIN
ZONING MAP
with LAND USE shown

LAND USE
PLANNING DISTRICT DESIGNATIONS

- Single-Family Residential
- Multi-Family Residential
- Age restricted Residential
- Medical and Senior Facility
- Central Business District
- Conventional Commerical
- Industrial
- Institutional
- Open Space & Recreation

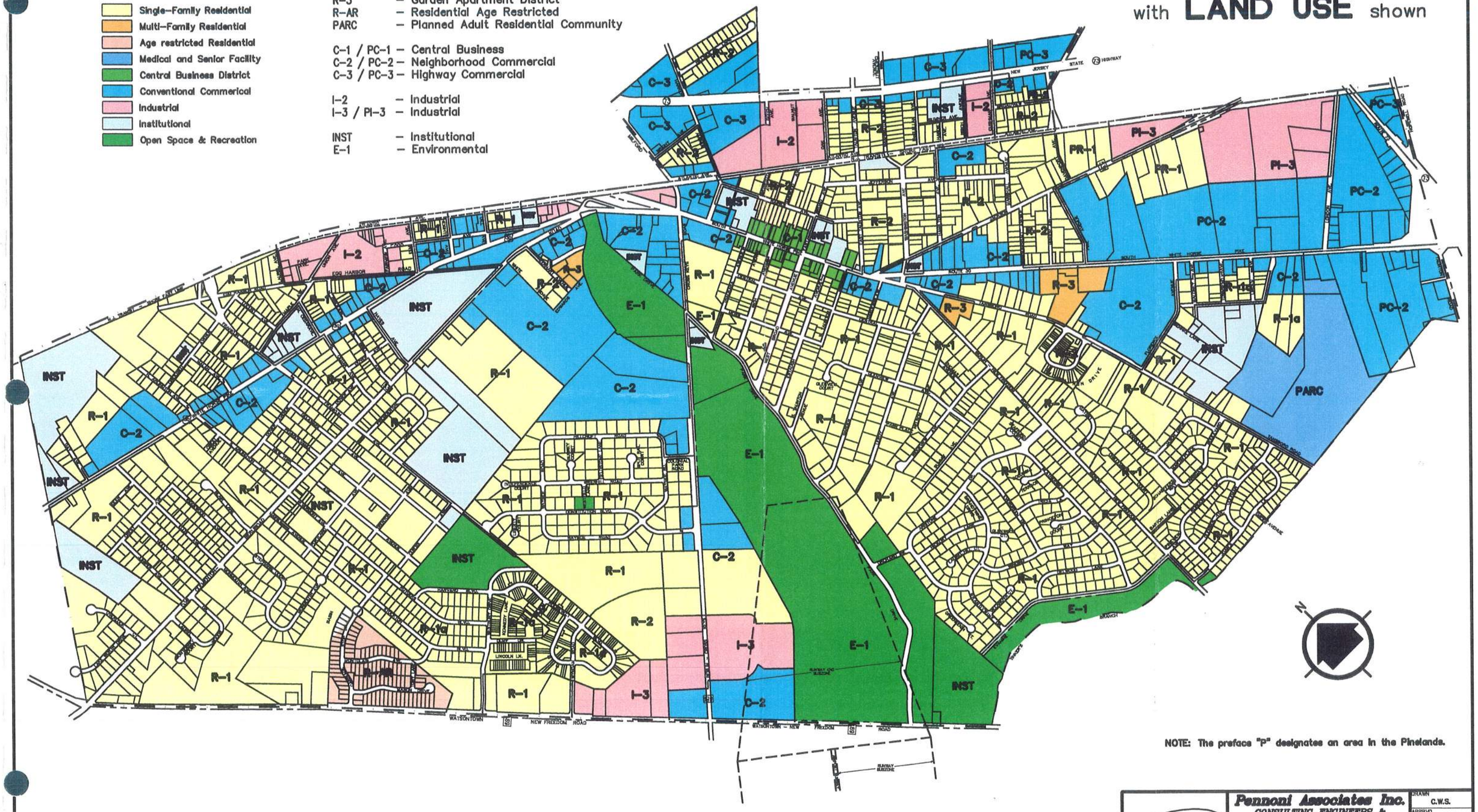
ZONING LEGEND

R-1 / PR-1 – Low Density Residential
R-1a – Medium Density Residential
R-2 / PR-2 – High Density Residential
R-3 – Garden Apartment District
R-AR – Residential Age Restricted
PARC – Planned Adult Residential Community

C-1 / PC-1 – Central Business
C-2 / PC-2 – Neighborhood Commercial
C-3 / PC-3 – Highway Commercial

I-2 – Industrial
I-3 / PI-3 – Industrial

INST – Institutional
E-1 – Environmental



NOTE: The preface "P" designates an area in the Pinelands.

Pennoni

Pennoni Associates Inc.
CONSULTING ENGINEERS & PROFESSIONAL LAND SURVEYORS
515 Grove Street
Haddon Heights, New Jersey 08035
DENNIS S. DiBLASIO NJPLS *GS 28307
New Jersey Certificate of Authorization # 24GA20033300

DRAWN	C.W.S.
APPRVD	Dennis DiBlasio
DATE	3/01/04
SHEET	1 of 1

J:\LandProjects\BRGF\0411\DWG\ZoneMap.dwg