

**BOROUGH OF MANTOLOKING**  
OCEAN COUNTY, NEW JERSEY

**Stormwater Pollution Prevention Plan  
(SPPP)**

NJPDES #: NJG0153281  
PI ID #: 203290

Dated  
January 27, 2005

Revised  
June 2009  
September 10, 2010  
May 2, 2018  
December 2021



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# STORMWATER POLLUTION PREVENTION PLAN (SPPP)

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## **BOROUGH OF MANTOLOKING**

### **STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

#### **INTRODUCTION**

##### **Background/Authorization**

In December 1999, the United States Environmental Protection Agency (USEPA) issued Phase II Stormwater Rules to address pollutants entering municipal separate storm sewer systems, also referred to as “MS4s”. To comply with USEPA requirements and goals of the stormwater program, the New Jersey Department of Environmental Protection (NJDEP) has developed the Municipal Stormwater Regulation Program, which regulates all 566 municipalities within the State.

As a result of the statewide Municipal Stormwater Regulation Program, the Tier A municipalities, including the Borough of Mantoloking, has been issued a Tier A Municipal Stormwater Master General Permit, number NJ0141852. The NJPDES permit number unique to the Borough of Mantoloking is NJG0153281, with an original “Effective Date of Permit Authorization” (EDPA) of April 1, 2004. The NJDEP has renewed the Tier A Municipal Stormwater General Permit for Mantoloking with a new EDPA of January 1, 2018. The Tier A Municipal Stormwater General Permit has mandatory elements that must be implemented to avoid possible enforcement action and penalties from the State, and the General Permit requires that the Borough prepare this Stormwater Pollution Prevention Plan (SPPP). The purpose of the plan is to document SPPP team member assignments, scope of activities, schedule, and completion dates of tasks necessary to meet permit mandated Statewide Basic Requirements (SBRs). The SBRs were developed by NJDEP for prevention of nonpoint-source stormwater pollution in order to improve the quality of our surface and ground waters, the health of our ecosystems, and ultimately the quality of our lives. The SPPP has been revised, updated, and amended to include the latest changes and requirements from the reissued NJDEP Tier A Permit.

##### **Intended Use of the SPPP**

Tier A Municipalities are required to develop, implement, and enforce a Stormwater Management Program to satisfy the appropriate water quality requirements of the National Pollutant Discharge Elimination System Phase II rule of the Federal Clean Water Act and the New Jersey Department of Environmental Protection, Division of Watershed Management, Municipal Stormwater Regulation Program. The Stormwater Pollution Prevention Plan (SPPP) describes the Tier A Municipalities stormwater program and serves as a mechanism for implementation of the Statewide Basic Requirements (SBR). The SPPP addresses stormwater quality issues related to new development, redevelopment, and existing development. The SPPP shall include, at a minimum, all of the information and items identified in Attachment A of the Borough’s Tier A Municipal Master General Permit (Appendix D of the SPPP).

### **Information/Actions Required to Complete SPPP**

The Borough of Mantoloking shall review the items identified in Forms 1 through 15 and implement the SPPP in accordance with the requirements specified in Part IV.F.1.c of the latest issued permit. The SPPP Team Members Form includes the Borough's reorganizational meeting minutes for the appointment of the Stormwater Program Coordinator position. A renewal of the Tier A Municipal Stormwater General Permit was issued by the NJDEP on December 08, 2017 with an effective date of January 1, 2018. Therefore, the EDPA for the latest issued Authorization To Discharge for the Tier A Permit is January 1, 2018 with an expiration date for the current Tier A Permit of December 31, 2022. The SPPP shall be signed, dated and be retained by the Borough of Mantoloking's Stormwater Program Coordinator. The Borough shall certify annually that they have developed, implemented, and are actively enforcing the program. The Annual Reports and Certifications (ARC) for the appropriate items and general permit requirements are found in Appendix A of this Stormwater Pollution Prevention Plan. The Annual Reports and Certifications, including the Supplemental Questionnaire, shall be submitted via electronically to NJDEP Division of Water Quality, Bureau of Nonpoint Pollution Control, Municipal Stormwater Regulation Program via the State web portal ([www.njdeponline.com](http://www.njdeponline.com)). The ARCs shall be submitted annually on or before May 2nd.

Should Amendments to the SPPP be necessary, the amended SPPP shall also be signed, dated, and be retained and otherwise treated in the same manner as the original SPPP. The Borough of Mantoloking shall retain each previous SPPP for a period of at least five years from the date of the previous SPPP. Additional information regarding the SPPP can be found in Part IV.F.1 of the latest issued permit.

The Borough of Mantoloking shall make available the SPPP and Annual Reports and Certification upon request to an authorized representative of NJDEP Municipal Stormwater Regulation Program and to the public at reasonable times during regular business hours.

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**SCHEDULE**

**Required Actions and Schedule**

The SPPP has a series of required actions over the life of the plan. Some of the required actions are one-time actions, such as adopting an amended stormwater management ordinance, and other actions will require continued attention and/or updating as part of the municipal operations and maintenance, such as annual inspections for outfall pipe stream scouring remediation and inlet labeling. Each required action has a regulatory date for implementation based on the original EDPA or the current EDPA on the Tier A Permit renewed by the NJDEP. The required actions are specifically described on the provided forms, and a schedule for each required action, their implementation dates, and the current implementation status is located on the attached Summary of Statewide Basic Requirements (SBRs).

NJPDES Municipal Stormwater Regulation Program  
**Summary of Statewide Basic Requirements (SBRs)**  
Tier A Municipal Stormwater General Permit (NJG0151092)

(Please refer to final permit for details on SBRs)

Statewide Basic Requirement	Minimum Standard	Implementation Schedule
<b>Stormwater Pollution Prevention Plan (SPPP)</b>	Preparation of <b>SPPP</b> which describes the municipality's stormwater program, including details on the implementation of required SBRs. The SPPP shall be amended, as necessary, and amended SPPPs shall be signed, dated, implemented, retained, and otherwise treated in the same manner as the original SPPP. SPPP shall be revised and amended to incorporate additional SBRs, best management practices, and other changes required by the renewal of the Tier A Permit.	Modify and update to conform with new regulations or as needed and shall be done within 30 days of written notification by the NJDEP: <b>Prepared and ongoing</b>
Post on the municipality's website	Post the current SPPP on the municipality's website	EDPA + 90 Days: <b>Posted to Website</b>
Post on the municipality's website	Post the current Municipal Stormwater Management Plan (MSWMP) and related ordinances on the municipality's website	EDPA + 90 Days: <b>Posted on Website</b>
Public Notice	Comply with applicable State and local public notice requirements when providing for public participation.	Upon original EDPA by 4/1/04: <b>Ongoing compliance</b>
<b>Post-Construction Stormwater Management in New Development and Redevelopment</b>		
Stormwater Management Plan	Adopt stormwater management (SWM) plan in accordance with N.J.A.C. 7:8-4.	Complete 12 mos. from original EDPA by 4/1/05: <b>Adopted</b>
Stormwater Control Ordinance	Adopt and implement stormwater control ordinance in accordance with N.J.A.C. 7:8-4.	Adopt ordinance 12 months from SWM plan adoption by 4/1/06: <b>Adopted</b>
Residential Site Improvement Standards	Ensure compliance with Residential Site Improvement Standards for stormwater management (N.J.A.C. 5:21-7), including any exception, waiver, or special area standard approved under N.J.A.C. 5:21-3.	Upon original EDPA by 4/1/04: <b>Ongoing compliance</b>
BMP Operation and Maintenance	Ensure adequate long-term operation and maintenance of BMPs.	Original EDPA of 4/1/04 for BMPs on municipal property, 24 months for BMPs elsewhere by 4/1/06: <b>Ongoing compliance</b>

<b>Statewide Basic Requirement</b>	<b>Minimum Standard</b>	<b>Implementation Schedule</b>
Storm Drain Inlets Design Standards for New Construction	New storm drain inlets must meet the design standards specified in Attachment C of the permit.	11 months from original EDPA if municipally installed, by 4/1/05. Otherwise 24 mos. from original EDPA by 4/1/06: <b>Ongoing compliance</b>
For each structural and non-structural stormwater measure (e.g. basins), for which an application is made to the municipality after EDPA, the municipality shall complete, update, finalize and maintain a Major Development Stormwater Summary.	Certify in each annual report that Major Development Stormwater Summaries (Attachment D) have been completed and records have been maintained by the Tier A municipality. Records demonstrating compliance with Part IV.B.4 shall be kept and their location shall be referenced, in the SPPP.	EDPA
BMP Maintenance Plans	Maintain copies of all maintenance plans for stormwater facilities approved by the municipality, and make them available to the the Department upon request.	EDPA + 12 Months
<b>Local Public Education</b>		
Local Public Education Program	Annually conduct educational activities that total a minimum of 10 points, as identified on Attachment E of the Tier A Permit for approved activities and the assigned point value.	Start 12 months from original EDPA by 4/1/05: <b>Completed and ongoing</b>
Storm Drain Inlet Labeling and Maintenance	Label all municipal storm drain inlets that are next to sidewalks, or within plazas, parking areas or maintenance yards. Coordinate efforts with watershed groups and volunteer organizations and maintain legibility of the inlet labels.	Within 60 months from original EDPA by 4/1/09: <b>Completed and ongoing</b>
Advertise public involvement program(s) pertaining to education and outreach activities	Certify in each annual report that public involvement program(s) have been properly advertised on the website, through a mailing, through newspaper advertisement, or other similar means. Public advertisement records shall be kept with the SPPP	EDPA + 12 Months: <b>Completed and ongoing</b>
<b>Improper Disposal of Waste</b>		
Pet Waste Ordinance	Adopt and enforce an ordinance requiring owners and keepers to immediately and properly dispose of their pet's solid waste. Distribute information with pet licenses regarding the ordinance and the environmental benefits of proper disposal of pet waste.	Complete 18 mos. and ongoing: <b>Adopted and ongoing</b>
Litter Ordinance	Adopt and enforce a litter ordinance, or enforce the existing State litter statute (N.J.S.A. _13: 1E-99.3).	Complete 18 mos. and ongoing: <b>Adopted and ongoing</b>
Improper Waste Disposal Ordinance	Adopt and enforce an ordinance prohibiting spilling, dumping or disposal of any materials other than stormwater into the MS4.	Complete 18 mos. from original EDPA by 10/1/05 and ongoing: <b>Adopted and ongoing</b>

<b>Statewide Basic Requirement</b>	<b>Minimum Standard</b>	<b>Implementation Schedule</b>
Wildlife Feeding Ordinance	Adopt and enforce an ordinance that prohibits feeding of non-confined wildlife in any public park or property owned/operated by the municipality (except environmental education centers).	Complete 18 months from original EDPA by 10/1/05 and ongoing: <b>Adopted and ongoing</b>
Yard Waste Ordinance / Collection Program	Adopt and enforce an ordinance that prohibits placing non-containerized yard waste in the street, <b>or</b> collect yard waste based on a frequency as determined by the municipality. Non-containerized yard waste cannot be placed any closer than 10' from a storm drain inlet.	Start 18 months from original EDPA by 10/1/05 and ongoing: <b>Adopted and ongoing</b>
Refuse Container / Dumpster Ordinance	Adopt and enforce an ordinance requiring dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times and which prohibits the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids, or solids from the containers.	Complete on or before 9-1-10: <b>Adopted and ongoing.</b>
Private Storm Drain Inlet Retrofitting Ordinance	Adopt and enforce an ordinance requiring the retrofitting of existing storm drain inlets to meet the standard in Attachment C of the permit which are in direct contact with repaving, repairing, reconstruction, resurfacing, or alterations of facilities on property not owned or operated by the municipality (except individual single family homes).	Complete on or before 9-1-10: <b>Adopted and ongoing.</b>
<b>Illicit Connection Elimination and MS4 Outfall Mapping</b>		
Illicit Connection Ordinance	Develop, implement and enforce an ordinance, to the extent allowable under State law, to prohibit illicit connections to MS4.	Develop & implement 18 months from original EDPA by 10/1/05: <b>Adopted and ongoing</b>
Illicit Connection Elimination Program	Develop, implement and enforce a program to detect and eliminate illicit connections into the municipality's small MS4.	Develop & implement 18 months from original EDPA by 10/1/05: <b>Completed and ongoing</b>
MS4 Outfall Pipe Mapping	Map all municipal storm sewer outfall pipe which discharges to surface water by dividing the municipality into two sectors for the purposes of outfall mapping.	Map 1 <sup>st</sup> sector 36 mos. from original EDPA by 4/1/07 Map 2 <sup>nd</sup> sector 60 mos. from original EDPA by 4/1/09: <b>Completed</b>
<b>Solids and Floatable Controls</b>		
Street Sweeping	In predominantly commercial and/or industrial areas, conduct monthly sweeping of curbed streets, roads and highways (with a speed limit less than 35 mph), and sweeping within one week of any leaf pick up or snow melt.	Start 12 months from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>
Storm Drain Inlet Retrofitting	Retrofitting of storm drain inlets during road repair, reconstruction, alterations or repaving with inlets that meet the design standards specified in Attachment C of the permit.	Start 12 months from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>

<b>Statewide Basic Requirement</b>	<b>Minimum Standard</b>	<b>Implementation Schedule</b>
Stormwater Facility Maintenance	Develop and implement a stormwater facility maintenance program that includes yearly catch basin cleaning and ensures proper function and operation of all municipally operated stormwater facilities.	Start 12 months from original EDPA by 4/1/05 and ongoing: <b>Ongoing compliance</b>
Catch Basin Inspection and Cleaning	Inspect all municipally owned and operated catch basins and inlets at least once every five (5) years and clean those basins as needed to remove sediment, trash, or debris.	Start 12 months from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>
Outfall Pipe Stream Scouring Remediation	Develop and implement a stormwater outfall pipe scouring detection, remediation and maintenance program to identify and stabilize localized stream and stream bank scouring in the vicinity of outfall pipes operated by the municipality. Repairs shall be in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90-1).	Start 18 months from original EDPA by 10/1/05 and ongoing: <b>Completed and ongoing</b>
<b>Maintenance Yard Operations</b>		
De-icing Material Storage	Construct permanent indoor storage with an impermeable floor for deicing materials. Seasonal tarping shall be used as an interim BMP until the permanent structure is completed. Uncovered sand may be stored outside if a 50' setback is maintained from any storm sewer inlet.	Comply w/ tarping & sand storage requirements w/ in 12 mos., by 4/1/05 complete perm. structure w/ in 36 mos. from original EDPA by 4/1/07: <b>Completed with Shared Services with another party and ongoing</b>
Equipment and Vehicle Washing	Manage any equipment and vehicle washing activities to control and prevent unpermitted discharges of wash wastewater. Maintain a record of where and when equipment and vehicle washing occurs to document proper management.	Start 12 months from original EDPA and ongoing: <b>Ongoing compliance</b>
Fueling Operations	Develop and implement SOPs for vehicle fueling and bulk delivery and implement with the required practices contained in Attachment D of the permit.	Start 12 months from original EDPA and ongoing: <b>Completed with Shared Services with another party and ongoing</b>
Vehicle Maintenance	Implement required practices for vehicle maintenance contained in Attachment D of the permit.	Start 12 mos. from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>
Good Housekeeping	Implement required practices for good housekeeping, contained in Attachment D of the permit.	Start 12 mos. from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>
<b>Employee Training</b>		

Statewide Basic Requirement	Minimum Standard	Implementation Schedule
Employee Training	Develop and conduct an employee training program for appropriate employees that cover the required topics contained in the permit.	Start 12 mos. from original EDPA by 4/1/05 and ongoing: <b>Completed and ongoing</b>
Employee Training	Ensure that individuals that review development and redevelopment projects for compliance with N.J.A.C. 7:8 on behalf of the municipality complete Department approved training once every five years.	EDPA + 12 Months
Employee Training	Ensure that current Municipal Board and Governing Body Members that review and approve applications for development and redevelopment projects complete the "Training Tool" on or before EDPA + 6 months, and by new members within 6 months of commencement of duties. Once per term of service thereafter, Municipal Board and Governing Body Members must review at least one of the tools offered under the Post-Construction Stormwater Management website.	EDPA + 6 Months

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**MAPS**

**Required Maps**

The SPPP contains a map of the Borough of Mantoloking which identifies the location of municipal outfall pipes for the Municipal Separate Storm Sewer System (MS4s) for both Sector A and Sector B. The map of the MS4 outfalls can be found in Appendix E of the SPPP.

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**FORMS**

## SPPP Form 1 – SPPP Team Members

<b>Stormwater Program Coordinator (SPC)</b>	
Print/Type Name and Title	Lawrence Plevier, PE, CME, Borough Engineer
Office Phone # and eMail	(732)-475-6983 ext. 310; larry.plevier@mottmac.com
Signature/Date	
<b>Individual(s) Responsible for Major Development Project Stormwater Management Review</b>	
Print/Type Name and Title	Lawrence Plevier, PE, CME, Borough Engineer and Planning/Zoning Board Engineer
Print/Type Name and Title	
<b>Other SPPP Team Members</b>	
Print/Type Name and Title	Beverley Konopada, RMC, CMR, Borough Clerk
Print/Type Name and Title	Scott Hulse, Superintendent of Public Works
Print/Type Name and Title	Jean Cipriani, Esq., Borough Attorney
Print/Type Name and Title	Barbara Hood Benz, Environmental Commission Chairwoman
Print/Type Name and Title	Brett Radi, Business Administrator

## SPPP Form 2 – Revision History

Please record changes to the signature page and updates to the approach taken to comply with the permit, e.g., new street sweeping frequency, change to shared services, etc.

	<b>Revision Date</b>	<b>SPC Initials</b>	<b>SPPP Form Changed</b>	<b>Reason for Revision</b>
1.	June 2009	LP	Various	Update for Compliance with Latest Issued Tier A Municipal Stormwater General Permit
2.	September 10, 2010	LP	Various	Update for Compliance with Latest Issued Tier A Municipal Stormwater General Permit
3.	May 2, 2018	LP	Various	Update for Compliance with Latest Issued Tier A Municipal Stormwater General Permit
4.	December 2021	LP	Various	Update for Compliance with Latest Issued Tier A Municipal Stormwater General Permit
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

## 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:	<a href="https://www.mantoloking.org/sites/g/files/vyhlf6076/f/uploads/stormwater_pollution_prevention_plan.pdf">https://www.mantoloking.org/sites/g/files/vyhlf6076/f/uploads/stormwater_pollution_prevention_plan.pdf</a>
2. Date of most current SPPP:	December 2021
3. Website URL where the Municipal Stormwater Management Plan (MSWMP) is posted online:	<a href="https://www.mantoloking.org/sites/g/files/vyhlf6076/f/uploads/2007_municipal_stormwater_management_plan.pdf">https://www.mantoloking.org/sites/g/files/vyhlf6076/f/uploads/2007_municipal_stormwater_management_plan.pdf</a>
4. Date of most current MSWMP:	May 2007
5. Physical location and/or website URL where associated municipal records of public notices, meeting dates, minutes, etc. are kept:	<a href="https://www.mantoloking.org/minutes-and-agendas">https://www.mantoloking.org/minutes-and-agendas</a>
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:	
<p>For meetings where public notice is required under the Open Public Meetings Act (“Sunshine Law,” N.J.S.A. 10:4-6 et seq.), Mantoloking Borough provides public notice in a manner that complies with the requirements of that Act. Also, in regard to the passage of ordinances, Mantoloking Borough provides public notice in a manner that complies with the requirements of N.J.S.A. 40:49-1 et seq. In addition, for municipal actions (e.g., adoption of the municipal stormwater management plan) subject to public notice requirements in the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), Mantoloking Borough complies with those requirements.</p>	

## 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.

The Borough of Mantoloking performs public education through the annual distribution of a NJDEP brochure to all residents. Pet waste brochures are also distributed with pet licenses.

The official Borough website contains a link to the Clean Water NJ (NJDEP) web address. The Clean Water NJ (NJDEP) website is an educational webpage and valuable tool for gaining an understanding and knowledge for non-point source pollution, impacts from stormwater runoff on the environment, and potential actions which can be taken to reduce the impacts on the environment and control non-point source pollution. The official Borough website also contains links to other related sites including Barnegat Bay National Estuary Program and Barnegat Bay environmental groups.

Educational stormwater displays are in the Borough Hall, including posters and brochures from the NJDEP related to stormwater pollution control. The Borough Hall also contains flyers and educational information from environmental groups on the current condition of the Barnegat Bay and actions to be taken to preserve the Barnegat Bay. Educational information related to the impacts from stormwater non-point source pollution on the Barnegat Bay is contained within free handouts and literature available at Borough Hall.

The Mantoloking Environmental Commission (MEC) also provides an educational newsletter to the residents of Mantoloking. The MEC Newsletter contains information related to the preservation of the Barnegat Bay thru guidelines for fertilizer use and the impacts of improper fertilization conveyed downstream by stormwater runoff into Barnegat Bay. The MEC also has a sub-committee for the Barnegat Bay Estuary.

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.

Beginning in 2010, the Mayor sends an annual letter to all residents and businesses in the Borough of Mantoloking with information for the history of Phase II of the Clean Water Act and the Tier A Permit, non-point source pollution, and a reference to all municipal codes related to stormwater pollution prevention. The annual stormwater letter from the Mayor also includes a reference to the NJDEP website for stormwater pollution prevention information and a reference to the Mantoloking Borough official website.

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

The records for the mailings and for public event schedules are maintained on the municipal website and/or at the Municipal Building.

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

All records must be available upon request by NJDEP.

<p>1. How does the municipality define 'major development'?</p>
<p>In accordance with Chapter 18-1.2 of the municipal code, Major Development means an individual "development," as well as multiple developments that individually or collectively result in:</p> <ol style="list-style-type: none"><li>1. The disturbance of one or more acres of land since February 2, 2004;</li><li>2. The creation of one-quarter acre or more of "regulated impervious surface" since February 2, 2004;</li><li>3. The creation of one-quarter acre or more of "regulated motor vehicle surface" since March 2, 2021; or</li><li>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.</li></ol> <p>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."</p>
<p>2. Does the municipality approach residential projects differently than it does for non-residential projects? If so, how?</p>
<p>No. In accordance with Chapter 18-1 of the municipal code, the scope, purpose and applicability for the stormwater management municipal design standards indicates that all site plans and subdivisions for major development for preliminary and final site plan or subdivision review apply, including non-residential major development and aspects of residential major developments that are not preempted by the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21.</p>
<p>3. What process is in place to ensure that municipal projects meet the Stormwater Control Ordinance?</p>
<p>The municipal engineer will ensure that all major developments undertaken by the Borough of Mantoloking will comply with the stormwater municipal design standards as required in Chapter 18-1 of the municipal code.</p>

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

All records must be available upon request by NJDEP.

<p>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.</p>	
<p>An application for a proposed development project is submitted to the municipal Zoning Officer, and a review of the application is completed by the Zoning Officer in accordance with the time frame as established by law. If the application is denied and requires a variance, the application is sent to either the Planning Board or the Zoning Board of Adjustment for a hearing, and if the application is defined as a Major Development, the Borough Engineer reviews the application for compliance with the municipal design standards, the RSIS (as applicable for residential development), and for compliance with N.J.A.C. 7:8.</p> <p>If an application does not require Board approval and is approved by the Zoning Officer, the Borough Engineer will review any application for residential development which would not require Board approval yet meets the criteria for a Major Development to ensure compliance with the municipal design standards and for compliance with N.J.A.C. 7:8.</p> <p>Any application submitted to either the Planning Board or Zoning Board of Adjustment which qualifies as a Major Development will be reviewed by the Borough Engineer for compliance with the municipal design standards, the RSIS (as applicable for residential development), and for compliance with N.J.A.C. 7:8.</p>	
<p>5. Does the Municipal Stormwater Management Plan include a mitigation plan?</p>	<p>Yes</p>
<p>6. What is the physical location of approved applications for major development projects, Major Development Summary Sheets (permit att. D), and mitigation plans?</p>	<p>Municipal Building</p>

## 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	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
2. Wildlife Feeding permit cite IV.B5.a.ii	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
3. Litter Control permit cite IV.B5.a.iii	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
4. Improper Disposal of Waste permit cite IV.B.5.a.iv	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
5. Containerized Yard Waste/ Yard Waste Collection Program permit cite IV.B.5.a.v	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
6. Private Storm Drain Inlet Retrofitting permit cite IV.B.5.a.vi	7-9-10	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
7. Stormwater Control Ordinance permit cite IV.B.4.g and IV.B.5.a.vii	7-16-07; Revised 3-16-21	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
8. Illicit Connection Ordinance permit cite IV.B.5.a.vii and IV.B.6.d	2-21-06	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
9. Optional: Refuse Container/ Dumpster Ordinance permit cite IV.E.2	7-9-10	<a href="https://ecode360.com/MA4063">https://ecode360.com/MA4063</a>		Code enforcement officer and local police officers
Indicate the location of records associated with ordinances and related enforcement actions:				
Records are located on the official municipal website with a link to the municipal e-code and/or at the Municipal Building.				

## 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.

In accordance with the Tier A permit requirements, no municipal roadways meet all of the following criteria: (1) the street is owned or operated by the municipality; (2) the street is curbed and has storm drains; (3) the street has a posted speed limit of 35 miles per hour or less; (4) the street is not an entrance or exit ramps; and (5) the street is in a predominantly commercial area, and, therefore, the Borough of Mantoloking is not required to perform street sweeping activities.

However, the Mantoloking Department of Public Works sweeps all municipal streets approximately four (4) times annually with a municipal street sweeper truck.

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.

The Mantoloking Department of Public Works sweeps all municipal streets approximately four (4) times annually with a municipal street sweeper truck.

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

No, the Borough of Mantoloking does not provide street sweeping services for other municipalities.

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.

Not applicable. The Borough of Mantoloking is not required to perform street sweeping activities.

## SPPP Form 8 – Catch Basins and Storm Drain Inlets

All records must be available upon request by NJDEP.

<p>1. Describe the schedule for catch basin and storm drain inlet inspection, cleaning, and maintenance.</p>
<p>The Borough of Mantoloking has an annual catch basin and inlet cleaning program to maintain catch basin and inlet functions and efficiency. All catch basins and inlets will be inspected once each year. If, at the time of inspection, no sediment, trash or debris is observed in the catch basin or inlet, then that catch basin or inlet will not be cleaned. All catch basins and inlets will be inspected yearly, even if they were found to be “clean” the previous year. At the time of cleaning, the catch basins and inlets will also be inspected for proper function. Maintenance will be scheduled for those catch basins and inlets that are in disrepair. Mantoloking Public Works annually inspects, cleans, and removes sediment/debris from catch basins and inlets.</p>
<p>2. List the locations of catch basins and storm drain inlets with recurring problems, i.e., flooding, accumulated debris, etc.</p>
<p>No catch basins and/or storm drain inlets have recurring problems at this time.</p>
<p>3. Describe what measures are taken to address issues for catch basins and storm drain inlets with recurring problems and how they are prioritized.</p>
<p>Maintenance will be scheduled for those catch basins and inlets that are in disrepair. Mantoloking Public Works annually inspects, cleans, and removes sediment/debris from catch basins and inlets.</p>
<p>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.</p>
<p>For our storm drain inlet labeling program, the Mantoloking Department of Public Works (DPW) have completed the retrofitting of all type “B” inlets with Phase II compliance castings, including the permanently cast educational message of “Dump No Waste Drains to Waterway” with a fish logo on the top surface of the curb piece. In addition to type “B” inlets, all other storm drain inlets that are along municipal streets with sidewalks and all storm drain inlets within plazas, parking areas, or maintenance yards that are operated by the Borough of Mantoloking have been labeled. The DPW, with assistance from the Mantoloking Environmental Commission (MEC), will monitor the existing storm drain inlet labels for legibility and clarity. If any maintenance is required for the existing inlet label stenciling or medallions, the DPW or the MEC will ensure the re-application of paint for the stenciled labels or re-installation of new medallions for the storm drain inlets delineated by educational markers.</p>

## **SPPP Form 8 – Catch Basins and Storm Drain Inlets**

All records must be available upon request by NJDEP.

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.

Records are located at the Municipal Building.

## 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.
<p>In accordance with Attachment C (Design Standards for Storm Drain Inlets) of the Tier A Municipal Stormwater Permit, all new capital projects are required to retrofit existing storm drain inlets that are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities.</p> <p>The Mantoloking Department of Public Works (DPW) have completed the retrofitting of all type “B” inlets with Phase II compliance castings, including the permanently cast educational message of “Dump No Waste Drains to Waterway” with a fish logo on the top surface of the curb piece. In addition to type “B” inlets, all other storm drain inlets that are along municipal streets with sidewalks and all storm drain inlets within plazas, parking areas, or maintenance yards that are operated by the Borough of Mantoloking have been labeled. The DPW, with assistance from the Mantoloking Environmental Commission (MEC), will monitor the existing storm drain inlet labels for legibility and clarity. If any maintenance is required for the existing inlet label stenciling or medallions, the DPW or the MEC will ensure the re-application of paint for the stenciled labels or re-installation of new medallions for the storm drain inlets delineated by educational markers.</p>
2. Describe the inspection process to verify that appropriate retrofits are completed on municipally owned storm drain inlets.
<p>The Contract Drawings for capital projects for the Borough with the required inlet retrofitting improvements are inspected in the field during construction by the Engineering Department, and the Contractor is not provided final payment for any project until all proposed improvements are completed in accordance with the Contract Documents, including any proposed inlet retrofitting improvements.</p>
3. Describe the procedure for ensuring that privately owned storm drain inlets are retrofitted.
<p>In accordance with Attachment C (Design Standards for Storm Drain Inlets) of the Tier A Municipal Stormwater Permit, all new private projects are required to retrofit existing storm drain inlets that are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities.</p>
4. Describe the inspection process to verify that appropriate retrofits are completed on privately owned storm drain inlets.
<p>The Contract Drawings for private projects for the Borough with the required inlet retrofitting improvements are inspected in the field during construction by the Engineering Department.</p>

# 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:

**Mantoloking Public Works Department, 203 Downer Avenue, Mantoloking NJ 08738**

**Municipal Yard, 1303 Bay Avenue, Mantoloking NJ 08738**

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 – Not applicable

Intermediate products – Not applicable

Final products – Not applicable

Waste materials – Not applicable

By-products – Not applicable

Machinery – Not applicable

Fuel – Not applicable

Lubricants – Not applicable

Solvents – Not applicable

Detergents related to municipal maintenance yard or ancillary operations – Not applicable

Other – Not applicable

# SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

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

There are no fueling operations located within the Borough of Mantoloking.

## 2. Vehicle Maintenance

Vehicle and equipment maintenance activities are conducted indoors whenever possible to prevent the exposure of pollutants to stormwater. Whenever maintenance must take place outdoors, a cover is placed over the vehicle or equipment under maintenance, and drip pans are used. Maintenance activities are conducted as far away from storm drains as possible.

## 3. On-Site Equipment and Vehicle Washing

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

The Borough does not wash their vehicles or equipment on-site.

## 4. Discharge of Stormwater from Secondary Containment

Not applicable, no equipment or material which could be a source of pollution is stored outside at municipal facilities or sites.

# SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

## 5. Salt and De-Icing Material Storage and Handling

The Borough's solid de-icing materials are stored in the Borough of Bay Head at the DPW yard on Park Avenue (Block 5, Lot 13). The de-icing material is located at the Bay Head DPW yard within a permanent storage shed. The Borough of Mantoloking also stores Ice Ban® liquid de-icing material, which is kept in a 250 gallon storage tank on the DPW yard on Bay Avenue (Block 34, Lot 4) in the Borough of Mantoloking.

## 6. Aggregate Material and Construction Debris Storage

The Borough does not store aggregate material or construction debris outside.

## 7. Street Sweepings, Catch Basin Clean Out and Other Material Storage

Road cleanup materials are disposed of in accordance with N.J.A.C. 7:26-1.1.

## 8. Yard Trimmings and Wood Waste Management Sites

The Borough does not operate any yard trimming or wood waste management sites.

## 9. Roadside Vegetation Management

The Borough of Mantoloking prohibits the application of herbicides on or adjacent to storm drain inlets, on steeply sloping ground, along curb lines, and along unobstructed shoulders. Wherever overgrowth presents a safety hazard or wherever it is unsafe to mow, the Borough of Mantoloking will mow or trim vegetation as necessary.

## SPPP Form 11 – Employee Training

All records must be available upon request by NJDEP.

<p><b>A. Municipal Employee Training:</b> 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.</p>		
Topic	Frequency	Title of trainer or office to conduct training
1. Maintenance Yard Operations (including Ancillary Operations)	Every year	Public Works Employees
2. Stormwater Facility Maintenance	Every year	Public Works Employees
3. SPPP Training & Recordkeeping	Every year	
4. Yard Waste Collection Program	Every 2 years	Public Works Employees
5. Street Sweeping	Every 2 years	Public Works Employees
6. Illicit Connection Elimination and Outfall Pipe Mapping	Every 2 years	Borough Engineer & Public Works Employees
7. Outfall Pipe Stream Scouring Detection and Control	Every 2 years	Public Works Employees
8. Waste Disposal Education	Every 2 years	Environmental Commission Members
9. Municipal Ordinances	Every 2 years	Code Enforcement Officer, Police Department, & Public Works Employees
10. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment	Every 2 years	Public Works Employees
<p><b>B. Municipal Board and Governing Body Members Training:</b> 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 <a href="http://www.nj.gov/dep/stormwater/training.htm">www.nj.gov/dep/stormwater/training.htm</a>.</p> <p>Within 6 months of commencing duties, watch <i>Asking the Right Questions in Stormwater Review Training Tool</i>. 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.</p>		
<p><b>C. Stormwater Management Design Reviewer Training:</b> 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 <a href="http://www.nj.gov/dep/stormwater/training.htm">www.nj.gov/dep/stormwater/training.htm</a>. Indicate the location of the DEP certificate of completion for each reviewer.</p>		

## 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](http://www.nj.gov/dep/dwq/msrp_map_aid.htm).*

A copy of the most current outfall pipe map is attached.

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

Inspections of storm sewer outfalls are conducted throughout the year during the maintenance and cleaning of check valves. Records are maintained by the Department of Public Works.

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.

No streams are located within the Borough of Mantoloking, The MS4 outfalls are located within Barnegat Bay, and the outfalls are submerged. The opposite situation is typical at the MS4 outfall locations where sedimentation occurs at the pipe end and within the outfall discharge pipe. Existing check valves located on the ends of several outfall pipes need to be monitored for proper operation due to the potential for silt and sedimentation occurring around the check valve at the end of said outfalls.

The Borough Engineer's office inspected all municipal outfall pipes for evidence of scouring. No substantial pipe scouring was identified at municipal outfalls during the initial inspection. However, all future sites with scouring will be placed on a prioritized list and repairs will be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey and the NJDEP.

We will follow each repair up with an annual inspection of the site to ensure that scouring has not resumed.

A list will be attached of all sites with outfall pipe stream scouring, the date we plan on repairing the scouring, and the method of repair we will use. When repairs are completed, we will note the date of that repair on the form.

## SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

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](http://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 will be included in the SPPP and will be submitted to DEP with the annual report.*

The MS4 outfalls are perpetually submerged in Barnegat Bay. The inspections for illicit connections are difficult to determine based on the dry weather flow approach. The outfalls have been inspected in the past, and at that time, there was no visual or olfactory evidence of an illicit connection. However, the Borough had completed closed-circuit television (CCTV) internal video inspection on the majority of the municipal storm sewer system in 2010, including the storm sewer outfalls. Based on the CCTV video inspection results, the MS4 systems do not appear to have any illicit connections. However, the Borough will continue to monitor the MS4 system for potential illicit connections. Copies of the Video Inspection Reports are included in Appendix B of the SPPP. If we are able to locate any illicit connection (and the connection is within Mantoloking Borough) we will cite the responsible party for being in violation of our Illicit Connection Ordinance, and we will have the connection eliminated immediately. If, after the appropriate amount of investigation, we are unable to locate the source of the illicit connection, we will submit the Closeout Investigation Form with our Annual Inspection and Recertification. If an illicit connection is found to originate from another public entity, Mantoloking Borough will report the illicit connection to the New Jersey Department of Environmental Protection. However, no illicit connections were identified during any physical inspections performed by the office of the Borough Engineer or during the CCTV internal pipe video inspection.

## 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 Borough of Mantoloking implements a stormwater facility maintenance program to ensure that all stormwater facilities operated by the Borough function properly. The Borough of Mantoloking operates the following: catch basins/inlets, storm sewer piping, and outfall check valves.

These stormwater facilities are inspected annually to ensure that they are functioning properly. In high risk areas, preventative maintenance are performed on all stormwater facilities to ensure that they do not begin to fail. If any stormwater facility is found not to be functioning properly, it will be placed on a prioritized list and repairs will be made.

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.

The Borough does not have significant stormwater BMP facilities. Smaller private on-site stormwater infiltration BMP facilities are reviewed during the permit application process and inspected during the construction phase. Any complaints from the public will be addressed accordingly on an as-needed basis.

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.

The Borough does not have significant stormwater BMP facilities including larger BMPs which receive runoff from multiple upstream parcels or development.

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](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/](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](http://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.

The Borough of Mantoloking will annually review the adopted TMDL titled, "Fourteen Total Maximum Daily Loads for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 13 Atlantic Coastal Water Region" and identify stormwater related pollutants associated with Barnegat Bay. Barnegat Bay is divided into smaller subgroups where Barnegat Bay D refers to the section directly related to the borough. There are no TMDL reductions required for Barnegat Bay D.

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

Barnegat Bay is listed as an impaired waterbody because it does not fully support shellfish use. Although there are no TMDL reductions required for Barnegat Bay D, the Borough appreciates the need to maintain a high water quality for the health and enjoyment of the residents of not only the Borough but also those who come to use these waters for recreational purposes from other areas of the State and the country. To that end, the Borough has been diligent in making sure that the new stormwater inlets are fitted with NJDEP-approved castings to control the quantity of floatables that will be able to make their way into these waters and that existing inlets continue to comply with NJDEP requirements. The Borough has programs in place such as the Illicit Connection Elimination Program, and Yard Waste Collection Program in order to substantially reduce bacteria loadings from draining into the municipal stormwater facility.

## 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.

The Mantoloking Department of Public Works sweeps all municipal streets.

2. Has the permittee adopted a Refuse Container/Dumpster Ordinance?

Yes, ordinance adopted on 7-19-10.

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**APPENDICES**

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**  
**APPENDIX A – ANNUAL REPORT AND CERTIFICATION**

**MSRP ANNUAL REPORT - Tier A**

**You have completed the Annual Report submittal process. You may print or save a copy of this submittal report for your records.**

**Service ID:** 1218685  
**Facility Name:** MANTOLOKING BORO  
**Reporting Period:** January 1, 2020 through December 31, 2020  
**NJPDES Permit #:** NJG0153281  
**Activity ID:** DST170001

**Contacts**

**Name:** Larry Plevier  
**Title:** Principal Engineer  
**Contact Type:** Stormwater Coordinator  
**Organization Name:** MOTT MACDONALD  
**Organization Type:** Private  
**E-Mail:** larry.plevier@mottmac.com  
**Phone:** (732) 780-6565 (Work Phone Number)  
**Contact Address:** 3 PARAGON WAY  
 East Freehold, New Jersey 07728

**Uploaded Attachments**

Attachment Name	Attachment Description	File Name
Supplemental Questionnaire	Mantoloking 2020 ARC	Supplemental_Questionnaire_2020_Mantoloking Borough.pdf

**Annual Report Details - Part A****Municipality Information**

Team member responsible for completing the report:	Lawrence Plevier
Team member email address:	larry.plevier@mottmac.com

**Stormwater Pollution Prevention Plan**

1. Has the municipality revised its Stormwater Pollution Prevention Plan during the last calendar year?	No
2. Date of the last revised SPPP:	

**Public Notice**

1. Is the municipality complying with applicable State and local public notice requirements when providing for public participation in the ongoing development and implementation of the stormwater program?	Yes
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## Report Details - Part B

### Post-Construction Stormwater Management in New Development and Redevelopment

1. Is the municipality reviewing and approving major development residential projects in accordance with the Residential Site Improvement Standards (RSIS)?	Yes
2. Did the municipality adopt a municipal stormwater management plan?	Yes
3. Most recent date of adopted municipal stormwater management plan:	06/18/2007
4. Status of this plan (if not adopted):	
5. Did the municipality adopt the municipal stormwater control ordinance provided by NJDEP without change?	Yes
6. Most recent date the municipality adopted a municipal stormwater control ordinance:	07/16/2007
7. What is the current status of the ordinance?	
8. Did the municipality submit the adopted municipal stormwater management plan to the appropriate county review agency for approval?	Yes
9. Most recent date the adopted Municipal Stormwater Management Plan was submitted to the appropriate county review agency for approval:	06/05/2007
10. If yes, did the municipality send the adopted municipal stormwater control ordinance to the appropriate county review agency for approval?	Yes
11. Most recent date the adopted Municipal Stormwater Control Ordinance was submitted to the appropriate county review agency for approval:	06/05/2007
12. Status of county review:	Approved
13. Did the municipality adopt the review agency's required amendments and resubmit to the county review agency?	
14. Is the Stormwater Control Ordinance in effect?	Yes
15. Most recent effective date of Stormwater Control Ordinance:	07/16/2007
16. Ordinance Number(s):	543
17. What is the current status of the adopted plan and ordinance?	
18. Are you reviewing projects as part of your site plan and subdivision approval process to ensure that they comply with your municipality's effective municipal stormwater control ordinance(s)?	Yes
19. How many projects that were subject to either the municipal stormwater control ordinance or the stormwater provisions of RSIS did the municipality approve?	60
20. Does the municipal stormwater management plan contain a mitigation plan?	Yes

21. Has the municipality granted any variances or exemptions from the design and performance standards for stormwater management measures set forth in the approved municipal stormwater management plan and stormwater control ordinance(s)?	No
22. If yes, how many variances or exemptions from the design and performance standards has the municipality granted?	
23. If granted any variances or exemptions, did you submit a written report to the county review agency describing the variance or exemption and the required mitigation?	
24. Does the municipality's plan review evaluate storm drain inlet protection for solids and floatables in accordance with Attachment C of the permit?	Yes
25. Does the municipality require plans for long-term operation and maintenance for stormwater BMPs?	Yes
26. Are you ensuring that adequate long-term operation and maintenance of stormwater BMPs is being performed on property that you do not own or operate?  <b>Please keep an inventory of stormwater BMPs indicating type, function and location in a format provided by the Department onsite and available for inspection or upon request.</b>	Yes
27. Briefly indicate how this is being accomplished (e.g., ordinance requiring operation and maintenance by private entity; operation and maintenance by you or other governmental entity):	Ordinance requiring operation and maintenance by private entity.
28. Is the municipality's stormwater management plan re-examined at each re-examination of the master plan in accordance with N.J.A.C. 7:8-4?	N/A - we did not re-examine our master plan this year
29. Date re-examination report was last adopted:	

### Report Details - Part C

### Local Public Education Program and Outreach

1. Has the municipality developed a Local Public Education Program?	Yes
2. Has the municipality conducted educational activities that total the minimum number of points required by the permit?	Yes

### Storm Drain Inlet Labeling

1. Has the municipality established a storm drain inlet labeling program?	Yes
2. Indicate the percentage labeled to date:	100%
3. Other Amount:	
4. Is your municipality maintaining the labels (i.e. replacing and/or repainting)?	Yes

## Community Wide Ordinances

### Have you adopted and are you enforcing a regulatory mechanism for:

1. Pet Waste Ordinance:	Yes
2. Date adopted:	02/21/2006
3. Litter Ordinance/State Litter Statute:	Litter Ordinance
4. Date adopted:	02/21/2006
5. Improper Disposal of Waste Ordinance:	Yes
6. Date adopted:	02/21/2006
7. Wildlife Feeding Ordinance:	Yes
8. Date adopted:	02/21/2006
9. Containerized Yard Waste Ordinance / Yard Waste Collection Program Ordinance:	Containerized Yard Waste Ordinance
10. Date adopted:	02/21/2006
11. Illicit Connection Ordinance:	Yes
12. Date adopted:	02/21/2006
13. Refuse Container/Dumpster Ordinance:	Yes
14. Date adopted:	07/19/2010
15. Private Storm Drain Inlet Retrofitting Ordinance:	Yes
16. Date adopted:	07/19/2010
17. Status of these ordinances (if not adopted):	
18. Method(s) of enforcement (e.g., summons, warnings, additional signs, etc.):	Warnings and Summons.
19. Are you distributing the Pet Waste Information Sheets with pet licenses?	Yes

## Report Details - Part D

### MS4 Outfall Pipe Mapping

1. Has the municipality completed the mapping of the MS4 outfall pipes?	Yes
2. Date completed:	04/01/1994
3. Number of outfall pipes that you operate in the municipality:	30
4. How many MS4 outfall pipes are mapped?	30

### Illicit Connection Elimination Program

1. Does the municipality have an ongoing program to detect and eliminate illicit connections to municipally owned or operated outfall	Yes
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pipes?	
2. How many outfall pipes were inspected during the past calendar year?	4
3. Number of illicit connections detected during the past calendar year:	0
4. Number of illicit connections eliminated during the past calendar year:	0

### Street Sweeping Program

1. In the past calendar year, were all required streets swept?	N/A - no streets required to be swept
2. What was the total number of miles swept?	

### List the amount of materials collected for each month in 2020.

3. Units:	
4. January:	
5. February:	
6. March:	
7. April:	
8. May:	
9. June:	
10. July:	
11. August:	
12. September:	
13. October:	
14. November:	
15. December:	
16. Total (Note: 1.053 cubic yards = 1 ton):	0
17. Explain the reason if reporting zero (0) for a month above:	

### Storm Drain Inlet Retrofitting

1. Has the municipality completed repaving, repairing, reconstruction, or alterations on any road surfaces in direct contact with municipally owned or operated storm drain inlets?	N/A - no paving that required storm drain inlet retrofitting
2. Approximately what percentage of storm drains within the municipality currently meet the standard?	

### Stormwater Facility Maintenance

**Stormwater facilities include, but are not limited to, catch basins, extended detention basins, low flow bypasses, underground detention, dry wells, manufactured treatment devices, pervious paving buffers, infiltration basins/trenches, sand filters, constructed wetlands, wet ponds, bioretention, rooftop vegetated cover, vegetative filters, and stormwater conveyance systems. Stormwater facility inventories that indicate the type, function, and location of the facility must be kept onsite and available for inspection or upon request in a format provided by the Department. The format is available as SPPP Form 13 at: [http://www.nj.gov/dep/dwq/pdf/Tier\\_A/A%20-%20pdf%206.pdf](http://www.nj.gov/dep/dwq/pdf/Tier_A/A%20-%20pdf%206.pdf).**

1. Have you developed a Stormwater Facility Maintenance Program?	Yes
--	-----

**Other Stormwater Facilities**

1. Were all stormwater facilities that you operate inspected?	Yes
2. Were any found to be in need of cleaning or repair in order to function properly?	Yes
3. During the past calendar year, were any stormwater facilities (excluding catch basins) cleaned?	N/A - no cleaning needed
4. Were repairs made?	N/A - no repairs needed
5. Describe repair(s) or if repairs have not yet been made, provide a schedule for the repair(s):	

**Catch Basins**

1. Total number of catch basins that the municipality operates:	121
2. Total number of catch basins inspected:	121
3. Total number of catch basins cleaned:	121
4. Amount of materials removed from catch basins, in tons, during the past calendar year:	4
5. Units:	Cubic yards

**Report Details - Part E**

**Outfall Pipe Stream Scouring Remediation**

**For all outfall pipes undergoing remediation through a scour remediation program, attach additional page(s) as necessary indicating the location of the outfall pipe (including the alphanumeric identifier), the repair start date, and the repair completion date.**

1. Has the municipality developed a prioritized list of outfall pipes requiring outfall pipe stream scouring remediation?	N/A - no outfalls meet the stream scouring requirement
---	--

**De-icing Material and Sand Storage**

1. Does the municipality have a permanent structure for all de-icing material storage?	N/A - share services with another entity
2. If sand is being stored outside, is it set back 50 feet from storm sewer inlets, ditches or other stormwater conveyance channels, and surface water bodies?	N/A - no sand stored outdoors

### Fueling Operations

1. Is the municipality implementing Best Management Practices for vehicle fueling and receiving of bulk fuel deliveries at maintenance yard operations in accordance with Attachment E of the permit?	N/A - no fueling
---	------------------

### Vehicle Maintenance

1. Is the municipality implementing Best Management Practices for vehicle maintenance and repair activities at maintenance yard operations in accordance with Attachment E of the permit?	N/A - no maintenance or repairs
---	---------------------------------

### Good Housekeeping Practices

1. Is the municipality implementing Good Housekeeping Practices for all materials or machinery listed in the Inventory Requirements for Municipal Maintenance Yard Operations (including maintenance activities and ancillary operations) in accordance with Attachment E of the permit?	Yes
--	-----

### Equipment and Vehicle Washing

1. Has the municipality implemented measures to properly handle the discharge of equipment and vehicle wash wastewater from municipal maintenance yard operations?	Yes
2. Please indicate which option you implemented to eliminate the unpermitted discharge:	Ceased the discharge (no longer wash onsite)
3. Date the management measure was implemented:	01/01/2006
4. What is the NJPDES permit number that authorizes the discharge of vehicle and equipment wash wastewater?	
5. Is the municipality maintaining records of vehicle and equipment washing?	N/A - we do not wash our vehicles

### Annual Employee Training

1. Did the municipality conduct training for employees on	Yes
---	-----

stormwater related topics as required under the MS4 permit (e.g., police officers trained on ordinances)?	
2. List date(s) of employee training:	9-15-20

**Report Details - Part F**

**Sharing of Responsibilities**

Does the municipality share services with another entity to satisfy a permit requirement?	Yes
---	-----

**For each of the following, indicate if you are relying on another entity to satisfy all or part of any permit requirements. Please provide additional information for any "Yes" answers in the provided Comments field.**

1. Public notice:	No
2. Comments:	
3. Ensure compliance with RSIS for stormwater management:	No
4. Comments:	
5. Municipal stormwater management plan:	No
6. Comments:	
7. Municipal stormwater control ordinance:	No
8. Comments:	
9. Long term operation and maintenance of BMPs (post-construction):	No
10. Comments:	
11. Storm drain inlet design standard (post-construction):	No
12. Comments:	
13. Local public education program:	No
14. Comments:	
15. Storm Drain Inlet Labeling Program:	No
16. Comments:	
17. Illicit connection elimination program:	No
18. Comments:	
19. Street sweeping:	No
20. Comments:	
21. Storm drain inlet retrofitting:	No
22. Comments:	
23. Maintenance of municipally operated stormwater facilities:	No
24. Comments:	

25. Outfall pipe stream scouring:	No
26. Comments:	
27. De-icing and sand storage:	Yes
28. Comments:	Utilization of Storage Facility at the Bay Head Borough DPW Yard.
29. Fueling operations:	Yes
30. Comments:	Utilization of pumps at the Point Pleasant Beach Borough DPW Yard.
31. Vehicle maintenance:	Yes
32. Comments:	Work completed at privately owned garages.
33. Good Housekeeping:	No
34. Comments:	
35. Vehicle and Equipment Washing:	Yes
36. Comments:	Utilization of facilities at the Point Pleasant Beach Borough DPW Yard.
37. Employee Training:	No
38. Comments:	

### Incidents of Non-compliance

**Based on the answers you provided above, the Department has identified the following possible permit compliance issues. Please complete the Incidents of Non-compliance section and identify steps being taken to correct these deficiencies.**

**- Your municipality has not revised your Stormwater Pollution Prevention Plan to incorporate changes required by the renewal permit.**

1. Did your municipality have any incidents of non-compliance?	Yes
2. Identify the steps being taken to remedy the noncompliance and to prevent such incidents from recurring. <b>(If the text box is not large enough to complete this section, please provide your report as an attachment and upload it on the next screen. Please reference the attachment in the textbox.)</b>	Update the SPPP as needed in 2021 to reflect the new permit requirements.

### Certification

**Certifier:** Larry Plevier  
**Certifier ID:** PLEVIER1  
**Challenge/Response Question:** What is your favorite hobby?

**Challenge/Response**           \*\*\*\*\*  
**Answer:**  
**Certification PIN:**           \*\*\*\*\*  
**Date/Time of**  
**Certification:**               04/30/2021 14:59

"I certify under penalty of law that this Annual Report and Certification and all attached documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate this information. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering this information, the information in this Annual Report and Certification and all attached documents is, to the best of my knowledge and belief, true, accurate and complete.

"I certify that the municipality is in compliance with its stormwater program, Stormwater Pollution Prevention Plan (SPPP) and the NJPDES Tier A Municipal Stormwater General Permit No. NJG0153281 except for any incidents of non-compliance which are identified herein. For any incidents of non-compliance, the Annual Report identifies the steps being taken to remedy the non-compliance and to prevent such incidents from recurring.

"I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information."

**Please note, no changes will be allowed to be made to this report upon its certification. If you need to correct or modify the report after certification, please contact your case manager at (609) 633-7021 so they may enable that function.**

Larry Plevier                       04/30/2021  
**General**                           **Date**

Instructions for Saving and Submitting the  
2020 MS4 Tier A Permit Annual Report - Supplemental Questionnaire

1. Once opened, please save the Questionnaire to your computer, using the “Save As” function. This can be done by going to FILE > then Save As... or Shift + Ctrl + S. Name the document Supplemental\_Questionnaire\_TOWN NAME
2. Complete the Questionnaire.
3. Once you have completed the Questionnaire, use the “Save” function to save your answers to the Questionnaire to your computer . This can be done by going to FILE > then Save or Ctrl + S.
4. The completed and saved Questionnaire must then be uploaded as an attachment, in Part 7, to your Annual Report before the Annual Report is submitted to the Department.
5. To access the Annual Report, open the link to “NJDEP Online Portal” at [http://www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm). In Part 7, you will be asked to complete information regarding the file(s) to be uploaded. Navigate to your saved Questionnaire and then hit the “Upload” button in the lower right section of Part 7. The Annual Report will indicate if the Questionnaire was successfully uploaded. Then click on the “Continue” button and proceed with finalizing your Annual Report.

Your Annual Report will be considered incomplete if the Supplemental Questionnaire is not attached. If you experience any difficulty in this process, please contact your municipal case manager at 609-633-7021.

*Please note that use of Adobe Acrobat Reader DC is recommended. This free software is available for download at <http://get.adobe.com/reader/> . If you have an earlier version of Adobe Reader, please go to the Adobe website at <http://tv.adobe.com/watch/acrobat-x-tips-tricks/quick-tip-how-to-save-form-data-in-adobe-reader/> for detailed instructions on how to save your completed Questionnaire.*

# 2020 MS4 Tier A Permit Annual Report - Supplemental Questionnaire

## General Information

### A. Municipal Information

Municipality: Borough of Mantoloking

County: Ocean County

Stormwater Coordinator: Larry Plevier, PE, CME

Phone: 732-233-1327

Email: larry.plevier@mottmac.com

## Public Involvement and Participation

Provide a web address for each of the following:

Current Stormwater Pollution Prevention Plan (SPPP): <http://www.mantoloking.org/stormwaterplan2018.pdf>

Municipal Stormwater Management Plan: <http://www.mantoloking.org/wp-content/uploads/2019/04/2007-Municipal-storm-water-management-plan.pdf>

## Local Public Education and Outreach

Report the number of points obtained in each public education and outreach category:

General Public Outreach: 1

Watershed/Regional Collaboration: 6

Targeted Audiences Outreach: 6

Community Involvement Activities: 0

School/Youth Education and Activities: 0

Has the municipality advertised public education and outreach activities on the municipalities website?:  Yes  No

## Post Construction Stormwater Management

Note: This portion of the annual report should be completed by a person knowledgeable in post-construction stormwater management project review and approvals.

Name of person completing this section: Larry Plevier

Affiliation of person completing this section: Joint Planning/Zoning Board Engineer and Municipal Engineer

Please fill out the attached major development project list for all major developments approved in the last calendar year.

## Community Wide Ordinances

Does the municipality maintain a database to track all instances of community wide ordinance violations?:

Yes  No

Provide the web address for each ordinance and report the entity responsible for the enforcement of each ordinance as well as the number of warnings and violations issued for each in the past calendar year:

### Pet Waste Ordinance

Entity:

Warnings/Violations: 0

### Wildlife Feeding Ordinance

Entity:

Warnings/Violations: 0

### Litter Control Ordinance

Entity:

Warnings/Violations: 0

### Improper Disposal of Waste Ordinance

Entity:

Warnings/Violations: 0

**Containerized Yard Waste/Yard Waste Collection Program Ordinance**

Entity: Warnings/Violations: 0

**Private Storm Drain Inlet Retrofitting Ordinance**

Entity: Warnings/Violations: 0

**Illicit Connection Ordinance**

Entity: Warnings/Violations: 0

**Stormwater Control Ordinance**

Entity: Warnings/Violations: 0

**Municipal Maintenance Yard and Other Ancillary Operations**

Does the municipality maintain a list of all materials and machinery located at each municipal maintenance yard and ancillary operation which could be a source of pollutants in a stormwater discharge?:  Yes  No

Has the municipality implemented Best Management Practices as described in Attachment E for all applicable activities at each municipal maintenance yard and ancillary operation owned or operated by the municipality?:  Yes  No

Does the municipality maintain an inspection log detailing conditions requiring attention and remedial actions taken at municipal maintenance yards and other ancillary operations?:  Yes  No

Does the municipality have an underground vehicle wash water storage tank?  Yes  No

**Employee Training**

Does the municipality maintain records of employee training including sign in sheets, dates of training, and training agendas?:  Yes  No

Does the municipality maintain a list of the names and dates of the municipal board and governing body members that review and approve applications for development and redevelopment projects who have completed the "Asking the Right Questions in Stormwater Review" training tool?:  Yes  No

Does the municipality maintain a list of the names and dates of individuals that review development and redevelopment projects for compliance with NJAC 7:8 on behalf of the municipality who have completed the Department approved stormwater management training once every 5 years?:  Yes  No

**Outfall Pipe Mapping**

Check the box(es) for the components included on the municipality's outfall pipe map in addition to MS4 outfalls and surface water bodies:

- |   |   |
|---|---|
| Conveyances (Pipes, Swales, Ditches) <input type="checkbox"/> | Stormwater Management Basins <input type="checkbox"/>             |
| Culverts <input type="checkbox"/>                             | Storm Drain Inlets <input type="checkbox"/>                       |
| Block and Lots <input type="checkbox"/>                       | Streets/Roadways <input checked="" type="checkbox"/>              |
| Green Infrastructure <input type="checkbox"/>                 | Subsurface Infiltration/Detention Basins <input type="checkbox"/> |
| Manufactured Treatment Devices <input type="checkbox"/>       |   |

Has the municipality included the outfall pipe map in the SPPP?:  Yes  No

Does the municipality update the outfall pipe map annually?:  Yes  No

Does the municipality's map identify outfalls that do not discharge to surface waters?:  Yes  No

**Stream Scouring**

How many outfalls did the municipality inspect for stream scouring in the past calendar year?: 4

How many instances of stream scouring were found during those inspections?: 0

How many instances of stream scouring were remediated in the past calendar year?: 0

## Stormwater Facilities Maintenance

Does the municipality keep up to date stormwater facility maintenance logs and inspection records for stormwater facilities owned or operated by the municipality?:  Yes  No

How does the municipality ensure adequate long-term cleaning, operation, and maintenance of stormwater facilities not owned or operated by the municipality?:

Private residential ownership of individual lots with no major development and without any other privately owned BMPs within the municipality.

Does the municipality keep up to date stormwater facility maintenance logs and inspection records for stormwater facilities not owned or operated by the municipality?:  Yes  No

## Total Maximum Daily Load (TMDL)

Has the municipality reviewed TMDL reports to identify those which are relevant to the municipality's water bodies?:  Yes  No

How many TMDLs were found to be applicable to the municipality?: 1 TMDL for Total Coliform for Barnegat Bay

How has the municipality used TMDL information to assist in the prioritization of stormwater facility maintenance?:

Not applicable to the municipality as the NJDEP Bureau of Nonpoint Pollution Control has not identified any streams or lakes in the Borough of Mantoloking with total maximum daily loads (TMDLs). The applicable shellfish TMDL for total coliform for shellfish impaired waters in the Watershed Management Area 13 have been addressed by the SPPP and other applicable Tier A Permit required codes by the prohibition of illicit connections for sanitary sewer laterals to the storm sewer, the requirement for proper pet waste cleanup, and prohibition for feeding of wildlife to prevent the gathering of water fowl such as Canadian geese. The amendment to the Monmouth and Ocean Counties Water Quality Management Plans - Fourteen Total Maximum Daily Loads for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 13 Atlantic Coastal Water Region did not contain any recommendations or action items which could also be implemented by the Borough to supplement the current Tier A related activities to further control or reduce the total coliform from stormwater runoff to further address the TMDL.

Has the municipality updated its SPPP to include TMDL information?:  Yes  No

Has the municipality incorporated any additional or optional measures? If so, please elaborate:

The Borough performs street sweeping for all roadways within the Borough, which is not required under the Tier A Permit as no municipal roadways meet the permit requirements / thresholds for street sweeping.





This Supplemental Questionnaire must be attached to your Annual Report to be considered complete. If you experience any difficulty in this process, please contact your municipal case manager at 609-633-7021.

1. Once you have completed the Questionnaire, use the "Save" function to save your answers to the Questionnaire to your computer. This can be done by going to FILE > then Save or Ctrl + S.
2. The completed and saved Questionnaire must then be uploaded as an attachment, in Part 7, to your Annual Report before the Annual Report is submitted to the Department.
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**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**  
**APPENDIX B – VIDEO INSPECTION REPORTS**

# AMERICAN PIPE CLEANING, LLC

*Pipe Jetting & Vacuum Services • Digital TV Inspection  
Manhole & Catch Basin Cleaning • Hydro Excavation*



Borough of Mantoloking

*DVD/Video Report*

May 11, 2010

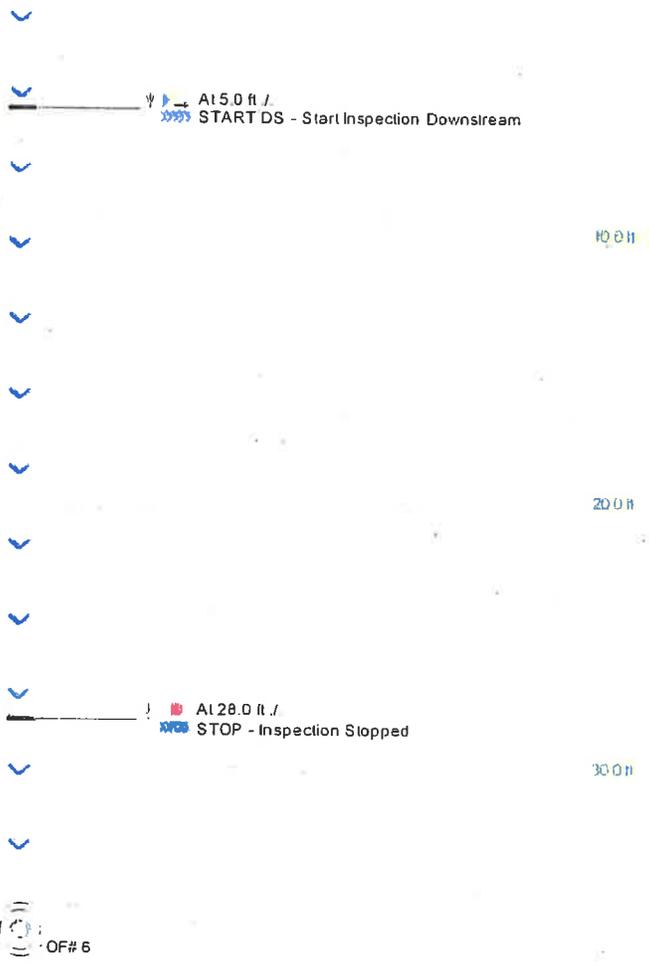
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Mantoloking, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-OF 6	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	28.0	Sunny	Disc # 1 0:00

CB# 6.1



Asset Height 35.0 ft  
 Surveyed Height 28.0 ft

American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 6.1-OF 6      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 2:24:59 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.1      Downstream Node: OF# 6      Main Length: 35.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
5.0		START DS	No	/		
28.0		STOP	No	/		Camera could not pass debris

American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Man, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	143.0	Sunny	Disc #2 6:49



Asset length: 143.0 ft  
Surveyed length: 143.0 ft

American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 6.1-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 2:41:08 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2      Downstream Node: CB# 6.1      Main Length: 144.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
143.0		STOP	Yes	/		Camera could not pass debris

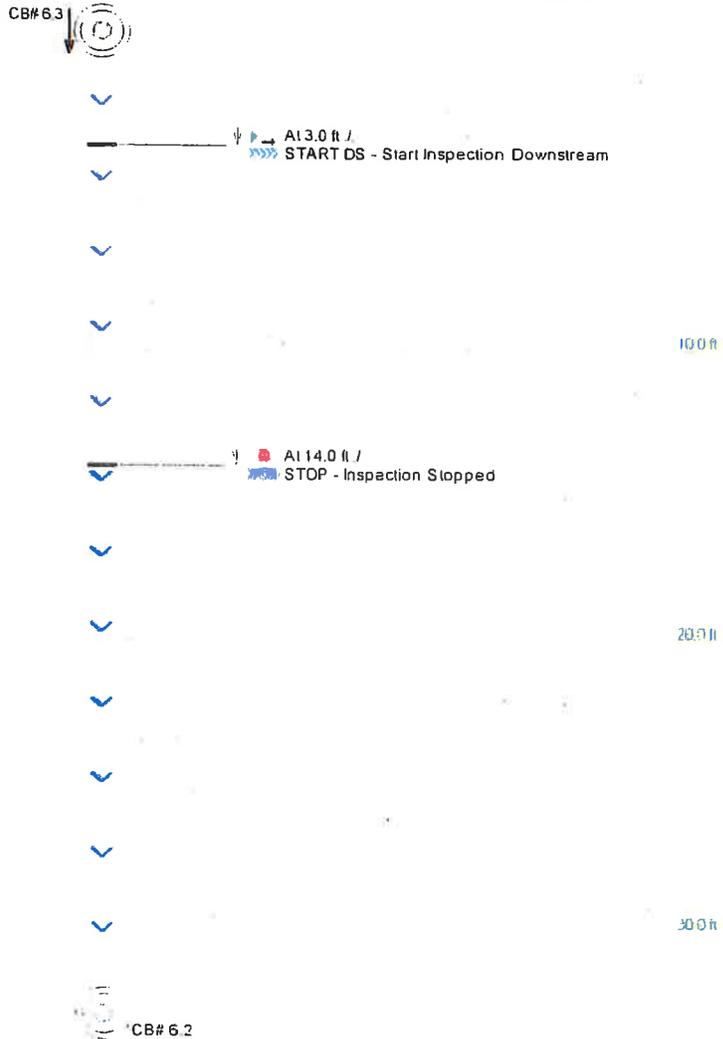
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Mahwah, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010	0	12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	14.0	Showers	DISC # 1 14:43

Asset length: 32.0 ft  
Surveyed length: 14.0 ft



American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 6.3-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 3:20:57 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 6.3      Downstream Node: CB# 6.2      Main Length: 32.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
14.0		STOP	No	/		Camera could not pass debris

American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Mantoloking, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.4	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	9.0	Showers	<i>Disc #1 17:43</i>

Asset length: 43.0 ft.  
Surveyed length: 9.0 ft

CB# 6.4



100 ft  
200 ft  
300 ft  
400 ft

CB# 6.3

American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 6.3-6.4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 3:31:17 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 6.4      Downstream Node: CB# 6.3      Main Length: 43.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
9.0		STOP	Yes	/		Camera could not pass debris

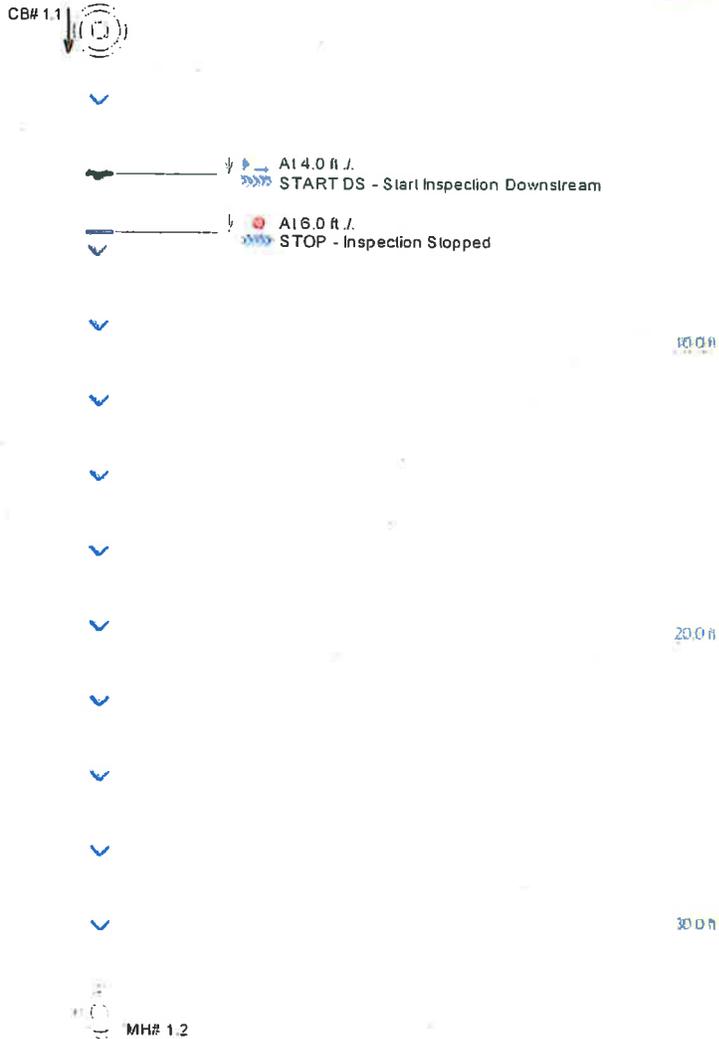
American Pipe Cleaning, LLC  
 Box 2043  
 Mantoloking, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 1.1- MH 1.2	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		16	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	6.0	Showers	Disc #2 19:56

Asset length: 32.0 ft.  
Surveyed length: 6.0 ft.



American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 1.1- MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:25:24 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.1      Downstream Node: MH# 1.2      Main Length: 32.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
6.0		STOP	No	/		Camera could not pass debris

American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Mantoloking, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 1.3 - MH 1.2	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		8	Clay Tile
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	42.0	Showers	Disc # 1



Asset length: 42.0 ft  
Surveyed length: 42.0 ft

American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 1.3 - MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:30:04 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.3      Downstream Node: MH# 1.2      Main Length: 42.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
42.0		STOP	No	/		

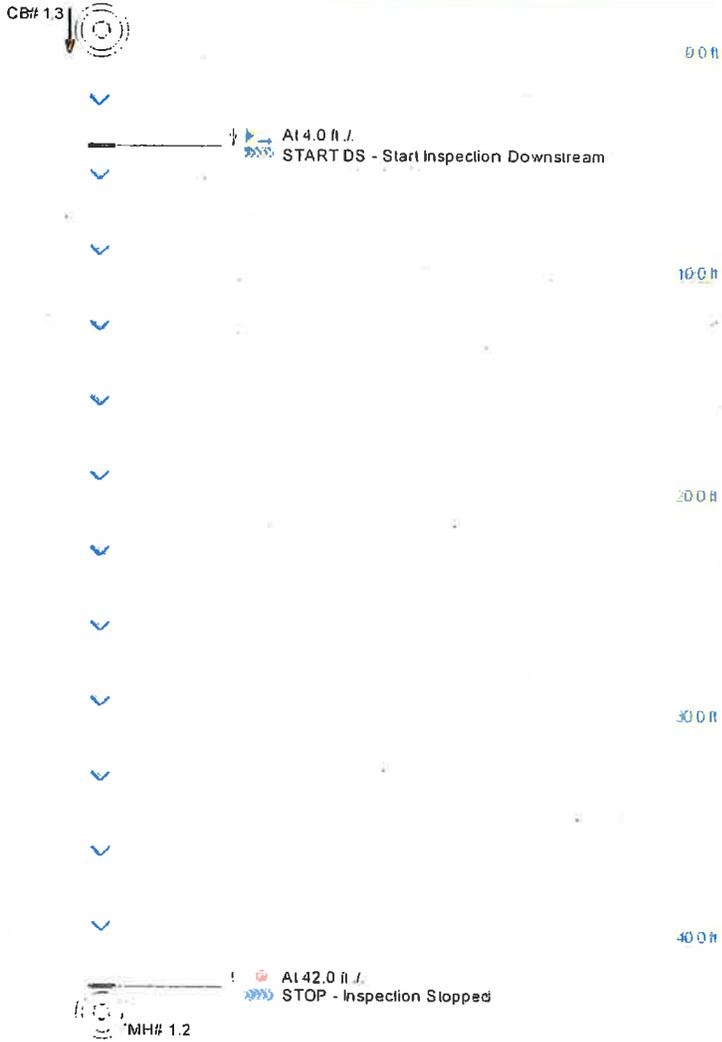
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Mantoloking, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 1.3 - MH 1.2	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		8	Clay Tile
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	42.0	Light Rain	Disc # 1 26:16

Asset length: 42.0 ft.  
Surveyed length: 42.0 ft.



American Pipe Cleaning, LLC  
P.O. Box 2043  
Ocean, New Jersey 07712  
732-751-0006  
732-751-0236 Fax



## Observation Report with Still Images

Main Asset ID: CB 1.3 - MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:48:28 PM      Weather: Light Rain      Operator: Ray R.

Upstream Node: CB# 1.3      Downstream Node: MH# 1.2      Main Length: 42.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos	Severity	Comment
4.0		START DS	No	/		
42.0		STOP	No	/		

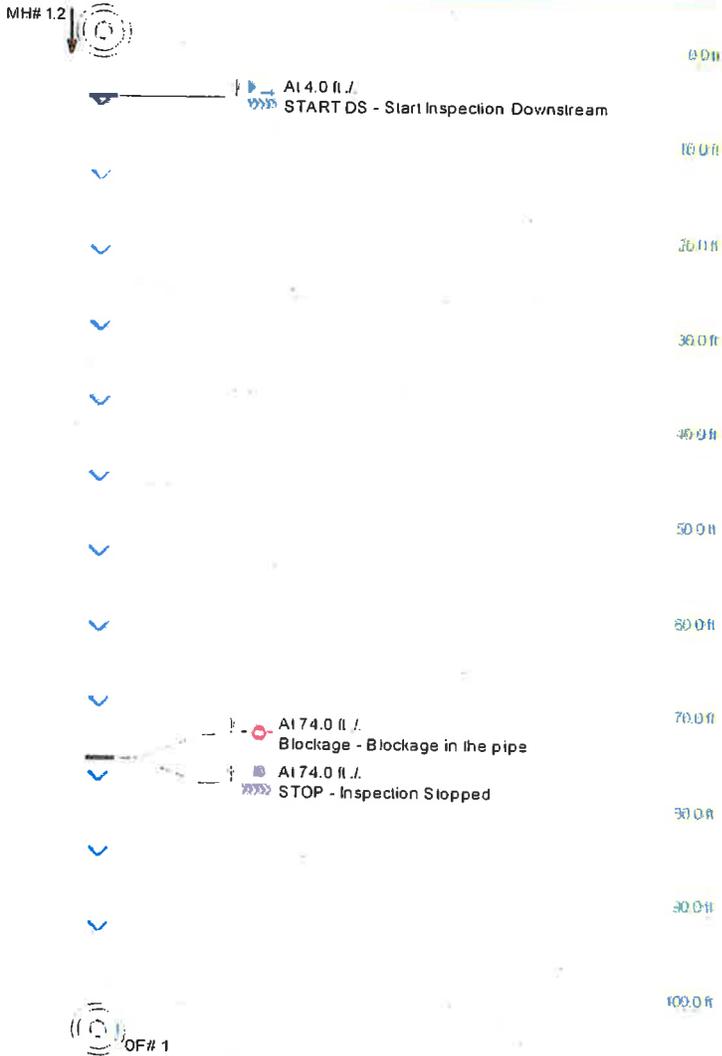
American Pipe Cleaning, LLC  
 P O. Box 2043  
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	MH 1.2-OF 1	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		18	HDPE
			Surface Condition:
			Garden
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	74.0	Showers	Disc # 1 29:16

Asset Length: 100.0 ft.  
 Surveyed Length: 74.0 ft.



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## Observation Report with Still Images

Main Asset ID: MH 1.2-OF 1	Project Name: Borough of Mantoloking-A	Inspection Date: 4/21/2010 6:14:04 PM	Weather: Showers	Operator: Ray R.
Upstream Node: MH# 1.2	Downstream Node: OF# 1	Main Length: 100.0		

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
74.0		Blockage	No	/		Sandbag in line
<div> </div>						
74.0		STOP	No	/		Camera cannot pass Sand Bag

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	MH 1.2-CB 1.1	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		16	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	30.0	Showers	Disc # 1

Asset length: 32.0 ft  
 Surveyed length: 30.0 ft



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## Observation Report with Still Images

Main Asset ID: MH 1.2-CB 1.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 6:22:12 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.1      Downstream Node: MH# 1.2      Main Length: 32.0

Comments:  
After cleaning

### Observations

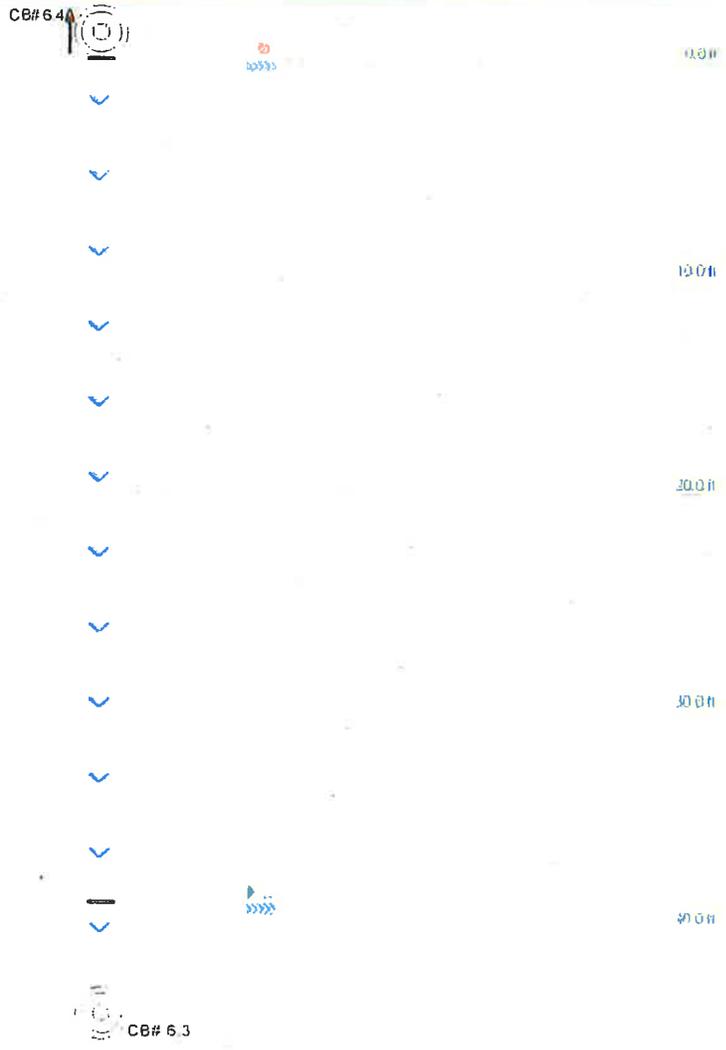
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
21.4		Joint - Separated	Yes	/		Exposed gasket
30.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.4	Boro of Mantoloking, NJ	Bergen Ave. - Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	43.0	Sunny	<i>Disc # 2 0:00</i>



ASSET HEIGHT: 43.0 ft  
 Surveyed length: 43.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 10:32:31 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.4      Downstream Node: CB# 6.3      Main Length: 43.0

Comments:  
After cleaning - pipe has scaling throughout the entire run

### Observations

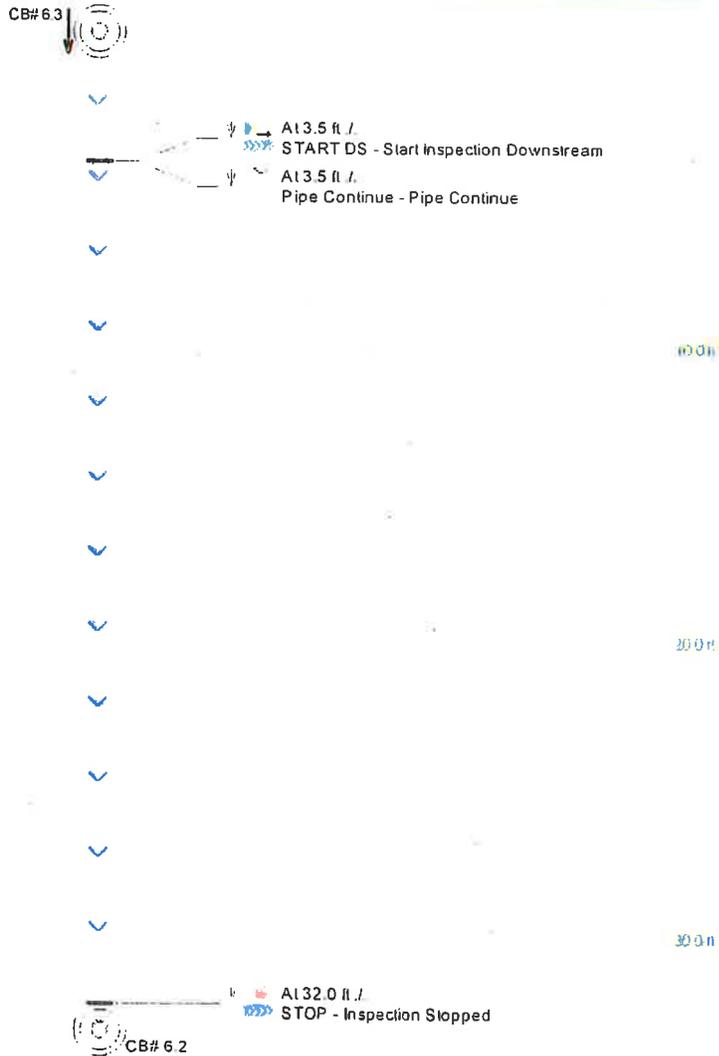
Distance	Length	Code	Reversed	Clock Pos	Severity	Comment
4.0		START US	Yes	/		
43.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

<b>Project Name:</b> Borough of Mantoloking-A	<b>Asset ID:</b> CB 6.3-6.2	<b>City:</b> Boro of Mantoloking, NJ	<b>Address:</b> Bergen Ave. - Location 12
<b>Date:</b> 4/22/2010	<b>Pipe Width:</b> 0	<b>Pipe Height:</b> 12	<b>Pipe Type:</b> DIP
<b>Direction:</b> Downstream	<b>Surveyed Footage:</b> 32.0	<b>Weather:</b> Sunny	<b>Surface Condition:</b> Asphalt
			<b>Tape/Media #</b> <i>Disc # 2 5.00</i>



Asset length: 32.0 ft.  
 Surveyed length: 32.0 ft.

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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 10:43:04 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.3      Downstream Node: CB# 6.2      Main Length: 32.0

Comments:  
After cleaning - pipe has scaling throughout the entire run

### Observations

Distance	Length	Code	Reversed	Clock Pos	Severity	Comment
3.5		START DS	No	/		
3.5		Pipe Continue	No	/		pipe has scaling throughout the entire run
32.0		STOP	No	/		

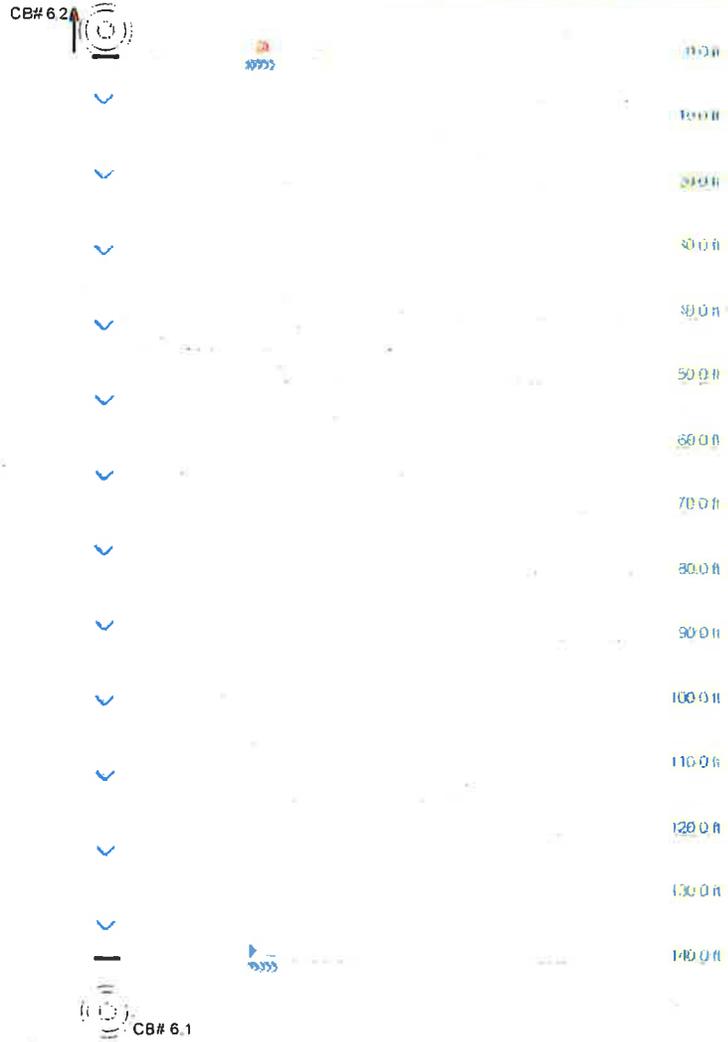
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	144.0	Sunny	<i>Disc #2 8:15</i>

Asset Length: 144.0 ft  
 Surveyed Length: 144.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.1-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:09:45 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2      Downstream Node: CB# 6.1      Main Length: 144.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.2		START US	Yes	/		
144.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.2-6.2.1	Boro of Mantoloking, NJ	Bergen Ave. - Location 12
Date:	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather:	Tape/Media #
Upstream	48.0	Sunny	Disc #2 20:42

CB# 6.2.1



CB# 6.2

00:00

20:00

30:00

40:00

Asset length 48.0 ft.  
Surveyed length 48.0 ft.

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## Observation Report with Still Images

Main Asset ID: CB-6.2-6.2.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:29:43 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2.1      Downstream Node: CB# 6.2      Main Length: 48.0

Comments:  
 After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos	Severity	Comment
4.0		START US	Yes	/		
42.3		Deposits	Yes	/		Concrete build up
48.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-OF 6	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	34.0	Sunny	Disc # 2 28:55

CB# 6.1



At 4.0 ft /  
 START DS - Start Inspection Downstream



At 34.0 ft /  
 STOP - Inspection Stopped

OF# 6

Asset Length: 35.0 ft  
 Surveyed Length: 34.0 ft

100 ft  
 200 ft  
 300 ft

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## Observation Report with Still Images

Main Asset ID: CB 6.1-OF 6      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:58:18 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.1      Downstream Node: OF# 6      Main Length: 35.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
34.0		STOP	No	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.5	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	Disc #2 35:00

Asset length: 23.0 ft  
Surveyed length: 23.0 ft



CB# 4.4

100ft

200ft

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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.5      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:20:56 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.5      Downstream Node: CB# 4.4      Main Length: 23.0

Comments:  
Pre-cleaning inspection

### Observations

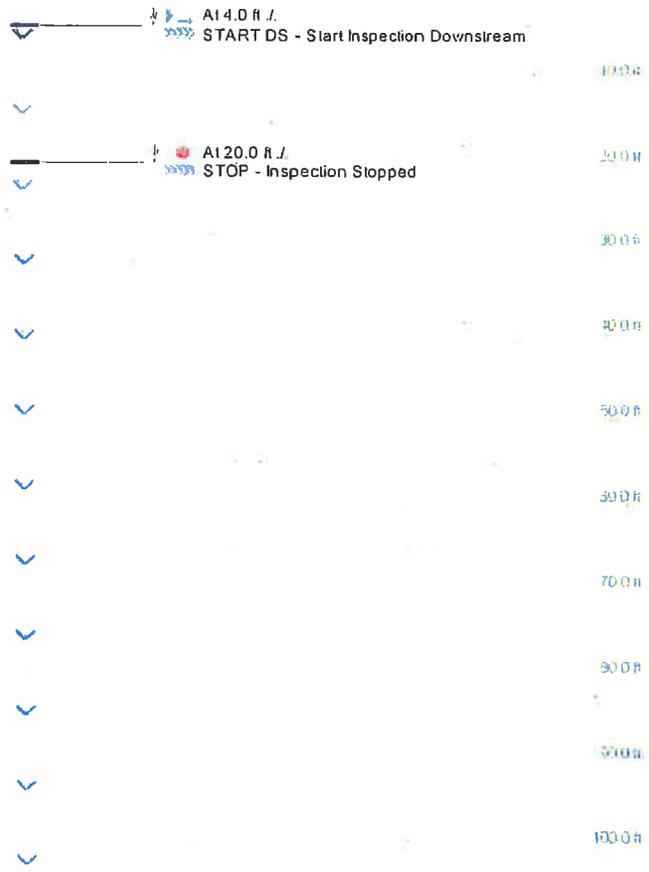
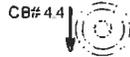
Distance	Length	Node	Revised	Close	Severity	Comment
3.0		START US	Yes	/		
23.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	20.0	Sunny	<i>Disc #2 42:49</i>



Asset length: 103.0 ft.  
Surveyed length: 20.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:38:07 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.4      Downstream Node: CB# 4.3      Main Length: 109.0

Comments:  
 Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Block Pos	Severity	Comments
4.0		START DS	No	/		
20.0		STOP	No	/		Camera could not pass debris

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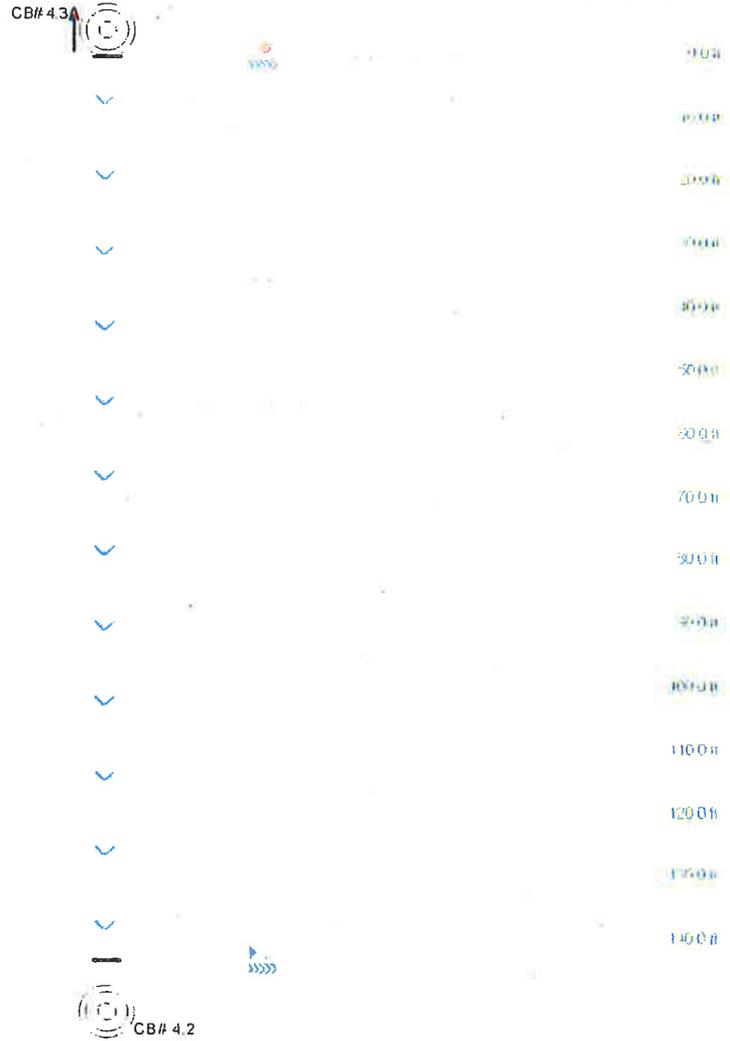
## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10

Date	Pipe Width:	Pipe Height:	Pipe Type:	Surface Condition:
4/22/2010		12	DIP	Asphalt

Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	147.0	Sunny	Disc #2 51:24

Asset length 147.0 ft  
 Surveyed length 147.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:59:41 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.3      Downstream Node: CB# 4.2      Main Length: 147.0

Comments:  
 Pre-cleaning inspection

### Observations

Distance	Remarks	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
147.0		STOP	Yes	/		

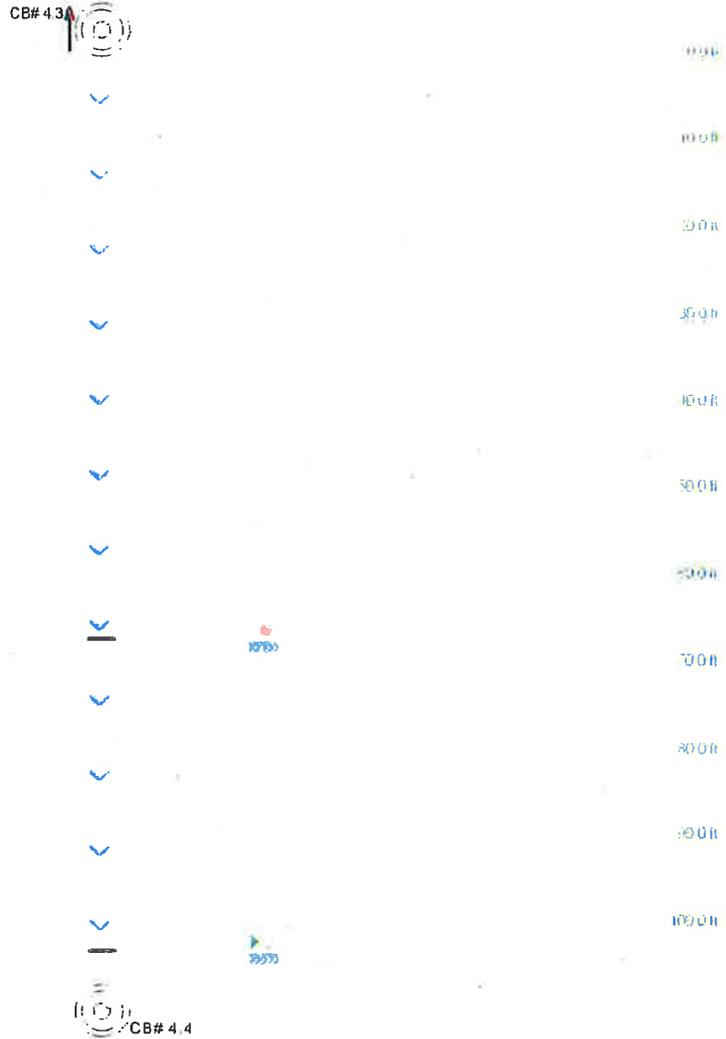
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.3-4.4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	40.0	Sunny	Disc # 2

Asset length: 107.0 ft.  
 Surveyed length: 40.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 4.3-4.4	Project Name: Borough of Mantoloking-A	Inspection Date: 4/22/2010 2:16:14 PM	Weather: Sunny	Operator: Ray R.
Upstream Node: CB# 4.3	Downstream Node: CB# 4.4	Main Length: 107.0		

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Start	Reverse	Code / Pos.	Severity	Comments
4.0		START US	Yes	/		
40.0		STOP	Yes	/		Camera cannot pass debris

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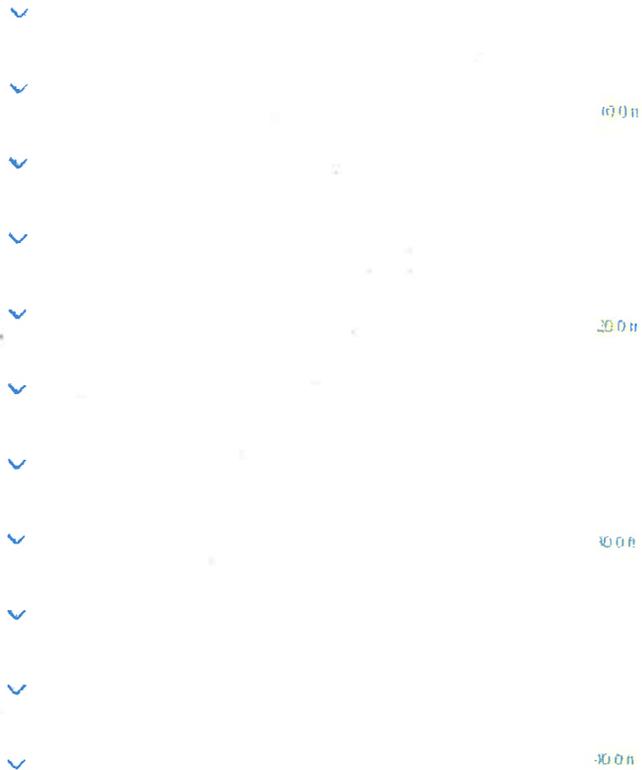


## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	43.0	Sunny	Disc # 2 1:01:49

CB# 4.2

At 13.0 ft.  
 START DS - Start Inspection Downstream



At 43.0 ft.  
 STOP - Inspection Stopped

CB# 4.1

Asset length 43.0 ft.  
 Surveyed length 43.0 ft.

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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 2:32:42 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.2      Downstream Node: CB# 4.1      Main Length: 43.0

Comments:  
 Pre-cleaning inspection

### Observations

Distance	Length	Code	Reverse	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
43.0		STOP	No	/		

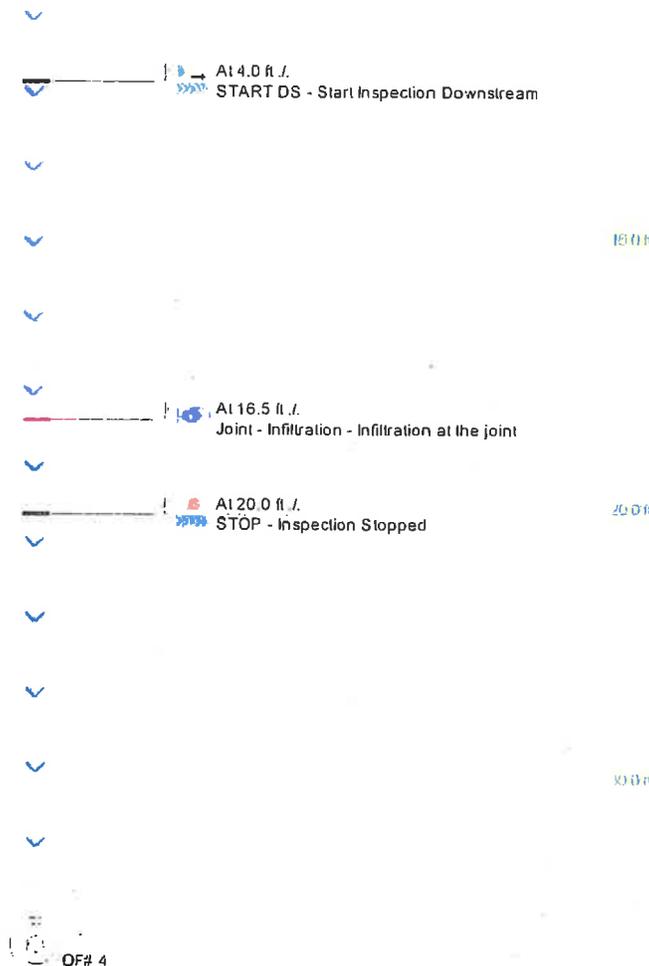
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.1-OF 4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	20.0	Sunny	Disc #2 1:09:23

CB# 4.1



Asset length: 35.0 ft.  
 Surveyed length: 20.0 ft

OF# 4

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## Observation Report with Still Images

Main Asset ID: CB 4.1-OF 4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 2:58:26 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.1      Downstream Node: OF# 4      Main Length: 35.0

Comments:  
 Pre-cleaning inspection

### Observations

Distance	Code	Reverse	Clock Pos.	Severity	Comment
4.0	START DS	No	/		
16.5	Joint - Infiltration	No	/		
20.0	STOP	No	/		Camera cannot pass debris

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**TV Inspection with Pipe-Run Graph**

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.5	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	<i>Disc #2 1:12:48</i>

Asset length: 23.0 ft.  
Surveyed length: 23.0 ft

CB# 4.5



CB# 4.4

10.0 ft

20.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.5      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 3:22:39 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.5      Downstream Node: CB# 4.4      Main Length: 23.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clod. Pos.	Safety	Comment
3.0		START US	Yes	/		
23.0		STOP	Yes	/		

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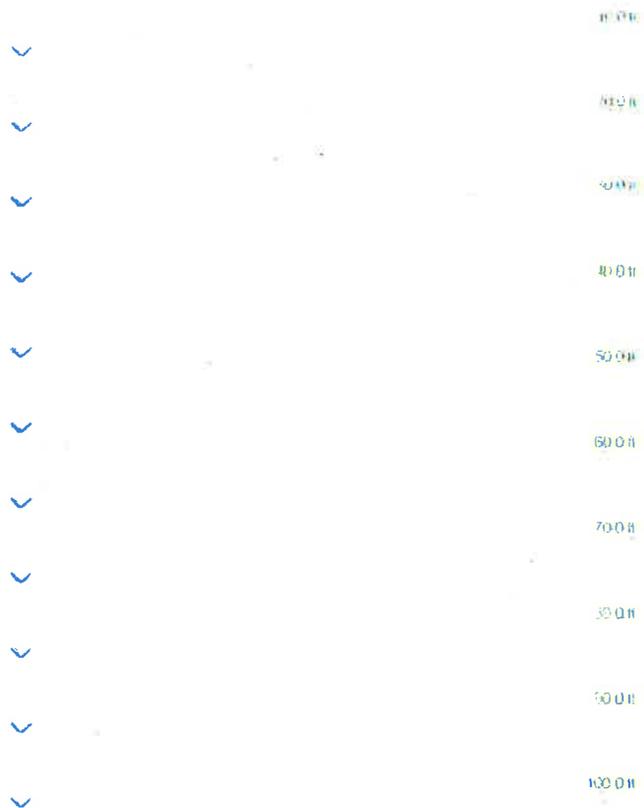


## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	109.0	Sunny	Disc #2 1:18:42



At 4.0 ft /  
 START DS - Start Inspection Downstream



At 109.0 ft /  
 STOP - Inspection Stopped



Asset length: 109.0 ft  
 Surveyed length: 109.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 3:34:48 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.4      Downstream Node: CB# 4.3      Main Length: 109.0

Comments:  
After cleaning

### Observations

Distance	Station	Code	Reversed	Flags	Severity	Comment
4.0		START DS	No	/		
109.0		STOP	No	/		

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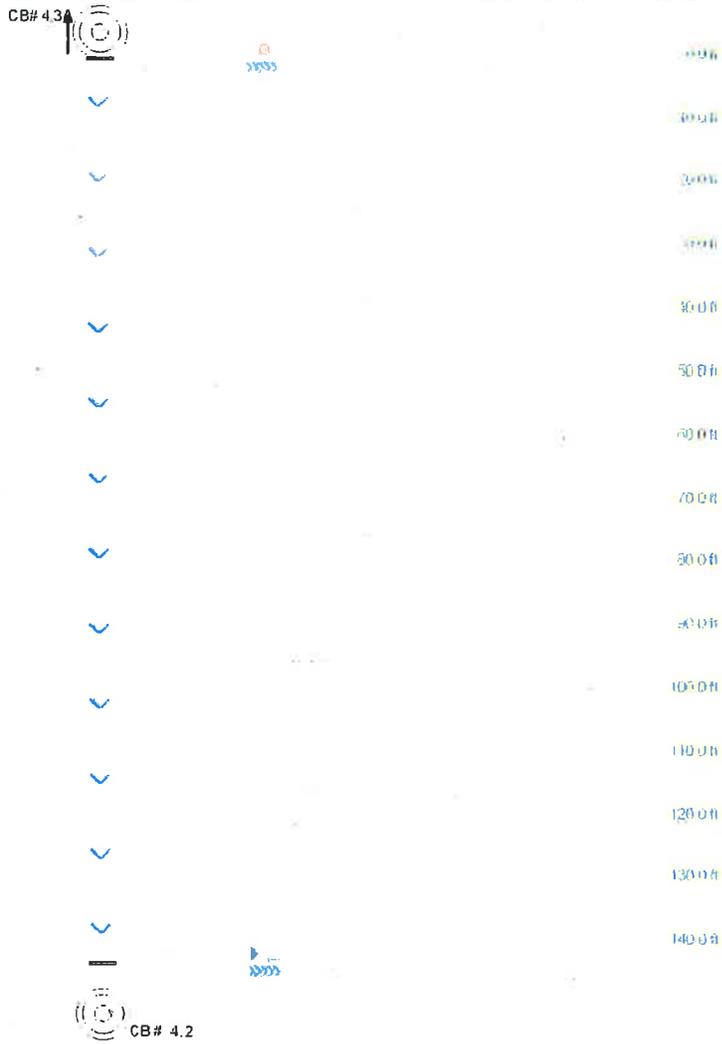
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# TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date:	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather:	Tape/Media #
Upstream	147.0	Sunny	Disc #2 1:27:52

Asset length: 147.0 ft  
Surveyed length: 147.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.3	Project Name: Borough of Mantoloking-A	Inspection Date: 4/22/2010 4:04:43 PM	Weather: Sunny	Operator: Ray R.
Upstream Node: CB# 4.3	Downstream Node: CB# 4.2	Main Length: 147.0		

Comments:  
After cleaning

### Observations

Distance	Report	Code	Reversed	Clear	Pos	Safety	Comment
4.0		START US	Yes		/		
147.0		STOP	Yes		/		

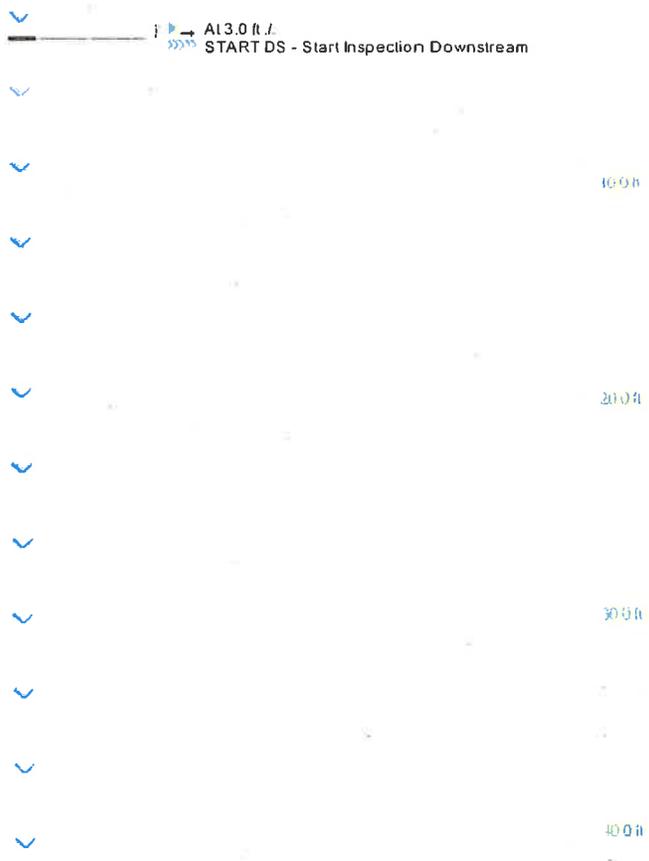
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Lagoon Lane, New Jersey 07712  
 732-751-0006  
 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	43.0	Sunny	Disc #2 1:36:14

CB# 4.2



Asset length: 43.0 ft.  
Surveyed length: 43.0 ft.

CB# 4.1

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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 4:19:02 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.2      Downstream Node: CB# 4.1      Main Length: 43.0

Comments:  
 After cleaning

### Observations

Distance	Length	Code	Reversed	Total Pts	Save	Comment
3.0		START DS	No	/		
43.0		STOP	No	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.1-OF 4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	31.0	Sunny	<i>Disc #2 (1:41:35)</i>



At 4.0 ft /  
 START DS - Start Inspection Downstream

At 9.2 ft 1/5  
 Joint - Separated - Joint separated in the Pipe 10 ft

At 17.0 ft 1/5  
 Joint - Separated - Joint separated in the Pipe 20 ft

At 25.4 ft 1/5  
 Joint - Separated - Joint separated in the Pipe  
 At 25.8 ft 6/  
 Joint - Infiltration - Infiltration at the joint 30 ft

At 31.0 ft /  
 STOP - Inspection Stopped

Asset length: 35 ft  
 Surveyed length: 31.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 4.1-OF 4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 4:26:51 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.1      Downstream Node: OF# 4      Main Length: 35.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Dist. Pos.	Severity	Comment
4.0		START DS	No	/		
9.2		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint
17.0		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint - infiltration seen on pre-cleaning inspection
25.4		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint
25.8		Joint - Infiltration	No	6 /		
31.0		STOP	No	/		

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## Project Summary

### Borough of Mantoloking-A

Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
6.1-OF 6	4/21/2010	Bergen Ave.- Location 12	CB# 6.1	OF# 6	RCP	35.0	28.0
6.1-6.2	4/21/2010	Bergen Ave.- Location 12	CB# 6.1	CB# 6.2	DIP	144.0	143.0
6.3-6.2	4/21/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.2	DIP	32.0	14.0
6.3-6.4	4/21/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.4	DIP	43.0	9.0
1.1- MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.1	MH# 1.2	DIP	32.0	6.0
1.3 - MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.3	MH# 1.2	Clay Tile	42.0	42.0
1.3 - MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.3	MH# 1.2	Clay Tile	42.0	42.0
1.2-OF 1	4/21/2010	Channel Lane - Location 14	MH# 1.2	OF# 1	HDPE	100.0	74.0
1.2-CB 1.1	4/21/2010	Channel Lane - Location 14	MH# 1.2	CB# 1.1	DIP	32.0	30.0
5.3-6.4	4/22/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.4	DIP	43.0	43.0

Project Summary

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Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
6.3-6.2	4/22/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.2	DIP	32.0	32.0
6.1-6.2	4/22/2010	Bergen Ave.- Location 12	CB# 6.1	CB# 6.2	DIP	144.0	144.0
6.2-6.2.1	4/22/2010	Bergen Ave.- Location 12	CB# 6.2	CB# 6.2.1	DIP	48.0	48.0
6.1-OF 6	4/22/2010	Bergen Ave.- Location 12	CB# 6.1	OF# 6	RCP	35.0	34.0
4.4-4.5	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.5	DIP	23.0	23.0
4.4-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	109.0	20.0
4.2-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.3	DIP	147.0	147.0
4.3-4.4	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	107.0	40.0
4.2-4.1	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.1	DIP	43.0	43.0
4.1-OF 4	4/22/2010	Lagoon Lane - Location 10	CB# 4.1	OF# 4	RCP	35.0	20.0
4.4-4.5	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.5	DIP	23.0	23.0
4.4-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	109.0	109.0

Project Summary

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Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed length
4.2-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.3	DIP	147.0	147.0
4.2-4.1	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.1	DIP	43.0	43.0
4.1-OF 4	4/22/2010	Lagoon Lane - Location 10	CB# 4.1	OF# 4	RCP	35.0	31.0
<b>Subtotal</b>						<b>1,625.0 ft</b>	<b>1,335.0 ft</b>
<b>Total</b>						<b>1,625.0 ft</b>	<b>1,335.0 ft</b>

Number of inspections: 25

# AMERICAN PIPE CLEANING, LLC

*Pipe Jetting & Vacuum Services • Digital TV Inspection  
Manhole & Catch Basin Cleaning • Hydro Excavation*



Borough of Mantoloking

*DVD/Video Report*

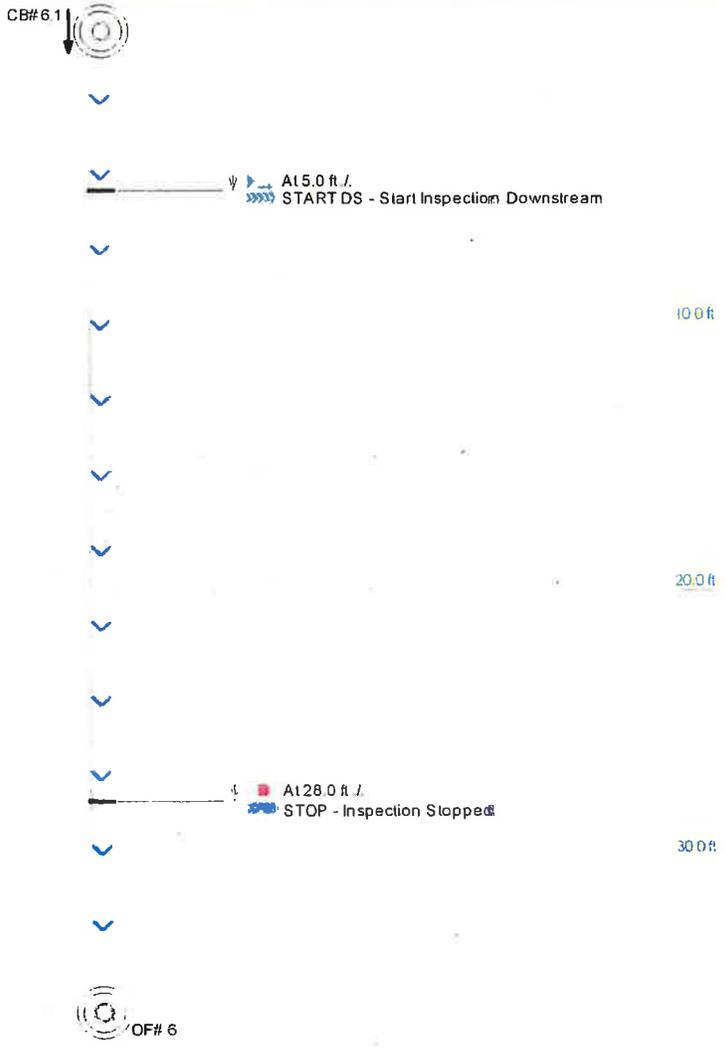
May 11, 2010

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-OF 6	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	28.0	Sunny	Disc #1 0:00



Asset length: 38.0 ft  
 Surveyed length: 28.0 ft

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## Observation Report with Still Images

Main Asset ID: CB 6.1-OF 6      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 2:24:59 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.1      Downstream Node: OF# 6      Main Length: 35.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
5.0		START DS	No	/		
28.0		STOP	No	/		Camera could not pass debris

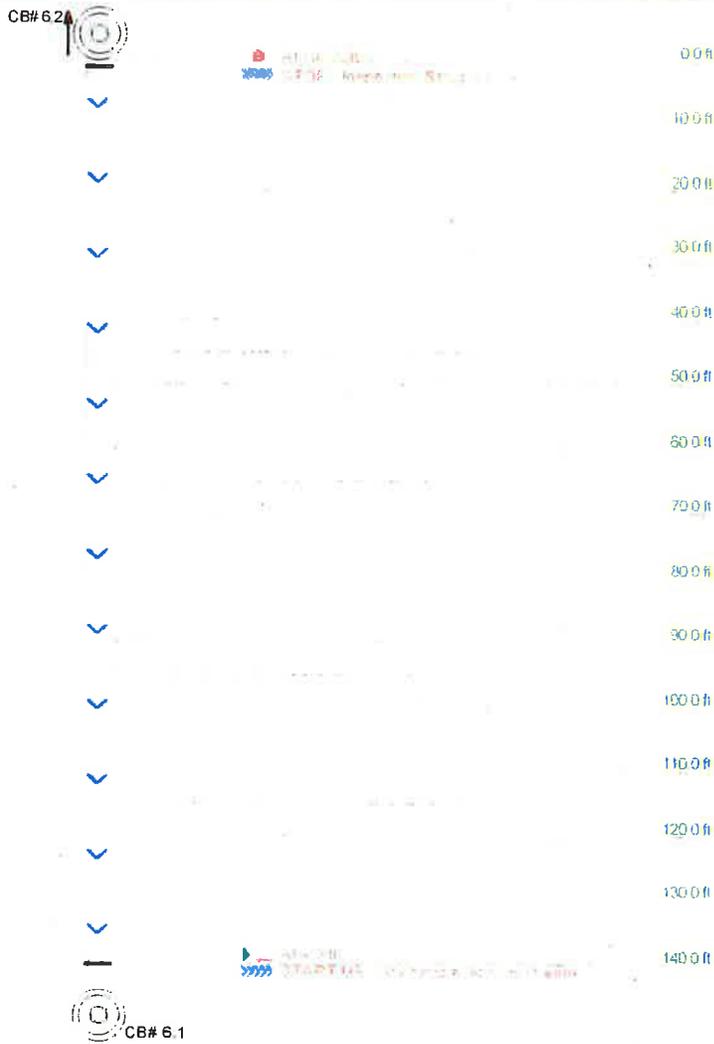
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Plain, New Jersey 07712  
 Phone: 732-751-0006  
 Fax: 732-751-0236



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	143.0	Sunny	Disc #1 6:49

Asset length: 144.0 ft  
 Surveyed length: 143.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.1-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 2:41:08 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2      Downstream Node: CB# 6.1      Main Length: 144.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
143.0		STOP	Yes	/		Camera could not pass debris

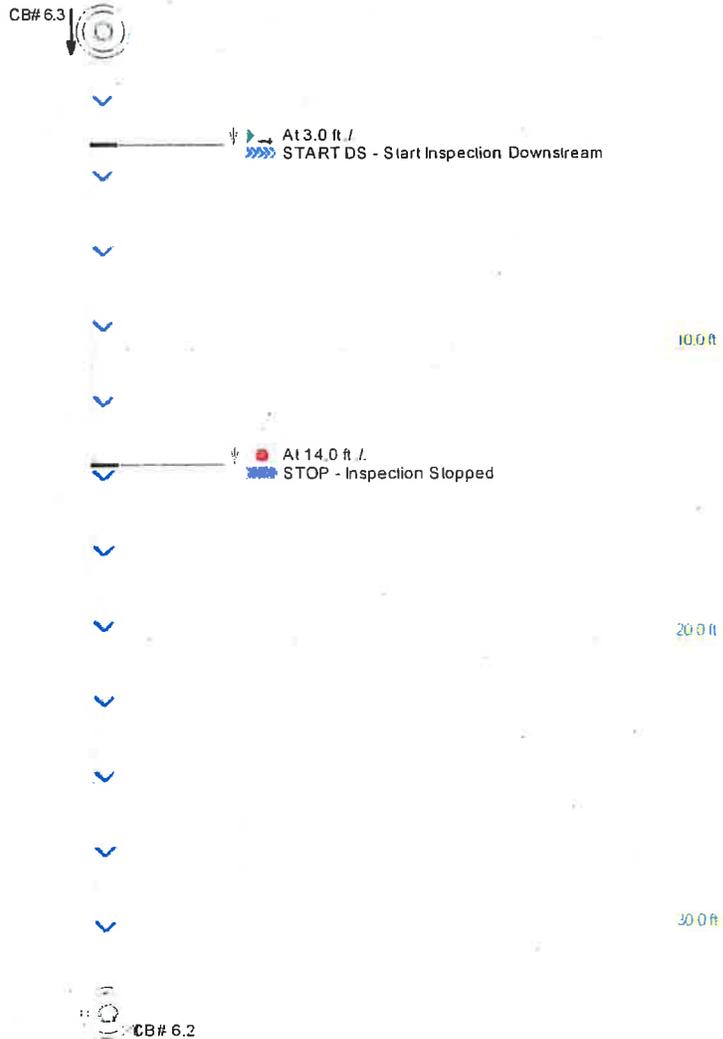
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010	0	12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	14.0	Showers	Disc # 2 14:43

Asset length: 32.0 ft.  
Surveyed length: 14.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.2	Project Name: Borough of Mantoloking-A	Inspection Date: 4/21/2010 3:20:57 PM	Weather: Showers	Operator: Ray R.
Upstream Node: CB# 6.3	Downstream Node: CB# 6.2	Main Length: 32.0		

Comments:  
Pre-cleaning Inspection

### Observations

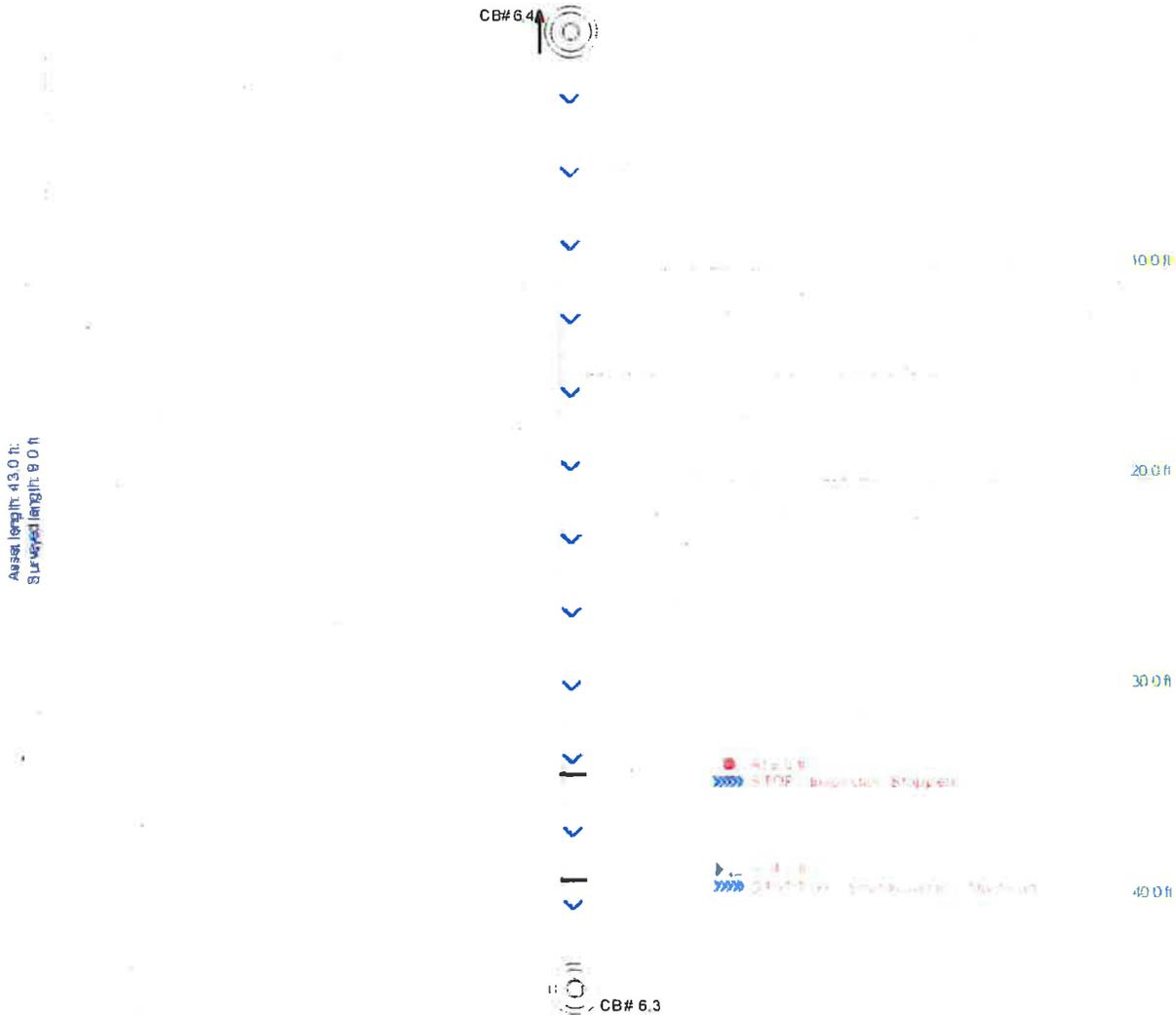
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
14.0		STOP	No	/		Camera could not pass debris

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.4	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	9.0	Showers	<i>Disc #1 17:43</i>



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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 3:31:17 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 6.4      Downstream Node: CB# 6.3      Main Length: 43.0

Comments:  
Pre-cleaning Inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
9.0		STOP	Yes	/		Camera could not pass debris

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 1.1- MH 1.2	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		16	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	6.0	Showers	<i>DISC#2 19:56</i>



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## Observation Report with Still Images

Main Asset ID: CB 1.1- MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:25:24 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.1      Downstream Node: MH# 1.2      Main Length: 32.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
6.0		STOP	No	/		Camera could not pass debris

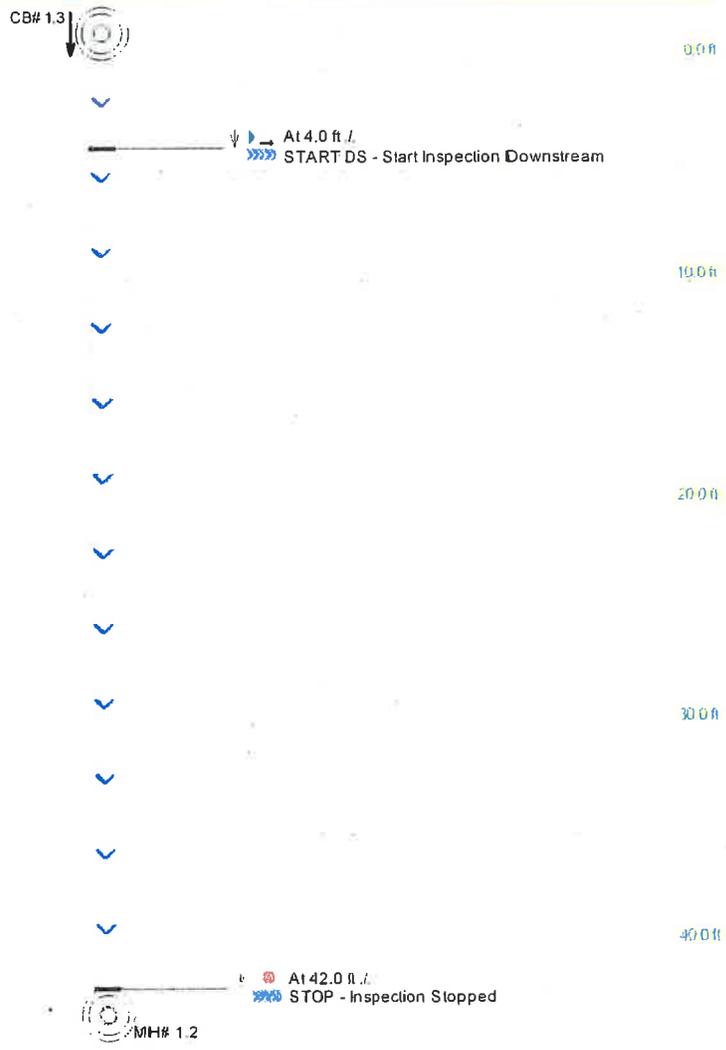
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## TV Inspection with Pipe-Run Graph

Project Name: <b>Borough of Mantoloking-A</b>	Asset ID: <b>CB 1.3 - MH 1.2</b>	City: <b>Boro of Mantoloking, NJ</b>	Address: <b>Channel Lane - Location 14</b>
Date: <b>4/21/2010</b>	Pipe Width: <b>8</b>	Pipe Height: <b>8</b>	Pipe Type: <b>Clay Tile</b>
Direction: <b>Downstream</b>	Surveyed Footage: <b>42.0</b>	Weather: <b>Showers</b>	Surface Condition: <b>Asphalt</b>
			Tape/Media #: <b>Disc # 1</b>

Asset length: 42.0 ft.  
Surveyed length: 42.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 1.3 - MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:30:04 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.3      Downstream Node: MH# 1.2      Main Length: 42.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
42.0		STOP	No	/		

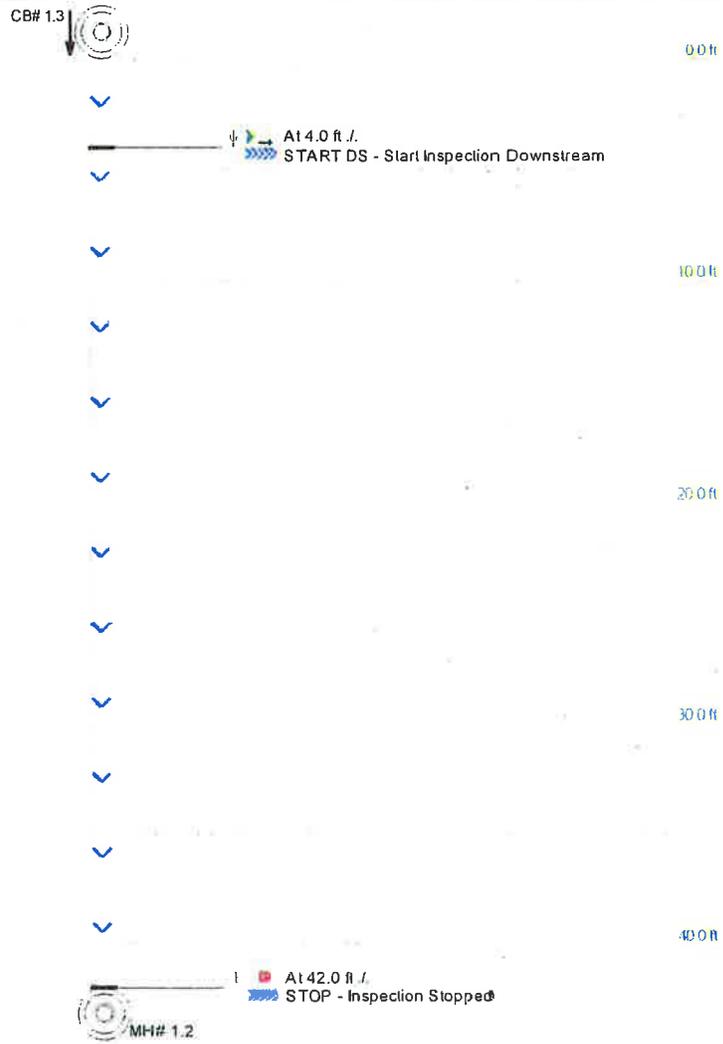
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 1.3 - MH 1.2	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		8	Clay Tile
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	42.0	Light Rain	Disc #1 26:16

Asset length: 42.0 ft.  
Surveyed length: 42.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 1.3 - MH 1.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 5:48:28 PM      Weather: Light Rain      Operator: Ray R.

Upstream Node: CB# 1.3      Downstream Node: MH# 1.2      Main Length: 42.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
42.0		STOP	No	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	MH 1.2-OF 1	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		18	HDPE
			Surface Condition:
			Garden
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	74.0	Showers	Disc # 2 29:16

Asset length: 100.0 ft.  
Surveyed length: 74.0 ft



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## Observation Report with Still Images

Main Asset ID: MH 1.2-OF 1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 6:14:04 PM      Weather: Showers      Operator: Ray R.

Upstream Node: MH# 1.2      Downstream Node: OF# 1      Main Length: 100.0

Comments:  
 Pre-cleaning inspection

### Observations

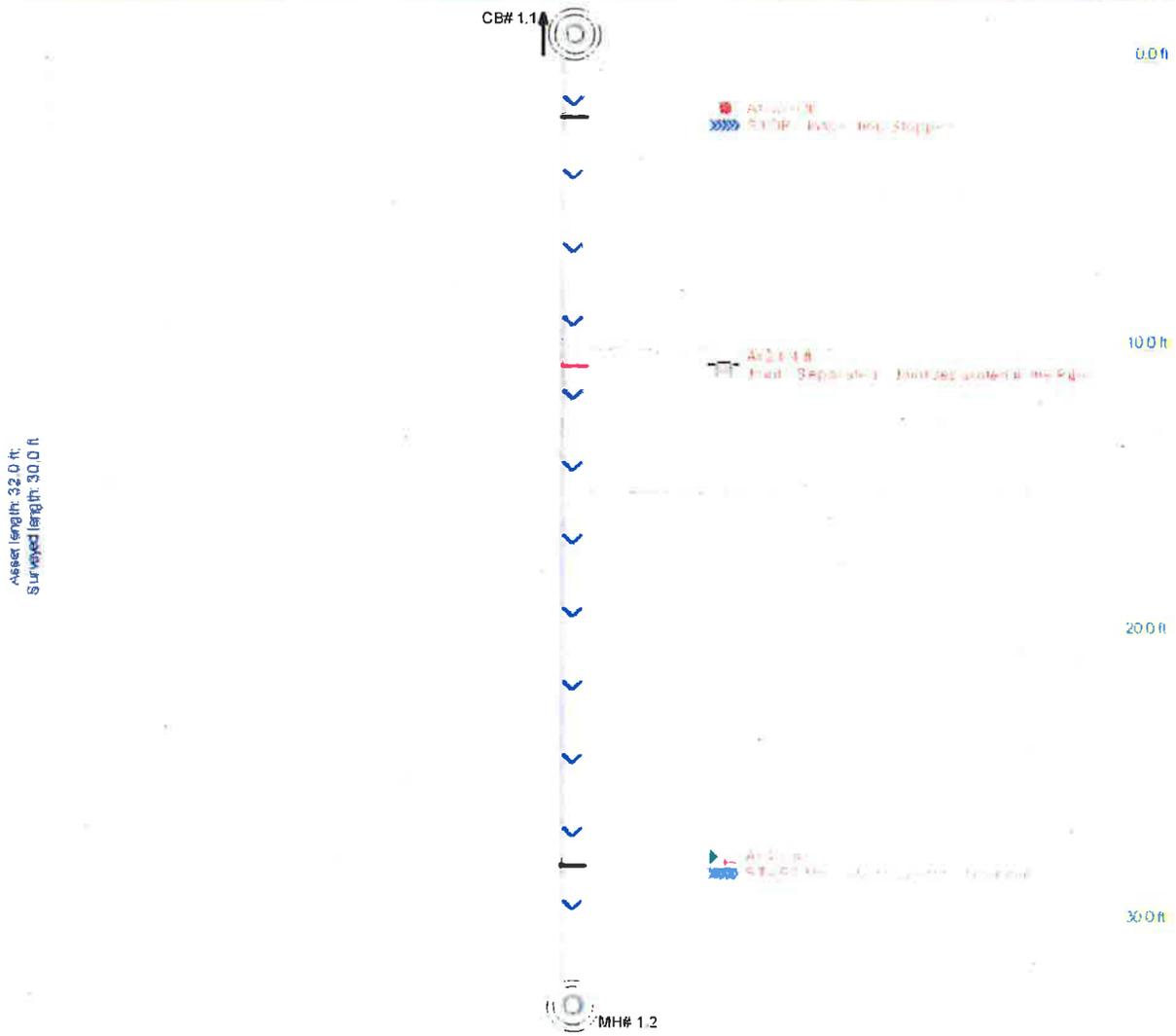
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
74.0		Blockage	No	/		Sandbag in line
						
74.0		STOP	No	/		Camera cannot pass Sand Bag

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	MH 1.2-CB 1.1	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/21/2010		16	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	30.0	Showers	<i>Disc #1</i>



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## Observation Report with Still Images

Main Asset ID: MH 1.2-CB 1.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/21/2010 6:22:12 PM      Weather: Showers      Operator: Ray R.

Upstream Node: CB# 1.1      Downstream Node: MH# 1.2      Main Length: 32.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
21.4		Joint - Separated	Yes	/		Exposed gasket
30.0		STOP	Yes	/		

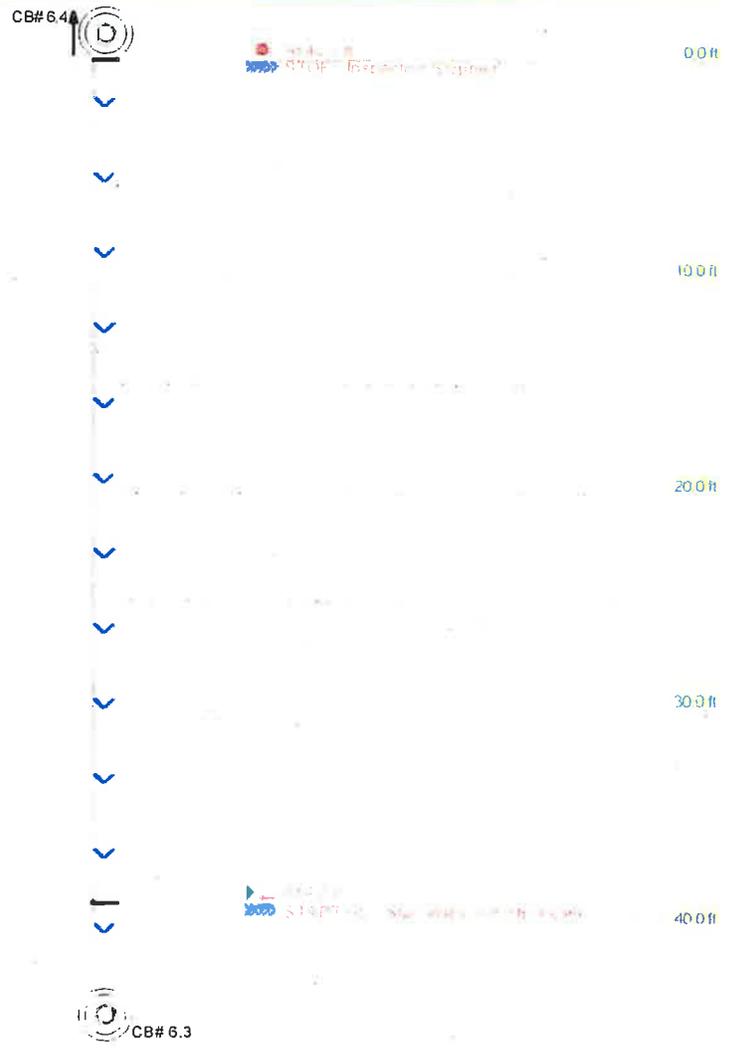
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.4	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date:	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
Direction:	Surveyed Footage:	Weather:	Tape/Media #
Upstream	43.0	Sunny	Disc # 2 0:00

Asset length: 43.0 ft  
Surveyed length: 43.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 10:32:31 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.4      Downstream Node: CB# 6.3      Main Length: 43.0

Comments:  
After cleaning - pipe has scaling throughout the entire run

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
43.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.3-6.2	Boro of Mantoloking, NJ	Bergen Ave. - Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010	0	12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	32.0	Sunny	DISC # 2 5.00

Asset length: 32.0 ft.  
Surveyed length: 32.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 6.3-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 10:43:04 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.3      Downstream Node: CB# 6.2      Main Length: 32.0

Comments:  
After cleaning - pipe has scaling throughout the entire run

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.5		START DS	No	/		
3.5		Pipe Continue	No	/		pipe has scaling throughout the entire run
32.0		STOP	No	/		

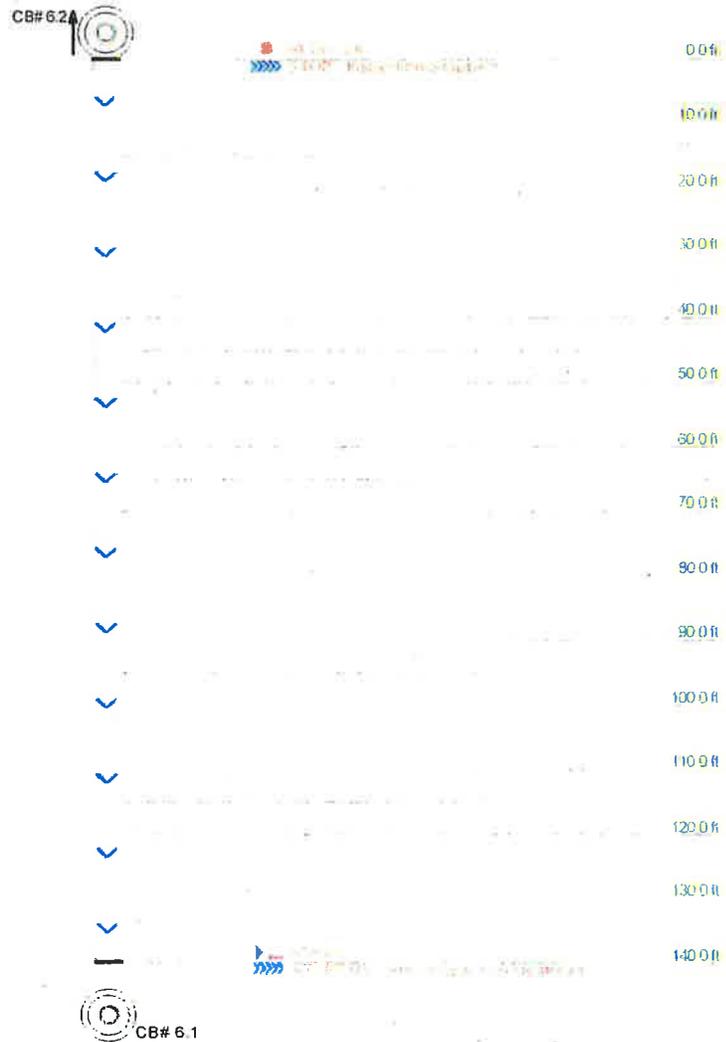
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 ...ean, New Jersey 07712  
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-6.2	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	144.0	Sunny	Disc #2 8/15

Asset length: 144.0 ft  
 Surveyed length: 144.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.1-6.2      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:09:45 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2      Downstream Node: CB# 6.1      Main Length: 144.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.2		START US	Yes	/		
144.0		STOP	Yes	/		

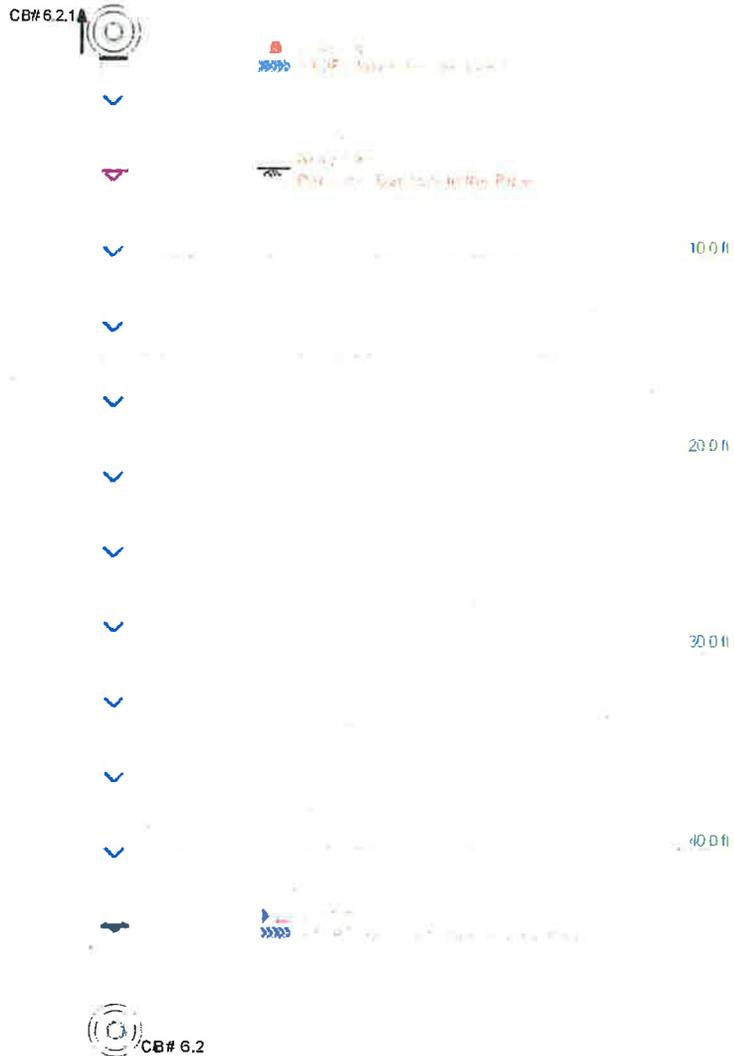
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.2-6.2.1	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	48.0	Sunny	<i>Disc #2 20142</i>

Asset length: 48.0 ft.  
Surveyed length: 48.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.2-6.2.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:29:43 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.2.1      Downstream Node: CB# 6.2      Main Length: 48.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
42.3		Deposits	Yes	/		Concrete build up
48.0		STOP	Yes	/		

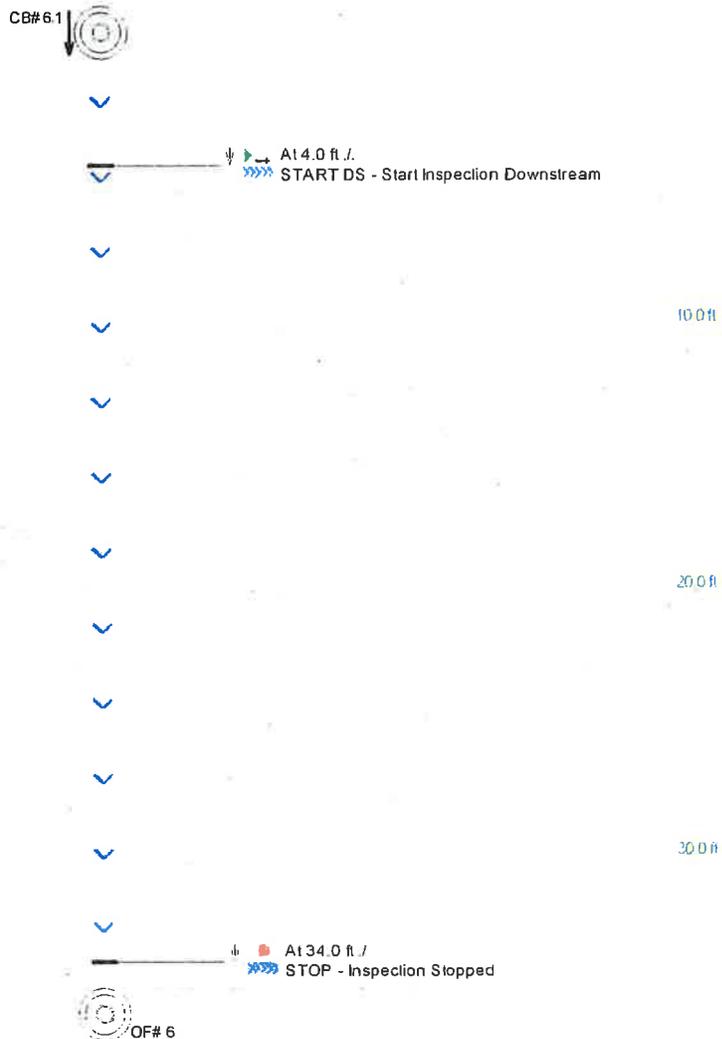
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 6.1-OF 6	Boro of Mantoloking, NJ	Bergen Ave.- Location 12
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	34.0	Sunny	Disc # 2 28:55

Asset length: 35.0 ft.  
 Surveyed length: 34.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 6.1-OF 6      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 11:58:18 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 6.1      Downstream Node: OF# 6      Main Length: 35.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
34.0		STOP	No	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.5	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	Disc #2 35:00

Asset length: 23.0 ft.  
Surveyed length: 23.0 ft.

CB# 4.5



CB# 4.4

100 ft

200 ft

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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.5      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:20:56 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.5      Downstream Node: CB# 4.4      Main Length: 23.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START US	Yes	/		
23.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	20.0	Sunny	<i>Disc #2 42:49</i>

Asset length: 109.0 ft.  
Surveyed length: 20.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:38:07 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.4      Downstream Node: CB# 4.3      Main Length: 109.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
20.0		STOP	No	/		Camera could not pass debris

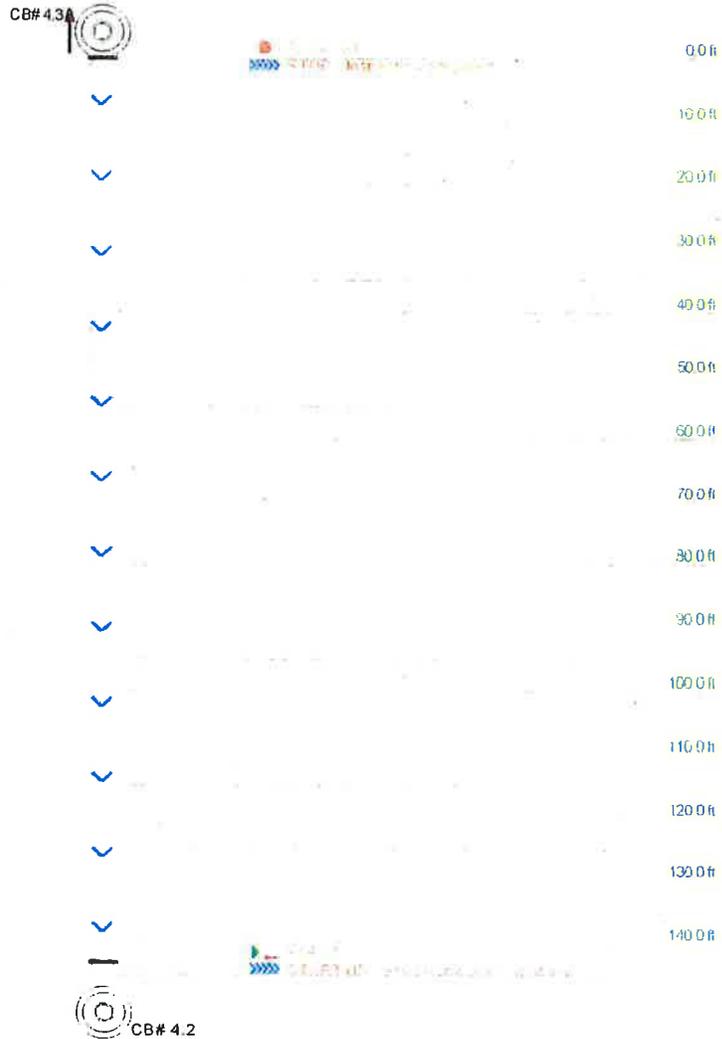
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	147.0	Sunny	Disc #2 51:24

Asset length: 147.0 ft.  
Surveyed length: 147.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 1:59:41 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.3      Downstream Node: CB# 4.2      Main Length: 147.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
147.0		STOP	Yes	/		

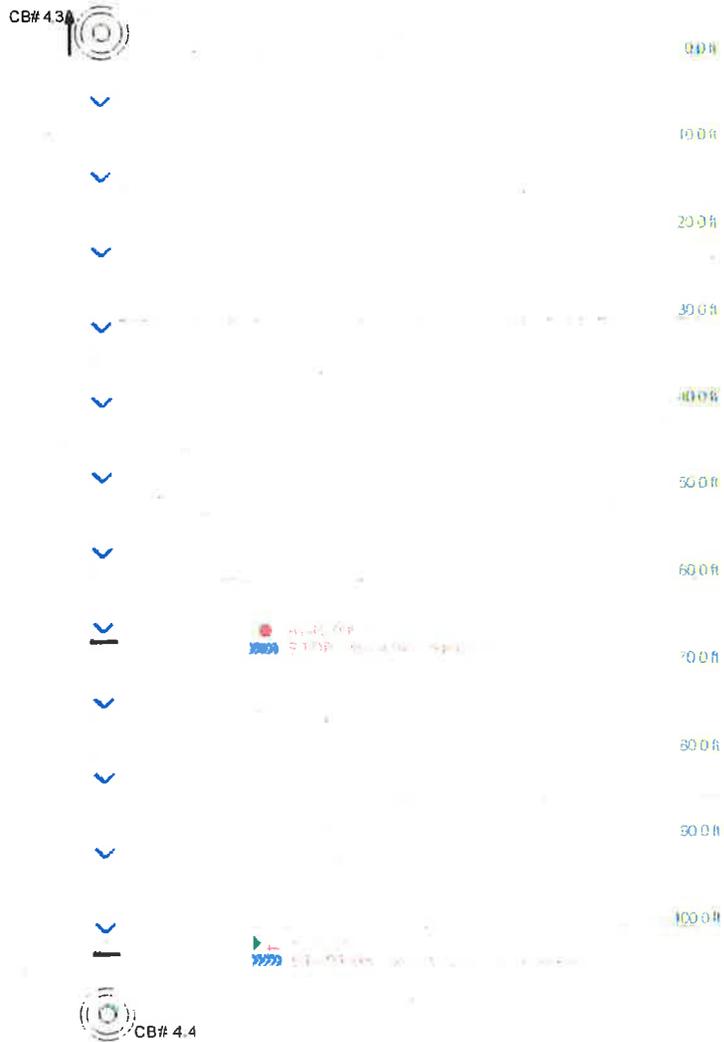
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.3-4.4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
Direction:	Surveyed Footage:	Weather	Surface Condition:
Upstream	40.0	Sunny	Asphalt
			Tape/Media #
			<i>Disc # 2</i>

Asset length: 107.0 ft  
Surveyed length: 40.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.3-4.4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 2:16:14 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.3      Downstream Node: CB# 4.4      Main Length: 107.0

Comments:  
Pre-cleaning inspection

### Observations

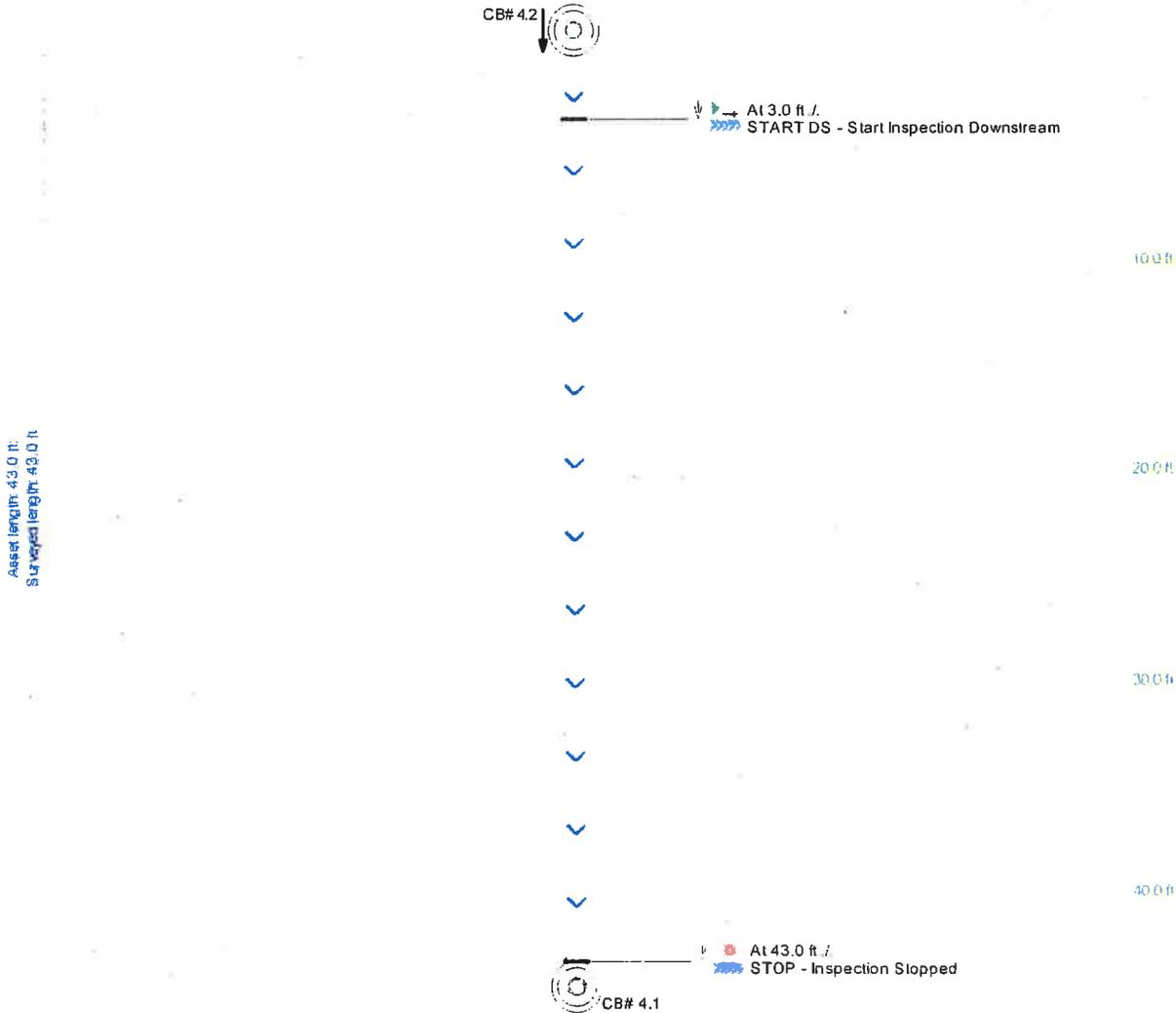
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
40.0		STOP	Yes	/		Camera cannot pass debris

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	43.0	Sunny	<i>Disc #2 1:01:49</i>



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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 2:32:42 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.2      Downstream Node: CB# 4.1      Main Length: 43.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
43.0		STOP	No	/		

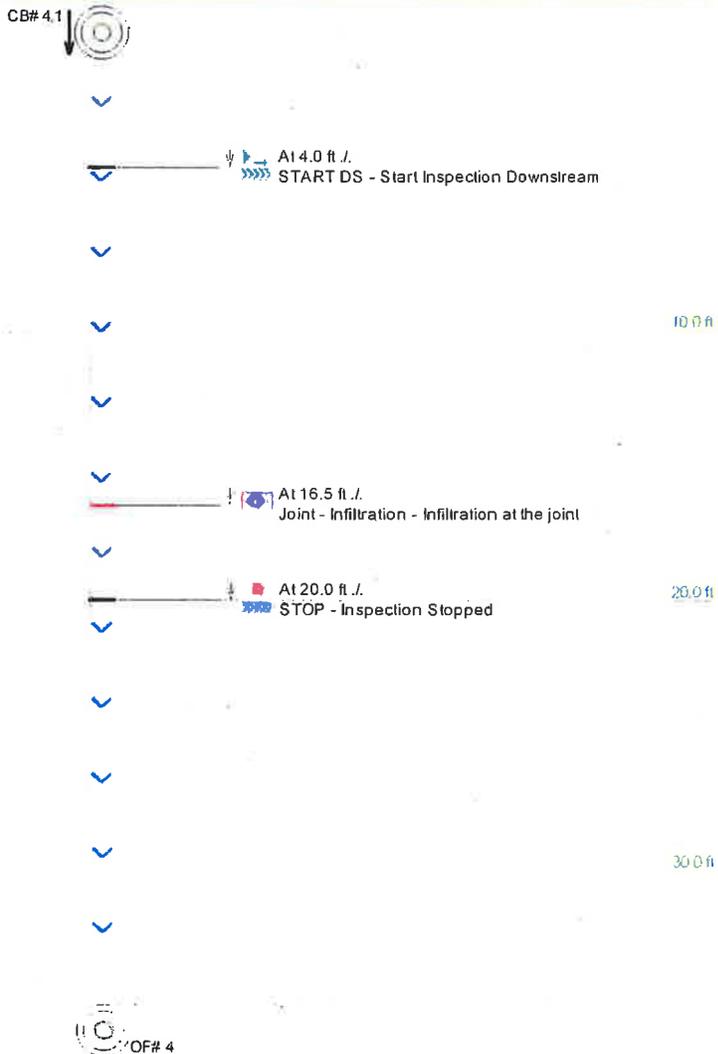
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.1-OF 4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	20.0	Sunny	<i>Disc #2 1:09:23</i>

Asset length: 35.0 ft.  
 Surveyed length: 20.0 ft.



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## Observation Report with Still Images

Main Asset ID: CB 4.1-OF 4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 2:58:26 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.1      Downstream Node: OF# 4      Main Length: 35.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
16.5		Joint - Infiltration	No	/		
20.0		STOP	No	/		Camera cannot pass debris

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.5	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	Disc #2 1:12:43

Asset length: 23.0 ft  
 Surveyed length: 23.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.5      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 3:22:39 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.5      Downstream Node: CB# 4.4      Main Length: 23.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START US	Yes	/		
23.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.4-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	109.0	Sunny	Disc #2 1:18:42

Asset length: 109.0 ft  
Surveyed length: 109.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.4-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 3:34:48 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.4      Downstream Node: CB# 4.3      Main Length: 109.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
109.0		STOP	No	/		

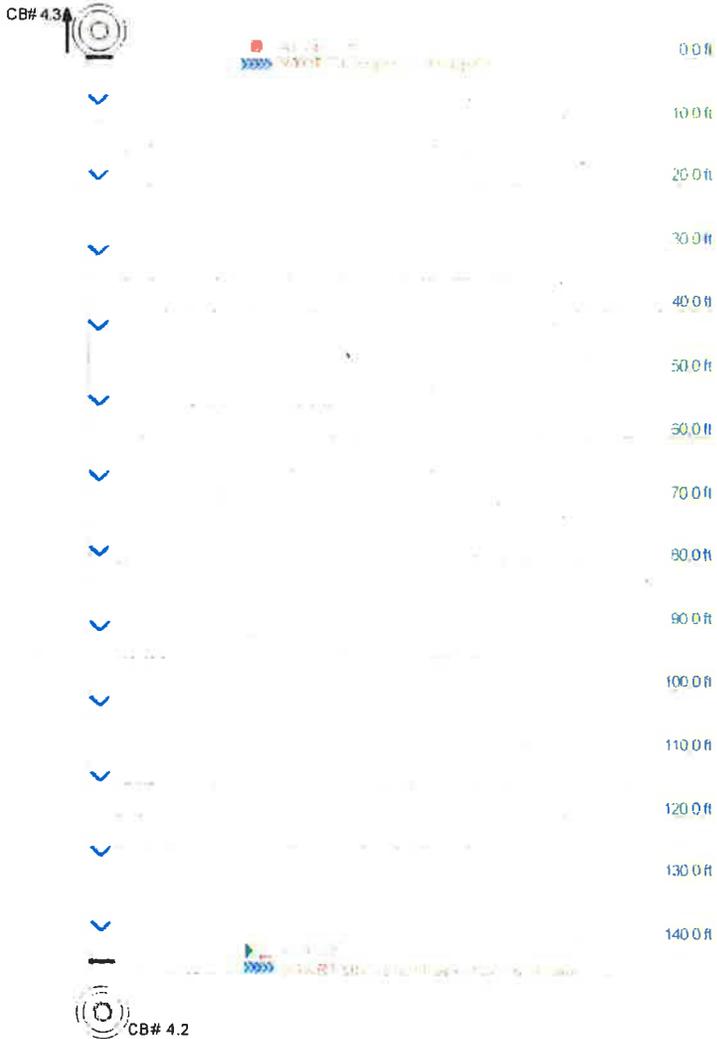
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.2-4.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 10
Date	Pipe Width:	Pipe Height:	Pipe Type:
4/22/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	147.0	Sunny	Disc #2 1:27:52

Asset length: 147.0 ft  
Surveyed length: 147.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.3      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 4:04:43 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.3      Downstream Node: CB# 4.2      Main Length: 147.0

Comments:  
After cleaning

### Observations

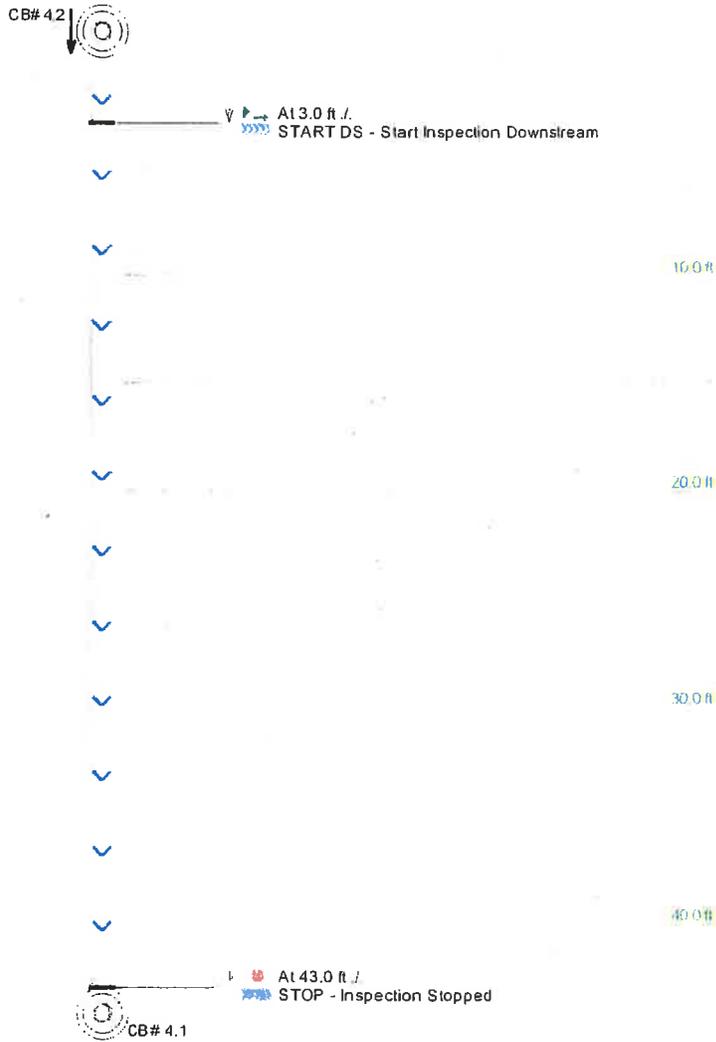
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START US	Yes	/		
147.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name: <b>Borough of Mantoloking-A</b>	Asset ID: <b>CB 4.2-4.1</b>	City: <b>Boro of Mantoloking, NJ</b>	Address: <b>Lagoon Lane - Location 10</b>
Date: <b>4/22/2010</b>	Pipe Width: <b>12</b>	Pipe Height: <b>12</b>	Pipe Type: <b>DIP</b>
Direction: <b>Downstream</b>	Surveyed Footage: <b>43.0</b>	Weather: <b>Sunny</b>	Surface Condition: <b>Asphalt</b>
		Weather: <b>Sunny</b>	Tape/Media #: <b>Disc #2 1:36:14</b>



Asset length: 43.0 ft.  
Surveyed length: 43.0 ft.

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## Observation Report with Still Images

Main Asset ID: CB 4.2-4.1      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 4:19:02 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.2      Downstream Node: CB# 4.1      Main Length: 43.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
43.0		STOP	No	/		

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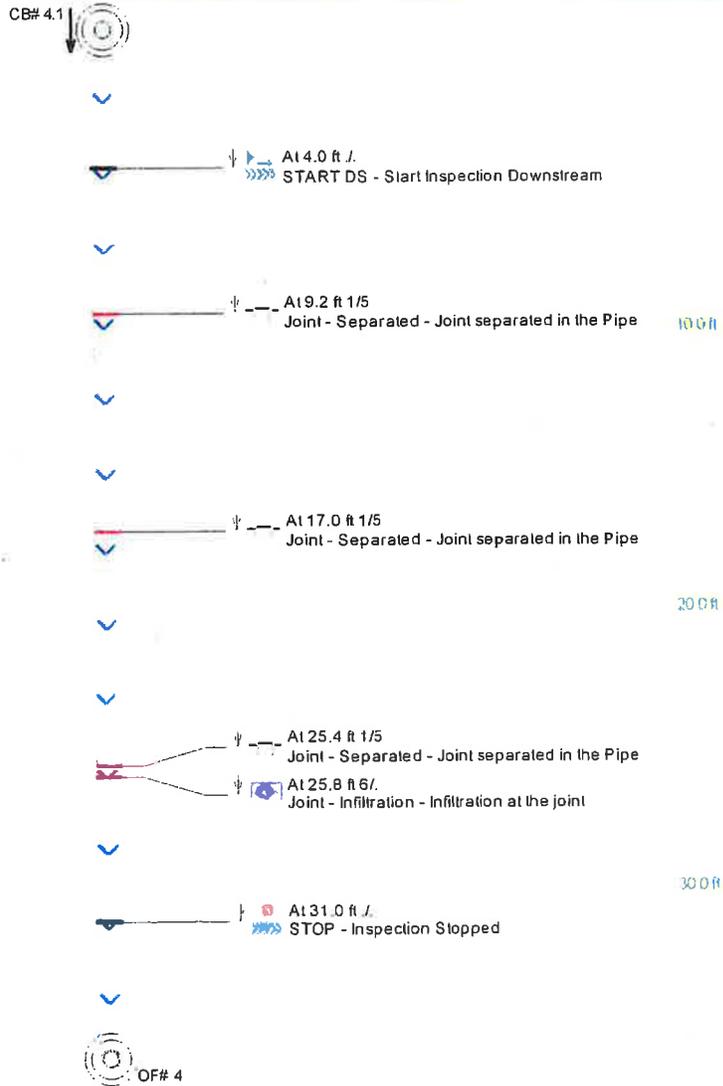
## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-A	CB 4.1-OF 4	Boro of Mantoloking, NJ	Lagoon Lane - Location 10

Date	Pipe Width:	Pipe Height:	Pipe Type:	Surface Condition:
4/22/2010		15	RCP	Asphalt

Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	31.0	Sunny	Disc #2 1:41:35

Asset length: 35.0 ft  
 Surveyed length: 31.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 4.1-OF 4      Project Name: Borough of Mantoloking-A      Inspection Date: 4/22/2010 4:26:51 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 4.1      Downstream Node: OF# 4      Main Length: 35.0

Comments:  
After cleaning

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
9.2		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint
17.0		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint - infiltration seen on pre-cleaning inspection
25.4		Joint - Separated	No	1 / 5		Pipe bends to the left slightly at the joint
25.8		Joint - Infiltration	No	6 /		
31.0		STOP	No	/		

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## Project Summary

### Borough of Mantoloking-A

Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
CB 6.1-OF 6	4/21/2010	Bergen Ave.- Location 12	CB# 6.1	OF# 6	RCP	35.0	28.0
CB 6.1-6.2	4/21/2010	Bergen Ave.- Location 12	CB# 6.1	CB# 6.2	DIP	144.0	143.0
CB 6.3-6.2	4/21/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.2	DIP	32.0	14.0
CB 6.3-6.4	4/21/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.4	DIP	43.0	9.0
CB 1.1- MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.1	MH# 1.2	DIP	32.0	6.0
CB 1.3 - MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.3	MH# 1.2	Clay Tile	42.0	42.0
CB 1.3 - MH 1.2	4/21/2010	Channel Lane - Location 14	CB# 1.3	MH# 1.2	Clay Tile	42.0	42.0
MH 1.2-OF 1	4/21/2010	Channel Lane - Location 14	MH# 1.2	OF# 1	HDPE	100.0	74.0
MH 1.2-CB 1.1	4/21/2010	Channel Lane - Location 14	MH# 1.2	CB# 1.1	DIP	32.0	30.0
CB 6.3-6.4	4/22/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.4	DIP	43.0	43.0

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Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
CB 6.3-6.2	4/22/2010	Bergen Ave.- Location 12	CB# 6.3	CB# 6.2	DIP	32.0	32.0
CB 6.1-6.2	4/22/2010	Bergen Ave.- Location 12	CB# 6.1	CB# 6.2	DIP	144.0	144.0
CB 6.2-6.2.1	4/22/2010	Bergen Ave.- Location 12	CB# 6.2	CB# 6.2.1	DIP	48.0	48.0
CB 6.1-OF 6	4/22/2010	Bergen Ave.- Location 12	CB# 6.1	OF# 6	RCP	35.0	34.0
CB 4.4-4.5	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.5	DIP	23.0	23.0
CB 4.4-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	109.0	20.0
CB 4.2-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.3	DIP	147.0	147.0
CB 4.3-4.4	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	107.0	40.0
CB 4.2-4.1	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.1	DIP	43.0	43.0
CB 4.1-OF 4	4/22/2010	Lagoon Lane - Location 10	CB# 4.1	OF# 4	RCP	35.0	20.0
CB 4.4-4.5	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.5	DIP	23.0	23.0
CB 4.4-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.4	CB# 4.3	DIP	109.0	109.0

Project Summary

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Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
CB 4.2-4.3	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.3	DIP	147.0	147.0
CB 4.2-4.1	4/22/2010	Lagoon Lane - Location 10	CB# 4.2	CB# 4.1	DIP	43.0	43.0
CB 4.1-OF 4	4/22/2010	Lagoon Lane - Location 10	CB# 4.1	OF# 4	RCP	35.0	31.0
<b>Subtotal</b>						<b>1,625.0 ft</b>	<b>1,335.0 ft</b>
<b>Total</b>						<b>1,625.0 ft</b>	<b>1,335.0 ft</b>

Number of inspections: 25

# AMERICAN PIPE CLEANING, LLC

*Pipe Jetting & Vacuum Services • Digital TV Inspection  
Manhole & Catch Basin Cleaning • Hydro Excavation*



Borough of Mantoloking

*DVD/Video Report*

May 11, 2010

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 Mantoloking, New Jersey 07712  
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.2-2.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		10	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	DISC #3 0:00

Asset length: 23.0 ft  
Surveyed length: 23.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 2.2-2.3      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 11:01:22 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 2.3      Downstream Node: CB# 2.2      Main Length: 23.0

Comments:  
Pre-cleaning inspection

### Observations

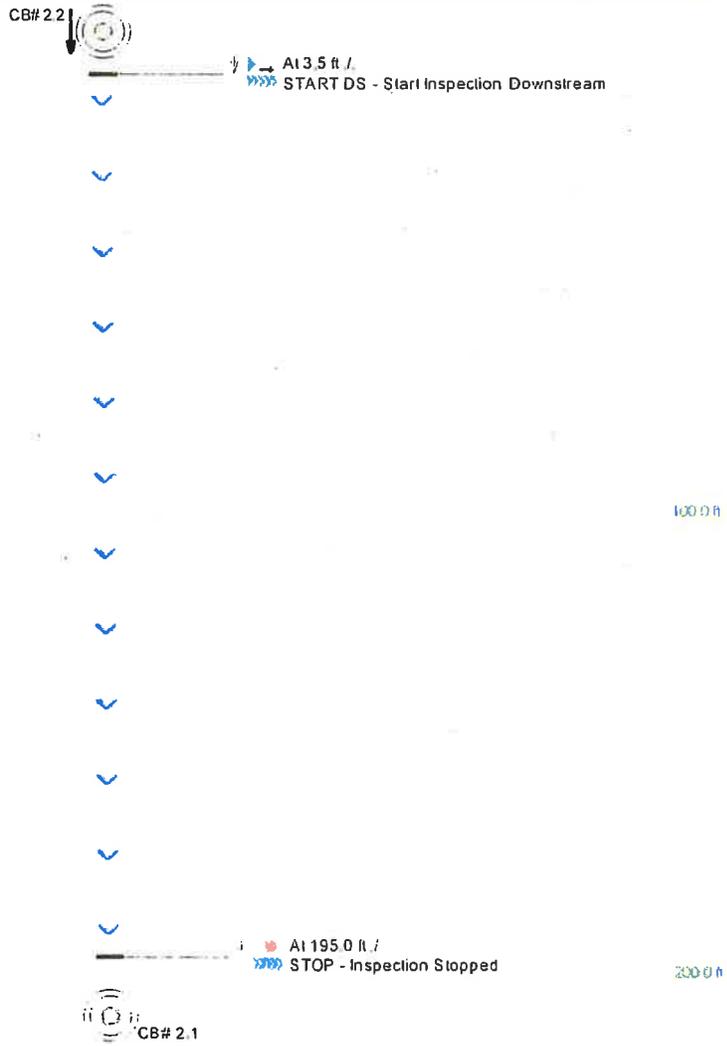
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START US	Yes	/		
23.0		STOP	Yes	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.2-2.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		12	ACP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	195.0	Sunny	Disc #3 4:00



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## Observation Report with Still Images

Main Asset ID: CB 2.2-2.1      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 11:28:55 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 2.2      Downstream Node: CB# 2.1      Main Length: 202.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Res	Severity	Comment
3.5		START DS	No	/		
195.0		STOP	No	/		

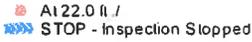
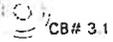
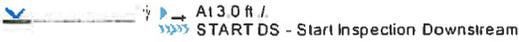
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 in, New Jersey 07712  
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.1-3.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		12	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	22.0	Sunny	Disc #3 17:38

Asset length: 22.0 ft.  
Surveyed length: 22.0 ft.



100 ft

200 ft

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## Observation Report with Still Images

Main Asset ID: CB 2.1-3.1      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 11:57:13 AM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 2.1      Downstream Node: CB# 3.1      Main Length: 22.0

Comments:  
Pre-cleaning inspection

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
3.0		START DS	No	/		
22.0		STOP	No	/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.2-2.3	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		10	DIP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	23.0	Sunny	<i>Disc # 3 2115</i>

Assan length: 23.0 ft.  
 Surveyed length: 23.0 ft.

CB# 2.3



10.0 ft

20.0 ft

CB# 2.2

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## Observation Report with Still Images

Main Asset ID: CB 2.2-2.3	Project Name: Borough of Mantoloking-B	Inspection Date: 5/6/2010 12:47:51 PM	Weather: Sunny	Operator: Ray R.
Upstream Node: CB# 2.3	Downstream Node: CB# 2.2	Main Length: 23.0		

Comments:  
After cleaning

### Observations

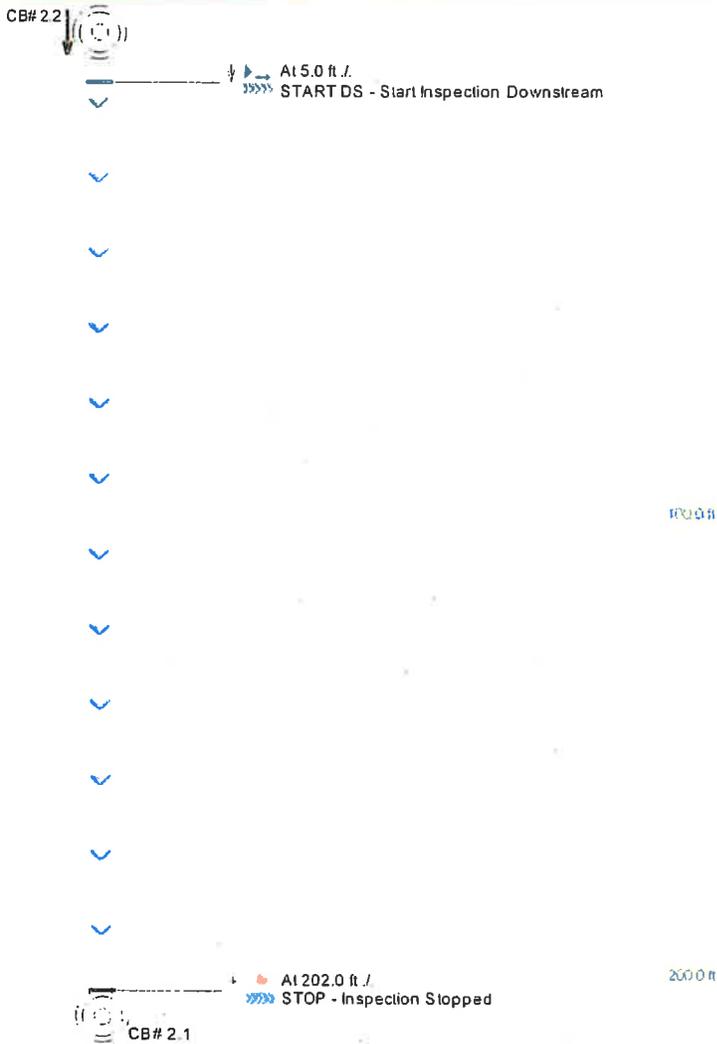
Distance	Length	Code	Reversed	Block ID	Severity	Comment	Cost
3.0		START US	Yes	/			
23.0		STOP	Yes	/			

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.2-2.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		12	ACP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	202.0	Sunny	Disc #3 23:20



Asset length: 202.0 ft.  
Surveyed length: 202.0 ft.

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## Observation Report with Still Images

Main Asset ID: CB 2.2-2.1      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 1:03:11 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 2.2      Downstream Node: CB# 2.1      Main Length: 202.0

Comments:  
 After cleaning

### Observations

Distance	Length	Code	Reversible	Code	Priority	Severity	Comments
5.0		START DS	No	/			
202.0		STOP	No	/			

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**TV Inspection with Pipe-Run Graph**

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 2.1-3.1	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		12	DIP
Direction:	Surveyed Footage:	Weather	Surface Condition:
Upstream	22.0	Sunny	Asphalt
			Tape/Media #
			Disc # 3 36:00

CB# 2.1



CB# 3.1

Asset length: 22.0 ft  
 Surveyed length: 22.0 ft

00:00

20:00

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## Observation Report with Still Images

Main Asset ID: CB 2.1-3.1      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 2:31:35 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 2.1      Downstream Node: CB# 3.1      Main Length: 22.0

Comments:  
 After cleaning

### Observations

Distance	Start/End	Stop?	Referenced	Photo	Severity	Comments
3.0	START US	Yes	/			
22.0	STOP	Yes	/			

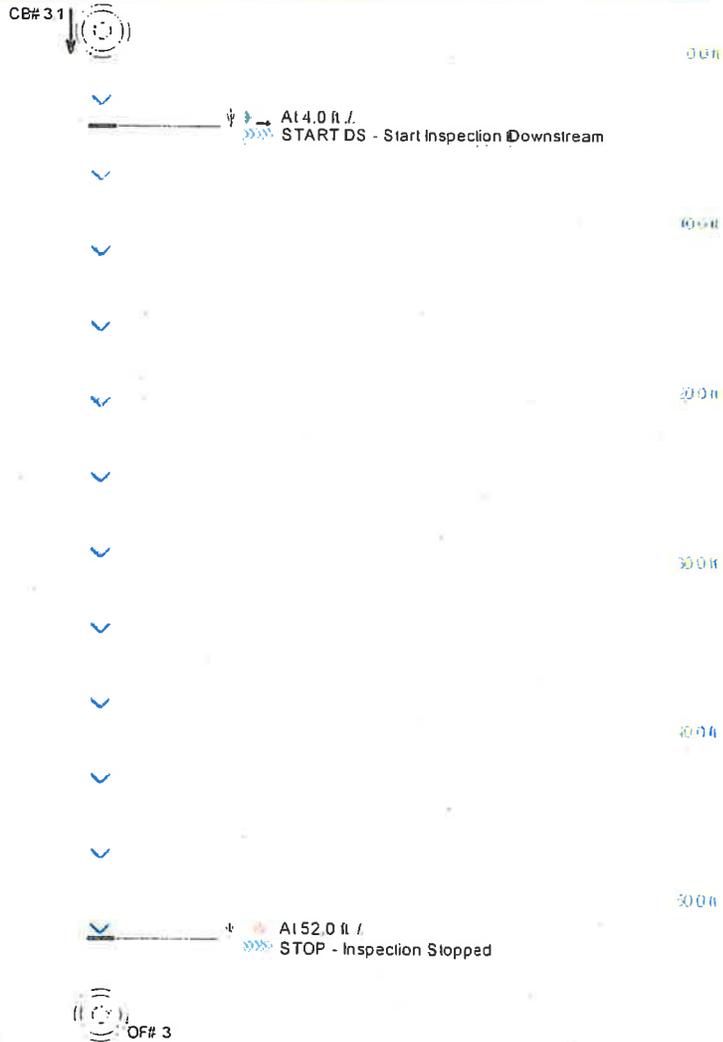
American Pipe Cleaning, LLC  
 P.O. Box 2043  
 Manalapan, New Jersey 07712  
 Phone: 732-751-0006  
 Fax: 732-751-0236



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-B	CB 3.1-OF 3	Boro of Mantoloking, NJ	Lagoon Lane - Location 13
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/6/2010		21	PVC
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	52.0	Sunny	Disc # 3 38:00

Asset Length: 65.0 ft  
Surveyed Length: 52.0 ft



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## Observation Report with Still Images

Main Asset ID: CB 3.1-OF 3      Project Name: Borough of Mantoloking-B      Inspection Date: 5/6/2010 2:38:11 PM      Weather: Sunny      Operator: Ray R.

Upstream Node: CB# 3.1      Downstream Node: OF# 3      Main Length: 55.0

Comments:

### Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
52.0		STOP	No	/		

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## Project Summary

### Borough of Mantoloking-B

Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset length	Surveyed Length
2.2-2.3	5/6/2010	Lagoon Lane - Location 13	CB# 2.2	CB# 2.3	DIP	23.0	23.0
2.2-2.1	5/6/2010	Lagoon Lane - Location 13	CB# 2.2	CB# 2.1	ACP	202.0	195.0
2.1-3.1	5/6/2010	Lagoon Lane - Location 13	CB# 2.1	CB# 3.1	DIP	22.0	22.0
2.2-2.3	5/6/2010	Lagoon Lane - Location 13	CB# 2.2	CB# 2.3	DIP	23.0	23.0
2.2-2.1	5/6/2010	Lagoon Lane - Location 13	CB# 2.2	CB# 2.1	ACP	202.0	202.0
2.1-3.1	5/6/2010	Lagoon Lane - Location 13	CB# 3.1	CB# 2.1	DIP	22.0	22.0
3.1-OF 3	5/6/2010	Lagoon Lane - Location 13	CB# 3.1	OF# 3	PVC	55.0	52.0

Number of inspections: 7

**Subtotal      549.0 ft      539.0 ft**

**Total            549.0 ft      539.0 ft**

# AMERICAN PIPE CLEANING, LLC

*Pipe Jetting & Vacuum Services • Digital TV Inspection  
Manhole & Catch Basin Cleaning • Hydro Excavation*



Borough of Mantoloking

*DVD/Video Report*

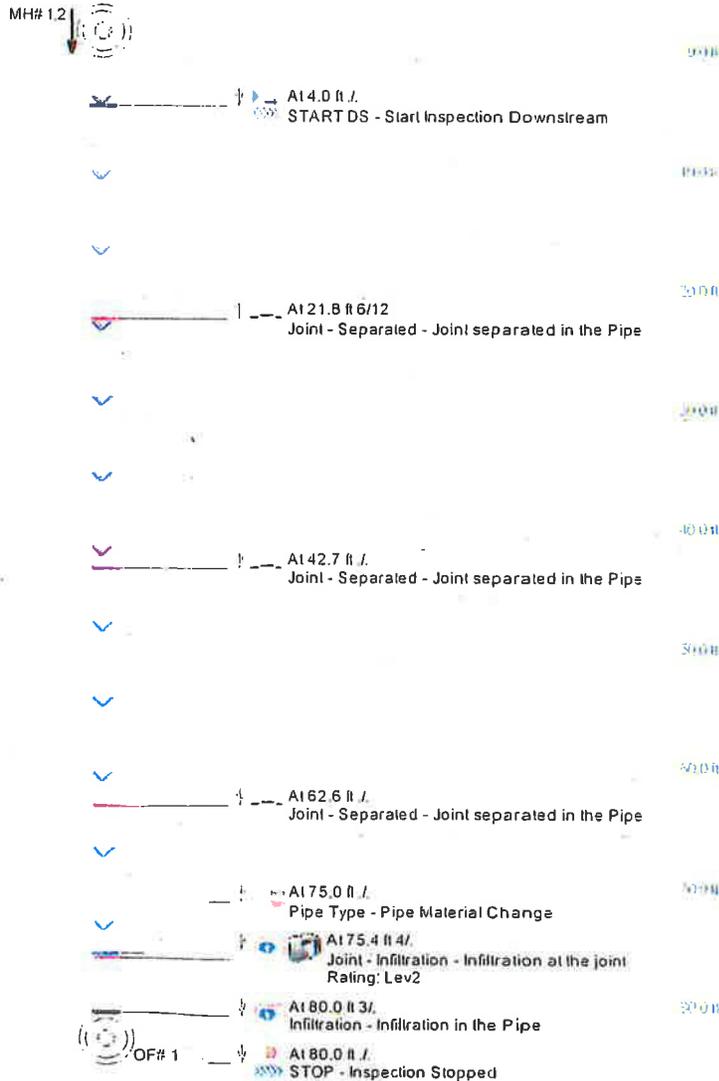
May 20th, 2010

American Pipe Cleaning, LLC  
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 Mantoloking, New Jersey 07712  
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 732-751-0236 Fax



## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-C	MH 1.2-OF 1	Boro of Mantoloking, NJ	Channel Lane - Location 14
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/19/2010		16	HDPE
			Surface Condition:
			Garden
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	80.0	Cloudy	18:35



Asset length: 80.0 ft  
Surveyed length: 80.0 ft

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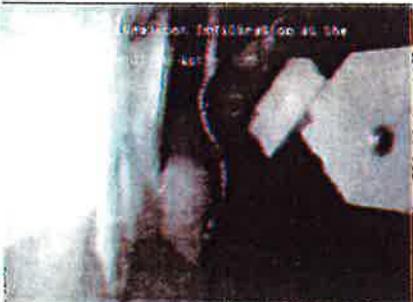


## Observation Report with Still Images

Main Asset ID: MH 1.2-OF 1	Project Name: Borough of Mantoloking-C	Inspection Date: 5/19/2010 5:03:40 PM	Weather: Cloudy	Operator: Ray R.
Upstream Node: MH# 1.2	Downstream Node: OF# 1	Main Length: 80.0		

Comments:  
After cleaning and removal of sandbags. Previous inspection incorrectly noted pipe diameter at 18 "

### Observations

Distance (ft)	Depth (ft)	Code	Reversed	Clock	Pos.	Severity	Comments
4.0		START DS	No	/			
21.8		Joint - Separated	No	6 / 12			Pipe run also bends slightly to the right
42.7		Joint - Separated	No	/			
62.6		Joint - Separated	No	/			
75.0		Pipe Type	No	/			Change to PVC
75.4		Joint - Infiltration	No	4 /	Light		Infiltration at the joint of the PVC and HDPE
							
80.0		Infiltration	No	3 /			At connection with "duckbill" / Tide-flex
80.0		STOP	No	/			

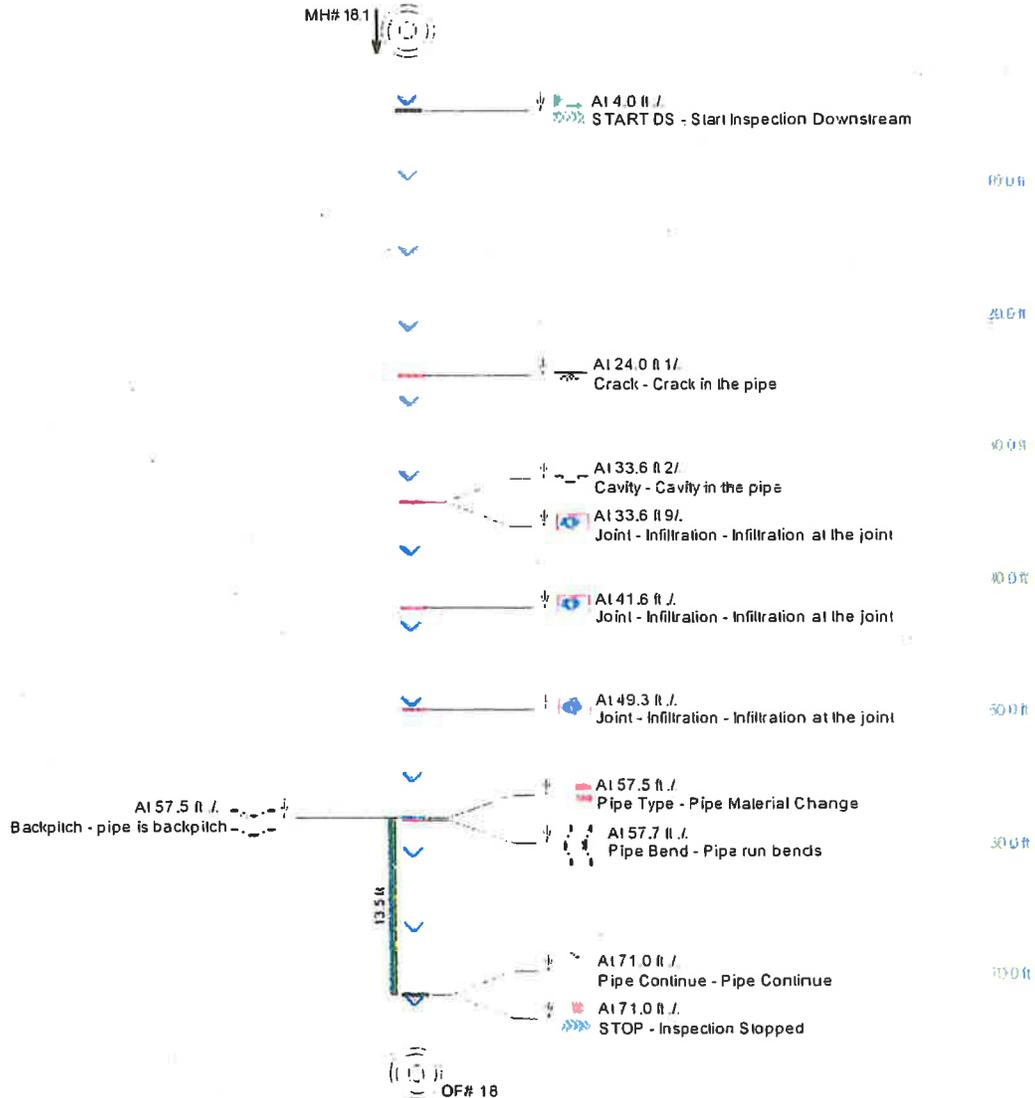
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 Mantoloking, New Jersey 07712  
 732-751-0006  
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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-C	MH 18.1-OF 18	Boro of Mantoloking, NJ	Old Bridge St. - Location 1
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/19/2010		15	RCP
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Downstream	71.0	Sunny	Disc # 6      0.00

Asset length: 75.0 ft  
Surveyed length: 71.0 ft



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## Observation Report with Still Images

Main Asset ID: MH 18.1-OF 18	Project Name: Borough of Mantoloking-C	Inspection Date: 5/19/2010 2:55:16 PM	Weather: Sunny	Operator: Ray R.
Upstream Node: MH# 18.1	Downstream Node: OF# 18	Main Length: 75.0		

Comments:  
We reached the plug at 71' then recorded in reverse until we reached 40' due to the "mist" in the line which made it hard to see

### Observations

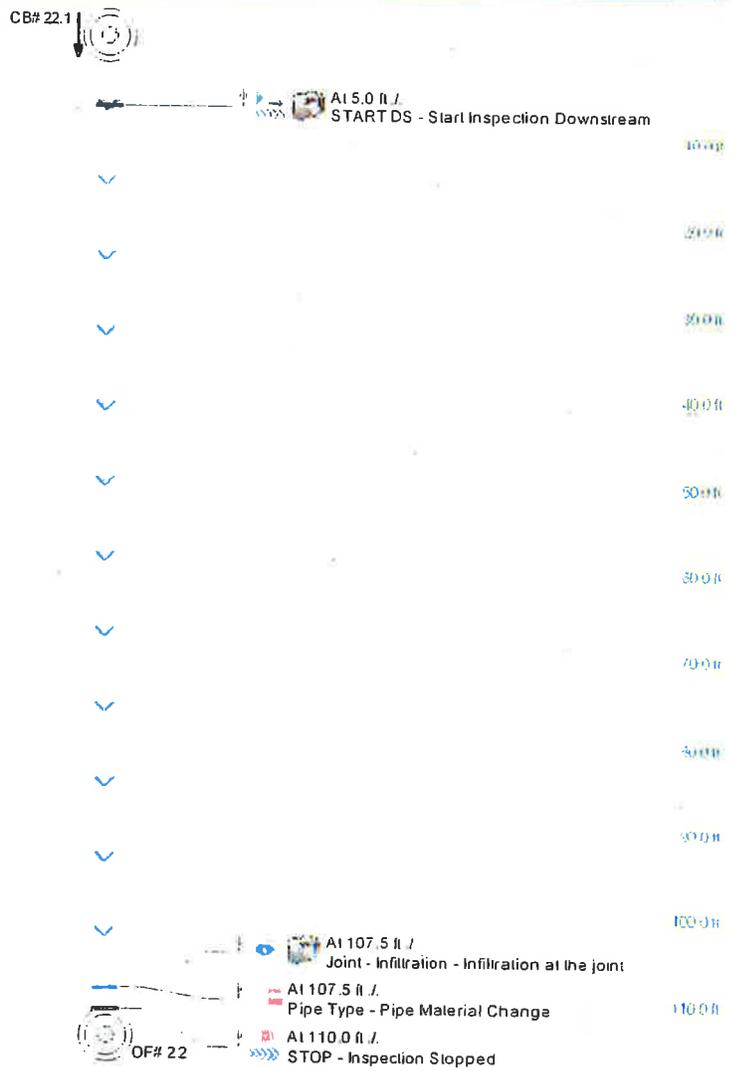
Distance	Length	Code	Reversed	Clock Pos.	Severity	Comment
4.0		START DS	No	/		
24.0		Crack	No	1 /	Longitudinal	
33.6		Cavity	No	2 /	Small	
33.6		Joint - Infiltration	No	9 /	Light	
41.6		Joint - Infiltration	No	/		
49.3		Joint - Infiltration	No	/		
57.5	13.5	Backpitch	No	/	Light	Pipe is backpitched
57.5		Pipe Type	No	/		Change to PVC- joint is separated
57.7		Pipe Bend	No	/		
71.0		Pipe Continue	No	/		Reached plug that was installed for inspection
71.0		STOP	No	/		Recorded in reverse until 40'

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## TV Inspection with Pipe-Run Graph

Project Name:		Asset ID:		City:		Address:	
Borough of Mantoloking-C		CB 22.1-OF 22		Boro of Mantoloking, NJ		Bay Avenue - Location 4	
Date	Pipe Width:	Pipe Height:	Pipe Type:	Surface Condition:			
5/17/2010	18	18	VCP	Asphalt			
Direction:	Surveyed Footage:		Weather	Tape/Media #			
Downstream	110.0		Sunny	Disc # 1			



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## Observation Report with Still Images

Main Asset ID: CB 22.1-OF 22	Project Name: Borough of Mantoloking-C	Inspection Date: 5/17/2010 11:05:33 AM	Weather: Sunny	Operator: Ray R.
Upstream Node: CB# 22.1	Downstream Node: OF# 22	Main Length: 110.0		

Comments:  
 Camera goes under water at 50 lf approx and emerges at 93 lf

### Observations

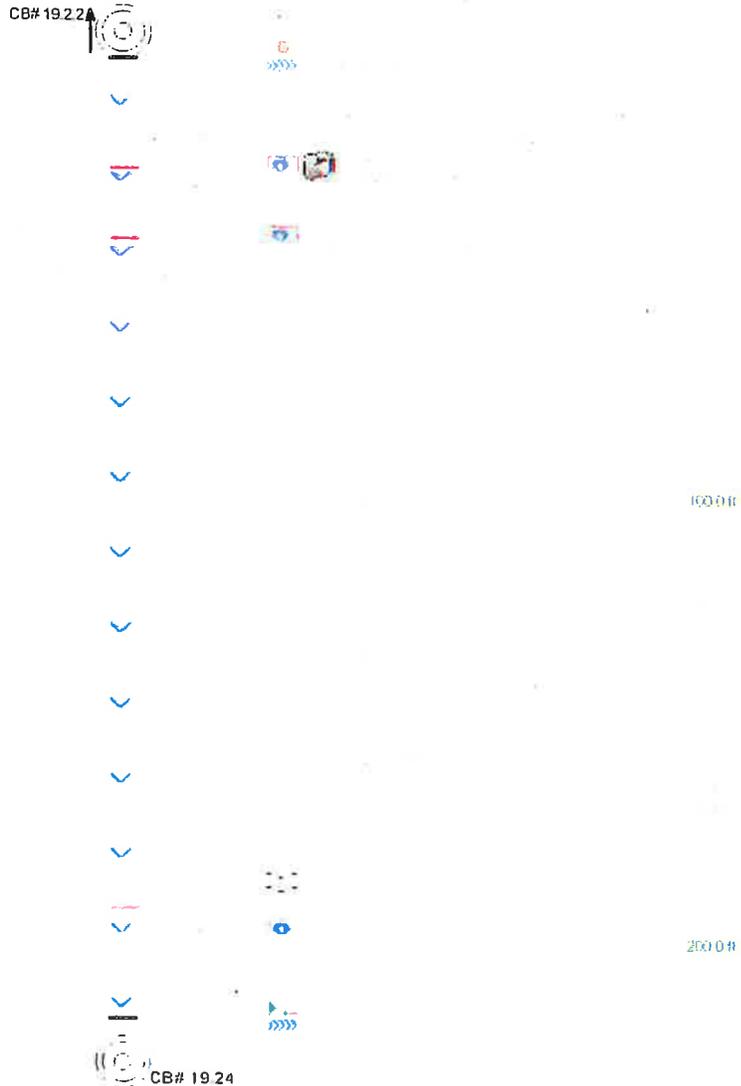
Distance	Length	Code	Reversed	Clock	Flgs	Severity	Comment
5.0		START DS	No		/		
							
107.5		Joint - Infiltration	No		/	Medium	Infiltration at joint with HDPE
							
107.5		Pipe Type	No		/		Changes to HDPE
110.0		STOP	No		/		

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## TV Inspection with Pipe-Run Graph

Project Name:	Asset ID:	City:	Address:
Borough of Mantoloking-C	CB 19.24-19.2.2	Boro of Mantoloking, NJ	Bay Ave. - Location 2
Date	Pipe Width:	Pipe Height:	Pipe Type:
5/7/2010		10	PVC
			Surface Condition:
			Asphalt
Direction:	Surveyed Footage:	Weather	Tape/Media #
Upstream	219.0	Sunny	<i>Disc # 4</i>



Asset length: 219.0 ft.  
Surveyed length: 219.0 ft.

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732-751-0236 Fax

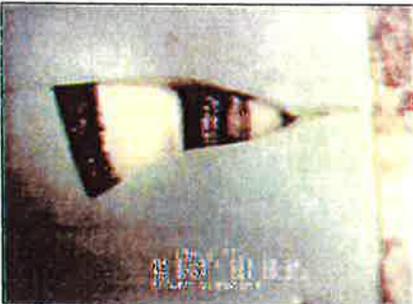


## Observation Report with Still Images

Main Asset ID: CB 19.24-19.2.2	Project Name: Borough of Mantoloking-C	Inspection Date: 5/7/2010 1:09:04 PM	Weather: Sunny	Operator: Ray R.
Upstream Node: CB# 19.2.2	Downstream Node: CB# 19.24	Main Length: 219.0		

Comments:  
After cleaning- the upstream basin has no bottom with groundwater coming in

### Observations

Distance	Length	Code	Reversed	Clock Pos	Severity	Comment
4.0		START US	Yes	/		
28.8		Joint - Infiltration	Yes	/	Light	Crack at 9 o'clock
29.1		Sag	Yes	/		Also pipe run starts bend to the left at the joint
178.9		Joint - Infiltration	Yes	/		
194.6	0.0	Infiltration	Yes	1 /		Crack with inftration at the joint
						
219.0		STOP	Yes	/		

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## Project Summary

### Borough of Mantoloking-C

Main ID	Date	Address	Start MH	Finish MH	Pipe	Asset Length Surveyed	Length
19.24-19.2.2	5/7/2010	Bay Ave. - Location 2	CB# 19.24	CB# 19.2.2	PVC	219.0	219.0
22.1-OF 22	5/17/2010	Bay Avenue - Location 4	CB# 22.1	OF# 22	VCP	110.0	110.0
18.1-OF 18	5/19/2010	Old Bridge St. - Location 1	MH# 18.1	OF# 18	RCP	75.0	71.0
1.2-OF 1	5/19/2010	Channel Lane - Location 14	MH# 1.2	OF# 1	HDPE	80.0	80.0
<b>Number of inspections:</b> 4						<b>Subtotal</b>	<b>484.0 ft</b>
						<b>Total</b>	<b>480.0 ft</b>

**BOROUGH OF MANTOLOKING**

**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**APPENDIX C – ILLICIT CONNECTION INSPECTION REPORT FORM**

# Illicit Connection Inspection Report Form

Municipality  
Information

Municipality: \_\_\_\_\_ County \_\_\_\_\_

NJPDES # : \_\_\_\_\_ PI ID #: \_\_\_\_\_

Team Member: \_\_\_\_\_

Date \_\_\_\_\_ Effective Date of Permit Authorization (EDPA): \_\_\_\_\_

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: Oil
- (b) COLOR: Yellow
- (c) TURBIDITY: Cloudy
- (d) FLOATABLES: Petroleum
- (e) DEPOSITS/STAINS: Sediment
- (f) VEGETATION CONDITIONS: Excessive Growth
- (g) DAMAGE TO OUTFALL STRUCTURES:

IDENTIFY STRUCTURE: \_\_\_\_\_

DAMAGE: Metal Corrosion

## 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:** 112

(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 wastewater source.)

(c) **FLUORIDE:** 123 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? 12

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. asdfsdfasdf \_\_\_\_\_

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.

**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**APPENDIX D – PERMIT COPIES**



## State of New Jersey

CHRIS CHRISTIE  
*Governor*

KIM GUADAGNO  
*Lt. Governor*

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Mail Code - 401-02B  
Water Pollution Management Element  
Bureau of Nonpoint Pollution Control  
P.O. Box 420 – 401 E. State St.  
Trenton, NJ 08625-0420  
Tel: (609) 633-7021 / Fax: (609) 777-0432  
[http://www.state.nj.us/dep/dwq/bnpc\\_home.htm](http://www.state.nj.us/dep/dwq/bnpc_home.htm)

BOB MARTIN  
*Commissioner*

December 8, 2017

**SENT VIA EMAIL** to: [larry.plevier@mottmac.com](mailto:larry.plevier@mottmac.com)

Larry Plevier  
MANTOLOKING BORO  
PO BOX 247 - 202 DOWNER AVE  
MANTOLOKING, NJ 08738-0247

Re: Stormwater Discharge General Permit Authorization Renewal  
Category: R9 -Tier A Municipal Stormwater General Permit  
NJPDES: NJG0153281 / PI ID #: 203290  
MANTOLOKING BORO  
Mantoloking Boro, Ocean County

Dear Stormwater Program Coordinator:

Enclosed is New Jersey Pollutant Discharge Elimination System (NJPDES) Authorization to Discharge No. NJG0153281 (Category R9 -Tier A Municipal Stormwater General Permit) issued under the authority of Stormwater NJPDES Master General Permit No. NJ0141852 (Tier A Permit).

The permit and associated documents are posted at [http://www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm), where you can find a copy of the Tier A Permit, and a Response to Comments document, which includes a summary of the significant and relevant comments received during the Tier A Permit public comment period, the Department's responses, and an explanation of any changes from the draft action. In addition, you can also find a crosswalk which provides a detailed comparison of changes from 2009 to this 2017 permit, and a Frequently Asked Questions document. These documents will be useful in understanding your renewed Authorization.

If you have any questions or comments regarding the above referenced action, please contact Anthony Washington by telephone at 609-633-7021.

Sincerely,

James J. Murphy, Chief  
Bureau of Nonpoint Pollution Control

C: Water Compliance and Enforcement Regional Office



Mail Code - 401-02B  
Bureau of Nonpoint Pollution Control  
Water Pollution Management Element  
PO Box 420  
Trenton, NJ 08625-0420  
Phone: (609) 633-7021  
Fax: (609) 777-0432

**AUTHORIZATION TO DISCHARGE**  
**R9 -Tier A Municipal Stormwater General Permit**

**Facility Name:** MANTOLOKING BORO

**Permit Number:** NJG0153281

**Program Interest No.:** 203290

**Facility Address:**  
202 DOWNER AVE  
MANTOLOKING, NJ 08738-0247

**Type of Activity:** Stormwater Discharge General Permit Authorization Renewal

**Owner:**  
MANTOLOKING BORO  
PO BOX 247 - 202 DOWNER AVE  
MANTOLOKING, NJ 08738-0247

**Operating Entity:**  
MANTOLOKING BORO  
PO BOX 247 - 202 DOWNER AVE  
MANTOLOKING, NJ 08738-0247

**Issuance Date:**  
12/08/2017

**Effective Date:**  
01/01/2018

**Expiration Date:**  
12/31/2022

Your Request for Authorization under NJPDES General Permit No. NJ0141852 has been approved by the New Jersey Department of Environmental Protection.

**Date:** 12/08/2017

**James J. Murphy, Chief**  
Bureau of Nonpoint Pollution Control

(Terms, conditions and provisions attached hereto)

**Division of Water Quality**

## PART I GENERAL REQUIREMENTS: NJPDES

### A. General Requirements of all NJPDES Permits

#### 1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
- |   |                                     |
|---|-------------------------------------|
| Penalties for Violations                            | N.J.A.C. 7:14-8.1 <u>et seq.</u>    |
| Incorporation by Reference                          | N.J.A.C. 7:14A-2.3                  |
| Toxic Pollutants                                    | N.J.A.C. 7:14A-6.2(a)4i             |
| Duty to Comply                                      | N.J.A.C. 7:14A-6.2(a)1 & 4          |
| Duty to Mitigate                                    | N.J.A.C. 7:14A-6.2(a)5 & 11         |
| Inspection and Entry                                | N.J.A.C. 7:14A-2.11(e)              |
| Enforcement Action                                  | N.J.A.C. 7:14A-2.9                  |
| Duty to Reapply                                     | N.J.A.C. 7:14A-4.2(e)3              |
| Signatory Requirements for Applications and Reports | N.J.A.C. 7:14A-4.9                  |
| Effect of Permit/Other Laws                         | N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c) |
| Severability  | N.J.A.C. 7:14A-2.2                  |
| Administrative Continuation of Permits              | N.J.A.C. 7:14A-2.8                  |
| Permit Actions                                      | N.J.A.C. 7:14A-2.7(c)               |
| Reopener Clause                                     | N.J.A.C. 7:14A-6.2(a)10             |
| Permit Duration and Renewal                         | N.J.A.C. 7:14A-2.7(a) & (b)         |
| Consolidation of Permit Process                     | N.J.A.C. 7:14A-15.5                 |
| Confidentiality                                     | N.J.A.C. 7:14A-18.2 & 2.11(g)       |
| Fee Schedule  | N.J.A.C. 7:14A-3.1                  |
| Treatment Works Approval                            | N.J.A.C. 7:14A-22 & 23              |
- c. Operation And Maintenance
- |                                      |                       |
|--------------------------------------|-----------------------|
| Need to Halt or Reduce not a Defense | N.J.A.C. 7:14A-2.9(b) |
| Proper Operation and Maintenance     | N.J.A.C. 7:14A-6.12   |
- d. Monitoring And Records
- |   |                    |
|---|--------------------|
| Monitoring                                    | N.J.A.C. 7:14A-6.5 |
| Recordkeeping                                 | N.J.A.C. 7:14A-6.6 |
| Signatory Requirements for Monitoring Reports | N.J.A.C. 7:14A-6.9 |
- e. Reporting Requirements
- |   |                                       |
|---|---------------------------------------|
| Planned Changes                               | N.J.A.C. 7:14A-6.7                    |
| Reporting of Monitoring Results               | N.J.A.C. 7:14A-6.8                    |
| Noncompliance Reporting                       | N.J.A.C. 7:14A-6.10 & 6.8(h)          |
| Hotline/Two Hour & Twenty-four Hour Reporting | N.J.A.C. 7:14A-6.10(c) & (d)          |
| Written Reporting                             | N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h) |
| Duty to Provide Information                   | N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1  |
| Schedules of Compliance                       | N.J.A.C. 7:14A-6.4                    |
| Transfer                                      | N.J.A.C. 7:14A-6.2(a)8 & 16.2         |

## PART II

# GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

### A. Additional Requirements Incorporated By Reference

- a. The Stormwater Management rules at N.J.A.C. 7:8.
- b. Conditions for General Permits at N.J.A.C. 7:14A-6.13, including the Department's authority to require, for due cause, a Tier A Municipality to apply for and obtain a different stormwater permit for specific activities otherwise authorized under this permit.
- c. Additional Conditions applicable to UIC permits at N.J.A.C. 7:14A-8.9, UIC Corrective Action (N.J.A.C. 7:14A-8.11) and UIC Operating Criteria (N.J.A.C. 7:14A-8.16).
- d. Conditions for reopening and modification of small MS4 permits at N.J.A.C. 7:14A-16.4(b) and N.J.A.C. 7:14A-25.7(b).
- e. Requirements for Discharges to Ground Water at N.J.A.C. 7:14A-7.
- f. National Pollutant Discharge Elimination System (NPDES) Electronic Reporting rule at 40 CFR Part 127.

### B. General Conditions

#### 1. Notification of Non-Compliance

- a. The Tier A Municipality shall notify the Department of any non-compliance when required by N.J.A.C. 7:14A-6.10 by contacting the DEP Hotline at 1-877-WARN-DEP.

#### 2. Discharge of Pollutants

- a. For discharges authorized by this permit, the Tier A Municipality is exempt from N.J.A.C. 7:14A-6.2(a)2. This exemption means that the discharge of any pollutant not specifically regulated in this NJPDES permit or listed and quantified in the RFA shall not constitute a violation of the permit.

#### 3. Standard Reporting Requirements – Electronic Reporting of NJPDES Information

- a. Unless already required by this permit to be submitted electronically by an earlier date, effective December 21, 2020, the below identified documents and reports shall be electronically submitted via the Department's designated electronic submission service:
  - i. General permit authorization requests (i.e. RFAs);
  - ii. General permit termination/revocation requests; and
  - iii. Municipal separate storm sewer system (MS4) program reports (see Part IV.G).

#### 4. Other Regulatory Requirements

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. The issuance of this permit shall not be considered as a waiver of any applicable federal, State or local rules, regulations and ordinances.
- c. In accordance with N.J.A.C. 7:14A-6.2(a)7, this permit does not authorize any infringement of State or local law or regulations, including, but not limited to, N.J.A.C. 7:50 (the Pinelands rules), N.J.A.C. 7:1-E (Discharges of Petroleum and other Hazardous Substances), regulations concerning threatened and endangered species and their designated critical habitat, and other Department rules. No discharge of hazardous substances (as defined in N.J.A.C. 7:1E-1.6) resulting from an onsite spill shall be deemed to be “pursuant to and in compliance with this permit” within the meaning of the Spill Compensation and Control Act at N.J.S.A. 58:10-23.11c.
- d. While the Tier A Municipality is required to comply with applicable operation and maintenance requirements of N.J.A.C. 7:14A-6.12(a), the Tier A Municipality is exempt from the operations and maintenance manual requirements of N.J.A.C. 7:14A-6.12(c). This exemption applies only to discharges authorized under this permit and does not alter the operation and maintenance requirements for municipally or privately owned stormwater facilities specified in this permit or N.J.A.C. 7:8.

## **C. Eligibility**

### **1. Permit Scope**

- a. The Tier A MS4 NJPDES Permit applies to all areas of New Jersey as follows:
  - i. This permit applies to all municipalities assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1. Tier A Municipalities are generally located within the more densely populated regions of the state or along or near the Atlantic coast.
  - ii. On a case-by-case basis, the Department may use this permit to regulate municipalities assigned to Tier B under N.J.A.C. 7:14A-25.3(a). As used in this permit, the term “Tier A Municipality” includes Tier B Municipalities that seek or obtain authorization under this provision of this permit.
- b. This permit applies to the owner or operator of the Municipal Separate Storm Sewer System (MS4) meaning the Tier A Municipality. The owner or operator is responsible for ensuring compliance with this permit.
- c. The short title of this permit is the “Tier A MS4 NJPDES permit.”

### **2. Authorized Discharges Under the Tier A MS4 NJPDES Permit**

- a. Eligible Stormwater Discharges – Except as provided in Part II.C.3 below, this permit authorizes all new and existing stormwater discharges to surface water and groundwater from:
  - i. Small MS4s (as defined at N.J.A.C. 7:14A-1.2) owned or operated by Tier A Municipalities; and
  - ii. Municipal maintenance yards and other ancillary operations (see Part IV.B.5.c) owned or operated by Tier A Municipalities.

- b. Eligible Non-Stormwater Discharges – Except as identified in Part II.C.3.e below, the following new and existing non-stormwater discharges from small MS4s owned or operated by Tier A Municipalities and from Municipal maintenance yards and other ancillary operations (see Part IV.B.5.c) owned or operated by Tier A Municipalities are eligible for authorization under this permit:
- i. Potable water line flushing and discharges from potable water sources, excluding the discharge of filter backwash and first flush water from potable well development/redevelopment activities utilizing chemicals in accordance with N.J.A.C. 7:9D. The volume of first flush water, which is a minimum of three times the volume of the well water column, shall be handled and disposed of properly;
  - ii. Uncontaminated ground water (e.g. infiltration, crawl space or basement sump pumps, foundation or footing drains, rising ground waters);
  - iii. Air conditioning condensate (excluding contact and non-contact cooling water; and industrial refrigerant condensate);
  - iv. Irrigation water (including landscape and lawn watering runoff);
  - v. Flows from springs, riparian habitats, wetlands, water reservoir discharges and diverted stream flows;
  - vi. Residential car washing water; and dechlorinated swimming pool discharges from single family residential homes;
  - vii. Sidewalk, driveway and street wash water;
  - viii. Flows from firefighting activities including the washing of fire fighting vehicles;
  - ix. Flows from clean water rinsing of beach maintenance equipment immediately following use and only if the equipment is used for its intended purpose;
  - x. Flows from clean water rinsing of equipment and vehicles used in the application of salt and de-icing materials. Prior to rinsing, all equipment shall be cleaned using dry methods such as shoveling and sweeping. Recovered materials are to be returned to storage or properly discarded; and
  - xi. Rinsing of equipment in Part II.C.2.b.ix and x, above is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.

### 3. Discharges Not Authorized Under the Tier A MS4 NJPDES Permit

- a. Stormwater Discharges Associated with Industrial Activity
- i. The Tier A MS4 NJPDES Permit does not authorize “stormwater discharge associated with industrial activity” as defined in N.J.A.C. 7:14A-1.2 except as otherwise specifically provided in this permit.
  - ii. Types of facilities that a Tier A Municipality might operate and that are considered to be engaging in “industrial activity” include but are not limited to certain: 1) landfills; 2) transportation facilities (including certain local passenger transit and air transportation facilities); 3) facilities handling domestic sewage or sewage sludge; and 4) steam electric power generating facilities.

- iii. Any municipality that operates an industrial facility with such a discharge must submit a separate Request for Authorization (RFA) or individual permit application for that discharge (see [www.nj.gov/dep/dwq/forms\\_storm.htm](http://www.nj.gov/dep/dwq/forms_storm.htm)). An RFA submitted for the Tier A MS4 NJPDES Permit does not qualify as an RFA for such a discharge.
  - iv. Yard Trimmings and Wood Waste Management Sites that are not owned and operated by the Tier A Municipality.
- b. Stormwater Discharges Associated with Construction Activity
- i. The Tier A MS4 NJPDES Permit does not authorize “stormwater discharges associated with construction activity” as described in N.J.A.C. 7:14A-24.10(a). In general, this is the discharge to surface water of stormwater from construction activity that disturbs at least one acre.
  - ii. Any municipality that operates a construction site with such a discharge shall submit a separate RFA under NJPDES Permit No. NJ0088323 (General Stormwater Permit Construction Activity, see [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm)), or an application for an individual permit for that discharge. An RFA submitted for the Tier A MS4 NJPDES Permit does not qualify as an RFA for such a discharge. See Part IV.B.3 of the Tier A MS4 NJPDES Permit.
- c. Stormwater Discharges Authorized under Another NJPDES Permit
- i. The Tier A MS4 NJPDES Permit does not authorize any stormwater discharge that is authorized under another NJPDES permit.
  - ii. A Tier A Municipality does not have to implement measures contained in this NJPDES permit for stormwater discharges at facilities owned or operated by that municipality that are regulated under a separate NJPDES stormwater permit authorizing those discharges.
- d. Stormwater Discharges that Conflict with a Water Quality Management Plan
- i. The Tier A MS4 NJPDES Permit does not authorize stormwater discharges from projects or activities that conflict with an adopted Areawide or Statewide Water Quality Management Plan.
- e. Non-Stormwater Discharges that are Contributors of Pollutants
- i. If any of the discharges listed in Part II.C.2.b above are identified by the Tier A Municipality as a significant contributor of pollutants to or from the MS4, the Tier A Municipality must address the discharge as an illicit connection or as an improper disposal of waste as specified in Part IV.B.6 of this permit.

## **D. Administrative Process**

### **1. Automatic Renewal of Authorizations**

- a. Upon reissuance of this general permit, existing authorizations shall be automatically renewed as provided by N.J.A.C. 7:14A-6.13(d)9 and 25.4(a)3 using the information provided in the permittees’ most recently submitted RFA.

### **2. Notification of Changes**

- a. A Tier A Municipality shall provide a corrected RFA to the Department within 90 days of the effective date of a renewed authorization under this general permit if any information in its most recently submitted RFA is no longer true, accurate, and/or complete.
- b. The Tier A Municipality shall notify the Department of any changes of its Municipal Stormwater Program Coordinator information using [www.nj.gov/dep/dwq/pdf/msrp\\_update\\_form.pdf](http://www.nj.gov/dep/dwq/pdf/msrp_update_form.pdf)

- c. A Tier A Municipality that already has authorization to discharge from a small MS4 under the Tier A permit does not need to submit an RFA for the expansion (e.g. new residential development) of an existing small MS4.

**3. Requests for Authorization (RFA, see [www.nj.gov/dep/dwq/forms\\_storm.htm](http://www.nj.gov/dep/dwq/forms_storm.htm))**

- a. New RFAs under the Tier A MS4 permit
  - i. A single RFA is required for the entire eligible discharge from the small MS4 owned or operated by and located within a single municipality. Multiple RFAs are not required for multiple municipal operations (e.g., municipally owned and operated maintenance yards or other ancillary operations, facilities, garages, and/or offices).
  - ii. An RFA shall include at a minimum: the name and address of the municipality; the name and address of the Municipal Stormwater Program Coordinator; a certification acknowledging the best management practices and measurable goals specified in the permit; and any other information as required by the Department.
- b. Upon receipt of an RFA the Department may, in accordance with N.J.A.C. 7:14A-6.13, do one of the following:
  - i. Issue notification of authorization under this permit;
  - ii. Deny authorization under this permit and require submittal of an application for an individual permit; or
  - iii. Deny authorization under this permit and require submittal of an RFA for another general permit.
- c. Reassignment of Municipality to Tier A
  - i. If a municipality receives notice from the Department (pursuant to N.J.A.C. 7:14A-25.3(a)(3)) that it has been reassigned from Tier B to Tier A (pursuant to N.J.A.C. 7:14A-25.3(a)(1) and (2)), the deadline to submit an RFA is 180 days after the receipt of that notice, unless the Department approves a later date.

## **PART III**

### **Recordkeeping and Reporting**

The Tier A Municipality shall keep records necessary to document, in the Annual Report and Certification, the status of compliance with the conditions of this permit. The requirement to keep records and to submit an Annual Report and Certification is found at Part IV.G of this permit.

## PART IV

# SPECIFIC REQUIREMENTS: NARRATIVE

### Notes and Definitions

#### A. Footnotes

##### 1. Acronyms

- a. Stormwater acronyms included in this permit are as follows:
  - i. "BMP" - Best Management Practice
  - ii. "CFR" - Code of Federal Regulations
  - iii. "EDPA" - Effective Date of Permit Authorization
  - iv. "MS4" - Municipal Separate Storm Sewer System
  - v. "MSWMP" - Municipal Stormwater Management Plan
  - vi. "MSRP" - Municipal Stormwater Regulation Program
  - vii. "MTD" - Manufactured Treatment Device
  - viii. "N.J.A.C." - New Jersey Administrative Code
  - ix. "NJPDES" - New Jersey Pollutant Discharge Elimination System
  - x. "N.J.S.A." - New Jersey Statutes Annotated
  - xi. "RSIS" - Residential Site Improvement Standards
  - xii. "SPPP" - Stormwater Pollution Prevention Plan
  - xiii. "TMDL" - Total Maximum Daily Load

##### 2. Internal Cross References

- a. For the purposes of this permit:
  - i. References to Part IV Notes and Definitions are preceded with the words "Notes and Definitions" (e.g. Notes and Definitions Part IV.A.1 refers to Acronyms).
  - ii. References to Part IV Tier A MS4 NJPDES Permit are not preceded by descriptive text (e.g. Part IV.A.1 refers to Overview of the Tier A MS4 NJPDES Permit).

##### 3. Department Resources for Guidance Relating to MS4 Issues

- a. MS4 main website and related links: [www.nj.gov/dep/dwq/msrp\\_home.htm](http://www.nj.gov/dep/dwq/msrp_home.htm)
- b. MS4 Tier A Guidance document: [www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)

## Notes and Definitions

- c. Construction Site Stormwater Runoff: [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm)
- d. Snow Removal and Disposal Policy: [www.nj.gov/dep/dwq/bnpc\\_home.htm](http://www.nj.gov/dep/dwq/bnpc_home.htm)
- e. Green Infrastructure and related links: [www.nj.gov/dep/gi/](http://www.nj.gov/dep/gi/)
- f. Stormwater management information and training tools: [www.nj.gov/dep/stormwater/](http://www.nj.gov/dep/stormwater/)
- g. Public education for stormwater pollution: [www.cleanwaternj.org](http://www.cleanwaternj.org)
- h. Clean Communities, a statewide litter abatement program: [www.njclean.org](http://www.njclean.org)
- i. Total Maximum Daily Load (TMDL) information: [www.nj.gov/dep/dwq/msrp-tmdl-rh.htm](http://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm)

### 4. EPA Resources for Guidance Relating to MS4 Issues

- a. EPA's MS4 website and related links:  
[www.epa.gov/npdes/stormwater-discharges-municipal-sources](http://www.epa.gov/npdes/stormwater-discharges-municipal-sources)
- b. EPA's National Menu of Stormwater Best Management Practices:  
[www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater](http://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater)
- c. EPA's guidance for Green Infrastructure:  
<http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>
- d. Guidance from EPA Region 3 for municipalities that wish to improve their municipal stormwater programs: [www.epa.gov/npdes/pubs/region3\\_factsheet\\_swmp.pdf](http://www.epa.gov/npdes/pubs/region3_factsheet_swmp.pdf)
- e. EPA's Trash Free Waters resource page: [www.epa.gov/trash-free-waters](http://www.epa.gov/trash-free-waters)
- f. Illicit Discharge Detection and Elimination Guidance  
[www3.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](http://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)

## B. Definitions

### 1. Definitions

- a. All words and terms used in this permit shall have meanings as defined in the "Regulations Concerning the New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A), unless otherwise stated or unless the context clearly requires a different meaning.
- b. "Catch Basin" means a cistern, vault, chamber or well that is usually built along a street as part of the storm sewer system to capture sediment, debris, and pollutants.
- c. "Effective Date of Permit Authorization" means the date the permittee's authorization to discharge under this Tier A MS4 NJPDES permit becomes effective. This date may be found on the permittee's Authorization to Discharge.
- d. "Existing permittee" means a municipality that held an authorization to discharge under the Tier A MS4 NJPDES permit on or before December 31, 2017.
- e. "Green infrastructure" means methods of stormwater management that reduce wet weather/stormwater volume, flow, or changes the characteristics of the flow into combined or separate sanitary or storm sewers, or surface waters, by allowing the stormwater to infiltrate, to be treated by vegetation or by soils, or to be stored for reuse. Green infrastructure includes, but is not limited to, pervious paving, bioretention basins, vegetated swales, and cisterns.

- f. "Illicit connection" means any physical or non-physical (i.e. leak, flow, or overflow into the municipal separate storm sewer system) connection that discharges the following to a municipal separate storm sewer system (unless that discharge is authorized under a NJPDES permit other than this Tier A MS4 NJPDES permit);
  - i. Domestic sewage;
  - ii. Non-contact cooling water, process wastewater, or other industrial waste (other than stormwater);  
or
  - iii. Any category of non-stormwater discharges that a permittee for the MS4 identifies as a source or significant contributor of pollutants pursuant to 40 C.F.R. 122.34(b)(3)(iii).
- g. "Maintenance plan" means a maintenance plan pursuant to N.J.A.C. 7:8-5.2(b) and 5.8 prepared by the design engineer for the stormwater management measures incorporated into the design of a major development.
- h. "Major development" means any development that provides for ultimately disturbing one or more acres of land and any additional development defined as "major development" by a municipality's stormwater control ordinance. Disturbance is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Projects undertaken by any government agency which 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-1et seq., are also considered "major development."
- i. "Manufactured treatment device" means a pre-fabricated stormwater treatment structure utilizing settling, filtration, absorptive/adsorptive materials, vortex separation, vegetative components, and/or other appropriate technology to remove pollutants from stormwater runoff.
- j. "Municipal separate storm sewer" means a municipal separate storm sewer as defined in N.J.A.C. 7:14A-1.2.
- k. "Municipality" means a municipality as defined in the Municipal Land Use Law at N.J.S.A. 40:55D-5, that is, any city, borough, town, township, or village.
- l. "New permittee" means a municipality that obtains its first authorization to discharge under the Tier A MS4 NJPDES permit on or after January 1, 2018.
- m. "Permanent structure" means a permanent building or permanent structure that is anchored to a permanent foundation with an impermeable floor, and that is completely roofed and walled (a door is recommended, but not required). A fabric frame structure is a permanent structure if it meets the following specifications:
  - i. Concrete blocks, jersey barriers or other similar material shall be placed around the interior of the structure to protect the side walls during loading and unloading of de-icing materials;
  - ii. The design shall prevent stormwater run-on and run through and the fabric cannot leak;
  - iii. The structure shall be erected on an impermeable slab;
  - iv. The structure cannot be open sided; and
  - v. The structure shall have a roll up door or other means of sealing the access way from wind driven rainfall.

- n. "Small MS4" means all municipal separate storm sewers (other than "large" or "medium" municipal separate storm sewer systems as defined in N.J.A.C. 7:14A-1.2) that are:
- i. Owned or operated by municipalities described under N.J.A.C. 7:14A-25.1(b);
  - ii. Owned or operated by county, State, interstate, or Federal agencies, and located at public complexes as described under N.J.A.C. 7:14A-25.2(a)2;
  - iii. Owned or operated by county, State, interstate, or Federal agencies, and located at highways and other thoroughfares as described under N.J.A.C. 7:14A-25.2(a)3; or
  - iv. Owned or operated by county, State, interstate, Federal, or other agencies, and receive special designation under N.J.A.C. 7:14A-25.2(a)4.
  - v. Note that all MS4s covered under the Tier A MS4 NJPDES permit are "small MS4s".
- o. "Solids and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids as defined at N.J.A.C. 7:14A-25.6(b)3iii.
- p. "Storm drain inlet" means the point of entry into the storm drain system and is, where a catch basin is present, the uppermost portion (or cover) of a catch basin.
- q. "Stormwater" means 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.
- r. "Stormwater facility" includes, but is not limited to: catch basins, detention basins, retention basins, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses, and stormwater conveyances. Stormwater facilities include structural stormwater management measures.
- s. "Stormwater management basin" means an excavation or embankment and related areas designed to retain stormwater runoff. A stormwater management basin may either be normally dry (that is, a detention basin or infiltration basin), retain water in a permanent pool (a retention basin or wet pond), or be planted mainly with wetland vegetation (most constructed stormwater wetlands).
- t. "Stormwater management measure" means any structural or nonstructural strategy, 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 management measures include stormwater facilities.
- u. "Stream scouring" means the erosion or removal of streambed or bank material by the physical action of flowing water and the sediment that it carries.
- v. "Subsurface infiltration/detention system" means a vault, perforated pipe, and/or stone bed that is located entirely below the ground surface and that temporarily stores and attenuates stormwater runoff."
- w. "Tier A Municipality's MS4" means an MS4 owned and operated by a Tier A Municipality.
- x. "Wood waste" means source separated whole trees, tree trunks, tree parts, tree stumps, brush and leaves provided that they are not composted, and lumber (non-chemically treated and unpainted);
- y. "Yard trimmings" means grass clippings, leaves, wood chips from tree parts, and brush.

z. "Yard waste" means loose leaves and grass clippings.

## Tier A Municipal Stormwater General Permit

### A. Permit Overview

#### 1. Overview of the Tier A MS4 NJPDES Permit

- a. The Tier A Municipality (i.e. the permittee) is required to develop, update, implement and enforce an MS4 stormwater program. A primary objective of the MS4 stormwater program is to implement best management practices and other measures that are designed to achieve the permit's requirement to reduce the discharge of pollutants from the Tier A Municipality's MS4, municipal maintenance yards and other ancillary operations, to the maximum extent practicable pursuant to N.J.A.C. 7:14A-25.6(a)1 and 40 CFR 122.34(a), to protect water quality, and to satisfy the applicable water quality requirements of the Clean Water Act.

#### 2. Primary Plans Required by the Tier A MS4 NJPDES Permit

- a. The Stormwater Pollution Prevention Plan (SPPP) documents the Tier A Municipality's stormwater program and describes the measures necessary for compliance with the Statewide Basic Requirements as well as any Other Control Measures, Additional Measures and/or Optional Measures (if deemed appropriate). See Part IV.F (SPPP) and Attachment A (Measurable Goals and Implementation Schedule for Existing Permittees) and Attachment A-1 (Measurable Goals and Implementation Schedule for New Permittees).
- b. A significant component of the SPPP is the Municipal Stormwater Management Plan (MSWMP). The MSWMP is also a component of the municipal master plan (N.J.S.A. 40:55D-94). The MSWMP describes the municipality's strategy, structure and process for addressing stormwater runoff from new development and redevelopment to ensure compliance with the Stormwater Management rules (N.J.A.C. 7:8 et seq.). This strategy, structure and process also constitutes much of the post construction stormwater management program in this permit. See Part IV.B.4 (Post Construction). Any MSWMP that complies with N.J.A.C. 7:8 also complies with this condition and Part IV.B.4.f (MSWMP).

#### 3. Summary of Tier A MS4 NJPDES Permit Requirements

- a. The Tier A Municipality shall develop, update, implement and enforce a stormwater program as documented in an SPPP to ensure compliance with:
  - i. The Statewide Basic Requirements. See Part IV.B;
  - ii. Other Control Measures. See Part IV.C;
  - iii. Additional Measures. See Part IV.D; and
  - iv. Optional Measures, if deemed appropriate See Part IV.E.
- b. The Tier A Municipality shall develop, update, implement and maintain a written SPPP in conformance with Attachment A (Measurable Goals and Implementation Schedule for Existing Permittees) and Attachment A-1 (Measurable Goals and Implementation Schedule for New Permittees). See Part IV.A.2.a and IV.F (SPPP).
- c. The Tier A Municipality shall submit an Annual Report and Certification summarizing the status of compliance with this permit. See Part IV.G (Annual Report and Certification).
- d. The Tier A Municipality shall adopt, amend and implement a written MSWMP. See Part IV.A.2.b and B.4.f (MSWMP).

## Tier A Municipal Stormwater General Permit

- e. The Tier A Municipality shall modify and update its stormwater program (including applicable plans and ordinances) to conform with applicable new legislation; or new or amended regulations. Such modification shall be completed and effective within 12 months of written notification by the Department of the need for modification.

### B. Statewide Basic Requirements and Associated Conditions

#### 1. Minimum Standards for Public Involvement and Participation Including Public Notice

- a. Tier A Municipalities shall comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of a MS4 stormwater program. Requirements include but are not limited to:
  - i. The Open Public Meetings Act (“Sunshine Law,” N.J.S.A. 10:4-6 et seq.);
  - ii. Statutory procedures for the enactment of ordinances (N.J.S.A. 40:49-2), including the municipal stormwater control ordinance and other ordinances adopted to comply with Part IV of this permit; and
  - iii. The Municipal Land Use Law concerning the adoption or amendment of the MSWMP (N.J.S.A. 40:55D-13, 28 and 94), and the review of applications for development (N.J.S.A. 40:55D-12). The Tier A Municipality shall also ensure that applicants for development meet the notice requirements of N.J.S.A. 40:55D-12.
- b. Tier A Municipalities shall make elements of its MS4 stormwater program available to the public:
  - i. Provide the current SPPP upon request as required by Part IV.F.1.g (SPPP);
  - ii. Post the current SPPP on its website to the extent required by Part IV.F.1.f (SPPP); and
  - iii. Post the current MSWMP and all ordinances required by this permit on its website or otherwise comply with the notification requirements of N.J.A.C. 7:8-4.4(e). See Part IV.B.4.f (MSWMP), 4.g (Stormwater Control Ordinance), 5.a (Community Wide Ordinances).
- c. The Tier A Municipality may involve another entity (e.g. a watershed association) to satisfy one or more of the Tier A Municipality’s NJPDES permit condition(s) (or component thereof) through the implementation of one or more best management practices or control measures. See Part IV.F.4 (Implementation of SPPP Conditions through Shared or Contracted Services).
- d. The Tier A Municipality shall maintain records necessary to demonstrate compliance with the public participation requirements of a, above.
- e. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Public Involvement and Participation specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

#### 2. Minimum Standards for Local Public Education and Outreach

- a. The Tier A Municipality shall implement a Public Education and Outreach Program that focuses on educational and pollution prevention activities about the impacts of stormwater discharges on surface water and groundwater and to involve the public in reducing pollutants in stormwater and mitigating flow. The Tier A Municipality shall annually conduct activities that total at least 12 points and include activities from at least three of the five categories as set forth in Attachment B (Points System for Public Education and Outreach Activities). At a minimum, at least one of the activities shall involve educating businesses and the general public of hazards associated with illicit connections and improper disposal of waste. Records shall be kept necessary to demonstrate compliance with this requirement, including date of activities and any other relevant documentation.
- b. The Tier A Municipality shall label all storm drain inlets for those drains that do not have permanent wording cast into the structure of the inlet. The Tier A Municipality shall also maintain the legibility of those labels and replace any labels that are missing or not legible. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for specific measures. This requirement shall include the following:
  - i. All storm drain inlets along sidewalks that are adjacent to municipal streets;
  - ii. All storm drain inlets within plazas, parking areas or maintenance yards that are operated by the municipality.
- c. The Tier A Municipality shall advertise public involvement program(s) pertaining to education and outreach activities on the municipality's website, through a mailing, through newspaper advertisement, or other similar means.
- d. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Local Public Education and Outreach specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

### **3. Minimum Standards for Construction Site Stormwater Runoff**

- a. Construction site stormwater runoff activities are authorized under a separate NJPDES permit, generally the Construction Activity Stormwater General Permit No. NJ0088323 pursuant to N.J.A.C. 7:14A-25.6(b)2 (or an individual permit pursuant to N.J.A.C. 7:14A-24.7(a)2). See Part II.C.3.b and [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm). Pursuant to N.J.A.C. 7:14A-25.7(b), the Tier A Municipality is not required to reference construction site stormwater runoff control in its SPPP.

### **4. Minimum Standards for Post Construction Stormwater Management in New Development and Redevelopment**

- a. The Tier A Municipality shall develop, update, implement and enforce its stormwater management program to address post construction stormwater runoff in new development and redevelopment and to ensure compliance with the Stormwater Management rules at N.J.A.C. 7:8 et seq. In general, the regulations at N.J.A.C. 7:8:
  - i. Contain requirements for stormwater management plans and stormwater control ordinances;
  - ii. Provide information for the adoption and implementation of municipal stormwater management plans and regional stormwater management plans; and
  - iii. Establish design, performance and maintenance standards for stormwater management measures and establish safety standards for stormwater management basins.

- b. The post construction stormwater management program established by the Tier A Municipality shall address stormwater runoff from the following types of major development unless any additional development is defined as “major development” by a municipality’s stormwater control ordinance:
  - i. New development and redevelopment projects that disturb one acre or more and are not operated by the municipality (e.g. retail stores, residential complexes);
  - ii. New development and redevelopment projects that disturb one acre or more and are operated by the municipality itself (e.g. town complex); and
  - iii. All new development and redevelopment projects that disturb less than one acre and are part of a larger common plan of development or sale (e.g. phased residential development) that ultimately disturbs one acre or more.
- c. The post construction stormwater management program established by the Tier A Municipality shall require compliance with the applicable design, performance and maintenance standards established under N.J.A.C. 7:8 et seq. for major development as defined in this permit.
- d. The Tier A Municipality shall review and analyze development applications for compliance with Part IV.B.4 (Post Construction) of this permit even if a separate permit is required by the Department for the same or similar activity (e.g. a Land Use permit).
- e. The post construction stormwater management program established by the Tier A Municipality shall ensure that any residential development and redevelopment projects that are subject to the Residential Site Improvement Standards (RSIS) for stormwater management (N.J.A.C. 5:21-7) comply with those standards, including any exception, waiver, or special area standard that was approved under N.J.A.C. 5:21 et seq.
- f. The Tier A Municipality shall adopt, amend and implement a written Municipal Stormwater Management Plan (MSWMP), pursuant to N.J.A.C. 7:8 et seq., to describe the framework of the Tier A Municipality’s strategy, structure and process for its post construction stormwater management program.
  - i. The Tier A Municipality shall submit the adopted plan for approval to the County review agency in accordance with N.J.A.C. 7:8-4;
  - ii. The Tier A Municipality shall notify the Department and post the approved plan and any amendments on its website (or otherwise comply with the notification requirements of N.J.A.C. 7:8-4.4(e)) within thirty days of the effective date of the plan. See Part IV.B.1.b.iii (Public Involvement and Participation);
  - iii. The Tier A Municipality shall review and update its MSWMP as necessary, and as a part of the reexamination of its municipal master plan in accordance with N.J.A.C. 7:8-4.3(c) and (d).
- g. In order to implement the post construction stormwater management program, the Tier A Municipality shall adopt, amend, implement and enforce a municipal stormwater control ordinance. The Tier A Municipality shall develop and adopt the contents of the ordinance in accordance with N.J.A.C. 7:8 et seq. A sample stormwater ordinance consistent with the requirements of the Stormwater Management Rules is posted at [www.nj.gov/dep/stormwater/bmp\\_manual2.htm](http://www.nj.gov/dep/stormwater/bmp_manual2.htm) and a sample stormwater ordinance applicable to Pinelands Area Municipalities is posted at [www.nj.gov/dep/stormwater/pinelands.htm](http://www.nj.gov/dep/stormwater/pinelands.htm). The municipal stormwater control ordinance shall include, at a minimum, the following elements:

- i. Control aspects of residential development and redevelopment projects that are not pre-empted by the RSIS;
  - ii. Control stormwater from non-residential development and redevelopment projects, in accordance with the requirements at N.J.A.C. 7:8 et seq.; and
  - iii. Set forth special area standards approved by the Site Improvement Advisory Board for residential development or redevelopment projects under N.J.A.C. 5:21-3.5.
- h. The Tier A Municipality shall only grant a variance or exemption from the design and performance standards for stormwater management measures if the municipality has a mitigation plan which meets the following requirements:
- i. A mitigation plan must be included in an approved MSWMP and stormwater control ordinance(s). The mitigation plan shall identify measures that are necessary to offset the deficit created by granting the variance or exemption, and can be provided through a menu of design and performance standards with corresponding mitigation projects for different drainage areas within the municipality. See Chapter 3 of the NJ Stormwater BMP Manual at [www.nj.gov/dep/stormwater/](http://www.nj.gov/dep/stormwater/) for guidance; and
  - ii. The municipality submits, within 30 days after the grant of a variance or exemption, a written report to the county review agency and the Department describing the variance or exemption and the required mitigation. Submit the written report to the Department at:  
NJDEP-DWQ-BNPC  
Mail Code 401-02B  
PO Box 420  
Trenton, NJ 08625-0420
- i. The Tier A Municipality shall:
- i. Enforce, through the stormwater control ordinance(s) or a separate ordinance, compliance with the standards set forth in Attachment C (Design Standards for Storm Drain Inlets) of this permit to control passage of solid and floatable materials through storm drain inlets not installed by the Tier A Municipality; and
  - ii. Comply with the standards set forth in Attachment C (Design Standards for Storm Drain Inlets) of this permit to control passage of solid and floatable materials through storm drain inlets installed by the municipality.
- j. The Tier A Municipality shall ensure adequate long-term cleaning, operation and maintenance of stormwater management measures:
- i. Pursuant to Part IV.C.1.a (Stormwater Facilities Maintenance), owned or operated by the Tier A Municipality; and
  - ii. Pursuant to Part IV.C.1.b (Stormwater Facilities Maintenance), not owned or operated by the Tier A Municipality.
- k. For each structural and non-structural stormwater measure (e.g. stormwater management basin, subsurface infiltration/detention system, manufactured treatment device, green infrastructure), the Tier A Municipality shall:
- i. Complete a Major Development Stormwater Summary (as posted on the Department's website at [www.nj.gov/dep/dwq/tier\\_a\\_forms.htm](http://www.nj.gov/dep/dwq/tier_a_forms.htm); courtesy copy provided as Attachment D of this permit) when an application is made to the Tier A Municipality after EDPA;

- ii. Update the Major Development Stormwater Summary while stormwater measures are being installed;
  - iii. Finalize the Major Development Stormwater Summary once certificate of occupancy is issued; and
  - iv. Maintain a completed Major Development Stormwater Summary and make it available to the Department upon request.
- l. The Stormwater Management rules (N.J.A.C. 7:8) and the Residential Site Improvement Standards for stormwater management (N.J.A.C. 5:21-7), independently and as implemented in this permit, apply to all areas of the Tier A Municipality.
- m. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Post Construction Stormwater Management in New Development and Redevelopment specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

#### **5. Minimum Standards for Pollution Prevention / Good Housekeeping for Municipal Operators**

- a. Community Wide Ordinances: The Tier A Municipality shall adopt and enforce the following community wide ordinances to address improper disposal of waste:
- i. Pet Waste Ordinance: Adopt and enforce an ordinance that requires pet owners or their keepers 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. Information on the Pet Waste Ordinance and the benefits of proper disposal of pet solid waste shall be distributed with pet licenses. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for a sample ordinance.
  - ii. Wildlife Feeding Ordinance: Adopt and enforce an ordinance that prohibits the feeding of any wildlife (e.g. Canada Geese) in any public park or on any other property owned or operated by the Tier A Municipality. Exclusions include wildlife confined in zoos, parks, or rehabilitation centers as well the following unconfined animals: (1) wildlife at environmental education centers; (2) feral cats as part of an approved Trap-Neuter-Release program; and (3) other kinds of unconfined animals, if any, that the ordinance specifically lists and excludes for reasons set forth in the ordinance. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for a sample ordinance.
  - iii. Litter Control Ordinance: Adopt and enforce a litter ordinance or enforce the existing State litter statute at N.J.S.A 13:1E-99.3. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for a sample ordinance.
  - iv. Improper Disposal of Waste Ordinance: Adopt and enforce an ordinance prohibiting the improper spilling, dumping, or disposal of materials other than stormwater into the MS4 system excluding those discharges as allowable under Part II.C.2.b. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for a sample ordinance.

- v. Containerized Yard Waste/Yard Waste Collection Program Ordinances: (1) Adopt and enforce an ordinance that prohibits placing non-containerized yard wastes (defined as leaves and/or grass clippings) into the street; or (2) develop and implement a non-containerized yard waste collection and disposal program that includes adoption and enforcement of an ordinance that prohibits placing non-containerized yard waste at the curb or along the street within 10 feet of any storm drain inlet and at any time other than a set yard waste collection schedule. The frequency of yard waste pickups shall be determined at the discretion of the Tier A Municipality but shall be part of a set yard waste collection schedule which is noticed to all municipal residents and businesses. Any area, which the municipality determines to have no yard waste, will be exempt from the collections. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for sample ordinances.
  - vi. Private Storm Drain Inlet Retrofitting Ordinance: Adopt and enforce an ordinance requiring the retrofitting of existing storm drain inlets on private property to meet the standard in Attachment C (Design Standard for Storm Drain Inlets). Specifically, this ordinance: 1) shall apply to storm drain inlets, on property not owned or operated by the Tier A Municipality (e.g. condominium associations), that are in direct contact (i.e. contiguous) to repaving; repairing (excluding individual pothole repair); resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); and reconstruction or alteration of facilities; and 2) shall not apply to a residential lot with one single family house. For a sample ordinance see [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm).
  - vii. Additional ordinance requirements of this permit are found at Part IV.B.4.g (Stormwater Control Ordinance) above and Part IV.B.6.d (Illicit Connection Ordinance) below.
- b. Community Wide Measures: The Tier A Municipality shall develop and continue to implement the following community wide pollution prevention/good housekeeping measures to control solids and floatables:
- i. Street Sweeping: Tier A Municipalities shall sweep, at a minimum of once per month (weather and street surface conditions permitting), all streets (including roads or highways) that meet all of the following criteria: (1) the street is owned or operated by the municipality; (2) the street is curbed and has storm drains; (3) the street has a posted speed limit of 35 miles per hour or less; (4) the street is not an entrance or exit ramp; and (5) the street is in a predominantly commercial area.
  - ii. Catch Basin and Storm Drain Inlet Inspection and Cleaning: The Tier A Municipality shall inspect storm drain inlets and any associated catch basins that it owns or operates and remove sediment, trash, or debris when present. Each catch basin and inlet shall be inspected at least once every five years. The Tier A Municipality shall clean any municipally owned or operated storm drain inlet or catch basin as frequently as necessary to eliminate recurring problems and restore proper function.
  - iii. Tier A Municipality Storm Drain Inlet Retrofit: The Tier A Municipality shall retrofit existing Tier A Municipality owned or operated storm drain inlets that are: (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities. Storm drain inlet retrofits shall meet the standard in Attachment C (Design Standards for Storm Drain Inlets).

- c. **Municipal Maintenance Yards and Other Ancillary Operations:** The Tier A Municipality shall implement the best management practices described in Attachment E (Best Management Practices for Municipal Maintenance Yards and Other Ancillary Operations) for municipal maintenance yards and other ancillary operations owned or operated by the Tier A Municipality. Ancillary operations include but are not limited to impound yards, permanent and mobile fueling locations, and yard trimmings and wood waste management sites. The Inventory of Material and Machinery, and Inspections and Good Housekeeping practices specified in Attachment E shall be conducted at all municipal maintenance yards and other ancillary operations. Best Management Practices shall be implemented for the following activities, whenever such activities occur:
- i. Fueling Operations;
  - ii. Discharge of Stormwater from Secondary Containment;
  - iii. Vehicle Maintenance;
  - iv. On-Site Equipment and Vehicle Washing and Wash Wastewater Containment;
  - v. Salt and De-icing Material Storage and Handling;
  - vi. Aggregate Material and Construction Debris Storage;
  - vii. Street Sweepings, Catch Basin Clean Out, and Other Material Storage;
  - viii. Yard Trimmings and Wood Waste Management Sites that are owned and operated by the Tier A Municipality; and
  - ix. Roadside Vegetation Management.
- d. **Employee Training:** The Tier A Municipality shall develop, update and implement an employee training program to address Tier A MS4 NJPDES permit components and SPPP requirements. All municipal employees shall receive training on those stormwater topics applicable to their title and duties within 3 months of commencement of duties. Records including sign in sheet(s), date(s) of training, and training agenda(s) shall be kept in the SPPP. Training shall occur at least once every two years, unless otherwise specified below:
- i. **Yard Waste Collection Program (if applicable) –** Provide training on frequency of yard waste pickups and schedule; and policy for how and when yard waste can be placed curbside. See Part IV.B.5.a.v (Yard Waste Ordinance).
  - ii. **Monthly Sweeping of Certain Streets in Predominantly Commercial Areas -** Provide training on sweeping schedules and proper management of materials collected. See Part IV.B.5.b.i (Street Sweeping).
  - iii. **Illicit Connection Elimination and Outfall Pipe Mapping -** Provide training on the impacts associated with illicit connections and details of the program including investigation techniques, physical observations, field sampling, and mapping procedures. See Part IV.B.6 (MS4 Outfall Pipe Mapping, and Illicit Discharge) and the National Menu of Stormwater Best Management Practices at [www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater](http://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater).
  - iv. **Outfall Pipe Stream Scouring Detection and Control -** Provide training on how to identify outfall pipe stream scouring and contributing factors. See Part IV.B.6.b (Stream Scouring).

- v. Maintenance Yard Operations (including Ancillary Operations) - Provide training annually on inventory of materials and machinery, inspections and good housekeeping; fueling operations; discharge of stormwater from secondary containment; vehicle maintenance; on-site equipment and vehicle washing and wash wastewater containment; salt and de-icing material storage and handling; aggregate material and construction debris storage; street sweeping, catch basin clean out, and other material storage; yard trimmings and wood waste management sites. See Part IV.B.5.c (Municipal Maintenance Yards and Other Ancillary Operations).
  - vi. Waste Disposal Education - Provide training on the impacts associated with improper waste disposal, how to respond to inquiries regarding improper waste disposal, and appropriate enforcement authority.
  - vii. Municipal Ordinances - Provide training on the following ordinances: Pet Waste Ordinance; Wildlife Feeding Ordinance; Litter Control Ordinance; Improper Disposal of Waste Ordinance; Containerized Yard Waste/Yard Waste Collection Ordinance; and the Private Storm Drain Inlet Ordinance. Training shall include an overview of these ordinance requirements, enforcement policies and the repercussions of non-compliance with these ordinances. See Part IV.B.5.a (Community Wide Ordinances).
  - viii. Stormwater Facility Maintenance – Provide training annually on maintenance of stormwater facilities, and catch basin and inlet cleaning methods. See Part IV.C.1 (Stormwater Facilities Maintenance), and Part IV.B.5.b.ii (Catch Basin and Storm Drain Inlets).
  - ix. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment - Provide general training on the permitting requirements for construction activity and Post-Construction Stormwater Management in New Development and Redevelopment. See Part IV.B.3 (Construction Site Runoff) and B.4 (Post Construction).
  - x. Provide general training annually on the Tier A Municipality’s SPPP, applicable recordkeeping requirements, and detailed training on any component applicable to an employee’s title and duties. See Part IV.F (SPPP).
  - xi. Training may also be conducted on stormwater-related topics that serve an educational purpose for employees.
- e. Stormwater Management Design Review Training: The Tier A Municipality shall ensure that all design engineers, municipal engineers and other individuals that review the stormwater management design for development and redevelopment projects on behalf of the municipality, complete the Department approved Stormwater Management Design Review Course (see [www.nj.gov/dep/stormwater/training.htm](http://www.nj.gov/dep/stormwater/training.htm)) once every five years. This includes those individuals that review any projects that are subject to the Tier A Municipality’s municipal stormwater management plan and control ordinance as described in Part IV.B.4 (Post Construction). Individuals that will review stormwater management design and have not completed this course within the past five years must attend the next scheduled course offering. If unable to attend, the Tier A Municipality must notify the Department in writing no later than thirty days after the missed course offering explaining why attendance was not possible and what alternate arrangements are being made. Training completed within five calendar years prior to EDPA qualifies towards this requirement. The Tier A Municipality is required to maintain a list of the dates and names of training program participants in its SPPP.

- f. **Municipal Board and Governing Body Member Related Training:** The Tier A Municipality shall ensure that municipal board and governing body members that review and approve applications for development and redevelopment projects, complete the “Asking the Right Questions in Stormwater Review Training Tool” posted at [www.nj.gov/dep/stormwater/training.htm](http://www.nj.gov/dep/stormwater/training.htm). This includes those individuals that review any projects for compliance with Part IV.B.4 (Post Construction) of this permit. Training must be completed by current municipal board and governing body members on or before EDPA + 6 months and by new members within six months of commencing duties. Once per term of service thereafter, municipal board and governing body members must review at least one of the tools offered under Post-Construction Stormwater Management found at the website above. The Tier A Municipality is required to maintain a list of the dates and names of training program participants in its SPPP.
- g. **Existing Permittee:** An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Pollution Prevention / Good Housekeeping for Municipal Operators specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

**6. Minimum Standards for MS4 Outfall Pipe Mapping, and Illicit Discharge and Scouring Detection and Control**

- a. **Outfall Pipe Mapping:** Tier A Municipalities shall develop, update and maintain an outfall pipe map showing the location of the end of all MS4 outfall pipes (tidal and non-tidal) owned or operated by the Tier A Municipality which discharge to a surface water body. The outfall pipe map shall:
  - i. Be current at the end of each calendar year;
  - ii. Show the location (and name, where known to the municipality) of all surface water bodies receiving discharges from those outfall pipes;
  - iii. Be included in the SPPP;
  - iv. Be provided to the Department by Existing Permittees on or before EDPA + 12 months and by New Permittees on or before EDPA + 36 months. New data points subsequently added to the map shall be provided to the Department annually thereafter; and
  - v. Be submitted electronically by December 21, 2020 via the Department’s designated electronic submission service.
- b. **Stream Scouring:** Tier A Municipalities shall develop, update and implement a program to detect, investigate and control any localized stream scouring from stormwater outfall pipes owned or operated by the municipality. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for specific measures. The Tier A Municipality shall, at a minimum:
  - i. Inspect each outfall pipe which discharges to a stream for localized stream scouring in the vicinity of the outfall pipe. Each outfall pipe shall be inspected at least once every five years;
  - ii. Inspect any outfall pipes newly identified in compliance with Part IV.B.6.a for localized stream scouring in the vicinity of the outfall pipe;

- iii. When localized stream scouring is detected, document sources of stormwater that contribute to the outfall pipes identified in i and ii, above. Each identified source shall be investigated; and (1) where identified sources are located on property owned or operated by the Tier A Municipality, corrective action to reduce stormwater rate or volume shall be taken by the municipality when feasible, or (2) where identified sources are within the jurisdiction of but not located on property owned or operated by the Tier A Municipality, the municipality shall ensure proper operation and maintenance of stormwater facilities located thereon pursuant to Part IV.C.1.b (Stormwater Facilities Maintenance), below;
  - iv. Prioritize, schedule and complete remediation of identified localized stream scouring and take action based upon the requirements of Part IV.B.6.b.iii(1) and (2), above. If not completed, a schedule for completion shall be maintained as required in Part IV.C.1.a.iv (Stormwater Facilities Maintenance); and
  - v. All stream scouring restoration shall be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90-1 (e.g., Conduit Outlet Protection 12-1) and the requirements for bank stabilization and channel restoration found at N.J.A.C. 7:13 et seq. All associated maintenance or repairs to stormwater facilities shall be made in accordance N.J.A.C 7:8.
- c. Illicit Discharge Detection and Elimination: The Tier A Municipality shall develop, update, implement and enforce an ongoing Illicit Discharge Detection and Elimination Program in accordance with this permit. This program shall be documented in the written SPPP, as required in Part IV.F.1.a.iii (SPPP). See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for specific measures. See also USEPA Guidance at [www3.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](http://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf). The Tier A Municipality shall, at a minimum:
- i. Conduct visual dry weather inspection of all outfall pipes owned or operated by the municipality at least once every five years to determine if dry weather flow or other evidence of illicit discharge is present. Dry weather flow is flow occurring 72 hours after a rain event.
  - ii. Investigate the source if evidence of illicit discharge is found;
  - iii. Eliminate non-stormwater discharges that are traced to their source and found to be illicit connections;
  - iv. Document investigations and actions taken using the Department's Illicit Connection Inspection Report Form. See [www.nj.gov/dep/dwq/tier\\_a\\_forms.htm](http://www.nj.gov/dep/dwq/tier_a_forms.htm);
  - v. Inspect any outfall pipes newly identified in compliance with Part IV.B.6.a for illicit discharges;
  - vi. Investigate dry weather flows discovered during routine inspection and maintenance of other elements of the MS4; and
  - vii. Investigate, within three months of receipt, complaints and reports of illicit connections, including those from operating entities of interconnected MS4s.
- d. The Tier A Municipality shall adopt and enforce an ordinance that prohibits illicit connections to the municipal separate storm sewer system operated by the Tier A Municipality. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for a sample ordinance.

- e. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for MS4 Outfall Pipe Mapping, and Illicit Discharge and Scouring Detection and Control specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

## **C. Other Control Measures**

### **1. Minimum Standards for Stormwater Facilities Maintenance**

- a. The Tier A Municipality shall develop, update and implement a program to ensure adequate long-term cleaning, operation and maintenance of all municipally owned or operated stormwater facilities.
  - i. Stormwater facility inspection and maintenance must be performed pursuant to any maintenance plans, or more frequently as needed, to ensure the proper function and operation of the stormwater facility. See [www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](http://www.nj.gov/dep/stormwater/maintenance_guidance.htm).
  - ii. The Tier A Municipality shall maintain a log sufficient to demonstrate compliance with this section; including but not limited to the stormwater facility inspected, location information of the facility inspected (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates), name of inspector, date of inspection, findings, and any preventative and corrective maintenance performed. Example Maintenance Logs and Inspection Records forms which are sufficient to demonstrate compliance with this section are available at [www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](http://www.nj.gov/dep/stormwater/maintenance_guidance.htm).
  - iii. The Tier A Municipality shall certify annually that municipally owned or operated stormwater facilities are properly functioning.
  - iv. If stormwater facilities were found not to be functioning properly and repairs were not made, then necessary preventive and corrective maintenance shall be documented and prioritized, and a schedule for such repairs shall be maintained. The Tier A Municipality shall prioritize this schedule based upon but not limited to: (1) environmental, health and safety concerns; (2) the findings of catch basin and storm drain inlet inspections performed pursuant to Part IV.B.5.b.ii, above; (3) the findings of stream scouring inspections performed pursuant to Part IV.B.6.b, above; and (4) to incorporate the findings pursuant to Part IV.C.2 (TMDL Information), below.
- b. The Tier A Municipality shall develop, update, implement and enforce a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned or operated by the Tier A Municipality, not subject to the conditions of another NJPDES stormwater permit and constructed after February 7, 1984.
  - i. The Tier A Municipality shall ensure that stormwater facility maintenance is performed pursuant to any maintenance plans, or more frequently as needed to ensure the proper function and operation of the stormwater facility. See [www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](http://www.nj.gov/dep/stormwater/maintenance_guidance.htm).

- ii. The Tier A Municipality shall maintain a log sufficient to demonstrate compliance with this section; including but not limited to the actions taken by the municipality to enforce compliance with the long-term cleaning, operation and maintenance program; the stormwater facility that was the subject of the action; location information of the facility that was the subject of the action (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates); the name of person taking the action; the date of the action; and the findings. Example Maintenance Logs and Inspection Records forms which are sufficient to demonstrate compliance with this section are available at [www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](http://www.nj.gov/dep/stormwater/maintenance_guidance.htm).
- c. The Tier A Municipality shall maintain copies of all maintenance plans, as defined in Notes and Definitions Part IV.B.1.g of this permit, for stormwater facilities approved by the municipality. The Tier A municipality shall make copies of these maintenance plans available to the Department upon request.
- d. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Stormwater Facilities Maintenance specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

## 2. Minimum Standards for Total Maximum Daily Load (TMDL) Information

- a. Incorporation of TMDL Information Into the SPPP
  - i. The Tier A Municipality shall annually review approved or adopted TMDL reports to identify stormwater related pollutants listed therein and associated with any segment of surface water wholly or partially within or bordering the Tier A Municipality. This information may be accessed at [www.nj.gov/dep/dwq/msrp-tmdl-rh.htm](http://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm);
  - ii. The Tier A Municipality shall use TMDL information identified in i, above to, at a minimum, (1) assist in the prioritization of stormwater facility maintenance including schedules for repairs required at Part IV.B.6.b.iv (Stream Scouring) and IV.C.1.a.iv (Stormwater Facilities Maintenance), above; and (2) identify and develop strategies to address specific sources of stormwater related pollutants contributing to discharges authorized under this Tier A MS4 NJPDES permit. Strategies may include but are not limited to those found in the implementation section of approved or adopted TMDL reports (for examples see “Total Maximum Daily Load (TMDL) Guidance for Tier A MS4 Permittees” found at [www.nj.gov/dep/dwq/msrp-tmdl-rh.htm](http://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm)); and
  - iii. The Tier A Municipality shall annually update its SPPP to list information identified in i and ii, above; and
  - iv. The Tier A Municipality shall incorporate any strategies identified in ii(2), above as an Optional Measure. See Part IV.E (Optional Measures) and Part IV.F.1.c (SPPP), below.
- b. Existing Permittee: An existing permittee shall meet the minimum standards of this permit, and the measurable goals (including any recordkeeping) and implementation schedules for Total Maximum Daily Load (TMDL) Information specified in Attachment A for Existing Permittees (Measurable Goals and Implementation Schedule).

## D. Additional Measures

### 1. Incorporation of Additional Measures

- a. Additional Measures are non-numeric (e.g., best management practices) or numeric effluent limitations that are expressly required to be included in a Tier A Municipality's stormwater program by a TMDL; a regional stormwater management plan; other elements of an adopted areawide Water Quality Management Plan; or the adopted Statewide Water Quality Management Plan.
- b. The Department will provide written notice of the adoption of any Additional Measure(s) to any affected Tier A Municipality. The Department will list each adopted Additional Measure in a minor modification to the Tier A MS4 NJPDES permit. For any required Additional Measure(s) other than numeric effluent limitations, the required Additional Measure(s) will specify the best management practices that shall be implemented and the measurable goals. The required Additional Measure(s) will also specify the implementation schedule.

## **E. Optional Measures**

### **1. Incorporation of Optional Measures**

- a. Optional Measures are BMPs, developed by the Tier A Municipality, that extend beyond the requirements of the Tier A MS4 NJPDES permit and that prevent or reduce pollution to waters of the State.
- b. The Tier A Municipality may, at its own discretion, incorporate Optional Measures into its MS4 stormwater program. Such BMPs shall be identified in the SPPP as Optional Measures.
- c. Failure to implement an Optional Measure identified in the SPPP shall not be considered a violation of the NJPDES permit.

### **2. Refuse Container / Dumpster Ordinance**

- a. Tier A Municipalities have the option of adopting and enforcing an ordinance requiring dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times. This ordinance serves to prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids or solids from the containers. This ordinance is not intended for litter receptacles; individual homeowner trash and recycling containers; containers that hold large bulky items (e.g., furniture, bound carpet and padding); permitted temporary demolition containers; and refuse containers at industrial facilities authorized to discharge stormwater under a valid NJPDES permit. For a sample ordinance see [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm).

## **F. Stormwater Pollution Prevention Plan (SPPP)**

### **1. SPPP Requirements**

- a. The Tier A Municipality shall develop, update, implement, and maintain a written SPPP (see the Tier A Municipal Guidance document [www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) that:
  - i. Identifies the person designated as the Municipal Stormwater Program Coordinator (Stormwater Coordinator) per Part IV.F.2, below and the members of the SPPP Team.
  - ii. Documents the municipality's Tier A MS4 Stormwater Program including a description of shared or contracted services as allowed under Part IV.F.4, below.
  - iii. Describes the measures necessary for compliance with all components of the Tier A MS4 NJPDES permit including all measures described in Part IV.B, C, D and E above.

- iv. Reflects the measurable goals, implementation schedules, record keeping and other requirements in Attachment A for Existing Permittees and Attachment A-1 for New Permittees (Measurable Goals and Implementation Schedule).
- b. The Tier A Municipality's Stormwater Coordinator shall sign and date the SPPP per Part IV.F.3, below.
- c. The Tier A Municipality shall review the SPPP at least annually and update it as often as necessary to reflect changes related to the municipality's Tier A MS4 Stormwater Program. Any amendments to the SPPP:
  - i. Shall continue to meet the requirements of this permit;
  - ii. Shall be signed and dated by the Stormwater Coordinator; and
  - iii. Shall be retained for a period of at least five years from the date of amendment unless the Department issues a written notice to extend the retention period.
- d. The SPPP shall include any records required by this Tier A MS4 NJPDES permit. See Attachment A for Existing Permittees and Attachment A-1 for New Permittees (Measurable Goals and Implementation Schedule) for additional detail.
- e. The Department may notify the Tier A Municipality at any time that the SPPP does not meet one or more of the minimum requirements. Within thirty (30) days after receiving such notification unless otherwise specified by the Department, the Tier A Municipality shall amend the SPPP to adequately address all deficiencies, and written certification of such amendments shall be submitted to the Department.
- f. The current SPPP shall be posted on the Tier A Municipality's website no later than EDPA + 90 days with updates posted annually thereafter. The version posted on the website can exclude:
  - i. Inspection logs and other required record keeping; and
  - ii. The names of SPPP Team members but must include the name of the Stormwater Coordinator.
- g. The SPPP shall be made available to the Department and public upon request pursuant to N.J.A.C. 7:14A-25.6(j)2.

**2. Designation of the Municipal Stormwater Program Coordinator (Stormwater Coordinator)**

- a. Each Tier A Municipality shall designate a Stormwater Coordinator.
- b. The Stormwater Coordinator shall be either a principal executive officer or a ranking elected official as required at N.J.A.C. 7:14A-4.9(a)3;
- c. A principal executive officer or ranking elected official of the Tier A Municipality may assign this responsibility, as allowed at N.J.A.C. 7:14A-4.9(b), to a duly authorized representative who has overall responsibility for the operation of municipal stormwater facilities or municipal environmental matters;
- d. If an assignment under b or c, above changes, then a new assignment of responsibility shall be submitted to the Department. This is accomplished through completion of the online MSRP Annual Report (see Part IV.G Annual Report and Certification below) or the Stormwater Program Coordinator Information Update Sheet posted at [www.nj.gov/dep/dwq/pdf/msrp\\_update\\_form.pdf](http://www.nj.gov/dep/dwq/pdf/msrp_update_form.pdf). This information shall be submitted to the Department within 30 days of such change taking place.

### **3. Responsibilities of the Municipal Stormwater Program Coordinator (Stormwater Coordinator)**

- a. The Tier A Municipality shall designate a Municipal Stormwater Program Coordinator (Stormwater Coordinator). The Stormwater Coordinator is responsible for:
  - i. Coordinating the permittee's implementation of the SPPP and Tier A MS4 NJPDES permit conditions;
  - ii. Signing and dating the SPPP;
  - iii. Coordinating the completion and submittal of the Annual Report and Certification; and
  - iv. Certifying, signing and dating the Annual Report.

### **4. Implementation of SPPP Conditions through Shared or Contracted Services**

- a. The Tier A Municipality may rely on another governmental, private, or nonprofit entity to satisfy one or more of the Tier A Municipality's MS4 NJPDES permit conditions, or component thereof, through the implementation of best management practices or control measures. This is only allowable provided the following conditions are met:
  - i. The other entity implements the best management practice(s) or control measure(s);
  - ii. The particular best management practice(s) or control measure(s), or component(s) thereof, is at least as stringent or as frequent as the corresponding NJPDES permit requirement;
  - iii. The other entity agrees in writing or is required by law to implement the measure(s), or component(s) thereof, in such a manner that is in compliance with the Tier A MS4 NJPDES permit on the Tier A Municipality's behalf; and
  - iv. The Tier A Municipality specifies in its SPPP (1) which NJPDES permit conditions will be implemented by another entity and (2) the name of the responsible entity.
- b. For any projects or activities which the Tier A Municipality assigns to another entity which is a private contractor, the awarded contract shall require the contractor to conduct such projects or activities in such a manner that is in compliance with the Tier A MS4 NJPDES permit.
- c. The Tier A Municipality is responsible for compliance with this permit if the other entity fails to implement the measure(s) or component(s), thereof.

## **G. Annual Report and Certification**

### **1. Reporting Requirements**

- a. The Tier A Municipality shall complete an Annual Report, including any Supplemental Questions, using the electronic format provided by the Department via the MSRP Annual Report service accessed through the Regulatory Services Portal ([www.njdeponline.com](http://www.njdeponline.com)). The Annual Report shall summarize the status of compliance with the conditions of this permit. Specifically, this includes compliance for the subject year between January 1 and December 31 with the Statewide Basic Requirements (Part IV.B), Other Control Measures (Part IV.C), Additional Measures (Part IV.D), Optional Measures (Part IV.E), Stormwater Pollution Prevention Plan (Part IV.F), and any other Tier A MS4 NJPDES permit conditions listed on the Annual Report form, including Supplemental Questions.

- b. The Stormwater Coordinator shall certify, sign and date the Annual Report.
- c. Submit an Annual Report and Certification: on or before May 1st annually to the Department through the Regulatory Services Portal (instructions at [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm)).
- d. A copy of each Annual Report and Certification shall be kept at a central location and shall be made available to the Department for inspection.
- e. The Tier A Municipality shall retain the Annual Report and Certification as well as any records required to be kept by this permit for a period of at least five years.
- f. The Tier A Municipality shall document in the Annual Report (1) if it relies on another entity to satisfy one or more of the Tier A Municipality's MS4 NJPDES permit conditions as described in Part IV.F.4.a (Implementation of SPPP Conditions through Shared or Contracted Services), above; (2) which NJPDES permit conditions will be satisfied by another entity; and (3) the name of the governmental, private, or nonprofit entity.

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Permit No. NJG0153281  
DST170001 Stormwater Discharge General Permit Authorization  
Renewal

## Attachment A – Measurable Goals and Implementation Schedule for Existing Permittees

### General

The following table specifies the Measurable Goals and Implementation Schedule of this Tier A MS4 NJPDES Permit for Existing Permittees. Each Measurable Goal and Implementation Schedule is associated with a permit citation and a summary of the associated Minimum Standard. The summary of Minimum Standard column represents a paraphrase of permit conditions. Actual Minimum Standards are found in Part IV of the permit.

An indication of whether the cited Minimum Standard is a new requirement is provided in the last column. Where a requirement is not new and not modified (and for some that are modified), the Existing Permittee is expected to be in compliance on the Effective Date of Permit Authorization (EDPA). For most new requirements (and for some modified requirements), additional time is provided for achieving compliance.

See below for specific Measurable Goals that shall be documented in the SPPP. **The SPPP shall be updated as required by Part IV.F.1.c, above.** The Implementation Schedule refers to the date that a Minimum Standard must be incorporated into the Tier A Municipality's stormwater program, along with any ongoing requirements. In addition to the requirements of Part IV.F.1 above, the SPPP shall identify and discuss the Minimum Standard of each Statewide Basic Requirement (Part IV.B, above) and Other Control Measures (Part IV.C, above) where the following information is required for each item:

- Describe the method of implementation;
- Include required recordkeeping;
- Include an implementation schedule, consistent with permit requirements, including interim milestones;
- Include any special diagrams required by the permit (e.g., stormwater facilities map); and
- Include inspection and maintenance schedules, as appropriate.

This table does not include Measurable Goals and an Implementation Schedule for the Notes and Definitions Part IV, Part IV.A (Permit Overview), Part IV.D (Additional Measures), IV.E (Optional Measures), IV.F (SPPP), and IV.G (Annual Report and Certification) because these are not Statewide Basic Requirements or Other Control Measures (see N.J.A.C. 7:14A-25.6). While not included in this table, Notes and Definitions Part IV, Part IV.A, D, E, F, and G are permit requirements and compliance is required.

<b>Measurable Goals for Statewide Basic Requirements and Other Conditions of this Permit for Existing Permittees</b>				
<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
<b>Public Involvement and Participation Including Public Notice</b>				
Provide for public notice under the Open Public Meetings Act, statutory procedures for enactment of ordinances, and Municipal Land Use Law when providing for public participation in the development and implementation of a stormwater program, and maintain records necessary to demonstrate compliance.	IV.B.1.a & d	Certify in each annual report that all public notice requirements have been met and relevant records kept. Reference in the SPPP the location of associated municipal records.	EDPA	No
Provide the current SPPP to the public upon request.	IV.B.1.b.i	Certify in each annual report that the SPPP was made available to the public.	EDPA	No
Post the current SPPP on the municipality's website.	IV.B.1.b.ii	Certify in each annual report that the SPPP has been posted on the municipality's website (to the extent required by Part IV.F.1.f) and that the posted SPPP is current.	EDPA + 90 days	Yes
Post the current Municipal Stormwater Management Plan (MSWMP) and related ordinances on the municipality's website.	IV.B.1.b.iii	Certify in each annual report that the MSWMP and related ordinances have been posted on the municipality's website and that the posted documents are current.	EDPA + 90 days	Yes
<b>Local Public Education and Outreach</b>				
Implementation of a Public Education and Outreach Program by conducting activities that total a minimum of 12 points on an annual basis.	IV.B.2.a	Certify in each annual report that the minimum point value has been met and report point totals in the Annual Report. Maintain records of materials and activities from Attachment B, including dates of activities and any other relevant documentation (e.g. brochures, pictures, sign-in sheets, press clippings).	EDPA	Modified
Label storm drain inlets, maintain the legibility of those labels, and replace labels that are missing or not legible along sidewalks that are adjacent to municipal streets; and within plazas, parking areas or maintenance yards operated by the municipality.	IV.B.2.b	Certify in each annual report that storm drains have been properly labeled and/or maintained. Records tracking storm drain inlet label status shall be kept with the SPPP.	EDPA	No

Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
Advertise public involvement program(s) pertaining to education and outreach activities.	IV.B.2.c	Certify in each annual report that public involvement program(s) have been properly advertised on the website, through a mailing, through newspaper advertisement, or other similar means. Public advertisement records shall be kept with the SPPP.	EDPA + 12 months	Yes
<b>Post Construction Stormwater Management in New Development and Redevelopment</b>				
Develop, update, implement and enforce its post construction stormwater management program in new development and redevelopment to ensure compliance with the Stormwater Management rules (N.J.A.C. 7:8).	IV.B.4.a, b, c, d, e, f, g, h, i, j, l	Certify in each annual report that the Tier A Municipality has developed, and is implementing and enforcing a program to address stormwater runoff from new development and redevelopment projects. Records demonstrating compliance with Part IV.B.4 shall be kept, or their location shall be referenced, in the SPPP.	EDPA	No
For each structural and non-structural stormwater measure (e.g. basins), for which an application is made to the municipality after EDPA, the municipality shall complete, update, finalize and maintain a Major Development Stormwater Summary.	IV.B.4.k	Certify in each annual report that Major Development Stormwater Summaries (Attachment D) have been completed and records have been maintained by the Tier A municipality. Records demonstrating compliance with Part IV.B.4 shall be kept, or their location shall be referenced, in the SPPP.	EDPA	Yes
<b>Pollution Prevention/Good Housekeeping - Community Wide Ordinances</b>				
Adopt and enforce a pet waste ordinance. Distribute pet waste ordinance information with pet licenses.	IV.B.5.a.i	Certify in each annual report the date the ordinance was adopted, that it is being enforced and that pet waste ordinance information is distributed with pet licenses. A log of enforcement actions and information distribution dates shall be kept in the SPPP.	EDPA	No
Adopt and enforce a wildlife feeding ordinance.	IV.B.5.a.ii	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA	No

Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
Adopt and enforce a litter control ordinance.	IV.B.5.a.iii	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA	No
Adopt and enforce an improper disposal of waste ordinance.	IV.B.5.a.iv	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA	No
Adopt and enforce a containerized yard waste / yard waste collection program ordinance.	IV.B.5.a.v	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA	No
Adopt and enforce a private storm drain inlet retrofitting ordinance	IV.B.5.a.vi	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA	No
<b>Pollution Prevention/Good Housekeeping - Community Wide Measures</b>				
Develop and continue to implement street sweeping measures as specified at Part IV.B.5.b.i.	IV.B.5.b.i	Certify in each annual report that a street sweeping schedule is being maintained as well as records including the date and areas swept, number of miles of streets swept, and the total amount of materials collected in wet tons. Include totals in the Annual Report and keep records in the SPPP.	EDPA	No
Develop and continue to implement catch basin and storm drain inlet inspection and cleaning measures as specified at Part IV.B.5.b.ii.	IV.B.5.b.ii	Certify in each annual report that a catch basin and storm drain inlet inspection and cleaning schedule is being maintained, and a log indicating the number of municipally owned and operated catch basins and inlets within the municipality, the number of catch basins and inlets inspected, and the number cleaned is being maintained. Maintain records documenting the amount of materials collected in wet tons during cleaning activities in the SPPP. Include totals in the Annual Report.	EDPA	Modified

Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
Develop and continue to implement storm drain inlet retrofit measures as specified at Part IV.B.5.b.iii.	IV.B.5.b.iii	Certify in each annual report that a record of the number and location of storm drain inlets retrofitted as well as the number and location of storm drain inlets exempted is being maintained. Include totals in the Annual Report and keep records in the SPPP.	EDPA	No
<b>Pollution Prevention/Good Housekeeping - Municipal Maintenance Yards and Other Ancillary Operations</b>				
Implement the BMP's found in Attachment E, including the Inventory of Materials and Machinery, and Inspections and Good Housekeeping practices, at Municipal Maintenance Yards and Other Ancillary Operations.	IV.B.5.c	Certify in each annual report that the SPPP includes all applicable requirements and that the requirements (including maintenance of inspection logs and tracking forms) of Attachment E have been met. Keep records required by Attachment E in the SPPP.	EDPA	No
BMPs shall be implemented for fueling operations.	IV.B.5.c.i	Certify in each annual report that BMPs in Attachment E have been implemented for fueling operations.	EDPA	No
BMPs shall be implemented for discharge of stormwater from secondary containment.	IV.B.5.c.ii	Certify in each annual report that BMPs in Attachment E have been implemented for discharge of stormwater from secondary containment.	EDPA	No
BMPs shall be implemented for vehicle maintenance.	IV.B.5.c.iii	Certify in each annual report that BMPs in Attachment E have been implemented for vehicle maintenance.	EDPA	No
BMPs shall be implemented for on-site equipment and vehicle washing and wash wastewater containment.	IV.B.5.c.iv	Certify in each annual report that BMPs in Attachment E have been implemented for on-site equipment and vehicle washing and wash wastewater containment.	EDPA	Modified
BMPs shall be implemented for salt and de-icing material storage and handling.	IV.B.5.c.v	Certify in each annual report that BMPs in Attachment E have been implemented for salt and de-icing material storage and handling.	EDPA	No
BMPs shall be implemented for aggregate material and construction debris storage.	IV.B.5.c.vi	Certify in each annual report that BMPs in Attachment E have been implemented for aggregate material and construction debris storage.	EDPA + 12 months	Yes

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
BMPs shall be implemented for street sweepings and catch basin clean-out material storage.	IV.B.5.c.vii	Certify in each annual report that BMPs in Attachment E have been implemented for street sweepings and catch basin clean-out material storage.	EDPA + 12 months	Yes
BMPs shall be implemented for yard trimmings and wood waste management sites.	IV.B.5.c.viii	Certify in each annual report that BMPs in Attachment E have been implemented for yard trimmings and wood waste management sites.	EDPA + 12 months	Yes
BMPs shall be implemented for roadside vegetation management.	IV.B.5.c.ix	Certify in each annual report that BMPs in Attachment E have been implemented for roadside vegetation management.	EDPA + 12 months	Yes
<b>Pollution Prevention/Good Housekeeping - Training Program</b>				
Provide training to municipal employees within 3 months of commencement of duties, and at least once every two years thereafter, to address all required components. The exceptions are Part IV.B.5.d.v, viii, and x which require annual training instead of once every two years.	IV.B.5.d	Certify in each annual report that employee training has been conducted, and maintain records including sign in sheet(s), date(s) of training, and training agenda(s). These records shall be kept in the SPPP.	EDPA + 12 months	Modified
Ensure that individuals that review development and redevelopment projects for compliance with N.J.A.C. 7:8 on behalf of the municipality complete Department approved training once every five years.	IV.B.5.e	Certify in each annual report that individuals reviewing projects have completed the required training, and maintain a list of the names and dates that individuals received training. This list shall be kept in the SPPP.	EDPA + 12 months	Yes
Ensure that current Municipal Board and Governing Body Members that review and approve applications for development and redevelopment projects complete the "Training Tool" on or before EDPA + 6 months, and by new members within 6 months of commencement of duties. Once per term of service thereafter, Municipal Board and Governing Body Members must review at least one of the tools offered under the Post-Construction Stormwater Management website.	IV.B.5.f	Certify in each annual report that municipal board and governing body members have completed the necessary training, and maintain a list of the names and dates that individuals completed training. This list shall be kept in the SPPP.	EDPA + 6 months	Yes

Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
<b>MS4 Outfall Pipe Mapping and Illicit Discharge and Scouring Detection and Control</b>				
Develop, update and maintain an MS4 Outfall Pipe Map showing the location of the end of all outfall pipe which discharge to a surface water body.	IV.B.6.a.i	Certify in each annual report that the outfall pipe map is current at the end of the calendar year.	EDPA	No
Show the location (and name where known) of all surface water bodies receiving discharges from those outfall pipes.	IV.B.6.a.ii	Certify in each annual report that the surface water bodies associated with each outfall pipe end is located on the map.	EDPA	No
Include Outfall Pipe map in the SPPP	IV.B.6.a.iii	Certify in each annual report following the implementation deadline that the Outfall Pipe Map is included in the SPPP.	EDPA +12 months	Yes
Provide Outfall Pipe Map to the Department	IV.B.6.a.iv	Certify in each annual report following the implementation deadline that the Outfall Pipe Map and any new data points subsequently added to the map have been provided to the Department.	EDPA +12 months	Yes
Submitted the Outfall Pipe Map information to the Department electronically by December 21, 2020	IV.B.6.a.v	Submit the Outfall Pipe Map information to the Department using Department's designated electronic submission service by December 21, 2020.	12/21/2020	Yes
Develop, update and implement a program to detect, investigate and control localized stream scouring from stormwater outfall pipes.	IV.B.6.b	Certify in each annual report that municipally owned outfall pipes have received the required visual inspection at least once every five years and maintain a log indicating the number and location of outfall pipes inspected, repairs prioritized, and repairs scheduled or performed. Certify in the annual report that a repair schedule has been prepared for those that have not been completed. Keep records required by Part IV.B.6.b in the SPPP.	EDPA + 12 months	Modified

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
Develop, update, implement and enforce an ongoing Illicit Discharge Detection and Elimination Program.	IV.B.6.c	Certify in each annual report that the municipality has developed a program to detect and eliminate illicit discharges and has conducted inspections required at Part IV.B.6.c at least once every five years. Document all investigations and actions taken on the Department's Illicit Connection Inspection Report Form. Keep records required by Part IV.B.6.c in the SPPP.	EDPA	Modified
Adopt and enforce an ordinance that prohibits illicit connections to the MS4 operated by the Tier A Municipality.	IV.B.6.d	Certify in each annual report that the ordinance is being maintained and the date it was adopted. A log of enforcement actions shall be kept in the SPPP.	EDPA	No
<b>Stormwater Facilities Maintenance</b>				
Develop, update and implement a program to ensure adequate long-term cleaning, operation and maintenance of all stormwater facilities owned or operated by the Tier A Municipality.	IV.C.1.a	Certify in each annual report that the municipality has developed, updated and implemented a program to ensure adequate long-term cleaning, operation and maintenance of all municipally owned stormwater facilities.  Records required by Part IV.C.1.a, a.i, a.ii, a.iii and a.iv shall be kept, or their location shall be referenced, in the SPPP.	EDPA	Modified
Inspect and maintain stormwater facilities pursuant to any maintenance plans, or more frequently as needed, to ensure proper function and operation of each stormwater facility.	IV.C.1.a.i	Certify in each annual report that inspections and maintenance was performed pursuant to any maintenance plans, or more frequently as needed, to ensure proper function and operation of stormwater facilities.	EDPA	Modified

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
Maintain a log sufficient to demonstrate compliance with this section; including but not limited a list of inspections and preventative and corrective maintenance performed, and a schedule for repairs to be made.	IV.C.1.a.ii	Certify in each annual report that a maintenance log is kept that, at a minimum, records the stormwater facility inspected, location information of the facility inspected (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates), name of inspector, date of inspection, findings, and any preventative and corrective maintenance performed.	EDPA	Modified
Certify annually that municipally owned or operated stormwater facilities are properly functioning.	IV.C.1.a.iii	Certify in each annual report that all municipally owned or operated stormwater facilities are properly functioning.	EDPA	No
If stormwater facilities were found not to be functioning properly and repairs not made, then necessary preventative and corrective maintenance shall be documented and prioritized and a schedule for maintenance shall be maintained.	IV.C.1.a.iv	Certify in each annual report that a prioritized schedule of necessary preventive and corrective maintenance exists for stormwater facilities inspected and found not to be functioning properly. The municipality shall prioritize this schedule as specified in Part IV.C.1.iv.	EDPA	Modified
Develop, update, implement and enforce a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned or operated by the Tier A Municipality, not subject to the conditions of another NJPDES stormwater permit and constructed after February 7, 1984.	IV.C.1.b	<p>Certify in each annual report that the municipality has developed, updated, implemented and enforced a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned and operated by the municipality, not subject to the conditions of another NJPDES stormwater permit and constructed after February 7, 1984.</p> <p>Records required by Part IV.C.1.b, b.i and b.ii shall be kept, or their location shall be referenced, in the SPPP.</p>	EDPA + 12 months	Modified

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
Ensure that stormwater facility inspection and maintenance is performed pursuant to any maintenance plans, or more frequently as needed to ensure proper function and operation of each stormwater facility.	IV.C.1.b.i	Certify in each annual report that maintenance was performed pursuant to any maintenance plans, or more frequently, to ensure proper function and operation of stormwater facilities not owned and operated by the municipality.	EDPA + 12 months	Modified
Maintain a log sufficient to demonstrate compliance with this section; including but not limited actions taken by the municipality to enforce compliance with the long-term cleaning, operation and maintenance program.	IV.C.1.b.ii	Certify in each annual report that a log is being kept that, at a minimum, records the actions taken by the municipality to enforce compliance with the long-term cleaning, operation and maintenance program; the stormwater facility that was the subject of the action; location information of the facility that was the subject of the action (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates); the name of person taking the action; the date of the action; and the findings.	EDPA + 12 months	Modified
Maintain copies of all maintenance plans for stormwater facilities approved by the municipality, and make them available to the Department upon request.	IV.C.1.c	Certify in each annual report that copies of all maintenance plans are kept on file. Records required by Part IV.C.1.c shall be kept, or their location shall be referenced, in the SPPP.	EDPA + 12 months	Yes
<b>Total Maximum Daily Load (TMDL) Info.</b>				
Annually review approved or adopted TMDL reports to identify stormwater related pollutants listed therein and associated with any segment of surface water wholly or partially within or bordering the Tier A Municipality.	IV.C.2.a.i	Certify in each annual report that approved or adopted TMDLs have been identified and reviewed and stormwater related pollutants identified.  Records required by Part IV.C.2.a.i, a.ii and a.iii shall be kept in the SPPP.	EDPA + 12 months	Yes

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>	<b>New Requirement?</b>
Use TMDL information identified in compliance with Part IV.C.2.a.i to: (1) assist in the prioritization of stormwater facility maintenance including schedules for repairs related to Stream Scouring and Stormwater Facilities Maintenance; and (2) identify and develop strategies to address specific sources of stormwater related pollutants contributing to discharges authorized under this Tier A MS4 NJPDES permit.	IV.C.2.a.ii	Certify in each annual report that the municipality has used information identified in compliance with Part VI.C.2.a.i to (1) assist in the prioritization of repairs as required at Part IV.B.6.b.iv (Stream Scouring) and IV.C.31.a.iv (Stormwater Facilities Maintenance); and (2) identify and develop strategies to address specific sources of stormwater related pollutants contributing to discharges authorized under this Tier A MS4 NJPDES permit.	EDPA + 12 months	Yes
Update SPPP to list information identified in Part VI.C.2.a.i and ii.	IV.C.2.a.iii	Certify in each annual report that the municipality has updated its SPPP to list information identified in Part VI.C.2.a.i and ii.	EDPA + 12 months	Yes
Incorporate any strategies identified in Part VI.C.2.a.ii(2) as an Optional Measure	IV.C.2.a.iv	Certify in each annual report that the municipality has incorporated any strategies identified in Part VI.C.2.a.ii(2) as an Optional Measure.	EDPA + 12 months	Yes

## Attachment A-1 – Measurable Goals and Implementation Schedule for New Permittees

### General

The following table specifies the Measurable Goals and Implementation Schedule of this Tier A MS4 NJPDES Permit for New Permittees. Each Measurable Goal and Implementation Schedule is associated with a permit citation and a summary of the associated Minimum Standard. The summary of Minimum Standard column represents a paraphrase of permit conditions. Actual Minimum Standards are found in Part IV of the permit.

See below for specific Measurable Goals that shall be documented in the SPPP. **The SPPP shall be created by EDP + 12 months and updated on annual basis thereafter as required by Part IV.F.** The Implementation Schedule refers to the date that a Minimum Standard must be incorporated into the Tier A Municipality's stormwater program, along with any ongoing requirements. In addition to the requirements of Part IV.F above, the SPPP shall identify and discuss the Minimum Standard of each Statewide Basic Requirement (Part IV.B, above) and Other Control Measures (Part IV.C, above) where the following information is required for each item:

- Describe the method of implementation;
- Include required recordkeeping;
- Include an implementation schedule, consistent with permit requirements, including interim milestones;
- Include any special diagrams required by the permit (e.g., stormwater facilities map); and
- Include inspection and maintenance schedules, as appropriate.

This table does not include Measurable Goals and an Implementation Schedule for the Notes and Definitions Part IV, Part IV.A (Permit Overview), Part IV.D (Additional Measures), IV.E (Optional Measures), IV.F (SPPP), and IV.G (Annual Report and Certification) because these are not Statewide Basic Requirements or Other Control Measures (see N.J.A.C. 7:14A-25.6). While not included in this table, Notes and Definitions Part IV, Part IV.A, D, E, F, and G are permit requirements and compliance is required.

<b>Measurable Goals for Statewide Basic Requirements and Other Conditions of this Permit for New Permittees</b>			
<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>
<b>Public Involvement and Participation Including Public Notice</b>			
Provide for public notice under the Open Public Meetings Act, statutory procedures for enactment of ordinances, and Municipal Land Use Law when providing for public participation in the development and implementation of a stormwater program, and maintain records necessary to demonstrate compliance.	IV.B.1.a & d	Certify in each annual report that all public notice requirements have been met and relevant records kept. Reference in the SPPP the location of associated municipal records.	EDPA
Provide the current SPPP to the public upon request.	IV.B.1.b.i	Certify in each annual report that the SPPP was made available to the public.	EDPA + 12 months
Post the current SPPP on the municipality's website.	IV.B.1.b.ii	Certify in each annual report that the SPPP has been posted on the municipality's website (to the extent required by Part IV.F.1.f) and that the posted SPPP is current.	EDPA + 12 months)
Post the current Municipal Stormwater Management Plan (MSWMP) and related ordinances on the municipality's website.	IV.B.1.b.iii	Certify in each annual report that the MSWMP and related ordinances have been posted on the municipality's website and that the posted documents are current.	EDPA + 90 days
<b>Local Public Education and Outreach</b>			
Implementation of a Public Education and Outreach Program by conducting activities that total a minimum of 12 points on an annual basis.	IV.B.2.a	Certify in each annual report that the minimum point value has been met and report point totals in the Annual Report. Maintain records of materials and activities from Attachment B, including dates of activities and any other relevant documentation (e.g. brochures, pictures, sign-in sheets, press clippings).	EDPA

<b>Summary of Minimum Standard</b> (See Part IV for specific permit requirements)	<b>Permit Cite</b>	<b>Measurable Goal</b> (See Part IV for specific permit requirements)	<b>Implementation Schedule</b>
Label storm drain inlets, maintain the legibility of those labels, and replace labels that are missing or not legible along sidewalks that are adjacent to municipal streets; and within plazas, parking areas or maintenance yards operated by the municipality.	IV.B.2.b	Certify in each annual report that storm drains have been properly labeled and/or maintained. Records tracking storm drain inlet label status shall be kept with the SPPP.	EDPA
Advertise public involvement program(s) pertaining to education and outreach activities.	IV.B.2.c	Certify in each annual report that public involvement program(s) have been properly advertised on the website, through a mailing, through newspaper advertisement, or other similar means. Public advertisement records shall be kept with the SPPP.	EDPA + 12 months
<b>Post Construction Stormwater Management in New Development and Redevelopment</b>			
Develop, update, implement and enforce its post construction stormwater management program in new development and redevelopment to ensure compliance with the Stormwater Management rules (N.J.A.C. 7:8).	IV.B.4.a, b, c, d, e, f, g, h, i, j, l	Certify in each annual report that the Tier A Municipality has developed, and is implementing and enforcing a program to address stormwater runoff from new development and redevelopment projects. Records demonstrating compliance with Part IV.B.4 shall be kept, or their location shall be referenced, in the SPPP.	EDPA
For each structural and non-structural stormwater measure ( basins), for which an application is made to the municipality after EDPA, the municipality shall complete, update, finalize and maintain a Major Development Stormwater Summary.	IV.B.4.k	Certify in each annual report that Major Development Stormwater Summaries (Attachment D) have been completed and records have been maintained by the Tier A municipality. Records demonstrating compliance with Part IV.B.4 shall be kept, or their location shall be referenced, in the SPPP.	EDPA

<b>Pollution Prevention/Good Housekeeping - Community Wide Ordinances</b>			
Adopt and enforce a pet waste ordinance. Distribute pet waste ordinance information with pet licenses.	IV.B.5.a.i	Certify in each annual report the date the ordinance was adopted, that it is being enforced and that pet waste ordinance information is distributed with pet licenses. A log of enforcement actions and information distribution dates shall be kept in the SPPP.	EDPA + 12 months
Adopt and enforce a wildlife feeding ordinance.	IV.B.5.a.ii	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
Adopt and enforce a litter control ordinance.	IV.B.5.a.iii	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
Adopt and enforce an improper disposal of waste ordinance.	IV.B.5.a.iv	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
Adopt and enforce a containerized yard waste / yard waste collection program ordinance.	IV.B.5.a.v	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
Adopt and enforce a private storm drain inlet retrofitting ordinance	IV.B.5.a.vi	Certify in each annual report the date the ordinance was adopted and that it is being enforced. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
<b>Pollution Prevention/Good Housekeeping - Community Wide Measures</b>			
Develop and continue to implement street sweeping measures as specified at Part IV.B.5.b.i.	IV.B.5.b.i	Certify in each annual report that a street sweeping schedule is being maintained as well as records including the date and areas swept, number of miles of streets swept, and the total amount of materials collected in wet tons. Include totals in the Annual Report and keep records in the SPPP.	EDPA + 24 months

Develop and continue to implement catch basin and storm drain inlet inspection and cleaning measures as specified at Part IV.B.5.b.ii.	IV.B.5.b.ii	Certify in each annual report that a catch basin and storm drain inlet inspection and cleaning schedule is being maintained, and a log indicating the number of municipally owned and operated catch basins and inlets within the municipality, the number of catch basins and inlets inspected, and the number cleaned is being maintained. Maintain records documenting the amount of materials collected in wet tons during cleaning activities in the SPPP. Include totals in the Annual Report.	EDPA + 24 months
Develop and continue to implement storm drain inlet retrofit measures as specified at Part IV.B.5.b.iii.	IV.B.5.b.iii	Certify in each annual report that a record of the number and location of storm drain inlets retrofitted as well as the number and location of storm drain inlets exempted is being maintained. Include totals in the Annual Report and keep records in the SPPP.	EDPA + 12 months
<b>Pollution Prevention/Good Housekeeping - Municipal Maintenance Yards and Other Ancillary Operations</b>			
Implement the BMP's found in Attachment E, including the Inventory of Materials and Machinery, and Inspections and Good Housekeeping practices, at Municipal Maintenance Yards and Other Ancillary Operations.	IV.B.5.c	Certify in each annual report that the SPPP includes all applicable requirements and that the requirements (including maintenance of inspection logs and tracking forms) of Attachment E have been met. Keep records required by Attachment E in the SPPP.	EDPA + 12 months
BMPs shall be implemented for fueling operations.	IV.B.5.c.i	Certify in each annual report that BMPs in Attachment E have been implemented for fueling operations.	EDPA + 12 months
BMPs shall be implemented for discharge of stormwater from secondary containment.	IV.B.5.c.ii	Certify in each annual report that BMPs in Attachment E have been implemented for discharge of stormwater from secondary containment.	EDPA + 12 months
BMPs shall be implemented for vehicle maintenance.	IV.B.5.c.iii	Certify in each annual report that BMPs in Attachment E have been implemented for vehicle maintenance.	EDPA + 12 months

BMPs shall be implemented for on-site equipment and vehicle washing and wash wastewater containment.	IV.B.5.c.iv	Certify in each annual report that BMPs in Attachment E have been implemented for on-site equipment and vehicle washing and wash wastewater containment.	EDPA + 60 months
BMPs shall be implemented for salt and de-icing material storage and handling.	IV.B.5.c.v	Certify in each annual report that BMPs in Attachment E have been implemented for salt and de-icing material storage and handling.	EDPA + 60 months
BMPs shall be implemented for aggregate material and construction debris storage.	IV.B.5.c.vi	Certify in each annual report that BMPs in Attachment E have been implemented for aggregate material and construction debris storage.	EDPA + 18 months
BMPs shall be implemented for street sweepings and catch basin clean-out material storage.	IV.B.5.c.vii	Certify in each annual report that BMPs in Attachment E have been implemented for street sweepings and catch basin clean-out material storage.	EDPA + 18 months
BMPs shall be implemented for yard trimmings and wood waste management sites.	IV.B.5.c.viii	Certify in each annual report that BMPs in Attachment E have been implemented for yard trimmings and wood waste management sites.	EDPA + 18 months
BMPs shall be implemented for roadside vegetation management.	IV.B.5.c.ix	Certify in each annual report that BMPs in Attachment E have been implemented for roadside vegetation management.	EDPA + 18 months
<b>Pollution Prevention/Good Housekeeping - Training Program</b>			
Provide training to municipal employees within 3 months of commencement of duties, and at least once every two years thereafter, to address all required components. The exceptions are Part IV.B.5.d.v, viii, and x which require annual training instead of once every two years.	IV.B.5.d	Certify in each annual report that employee training has been conducted, and maintain records including sign in sheet(s), date(s) of training, and training agenda(s). These records shall be kept in the SPPP.	EDPA + 12 months
Ensure that individuals that review development and redevelopment projects for compliance with N.J.A.C. 7:8 on behalf of the municipality complete Department approved training once every five years.	IV.B.5.e	Certify in each annual report that individuals reviewing projects have completed the required training, and maintain a list of the names and dates that individuals received training. This list shall be kept in the SPPP.	EDPA + 12 months

Ensure that current Municipal Board and Governing Body Members that review and approve applications for development and redevelopment projects complete the “Training Tool” on or before EDPA + 6 months, and by new members within 6 months of commencement of duties. Once per term of service thereafter, Municipal Board and Governing Body Members must review at least one of the tools offered under the Post-Construction Stormwater Management website.	IV.B.5.f	Certify in each annual report that municipal board and governing body members have completed the necessary training, and maintain a list of the names and dates that individuals completed training. This list shall be kept in the SPPP.	EDPA + 6 months
<b>MS4 Outfall Pipe Mapping and Illicit Discharge and Scouring Detection and Control</b>			
Develop, update and maintain an MS4 Outfall Pipe Map showing the location of the end of all outfall pipe which discharge to a surface water body.	IV.B.6.a.i	Certify in each annual report following the implementation deadline that the outfall pipe map is current at the end of the calendar year.	EDPA + 36 months
Show the location (and name where known) of all surface water bodies receiving discharges from those outfall pipes.	IV.B.6.a.ii	Certify in each annual report following the implementation deadline that the surface water bodies associated with each outfall pipe end is located on the map.	EDPA + 36 months
Include Outfall Pipe map in the SPPP	IV.B.6.a.iii	Certify in each annual report following the implementation deadline that the Outfall Pipe Map is included in the SPPP.	EDPA + 36 months
Provide Outfall Pipe Map to the Department	IV.B.6.a.iv	Certify in each annual report following the implementation deadline that the Outfall Pipe Map and any new data points subsequently added to the map have been provided to the Department.	EDPA + 36 months
Submitted the Outfall Pipe Map information to the Department electronically by December 21, 2020	IV.B.6.a.v	Submit the Outfall Pipe Map information to the Department using Department’s designated electronic submission service by December 21, 2020.	12/21/2020

Develop, update and implement a program to detect, investigate and control localized stream scouring from stormwater outfall pipes.	IV.B.6.b	Certify in each annual report that municipally owned outfall pipes have received the required visual inspection at least once every five years and maintain a log indicating the number and location of outfall pipes inspected, repairs prioritized, and repairs scheduled or performed. Certify in the annual report that a repair schedule has been prepared for those that have not been completed. Keep records required by Part IV.B.6.b in the SPPP.	EDPA + 60 months
Develop, update, implement and enforce an ongoing Illicit Discharge Detection and Elimination Program.	IV.B.6.c	Certify in each annual report that the municipality has developed a program to detect and eliminate illicit discharges and has conducted inspections required at Part IV.B.6.c at least once every five years. Document all investigations and actions taken on the Department's Illicit Connection Inspection Report Form. Keep records required by Part IV.B.6.c in the SPPP.	EDPA + 60 months
Adopt and enforce an ordinance that prohibits illicit connections to the MS4 operated by the Tier A Municipality.	IV.B.6.d	Certify in each annual report that the ordinance is being maintained and the date it was adopted. A log of enforcement actions shall be kept in the SPPP.	EDPA + 12 months
<b>Stormwater Facilities Maintenance</b>			
Develop, update and implement a program to ensure adequate long-term cleaning, operation and maintenance of all stormwater facilities owned or operated by the Tier A Municipality.	IV.C.1.a	Certify in each annual report that the municipality has developed, updated and implemented a program to ensure adequate long-term cleaning, operation and maintenance of all municipally owned stormwater facilities.  Records required by Part IV.C.1.a, a.i, a.ii, a.iii and a.iv shall be kept, or their location shall be referenced, in the SPPP.	EDPA + 18 months

Inspect and maintain stormwater facilities pursuant to any maintenance plans, or more frequently as needed, to ensure proper function and operation of each stormwater facility.	IV.C.1.a.i	Certify in each annual report that inspections and maintenance was performed pursuant to any maintenance plans, or more frequently as needed, to ensure proper function and operation of stormwater facilities.	EDPA + 18 months
Maintain a log sufficient to demonstrate compliance with this section; including but not limited a list of inspections and preventative and corrective maintenance performed, and a schedule for repairs to be made.	IV.C.1.a.ii	Certify in each annual report that a maintenance log is kept that, at a minimum, records the stormwater facility inspected, location information of the facility inspected (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates), name of inspector, date of inspection, findings, and any preventative and corrective maintenance performed.	EDPA + 18 months
Certify annually that municipally owned or operated stormwater facilities are properly functioning.	IV.C.1.a.iii	Certify in each annual report that all municipally owned or operated stormwater facilities are properly functioning.	EDPA + 18 months
If stormwater facilities were found not to be functioning properly and repairs not made, then necessary preventative and corrective maintenance shall be documented and prioritized and a schedule for maintenance shall be maintained.	IV.C.1.a.iv	Certify in each annual report that a prioritized schedule of necessary preventive and corrective maintenance exists for stormwater facilities inspected and found not to be functioning properly. The municipality shall prioritize this schedule as specified in Part IV.C.1.iv.	EDPA + 18 months
Develop, update, implement and enforce a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned or operated by the Tier A Municipality, not subject to the conditions of another NJPDES stormwater permit and constructed after February 7, 1984.	IV.C.1.b	<p>Certify in each annual report that the municipality has developed, updated, implemented and enforced a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned and operated by the municipality, not subject to the conditions of another NJPDES stormwater permit and constructed after February 7, 1984.</p> <p>Records required by Part IV.C.1.b, b.i and b.ii shall be kept, or their location shall be referenced, in the SPPP.</p>	EDPA + 18 months

Ensure that stormwater facility inspection and maintenance is performed pursuant to any maintenance plans, or more frequently as needed to ensure proper function and operation of each stormwater facility.	IV.C.1.b.i	Certify in each annual report that maintenance was performed pursuant to any maintenance plans, or more frequently, to ensure proper function and operation of stormwater facilities not owned and operated by the municipality.	EDPA + 18 months
Maintain a log sufficient to demonstrate compliance with this section; including but not limited actions taken by the municipality to enforce compliance with the long-term cleaning, operation and maintenance program.	IV.C.1.b.ii	Certify in each annual report that a log is being kept that, at a minimum, records the actions taken by the municipality to enforce compliance with the long-term cleaning, operation and maintenance program; the stormwater facility that was the subject of the action; location information of the facility that was the subject of the action (location information must be specific enough to locate and identify the stormwater facility in the field; e.g. geographic coordinates); the name of person taking the action; the date of the action; and the findings.	EDPA + 18 months
Maintain copies of all maintenance plans for stormwater facilities approved by the municipality, and make them available to the Department upon request.	IV.C.1.c	Certify in each annual report that copies of all maintenance plans are kept on file. Records required by Part IV.C.1.c shall be kept, or their location shall be referenced, in the SPPP.	EDPA + 12 months
<b>Total Maximum Daily Load (TMDL) Info.</b>			
Annually review approved or adopted TMDL reports to identify stormwater related pollutants listed therein and associated with any segment of surface water wholly or partially within or bordering the Tier A Municipality.	IV.C.2.a.i	Certify in each annual report that approved or adopted TMDLs have been identified and reviewed and stormwater related pollutants identified.  Records required by Part IV.C.2.a.i, a.ii and a.iii shall be kept in the SPPP.	EDPA + 12 months

Use TMDL information identified in compliance with Part IV.C.2.a.i to: (1) assist in the prioritization of stormwater facility maintenance including schedules for repairs related to Stream Scouring and Stormwater Facilities Maintenance; and (2) identify and develop strategies to address specific sources of stormwater related pollutants contributing to discharges authorized under this Tier A MS4 NJPDES permit.	IV.C.2.a.ii	Certify in each annual report that the municipality has used information identified in compliance with Part VI.C.2.a.i to (1) assist in the prioritization of repairs as required at Part IV.B.6.b.iv (Stream Scouring) and IV.C.31.a.iv (Stormwater Facilities Maintenance); and (2) identify and develop strategies to address specific sources of stormwater related pollutants contributing to discharges authorized under this Tier A MS4 NJPDES permit.	EDPA + 12 months
Update SPPP to list information identified in Part VI.C.2.a.i and ii.	IV.C.2.a.iii	Certify in each annual report that the municipality has updated its SPPP to list information identified in Part VI.C.2.a.i and ii.	EDPA + 12 months
Incorporate any strategies identified in Part VI.C.2.a.ii(2) as an Optional Measure	IV.C.2.a.iv	Certify in each annual report that the municipality has incorporated any strategies identified in Part VI.C.2.a.ii(2) as an Optional Measure.	EDPA + 12 months

## Attachment B – Points System for Public Education and Outreach Activities

The Tier A Municipality shall implement a Public Education and Outreach Program that focuses on educational and pollution prevention activities about the impacts of stormwater discharges on surface water and groundwater and to involve the public in reducing pollutants in stormwater runoff and mitigating flow.

The Tier A Municipality shall **annually** conduct educational activities that total at least **12 points** and include activities from at least three of the five categories found below. At a minimum, at least one of the activities shall involve educating businesses and the general public of hazards associated with illicit connections and improper disposal of waste. Each approved activity is listed below with an assigned point value. Additional information on how to conduct these Public Education and Outreach activities can be found under Notes and Definitions Part IV.A.3 and 4 of this Tier A MS4 NJPDES permit. Records shall be kept necessary to demonstrate compliance with this requirement, including date of activities and any other relevant documentation.

Category 1: General Public Outreach		
Activity	Description	Points
<b>Website and Social Media</b>	Maintain a stormwater related page on the municipal website or on a municipal social media site. The web page may include links to other stormwater related resources, including the NJDEP stormwater website ( <a href="http://www.njstormwater.org">www.njstormwater.org</a> ).	1
<b>Newspaper Ad</b>	Use Department created and approved stormwater education materials available on <a href="http://www.cleanwaternj.org">www.cleanwaternj.org</a> to publish an ad in a newspaper or newsletter that serves the municipality.	1
<b>Radio/Television</b>	Broadcast a radio or television public service announcement from <a href="http://www.cleanwaternj.org">www.cleanwaternj.org</a> on a local radio or municipal public service channel.	1
<b>Green Infrastructure Signage</b>	Post signs at municipally-owned green infrastructure sites that describe the function and importance of the infrastructure, contact phone number, municipal identification number, and/or website for more information.  *New signs receive 0.5 credits per sign. Existing signs that are maintained or upgraded receive 0.25 credits per sign. A maximum of 5 credits are allowed.	5*
<b>Billboard/Sign</b>	Produce and maintain (for credit in subsequent years) a billboard or sign which can be displayed on a bus, bus stop shelter, recreation field (outfield sign), or other similar public venue.	2
<b>Mural</b>	Produce and maintain (for credit in subsequent years) the planning and painting of a stormwater pollution themed mural, storm drain art or other artwork at a local downtown/commercial area or other similar public venue.	2
<b>Stormwater Facility Signage</b>	Post signs at municipally-owned stormwater management basins or other structural stormwater related facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information.  *New signs receive 0.5 credits per sign. Existing signs that are maintained or upgraded receive 0.25 credits per sign. A maximum of 5 credits are allowed.	5*

<b>Category 2: Targeted Audiences Outreach</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>Stormwater Display</b>	Present a stormwater related display or materials at any municipal event (e.g., Earth Day, town picnic), at the municipal building or other similar public venue.	1
<b>Promotional Item</b>	Distribute an item or items with a stormwater related message (e.g., refrigerator magnets, temporary tattoos, key chains, bookmarks, pet waste bag dispensers, coloring books, and pens or pencils). Municipality must initially have available a minimum number of the items equal to 10% of the municipal population.	2
<b>Mailing or e-Mailing Campaign</b>	Provide information to all known owners of stormwater facilities not owned or operated by the municipality (i.e., privately owned) highlighting the importance of proper maintenance of stormwater measures. For assistance, see information at <a href="http://www.nj.gov/dep/stormwater/maintenance_guidance.htm">www.nj.gov/dep/stormwater/maintenance_guidance.htm</a> .	3
<b>Mailing or e-Mailing Campaign</b>	Distribute any of the Department's educational brochures, tip cards, or a municipally produced equivalent (e.g., community calendar, newsletter, or recycling schedule) via a mailing to every resident and business in the municipality.	2
<b>Ordinance Education</b>	Distribute a letter or e-mail from the mayor or municipal official to every resident and business in the municipality highlighting the requirements and environmental benefits of the Pet Waste, Wildlife Feeding, Litter Control, Improper Disposal of Waste, Containerized Waste/Yard Waste Collection, Private Storm Drain Inlet Retrofitting and Illicit Connection ordinances. Provide a link to the municipal website where subject ordinances are posted.	3

<b>Category 3: School / Youth Education and Activities</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>School Presentations</b>	Provide water-related educational presentation(s) and/or activities to local preschool, elementary, middle, and/or high school classes using municipal staff or local partner organizations. Topics could include stormwater, nonpoint source pollution, watersheds, water conservation and water quality. For ideas, see information at <a href="http://www.nj.gov/dep/seeds">www.nj.gov/dep/seeds</a> .  *Presentations receive 1 credit per presentation, with a maximum of 5 credits allowed.	5*
<b>Water Education Workshops</b>	Provide water-related professional development workshops for local teachers from a registered NJ Department of Education Professional Development Provider.	2
<b>Storm Drain Labeling</b>	Organize a project to label and/or maintain storm drain labels (that are not already precast with a message) with a scout troop, local school district, or faith based group, or other community youth group for a minimum of 40 labels. This project could also include stenciling over precast labels to improve legibility.	3
<b>Educational Contest for Schools</b>	Organize an educational contest with a local school district or a local community organization serving youth to design a poster, magnet, rain stick, rain barrel or other craft/art object. Contest themes shall have an appropriate stormwater message. Winning entries are to be displayed at publicly accessible locations within the municipality such as at the town hall, library, post office, or school. The winning design should be shown on the municipality's website or social media site, if practical.	3
<b>AmeriCorps Event</b>	Coordinate an event (e.g. volunteer stream monitoring, educational presentations, or stormwater awareness project) through <a href="#">AmeriCorps NJ Watershed Ambassador Program</a>	4
<b>Clean-up</b>	Sponsor or organize a litter clean up for a scout troop, local school district, faith based group or other community youth group along a local waterway, public park, stormwater facility, or in an area with storm drains that discharge to a local lake or waterway.	3

### Category 4: Watershed/Regional Collaboration

Activity	Description	Points
<b>Regional Stormwater Collaboration</b>	Participate in a regional stormwater, community collaborative or other watershed-based group on a regular basis to discuss impaired waterbodies, TMDLs, regional stormwater related issues, or watershed restoration plans that address those waterbodies. Evaluate, develop and implement remedies that resolve stormwater-related issues within the affected waterbody or watershed.	3
<b>Green Infrastructure Workshop</b>	Organize or participate in a rain barrel, rain garden or other green infrastructure workshop on a regional or watershed basis. This could be a partnership exercise with a local watershed organization, utility, university, school, youth/faith based group, and/or other organization.	3
<b>Community Activity</b>	Organize or participate in the organization of a regional or watershed based event to carry out stormwater activities such as stormwater facility maintenance or litter clean-up. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, utility, university, school, youth/faith based group, and/or other organization to carry out these activities.	3

### Category 5: Community Involvement Activities

Activity	Description	Points
<b>Volunteer Stormwater Assessment or Stream Monitoring</b>	Establish a volunteer stormwater facility assessment (inspection, inventory and/or mapping) or stream monitoring program for a waterbody within the municipality in order to gauge the health of the waterway through chemical, biological or visual monitoring protocols. Contact NJDEP's <a href="#">AmeriCorps NJ Watershed Ambassador Program</a> or review <a href="#">USEPA National Directory of Volunteer Monitoring Programs</a> .	3
<b>Rain Barrel Workshop</b>	Organize or participate in a rain barrel workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith based group, and/or other nonprofit.	3
<b>Rain Garden Workshop</b>	Organize or participate in a rain garden training or installation workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith based group, and/or other nonprofit.	3
<b>Community Event</b>	Organize or participate in the organization of a community event to carry out stormwater activities such as stormwater measure maintenance or a stream buffer restoration. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, university, utility, school, youth/faith based group, and/or other nonprofit to carry out these activities.	3
<b>Community Involvement</b>	Organize a project with a local organization to create and post signs at either green and/or gray stormwater infrastructure sites or facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information.  *Signs receive 0.5 credits per sign. A maximum of 5 credits are allowed.	5*

## Attachment C - Design Standards for Storm Drain Inlets

### Application of Design Standard

The below design standard applies to the following types of storm drain inlet installation or retrofit projects unless a more stringent standard is specified by the municipality's stormwater control ordinance:

- Storm drain inlets installed as part of new development and redevelopment (public or private) that disturb one acre or more;
  - Storm drain inlets installed as part of new development and redevelopment (public or private) that disturb less than one acre that are part of a larger common plan of development or sale (e.g. phased residential development) that ultimately disturbs one acre or more;
- Tier A Municipality owned or operated storm drain inlets must be retrofitted where the storm drains are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities; and
- Privately owned or operated storm drain inlets (e.g. condominium association) must be retrofitted where the storm drains are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities. This does not include single family homes.

### Design Standard

Grates in pavement or other ground surfaces shall meet either of the following standards:

- The New Jersey Department of Transportation (NJDOT) bicycle safe grate standards described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (see [www.nj.gov/transportation/publicat/pdf/BikeComp/introtofac.pdf](http://www.nj.gov/transportation/publicat/pdf/BikeComp/introtofac.pdf)); or
- A grate where each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is not greater than 0.5 inches across the smallest dimension. Note that the Residential Site Improvement Standards at N.J.A.C. 5:21 include requirements for bicycle safe grates.

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 used to collect stormwater from the surface into a storm drain or surface water body.

For curb-openings inlets, including curb-opening inlets in combination inlets, the clear space in the curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches or be no greater than two (2.0) inches across the smallest dimension.

## Exemptions from the Design Standard

- Where each individual clear space in the curb opening in existing curb-opening inlets does not have an area of more than nine (9.0) square inches;
- Where the review agency determines that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;
- Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:

A rectangular space four and five-eighths inches long and one and one-half inches wide (this option does not apply for outfall netting facilities); or

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).

- Where flows are conveyed through a trash rack that has parallel bars with one inch (1”) spacing between the bars, to the elevation of the water quality design storm as specified in N.J.A.C. 7:8; or
- Where the Department determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet the standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

## Attachment D – Major Development Stormwater Summary

### General Information

1. Project Name:			
2. Municipality:	County:	Block(s):	Lot(s):
3. Site Location (State Plane Coordinates – NAD83):		E:	N:
4. Date of Final Approval for Construction by Municipality: Date of Certificate of Occupancy:			
5. Project Type (circle all that apply): Residential   Commercial   Industrial   Other (please specify) _____			
6. Soil Conservation District Project Number:			
7. Did project require NJDEP Land Use Permit?   Yes   No   Land Use Permit #:			
8. Did project require the use of any mitigation measures?   Yes   No If yes, which standard was mitigated?			

### Site Design Specifications

1. Area of Disturbance (acres):	Area of Proposed Impervious (acres):
2. List all Hydrologic Soil Groups:	
3. Please Identify the Amount of Each Best Management Practices (BMPs) Utilized in Design Below: Bioretention Systems ____   Constructed Wetlands ____   Dry Wells ____   Extended Detention Basins ____ Infiltration Basins ____   Combination Infiltration/Detention Basins ____   Manufactured Treatment Devices ____ Pervious Paving Systems ____   Sand Filters ____   Vegetative Filter Strips ____   Wet Ponds ____ Grass Swales ____   Subsurface Gravel Wetlands ____   Other _____	

### Storm Event Information

Storm Event: Rainfall (inches and duration)	2 yr.: _____	10 yr.: _____
	100 yr.: _____	WQ DS: _____
Runoff Computation Method (circle one): NRCS: Dimensionless Unit Hydrograph   NRCS: Delmarva Unit Hydrograph   Rational   Modified Rational Other: _____		

### Basin Specifications (answer all that apply)

\*If more than one basin, attach multiple sheets\*

1. Type of Basin:	Surface/Subsurface (circle one)
2. Owner (circle one): Public   Private: If so, Name:   Phone number:	
3. Basin Construction Completion Date:	
4. Drain Down Time (hr.):	
5. Design Soil Permeability (in./hr.):	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
7. Groundwater Recharge Methodology (circle one): 2 Year Difference   NJGRS   Other   NA	
8. Groundwater Mounding Analysis (circle one): Yes   No   If, Yes Methodology Used:	
9. Maintenance Plan Submitted: Yes   No   Is the Basin Deed Restricted: Yes   No	

Comments: \_\_\_\_\_

Name of Person Filling Out This Form: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Basin Specifications (answer all that apply)**

*\*If more than one basin, attach multiple sheets\**

10. Type of Basin:	Surface/Subsurface (circle one)
11. Owner (circle one):	Public          Private: If so, Name:          Phone number:
12. Basin Construction Completion Date:	
13. Drain Down Time (hr.):	
14. Design Soil Permeability (in./hr.):	
15. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
16. Groundwater Recharge Methodology (circle one):	2 Year Difference          NJGRS          Other          NA
17. Groundwater Mounding Analysis (circle one):	Yes    No    If, Yes Methodology Used:
18. Maintenance Plan Submitted: Yes    No	Is the Basin Deed Restricted: Yes    No

**Basin Specifications (answer all that apply)**

*\*If more than one basin, attach multiple sheets\**

19. Type of Basin:	Surface/Subsurface (circle one)
20. Owner (circle one):	Public          Private: If so, Name:          Phone number:
21. Basin Construction Completion Date:	
22. Drain Down Time (hr.):	
23. Design Soil Permeability (in./hr.):	
24. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
25. Groundwater Recharge Methodology (circle one):	2 Year Difference          NJGRS          Other          NA
26. Groundwater Mounding Analysis (circle one):	Yes    No    If, Yes Methodology Used:
27. Maintenance Plan Submitted: Yes    No	Is the Basin Deed Restricted: Yes    No

**Basin Specifications (answer all that apply)**

*\*If more than one basin, attach multiple sheets\**

28. Type of Basin:	Surface/Subsurface (circle one)
29. Owner (circle one):	Public          Private: If so, Name:          Phone number:
30. Basin Construction Completion Date:	
31. Drain Down Time (hr.):	
32. Design Soil Permeability (in./hr.):	
33. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
34. Groundwater Recharge Methodology (circle one):	2 Year Difference          NJGRS          Other          NA
35. Groundwater Mounding Analysis (circle one):	Yes    No    If, Yes Methodology Used:
36. Maintenance Plan Submitted: Yes    No	Is the Basin Deed Restricted: Yes    No

Name of Person Filling Out This Form: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **Attachment E – Best Management Practices for Municipal Maintenance Yards and Other Ancillary Operations**

The Tier A Municipality shall implement the following practices at municipal maintenance yards and other ancillary operations owned or operated by the municipality. Inventory of Materials and Machinery, and Inspections and Good Housekeeping shall be conducted at all municipal maintenance yards and other ancillary operations. All other Best Management Practices shall be conducted whenever activities described below occur. Ancillary operations include but are not limited to impound yards, permanent and mobile fueling locations, and yard trimmings and wood waste management sites.

### **Inventory of Materials and Machinery**

The SPPP shall include a list of all materials and machinery located at municipal maintenance yards and ancillary operations which could be a source of pollutants in a stormwater discharge. The materials in question include, but are not limited to: raw materials; intermediate products; final products; waste materials; by-products; machinery and fuels; and lubricants, solvents, and detergents that are related to the municipal maintenance yard operations and ancillary operations. Materials or machinery that are not exposed to stormwater at the municipal maintenance yard or related to its operations do not need to be included.

### **Inspections and Good Housekeeping**

1. Inspect the entire site, including the site periphery, monthly (under both dry and wet conditions, when possible). Identify conditions that would contribute to stormwater contamination, illicit discharges or negative impacts to the Tier A Municipality's MS4. Maintain an inspection log detailing conditions requiring attention and remedial actions taken for all activities occurring at Municipal Maintenance Yards and Other Ancillary Operations. This log must contain, at a minimum, a record of inspections of all operations listed in Part IV.B.5.c. of this permit including dates and times of the inspections, and the name of the person conducting the inspection and relevant findings. This log must be kept on-site with the SPPP and made available to the Department upon request. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for additional information.
2. Conduct cleanups of spills of liquids or dry materials immediately after discovery. All spills shall be cleaned using dry cleaning methods only. Clean up spills with a dry, absorbent material (i.e., kitty litter, sawdust, etc.) and sweep the rest of the area. Dispose of collected waste properly. Store clean-up materials, spill kits and drip pans near all liquid transfer areas, protected from rainfall.
3. Properly label all containers. Labels shall be legible, clean and visible. Keep containers in good condition, protected from damage and spillage, and tightly closed when not in use. When practical, store containers indoors. If indoor storage is not practical, containers may be stored outside if covered and placed on spill platforms or clean pallets. An area that is graded and/or bermed to prevent run-through of stormwater may be used in place of spill platforms or clean pallets. Outdoor storage locations shall be regularly maintained.

## Fueling Operations

1. Establish, maintain and implement standard operating procedures to address vehicle fueling; receipt of bulk fuel deliveries; and inspection and maintenance of storage tanks, including the associated piping and fuel pumps.
  - a. Place drip pans under all hose and pipe connections and other leak-prone areas during bulk transfer of fuels.
  - b. Block storm sewer inlets, or contain tank trucks used for bulk transfer, with temporary berms or temporary absorbent booms during the transfer process. If temporary berms or booms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel shall be within the temporarily bermed or boomed area during the loading/unloading of bulk fuels. A trained employee shall be present to supervise the bulk transfer of fuel.
  - c. Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment. Include all of the following:
    - “Topping off of vehicles, mobile fuel tanks, and storage tanks is strictly prohibited”
    - “Stay in view of fueling nozzle during dispensing”
    - Contact information for the person(s) responsible for spill response.
  - d. Immediately repair or replace any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair.

## Discharge of Stormwater from Secondary Containment

The discharge pipe/outfall from a secondary containment area (e.g. fuel storage, de-icing solution storage, brine solution) shall have a valve and the valve shall remain closed at all times except as described below. A municipality may discharge stormwater accumulated in a secondary containment area if a visual inspection is performed to ensure that the contents of aboveground storage tank have not come in contact with the stormwater to be discharged. Visual inspections are only effective when dealing with materials that can be observed, like petroleum. If the contents of the tank are not visible in stormwater, the municipality shall rely on previous tank inspections to determine with some degree of certainty that the tank has not leaked. If the municipality cannot make a determination with reasonable certainty that the stormwater in the secondary containment area is uncontaminated by the contents of the tank, then the stormwater shall be hauled for proper disposal.

## Vehicle Maintenance

1. Operate and maintain equipment to prevent the exposure of pollutants to stormwater.
2. Whenever possible, conduct vehicle and equipment maintenance activities indoors. For projects that must be conducted outdoors, and that last more than one day, portable tents or covers shall be placed over the equipment being serviced when not being worked on, and drip pans shall be used at all times. Use designated areas away from storm drains or block storm drain inlets when vehicle and equipment maintenance is being conducted outdoors.

## On-Site Equipment and Vehicle Washing and Wash Wastewater Containment

1. Manage any equipment and vehicle washing activities so that there are no unpermitted discharges of wash wastewater to storm sewer inlets or to waters of the State.
2. Tier A Municipalities which cannot discharge wash wastewater to a sanitary sewer or which cannot otherwise comply with 1, above, may temporarily contain wash wastewater prior to proper disposal under the following conditions:
  - a. Containment structures shall not leak. Any underground tanks and associated piping shall be tested for integrity every 3 years using appropriate methods determined by “*The List of Leak Detection Evaluations for Storage Tank Systems*” created by the National Work Group on Leak Detection Evaluations (NWGLDE) or as determined appropriate and certified by a professional engineer for the site specific containment structure(s).
  - b. For any cathodically protected containment system, provide a passing cathodic protection survey every three years.
  - c. Operate containment structures to prevent overflowing resulting from normal or abnormal operations, overflowing, malfunctions of equipment, and human error. Overfill prevention shall include manual sticking/gauging of the tank before each use unless system design prevents such measurement. Tank shall no longer accept wash wastewater when determined to be at 95% capacity. Record each measurement to the nearest ½ inch.
  - d. Before each use, perform inspections of all visible portions of containment structures to ensure that they are structurally sound, and to detect deterioration of the wash pad, catch basin, sump, tank, piping, risers, walls, floors, joints, seams, pumps and pipe connections or other containment devices. The wash pad, catch basin, sump and associated drains should be kept free of debris before each use. Log dates of inspection; inspector's name, and conditions. This inspection is not required if system design prevents such inspection.
  - e. Containment structures shall be emptied and taken out of service immediately upon detection of a leak. Complete all necessary repairs to ensure structural integrity prior to placing the containment structure back into service. Any spills or suspected release of hazardous substances shall be immediately reported to the NJDEP Hotline (1-877-927-6337) followed by a site investigation in accordance with N.J.A.C. 7:26C and N.J.A.C 7:26E if the discharge is confirmed.
  - f. All equipment and vehicle wash wastewater placed into storage must be disposed of in a legally permitted manner (e.g. pumped out and delivered to a duly permitted and/or approved wastewater treatment facility).
  - g. Maintain a log of equipment and vehicle wash wastewater containment structure clean-outs including date and method of removal, mode of transportation (including name of hauler if applicable) and the location of disposal. See Underground Vehicle Wash Water Storage Tank Use Log at end of this attachment.
  - h. Containment structures shall be inspected annually by a NJ licensed professional engineer. The engineer shall certify the condition of all structures including: wash pad, catch basin,

sump, tank, piping, risers to detect deterioration in the, walls, floors, joints, seams, pumps and pipe connections or other containment devices using the attached Engineer's Certification of Annual Inspection of Equipment and Vehicle Wash Wastewater Containment Structure. This certification may be waived for self-contained systems on a case-by-case basis. Any such waiver would be issued in writing by the Department.

3. Maintain all logs, inspection records, and certifications on-site. Such records shall be made available to the Department upon request.

### **Salt and De-icing Material Storage and Handling**

1. Store material in a permanent structure.
2. Perform regular inspections and maintenance of storage structure and surrounding area.
3. Minimize tracking of material from loading and unloading operations.
4. During loading and unloading:
  - a. Conduct during dry weather, if possible;
  - b. Prevent and/or minimize spillage; and
  - c. Minimize loader travel distance between storage area and spreading vehicle.
5. Sweep (or clean using other dry cleaning methods):
  - a. Storage areas on a regular basis;
  - b. Material tracked away from storage areas;
  - c. Immediately after loading and unloading is complete.
6. Reuse or properly discard materials collected during cleanup.
7. Temporary outdoor storage is permitted only under the following conditions:
  - a. A permanent structure is under construction, repair or replacement;
  - b. Stormwater run-on and de-icing material run-off is minimized;
  - c. Materials in temporary storage are tarped when not in use;
  - d. The requirements of 2 through 6, above are met; and
  - e. Temporary outdoor storage shall not exceed 30 days unless otherwise approved in writing by the Department;
8. Sand must be stored in accordance with Aggregate Material and Construction Debris Storage below.

### **Aggregate Material and Construction Debris Storage**

1. Store materials such as sand, gravel, stone, top soil, road millings, waste concrete, asphalt, brick, block and asphalt based roofing scrap and processed aggregate in such a manner as to minimize stormwater run-on and aggregate run-off via surface grading, dikes and/or berms (which may include sand bags, hay bales and curbing, among others) or three sided storage bays. Where possible the open side of storage bays shall be situated on the upslope. The area in front of storage bays and adjacent to storage areas shall be swept clean after loading/unloading.
2. Sand, top soil, road millings and processed aggregate may only be stored outside and uncovered if in compliance with item 1 above and a 50-foot setback is maintained from surface water bodies, storm sewer inlets, and/or ditches or other stormwater conveyance channels.
3. Road millings must be managed in conformance with the “Recycled Asphalt Pavement and Asphalt Millings (RAP) Reuse Guidance” (see [www.nj.gov/dep/dshw/rrtp/asphaltguidance.pdf](http://www.nj.gov/dep/dshw/rrtp/asphaltguidance.pdf)) or properly disposed of as solid waste pursuant to N.J.A.C. 7:26-1 et seq.
4. The stockpiling of materials and construction of storage bays on certain land (including but not limited to coastal areas, wetlands and floodplains) may be subject to regulation by the Division of Land Use Regulation (see [www.nj.gov/dep/landuse/](http://www.nj.gov/dep/landuse/) for more information).

### **Street Sweepings, Catch Basin Clean Out, and Other Material Storage**

1. For the purposes of this permit, this BMP is intended for road cleanup materials as well as other similar materials. Road cleanup materials may include but are not limited to street sweepings, storm sewer clean out materials, stormwater basin clean out materials and other similar materials that may be collected during road cleanup operations. These BMPs do not cover materials such as liquids, wastes which are removed from municipal sanitary sewer systems or material which constitutes hazardous waste in accordance with N.J.A.C. 7:26G-1.1 et seq.
2. Road cleanup materials must be ultimately disposed of in accordance with N.J.A.C. 7:26-1.1 et seq. See the “Guidance Document for the Management of Street Sweepings and Other Road Cleanup Materials” ([www.nj.gov/dep/dshw/rrtp/sweeping.htm](http://www.nj.gov/dep/dshw/rrtp/sweeping.htm)).
3. Road cleanup materials placed into storage must be, at a minimum:
  - a. Stored in leak-proof containers or on an impervious surface that is contained (e.g. bermed) to control leachate and litter; and
  - b. Removed for disposal (in accordance with 2, above) within six (6) months of placement into storage.

## Yard Trimmings and Wood Waste Management Sites

1. These practices are applicable to any yard trimmings or wood waste management site:
  - a. Owned and operated by the Tier A Municipality;
    - i. For staging, storing, composting or otherwise managing yard trimmings, or
    - ii. For staging, storing or otherwise managing wood waste, and
  - b. Operated in compliance with the Recycling Rules found at N.J.A.C. 7:26A.
2. Yard trimmings or wood waste management sites must be operated in a manner that:
  - a. Diverts stormwater away from yard trimmings and wood waste management operations; and
  - b. Minimizes or eliminates the exposure of yard trimmings, wood waste and related materials to stormwater.
3. Yard trimmings and wood waste management site specific practices:
  - a. Construct windrows, staging and storage piles:
    - i. In such a manner that materials contained in the windrows, staging and storage piles (processed and unprocessed) do not enter waterways of the State;
    - ii. On ground which is not susceptible to seasonal flooding;
    - iii. In such a manner that prevents stormwater run-on and leachate run-off (e.g. use of covered areas, diversion swales, ditches or other designs to divert stormwater from contacting yard trimmings and wood waste).
  - b. Maintain perimeter controls such as curbs, berms, hay bales, silt fences, jersey barriers or setbacks, to eliminate the discharge of stormwater runoff carrying leachate or litter from the site to storm sewer inlets or to surface waters of the State.
  - c. Prevent on-site storm drain inlets from siltation using controls such as hay bales, silt fences, or filter fabric inlet protection.
  - d. Dry weather run-off that reaches a municipal stormwater sewer system is an illicit discharge. Possible sources of dry weather run-off include wetting of piles by the site operator; uncontrolled pile leachate or uncontrolled leachate from other materials stored at the site.
  - e. Remove trash from yard trimmings and wood waste upon receipt.
  - f. Monitor site for trash on a routine basis.
  - g. Store trash in leak-proof containers or on an impervious surface that is contained (e.g. bermed) to control leachate and litter;
  - h. Dispose of collected trash at a permitted solid waste facility.
  - i. Employ preventative tracking measures, such as gravel, quarry blend, or rumble strips at exits.

## Roadside Vegetation Management

1. Tier A Municipalities shall restrict the application of herbicides along roadsides in order to prevent it from being washed by stormwater into the waters of the State and to prevent erosion caused by de-vegetation, as follows: Tier A Municipalities shall not apply herbicides on or adjacent to storm drain inlets, on steeply sloping ground, along curb lines, and along unobstructed shoulders. Tier A Municipalities shall only apply herbicides within a 2 foot radius around structures where overgrowth presents a safety hazard and where it is unsafe to mow.

**ENGINEERS CERTIFICATION OF ANNUAL INSPECTION OF EQUIPMENT AND VEHICLE WASH WASTEWATER CONTAINMENT STRUCTURE**  
**(Complete a separate form for each vehicle wash wastewater containment structure)**

Permittee: \_\_\_\_\_ NJPDES Permit No: \_\_\_\_\_

Containment Structure Location: \_\_\_\_\_

The annual inspection of the above referenced vehicle wash wastewater containment structure was conducted on \_\_\_\_\_ (date). The containment structure and appurtenances have been inspected for:

1. The integrity of the structure including walls, floors, joints, seams, pumps and pipe connections
2. Leakage from the structure's piping, vacuum hose connections, etc.
2. Bursting potential of tank.
3. Transfer equipment
4. Venting
5. Overflow, spill control and maintenance.
6. Corrosion, splits, and perforations to tank, piping and vacuum hoses

The tank and appurtenances have been inspected for all of the above and have been determined to be:

Acceptable \_\_\_\_\_

Unacceptable \_\_\_\_\_

Conditionally Acceptable \_\_\_\_\_

List necessary repairs and other conditions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment (N.J.A.C. 7:14A-2.4(d)).

Name (print): \_\_\_\_\_ Seal: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Underground Vehicle Wash Water Storage Tank Use Log

Name and Address of Facility \_\_\_\_\_

Facility Permit Number \_\_\_\_\_

Tank ID Number \_\_\_\_\_

Tank Location \_\_\_\_\_

Tank Volume \_\_\_\_\_ gallons

Tank Height \_\_\_\_\_ inches

95% Volume \_\_\_\_\_ gallons

95% Volume \_\_\_\_\_ inches

<u>Date and Time</u>	<u>Inspector</u>	<u>Height of Product Before Introducing Liquid (inches)</u>	<u>Is Tank Less Than 95% Full? (Y/N)</u>	<u>Visual Inspection Pass? (Y/N)</u>	<u>Comments</u>

Notes: The volume of liquid in the tank should be measured **before** each use.  
 Liquid **should not be introduced** if the tank contains liquid at 95% of the capacity or greater.  
 A visual inspection of all exposed portions of the collection system should be performed before each use. Use the comments column to document the inspection and any repairs.



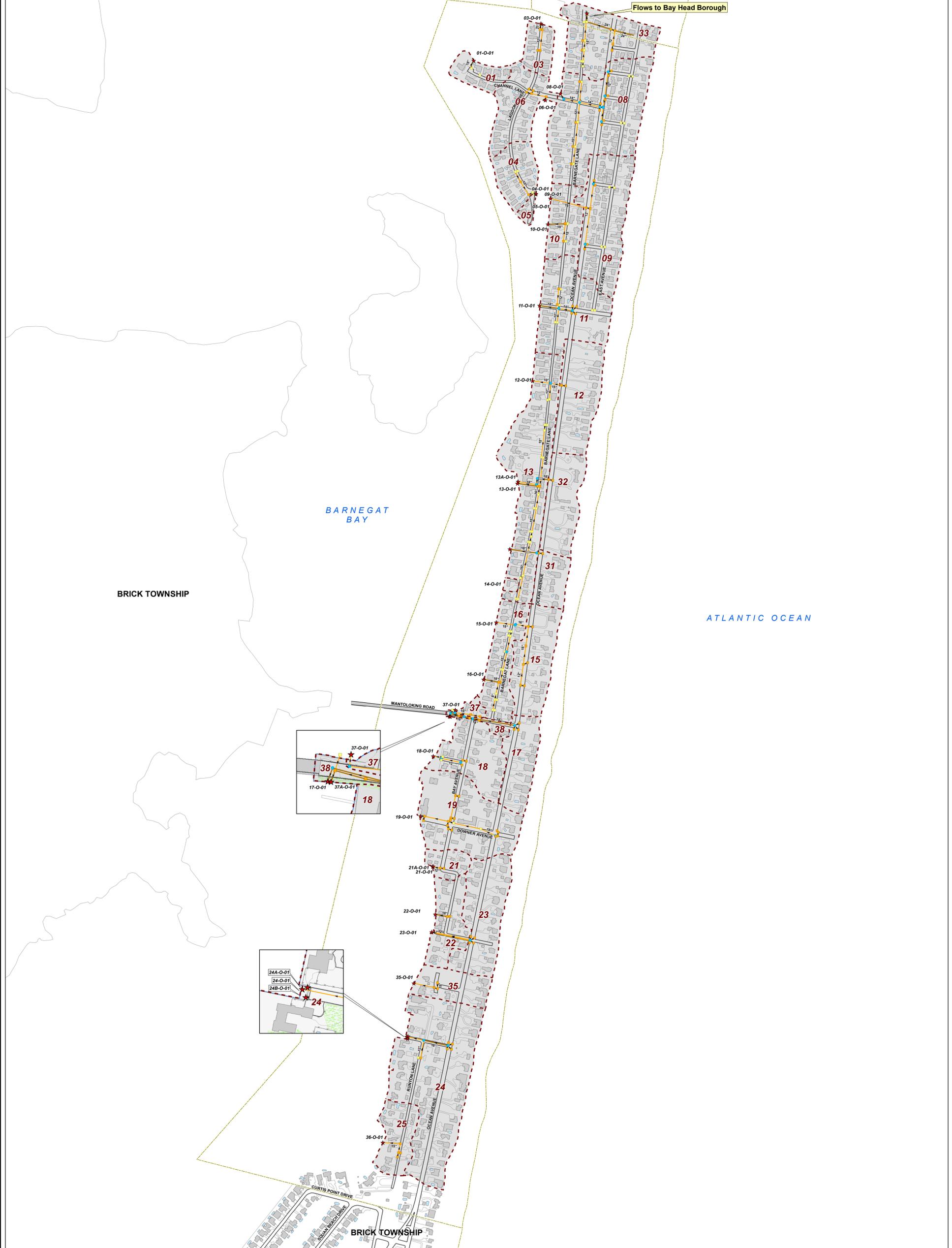
**BOROUGH OF MANTOLOKING**  
**STORMWATER POLLUTION PREVENTION PLAN (SPPP)**

**APPENDIX E – MS4 OUTFALL MAPS**

POINT PLEASANT BOROUGH

BAY HEAD BOROUGH

Flows to Bay Head Borough



- Legend**
- Catch Basin
  - Drainage Inlet
  - Manhole
  - ★ Outfall
  - Storm Chamber
  - Storm Drainage Basin
  - Municipal Border
- Storm Gravity Main**
- 16" or <
  - 18" or >

# MANTOLOKING BOROUGH

OCEAN COUNTY, NEW JERSEY

## TIER A MUNICIPAL STORMWATER (MS4) OUTFALL MAP



0 400 800 Feet



This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

