

# Hackensack Meadowlands Tide Gates Inspection Report

*prepared in conformity to*

**The National Flood Insurance Program  
Community Rating System**

*by*

**The New Jersey Meadowlands Commission  
One DeKorte Park Plaza  
Lyndhurst, New Jersey**

**March 27, 2006**





# TABLE OF CONTENTS

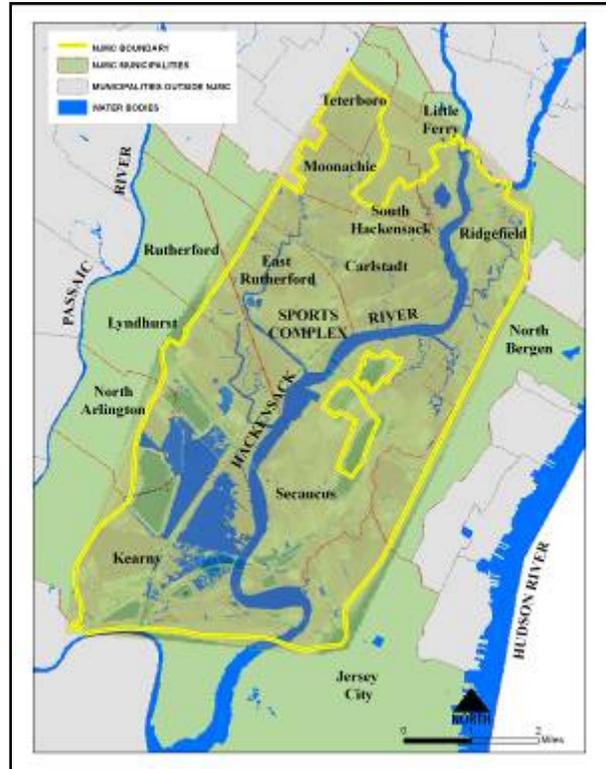
Content	Page
<b>Table of Contents</b>	<b>i</b>
<b>1. Executive Summary</b>	<b>1</b>
<b>2. Inspection Process</b>	<b>2</b>
<b>3. Summary of Tide Gate Conditions</b>	<b>5</b>
3.1 All Water Control Structures	6
3.2 Tide Gate Structures	9
3.3 Pump Station Structures	9
<b>4. Inspection Reports</b>	<b>10</b>
4.1 Carlstadt	
4.1.1 Broad Street and 20 <sup>th</sup> Street Tide Gate	12
4.1.2 Dell Road Tide Gate	18
4.1.3 East Riser Tide Gates	24
4.1.4 J.P. Smith Tide Gate	33
4.1.5 Lower Muddabach Tide Gate	38
4.1.6 Moonachie Creek Tide Gates	39
4.1.7 Peach Island Creek Tide Gates	47
4.1.8 Waitex Tide Gate	55
4.1.9 Yellow Freight Tide Gates	61
4.2 Kearny	
4.2.1 Belezza Tide Gate	69
4.2.2 Bergen Avenue Tide Gate	74
4.2.3 Cayuga Dike Pump Station and Tide Gates	82
4.2.4 Dead Horse Creek Tide Gates	88
4.2.5 Fish House Road Tide Gate	94
4.2.6 Frank's Creek Tide Gates	97
4.2.7 Harrison Avenue Tide Gate	105
4.2.8 Standard Chlorine Tide Gate	110
4.2.9 Trumbull Asphalt Tide Gate	114
4.2.10 USPS Tide Gate	122
4.3 Little Ferry	
4.3.1 DePeyster Pump Station	129
4.3.2 Losen Slote Pump Station and Tide Gates	134

4.4	Moonachie	
4.4.1	West Riser Tide Gates	140
4.5	North Arlington	
4.5.1	Kingsland Creek Tide Gate	149
4.6	Ridgefield	
4.6.1	Overpeck Creek Tide Gates	155
4.7	Rutherford	
4.7.1	Rutherford Tide Gates	160
4.8	Secaucus	
4.8.1	Acorn Road Tide Gate	170
4.8.2	Born Street Pump Station and Tide Gates	177
4.8.3	Farm Road Tide Gate	183
4.8.4	Golden Avenue Pump Station	187
4.8.5	Koelle Boulevard Tide Gate	188
4.8.6	Meadowlands Parkway Tide Gate	193
4.8.7	Mill Ridge Road Tide Gates	196
4.8.8	Penhorn Creek Pump Station	198
4.8.9	River Road Tide Gates and Pump Station	203
4.8.10	Route 3 West DOT Tide Gate	208
4.8.11	Secaucus High School Pump Station	212
4.8.12	St. Paul's Avenue Tide Gates and Pump Station	216
4.8.13	Syms Tide Gate	223
4.9	Teterboro	
4.9.1	Teterboro Pump Station	225

## 1. Executive Summary

The New Jersey Meadowlands Commission (“NJMC”) participates in the Federal Emergency Management Agency’s (FEMA) Community Rating System (“CRS”) on behalf of the 14 municipalities within the Hackensack Meadowlands District. This program is voluntary and recognizes and encourages community floodplain management activities that exceed the minimum National Flood Insurance Program (“NFIP”) requirements. Property owners and tenants in the Hackensack Meadowlands District currently enjoy a flood insurance discount due to the continued efforts by the NJMC to exceed the program requirements.

As required per the CRS Coordinator’s Manual Activity 540, “Drainage System Maintenance,” the NJMC evaluated the functionality of all of the tide gates and pump stations within the District. The conditions of the facilities, along with maintenance recommendations, have been documented based on numerous inspections. From the analysis of this inspection data, the NJMC has identified deficiencies in the water control structures and has been able to rate the overall condition of the District’s storm surge protection measures.



## 2. Inspection Process

Prior to each inspection, NJMC reviewed the 2004 CRS Activity 540 inspection reports in order to have a basic understanding of each flood control structure and its previously reported condition for comparison. Utilizing GIS data, NJMC also verified each structure's location and noted any significant changes to land uses with their respective drainage areas per aerial photos. GEOD Consulting surveyed most of the drainage structures for a project authorized by the Army Corps of Engineer in 2001. The site plans provided excellent support by providing pipe sizes, invert elevations, as well as basic system dimensions.

Due to the significant tidal impact on the structures, the tide gates were inspected at low and high tide condition. By inspecting during both conditions, the NJMC was able to observe both how well each tide gate was sealing against high tide backwater pressure, and how freely the tide gates were opening to allow upstream channels to empty during low tide. Also, low tide inspections provide a good view of typically submerged system components such as hinges, trash rack, and scour control, while high tide inspections help to identify seepage, undermining, and poor tide gate contact to its seal. Inspecting at various tide conditions also provides a better observation of the impact fluvial flooding will have during high tide conditions. There are several tide gate locations where high tide conditions and high intensity rainfall event will cause severe flooding in the area. Pump stations were inspected during the tide change from low to high only.

Each of the pump stations was inspected with the respective municipality's Department of Public Works (DPW) present to ensure access to all facilities. Additionally, the NJMC requested that each pump station be tested during the inspection to ensure the system is operating properly.

During each of the inspections, NJMC performed a general survey of the upstream and downstream area and verified that the garbage racks were clean, the tide gates were seating properly, if any part of the flood control structure was damaged, and if damaged, the extent of damage and the required maintenance necessary. All inspections included pictures of the drainage structures, including upstream of structure (if possible), downstream of structure, and any areas of concern around the facility. Each tide gate and pump station mapped location was checked and revised, as necessary, using field notes and aerial photography.

### **3. Summary of Tide Gate Conditions**

The following tables are the summary of all the water control structures within the Meadowlands District followed by a detailed breakdown of conditions for each facility.

#### **4. Inspection Reports**

Inspection reports are found in alphabetical order within each municipality's sub-section. A memo has been filed in this section for each tide gate that the NJMC has found to have been removed (decommissioned) or is no longer necessary for flood control.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Broad Street and 20<sup>th</sup> Street Tide Gate

Location: Intersection of Broad Street and 20<sup>th</sup> Street - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 10:10 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate is not seating properly and is lodged open with sediment and debris. The silt is interfering with the functionality of the gate.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The tide gate currently does not have a trash rack system and is in need of one due to the amount of debris that the ditch has accumulated. The drainage ditch needs to be dredged in order to keep up with the amount of sediment that collects in front of the gate.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Broad Street and 20<sup>th</sup> Street Tide Gate (Block: 120 Lot: 13)  
**Date:** 12/08/05      **Time:** 10:10 AM      **Tide Conditions:** Low



**Photo 1 Description: 1 steel flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Broad Street and 20<sup>th</sup> Street Tide Gate (Block: 120 Lot: 13)  
**Date:** 12/08/05      **Time:** 10:10 AM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Broad Street and 20<sup>th</sup> Street Tide Gate

Location: Intersection of Broad Street and 20<sup>th</sup> Street - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 1:50 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- \* Non-Functional

### Notes On Condition/Problems:

The tide gate is malfunctioning due to a build up of debris around the opening.

\* During low tide condition, the system was found to be non-functional. Please see attached low tide condition report.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The gate appears to be working during high tide conditions. The storm sewer in the area need to be maintained regularly due to the build up of sedimentation.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Broad Street and 20<sup>th</sup> Street Tide Gate (Block: 120 Lot: 13)  
**Date:** 12/08/05      **Time:** 1:50 PM      **Tide Conditions:** High



**Photo 1 Description: Location of steel flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Broad Street and 20<sup>th</sup> Street Tide Gate (Block: 120 Lot: 13)  
**Date:** 12/08/05      **Time:** 1:50 PM      **Tide Conditions:** High



**Photo 2 Description: Downstream view from tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Dell Road Tide Gate

Location: Intersection of Starke Road and Dell Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 9:25 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Make sure any debris and sediment remains clear of the tide gate structure.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Dell Road Tide Gate (Block: 123.01 Lot: 28)

Date: 12/08/05 Time: 9:25 AM Tide Conditions: Low



**Photo 1 Description: Metal flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dell Road Tide Gate (Block: 123.01 Lot: 28)  
**Date:** 12/08/05      **Time:** 9:25 AM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Dell Road Tide Gate

Location: Intersection of Starke Road and Dell Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-7-05 Time: 1:45 AM / **PM**

Conditions: Clear (Rain, Snow, **High Wind**, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appears to be working properly during high tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The drainage ditch should be maintained regularly in order to keep the gate free from the build-up of sediment and debris.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dell Road Tide Gate (Block: 123.01 Lot: 28)

**Date:** 12/07/05      **Time:** 1:45 PM      **Tide Conditions:** High



**Photo 1 Description: Metal flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dell Road Tide Gate (Block: 123.01 Lot: 28)

**Date:** 12/07/05      **Time:** 1:45 PM      **Tide Conditions:** High



**Photo 2 Description:** Upstream view from tide gate

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: East Riser Tide Gates

Location: Across the street from 368 Starke Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 9:40 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are not seating properly and water is entering into the system through gates two and four.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The trash rack needs immediate repair and cleaning. Debris has collected and blocks the flow of water through the gates. The roadway is also in need of repair due to settling above the tide gates.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** East Riser Tide Gates (Block: 123 Lot: 16)  
**Date:** 12/08/05      **Time:** 9:40 AM      **Tide Conditions:** Low



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

**Site ID/Name:** East Riser Tide Gates (Block: 123 Lot: 16)

**Date:** 12/08/05      **Time:** 9:40 AM      **Tide Conditions:** Low



**Photo 2 Description:** Upstream end of the tide gates

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** East Riser Tide Gates (Block: 123 Lot: 16)  
**Date:** 12/08/05      **Time:** 9:40 AM      **Tide Conditions:** Low



**Photo 3 Description:** Upstream view from tide gates and view of the trash rack system

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: East Riser Tide Gates

Location: Across the street from 368 Starke Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-7-05 Time: 1:55 AM / **PM**

Conditions: Clear (Rain, Snow, **High Wind**, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are malfunctioning and not seating properly, specifically tide gates two and four. The water is entering through the gates and entering the upstream system during high tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The trash rack needs to be maintained regularly. There is a build up of debris and sediment that blocks the flow of water.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: East Riser Tide Gates (Block: 123 Lot: 16)  
Date: 12/07/05 Time: 1:55 PM Tide Conditions: High



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: East Riser Tide Gates (Block: 123 Lot: 16)  
Date: 12/07/05 Time: 1:55 PM Tide Conditions: High



**Photo 2 Description: Upstream view from tide gates and view of the trash rack system**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** East Riser Tide Gates (Block: 123 Lot: 16)  
**Date:** 12/07/05      **Time:** 1:55 PM      **Tide Conditions:** High



**Photo 3 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: East Riser Tide Gates (Block: 123 Lot: 16)  
Date: 12/07/05 Time: 1:55 PM Tide Conditions: High



**Photo 4 Description: Upstream end of the tide gates**

# Drainage System Inspection Log

---

## Memorandum



## New Jersey Meadowlands Commission

To: Nicolas Agnoli  
From: Wai Lee  
Cc: File  
Date: February 6, 2006  
Re: J.P. Smith Tide Gate

---

The tide gate located in the intersection of 13<sup>th</sup> Street and Division Street in Carlstadt was inspected on December 19, 2005 during low and high tide conditions. The water elevation in the vicinity of the tide gate did not change regardless of the tidal conditions. The tide gate is constantly submerged and cannot be inspected. After a detailed analysis of the topographic data and aerial mapping, NJMC has determined tidal water cannot reach the tide gate, and therefore, it is recommended that the J.P. Smith Tide Gate no longer be inspected.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: J.P. Smith Tide Gate

Location: Intersection of 13<sup>th</sup> Street and Division Street - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 2:15 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Access to the tide gate was unavailable. The area is fenced in with a lock on the fence. A key is needed from the property owner. The tide gate is no longer in operation and needs to be decommissioned.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: J. P. Smith Tide Gate (Block: 111 Lot: 5)

Date: 12/19/05 Time: 2:15 PM Tide Conditions: Low



**Photo 1 Description: Remains of existing tide gate structure**

# **Drainage System Inspection Log**

---

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: J.P. Smith Tide Gate

Location: Intersection of 13<sup>th</sup> Street and Division Street - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-19-05 Time: 10:15 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No access to the tide gate was available. Area is fenced in with a lock on the fence. A key is needed from the property owner. The gate is no longer in operation and needs to be decommissioned.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** J. P. Smith Tide Gate (Block: 111 Lot: 5)

**Date:** 12/19/05      **Time:** 10:15 AM      **Tide Conditions:** High



**Photo 1 Description: Existing tide gate structure shown**

# Drainage System Inspection Log

---

## Memorandum



## New Jersey Meadowlands Commission

To: Nicolas Agnoli  
From: Wai Lee  
Cc: File  
Date: February 6, 2006  
Re: Lower Muddabach Tide Gate

---

Lower Muddabach Tide Gate, located in Block 137, Lot 46 in Carlstadt, has not been inspected due to access issues. The remote area of the site requires a boat for inspection. The weather from the winter hinders inspection by boats due to unsafe conditions on the boat. Inspection is pending on acceptable weather conditions.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Moonachie Creek Tide Gate

Location: Block 137, Lot 7 (next to Williams Corporation – Transco Pipeline)

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-29-05 Time: 1:00 AM / PM

Conditions: Rain (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appears to be functioning properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is some debris that has built up in front of the trash rack system that needs to be removed.

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
Date: 12/29/05 Time: 1:00 PM Tide Conditions: Low



**Photo 1 Description: Tide gate shown in the open position**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
Date: 12/29/05 Time: 1:00 PM Tide Conditions: Low



**Photo 2 Description: View of trash rack on upstream side of the tide gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
**Date:** 12/29/05      **Time:** 1:00 PM      **Tide Conditions:** Low



**Photo 3 Description: View of tide gate structure**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Moonachie Creek Tide Gate

Location: Block 137, Lot 7 (next to Williams Corporation – Transco Pipeline)

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-29-05 Time: 8:00 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Tina Schvejda

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appears to be working properly during high tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is minimal debris that has built up and needs to be removed in front of the trash rack.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
**Date:** 12/29/05      **Time:** 8:00 AM      **Tide Conditions:** High



**Photo 1 Description: Trash rack system**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
**Date:** 12/29/05      **Time:** 8:00 AM      **Tide Conditions:** High



**Photo 2 Description: Tide gate headwall**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Moonachie Creek Tide Gate (Block: 137 Lot: 7)  
**Date:** 12/29/05      **Time:** 8:00 AM      **Tide Conditions:** High



**Photo 3 Description: Downstream of the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Peach Island Creek Tide Gates

Location: Located next to 350 Gotham Parkway - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 9:15 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are not seating properly due to sediment and debris that has built up around the brim of the gates

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is some debris that has collected in front of the trash rack and blocks the flow of water through the tide gates

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/08/05      **Time:** 9:15 AM      **Tide Conditions:** Low



**Photo 1 Description: 4 metal flap gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/08/05      **Time:** 9:15 AM      **Tide Conditions:** Low



**Photo 2 Description: Upstream view from gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/08/05      **Time:** 9:15 AM      **Tide Conditions:** Low



**Photo 3 Description: Downstream view from gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Peach Island Creek Tide Gates

Location: Located next to 350 Gotham Parkway - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-7-05 Time: 1:30 AM / **PM**

Conditions: Clear (Rain, Snow, **High Wind**, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates do not seat properly during high tide conditions and a small amount of water continues to seep through and into the upstream system.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is a build-up of some sediment and debris located along the trash rack that blocks the flow of water.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/07/05      **Time:** 1:30 PM      **Tide Conditions:** High



**Photo 1 Description:** Trash rack on upstream side of the tide gates

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/07/05      **Time:** 1:30 PM      **Tide Conditions:** High



**Photo 2 Description: 4 metal flap gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Peach Island Creek Tide Gates (Block: 123.01 Lot: 11)  
**Date:** 12/07/05      **Time:** 1:30 PM      **Tide Conditions:** High



**Photo 3 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Waitex Tide Gate

Location: 50 Broad Street – Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 10:20 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appeared to be functioning properly at the time of the inspection.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Debris that has collected in front of the trash rack needs to be removed.

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Waitex Tide Gate (Block: 120 Lot: 18)

Date: 12/08/05 Time: 10:20 AM Tide Conditions: Low



**Photo 1 Description: Metal flap gate with a trash rack**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Waitex Tide Gate (Block: 120 Lot: 18)

**Date:** 12/08/05      **Time:** 10:20 AM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Waitex Tide Gate

Location: 50 Broad Street - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-7-05 Time: 2:15 AM / **PM**

Conditions: Clear (Rain, Snow, **High Wind**, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appeared to functioning properly at the time of the inspection.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Waitex Tide Gate (Block: 120 Lot: 18)

Date: 12/07/05 Time: 2:15 PM Tide Conditions: High



**Photo 1 Description: Metal flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Waitex Tide Gate (Block: 120 Lot: 18)

**Date:** 12/07/05      **Time:** 2:15 PM      **Tide Conditions:** High



**Photo 2 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Yellow Freight Tide Gates

Location: Located next to 390 Starke Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 9:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are not seating properly and debris has accumulated in front of the tide gates. The tide gates are hard to access due to thick vegetation. Access may need to be made by boat in order to obtain a good view of the gates

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The trash rack needs to be replaced.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Yellow Freight Tide Gates (Block: 123.01 Lot: 28)  
**Date:** 12/08/05      **Time:** 9:30 AM      **Tide Conditions:** Low



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Yellow Freight Tide Gates (Block: 123.01 Lot: 28)  
**Date:** 12/08/05      **Time:** 9:30 AM      **Tide Conditions:** Low



**Photo 2 Description:** Upstream view from tide gates

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Yellow Freight Tide Gates

Location: Located next to 390 Starke Road - Carlstadt

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 1:55 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are not seating properly and debris has accumulated in front of the tide gates. A feasibility study will be initiated in 2006 to investigate the overall functionality of the tide gates and the need for repairs and/or replacement.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is a build-up of debris that has collected in front of the trash rack system and needs to be removed.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Yellow Freight Tide Gates (Block: 123.01 Lot: 28)  
**Date:** 12/08/05      **Time:** 1:55 PM      **Tide Conditions:** High



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Yellow Freight Tide Gates (Block: 123.01 Lot: 28)  
**Date:** 12/08/05      **Time:** 1:55 PM      **Tide Conditions:** High



**Photo 2 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Belezza Tide Gate

Location: Belezza Company – 2 Fish House Road - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 3:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate is not seating properly due to debris and sediment.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The tide gate needs a trash rack system installed on both the upstream and downstream side of the structure.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Belezza Tide Gate (Block: 287 Lot: 81)  
**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 1 Description:** Tide gate shown with debris keeping it from closing properly

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Belezza Tide Gate (Block: 287 Lot: 81)  
**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 2 Description:** Upstream view from the tide gate

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Belezza Tide Gate (Block: 287 Lot: 81)

**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 3 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Belezza Tide Gate

Location: Belezza Company – 2 Fish House Road - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-16-05 Time: 9:00 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate was not visible during high tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

**Other Notes:** No pictures were taken at inspection since tide gate was not visible.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Bergen Avenue Tide Gate

Location: Block 275, Lot 3; Bergen Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-13-05 Time: 1:40 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)  
**Date:** 12/13/05      **Time:** 1:40 PM      **Tide Conditions:** Low



**Photo 1 Description: Tideflex™ check valve structure**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)  
**Date:** 12/13/05      **Time:** 1:40 PM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from tide gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)  
**Date:** 12/13/05      **Time:** 1:40 PM      **Tide Conditions:** Low



**Photo 3 Description:** Downstream detention basin located at the tide gate outfall

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Bergen Avenue Tide Gate

Location: Block 275, Lot 3; Bergen Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 2:35 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate is a Tideflex™ check valve system. Minor debris accumulated.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is some debris that has accumulated in front of the gate that needs to be removed.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)

**Date:** 12/08/05      **Time:** 2:35 PM      **Tide Conditions:** High



**Photo 1 Description: Tideflex™ check valve structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)  
**Date:** 12/08/05      **Time:** 2:35 PM      **Tide Conditions:** High



**Photo 2 Description: Downstream view from tide gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Bergen Avenue Tide Gate (Block: 275 Lot: 3)  
**Date:** 12/08/05      **Time:** 2:35 PM      **Tide Conditions:** High



**Photo 3 Description:** Downstream detention basin located at the outfall of the tide gate

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Cayuga Dike Pump Station & Tide Gates

**Location:** Block 287, Lot 33 (Next to access road from Route 7-Belleville Turnpike)

**File No.:** SP-501 **Tide Conditions:** (Low, **High**)

**Date:** 03-14-06 **Time:** 10:30 **AM** / PM

**Conditions:** Sunny and windy (Rain, Snow, High Wind, High/Low Tide, etc.)

**Inspected By:** NJMC: Wai Lee and Nicholas Agnoli

Army Corps of Engineers: Bryce Wisemiller, Milton Ricks, and Nuree Sarkar

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Three existing tide gates were found but the tide gate structures did not appear to be functional. The pump station is abandoned and without electrical service. Flow of water between the Hackensack River and the marsh across the dike might be seeping through the old tide gate structures. No signs or indications were found to prove the dike has been breached in the past.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

No interim maintenance is required because the Cayuga Dike system has deteriorated into a dilapidated state. An analysis of the Cayuga Dike system will be required to determine if the system is needed for flood control mitigation and should be repaired.

**Other Notes:** May be candidate for decommissioning.

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Cayuga Dike Pump Station and Tide Gates (Block: 287 Lot: 33)  
**Date:** 3/14/06      **Time:** 10:30 AM      **Tide Conditions:** High



**Photo 1 Description: View of old tide gate structure**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Cayuga Dike Pump Station and Tide Gates (Block: 287 Lot: 33)  
**Date:** 3/14/06      **Time:** 10:30 AM      **Tide Conditions:** High



**Photo 2 Description: View of pump station underneath the NJ Turnpike**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Cayuga Dike Pump Station and Tide Gates (Block: 287 Lot: 33)  
Date: 3/14/06 Time: 10:30 AM Tide Conditions: High



**Photo 3 Description: View of discharge pipes from pump station to Hackensack River**

# **Drainage System Inspection Log**

---

## **National Flood Insurance Program / Community Rating System**

**Site ID/Name:** Cayuga Dike Pump Station and Tide Gates (Block: 287 Lot: 33)  
**Date:** 3/14/06      **Time:** 10:30 AM      **Tide Conditions:** High



**Photo 4 Description: Looking inside of the Cayuga Dike Pump Station**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Cayuga Dike Pump Station and Tide Gates (Block: 287 Lot: 33)  
Date: 3/14/06 Time: 10:30 AM Tide Conditions: High



**Photo 5 Description: View of Cayuga Dike Pump Station's intake structure**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Dead Horse Creek Tide Gate

Location: Block 253, Lot 5A; Bergen Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-13-05 Time: 1:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dead Horse Creek Tide Gates (Block: 253 Lot: 5a)  
**Date:** 12/13/05      **Time:** 1:30 PM      **Tide Conditions:** Low



**Photo 1 Description: Tideflex™ check valve structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dead Horse Creek Tide Gates (Block: 253 Lot: 5a)  
**Date:** 12/13/05      **Time:** 1:30 PM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Dead Horse Creek Tide Gate

Location: Block 253, Lot 5A; Bergen Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 2:25 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Dead Horse Creek Tide Gates (Block: 253 Lot: 5a)  
Date: 12/08/05 Time: 2:25 PM Tide Conditions: High



**Photo 1 Description: Tideflex™ check valve structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Dead Horse Creek Tide Gates (Block: 253 Lot: 5a)  
**Date:** 12/08/05      **Time:** 2:25 PM      **Tide Conditions:** High



**Photo 2 Description: Downstream view from tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Fish House Road Tide Gate

Location: Block 298 Lot 28; Fish House Road – Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 2-6-06 Time: 9:10 AM / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Bob Segro

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The site contains a Tideflex™ check valve; it appears to be functional during low tide conditions. The discharge channel is clogged with debris and sediment.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The drainage ditch downstream of the Tideflex™ is in need of a clean-out. Sediment and debris have collected and block the flow of water.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Fish House Road Tide Gate (Block: 298 Lot: 28)  
**Date:** 2/6/06      **Time:** 9:10 AM      **Tide Conditions:** Low



**Photo 1 Description: Downstream view from tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Fish House Road Tide Gate (Block: 298 Lot: 28)  
Date: 2/6/06 Time: 9:10 AM Tide Conditions: Low



**Photo 2 Description: Tideflex™ check valve**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Frank's Creek Tide Gates

Location: Block 284, Lot 9CA - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 3:15 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates have debris (branches) wedged in them which is keeping them ajar. This is allowing water to enter the upstream system.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The tide gates need to have the debris removed in order for them to work properly.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Frank's Creek Tide Gates (Block: 284 Lot: 9ca)  
Date: 12/19/05 Time: 3:15 PM Tide Conditions: Low



**Photo 1 Description: Tide gate shown during low tide**

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Frank's Creek Tide Gates (Block: 284 Lot: 9ca)  
Date: 12/19/05 Time: 3:15 PM Tide Conditions: Low



**Photo 2 Description: Debris (rock) shown lodged in-between the gate keeping it ajar**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Frank's Creek Tide Gates (Block: 284 Lot: 9ca)  
**Date:** 12/19/05      **Time:** 3:15 PM      **Tide Conditions:** Low



**Photo 3 Description: Upstream view from the tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Frank's Creek Tide Gates

Location: Block 284, Lot 9CA - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-19-05 Time: 10:45 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates are not functioning properly. Water is seeping through during high tide conditions due to the tide gates not seating properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Frank's Creek Tide Gates (Block: 284 Lot: 9ca)  
**Date:** 12/19/05      **Time:** 10:45 AM      **Tide Conditions:** High



**Photo 1 Description:** Notice water (bubbles) traveling upstream of the tide gate during high tide conditions

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Frank's Creek Tide Gates (Block: 284 Lot: 9ca)

Date: 12/19/05 Time: 10:45 AM Tide Conditions: High



**Photo 2 Description: One of two metal flap gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Frank's Creek Tide Gates (Block: 284 Lot: 9ca)  
**Date:** 12/19/05      **Time:** 10:45 AM      **Tide Conditions:** High



**Photo 3 Description: Upstream view from tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Harrison Avenue Tide Gates

Location: 148-150 Harrison Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-13-05 Time: 2:20 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Harrison Avenue Tide Gates (Block: 284 Lot: 2a-3b-3ba)  
**Date:** 12/13/05      **Time:** 2:20 PM      **Tide Conditions:** Low



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Harrison Avenue Tide Gates (Block: 284 Lot: 2a-3b-3ba)  
**Date:** 12/13/05      **Time:** 2:20 PM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Harrison Avenue Tide Gates

Location: 148-150 Harrison Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 2:45 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Harrison Avenue Tide Gates (Block: 284 Lot: 2a-3b-3ba)  
**Date:** 12/08/05      **Time:** 2:45 PM      **Tide Conditions:** High



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Standard Chlorine Tide Gate

Location: Rear parking lot of 1035 Belleville Turnpike – Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-28-05 Time: 1:15 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Steve Spero

Keen Environmental: Matthew Sweed

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gate appears to be functioning properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Standard Chlorine Tide Gate (Block: 287 Lot: 49)  
Date: 12/28/05 Time: 1:15 PM Tide Conditions: Low



**Photo 1 Description: Metal flap gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Standard Chlorine Tide Gate

Location: Rear parking lot of 1035 Belleville Turnpike – Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-28-05 Time: 8:30 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist

Keen Environmental: Matthew Sweed

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gate appears to be functioning properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Standard Chlorine Tide Gate (Block: 287 Lot: 79)  
**Date:** 12/28/05      **Time:** 8:30 AM      **Tide Conditions:** High



**Photo 1 Description: Side view of tide gate**

# Drainage System Inspection Log

---

## Memorandum



## New Jersey Meadowlands Commission

To: Nicolas Agnoli  
From: Wai Lee  
Cc: File  
Date: February 6, 2006  
Re: Trumbull Asphalt Tide Gate

---

The tide gates in the property of Owens-Corning Fiberglas Corporation, located on 1249 Newark Turnpike, Kearny, were inspected on December 16, 2005 during high tide conditions and January 6, 2006 during low tide conditions. Two headwalls were found during the inspection but no additional structures were visible. Additionally, site plans from GEOD Consulting did not reveal any tide gate structures at the headwalls. The water elevation in the vicinity of the headwalls did not change regardless of the tidal conditions. After a detailed analysis of the topographic data and aerial mapping, NJMC has determined tidal water cannot reach the headwalls. Therefore, it is recommended that the Trumbull Asphalt Tide Gate no longer be inspected or considered to be part of the District's flood control system.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt Tide Gate

Location: 1249 Newark Turnpike

File No.: SP-501 Tide Conditions: (Low, High)

Date: 1-6-06 Time: 8:45 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Bob Segro

Owen Corning: Raul

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Headwalls were found during the inspection. The tide gate can not be found due to stagnant water around the structures.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Confirm the removal of the tide gates.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt (Block: 287 Lot: 67)  
Date: 1/6/06 Time: 8:45 AM



**Photo 1 Description: Location of possible submersed tide gate**

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt (Block: 287 Lot: 67)  
Date: 1/6/06 Time: 8:45 AM



**Photo 2 Description: Possible location of a old tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt Tide Gates

Location: 1249 Newark Turnpike - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-16-05 Time: 9:15 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee and John Enquist

Owens Corning: Jeff Wawrzeniak

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Located the headwall and sump pump. There were no tide gates visible at the time of the inspection.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

**Other Notes:** Jeff stated he was unaware of any tide gate structures located within the property.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt (Block: 287 Lot: 67)  
Date: 12/16/05 Time: 9:15 AM



**Photo 1 Description: Sump pump system**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt (Block: 287 Lot: 67)  
Date: 12/16/05 Time: 9:15 AM



**Photo 2 Description: Location of old headwall**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Trumbull Asphalt (Block: 287 Lot: 67)

Date: 12/16/05

Time: 9:15 AM



**Photo 3 Description: Possible location of tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: USPS Tide Gate

Location: 1200 Harrison Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-13-05 Time: 1:55 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: USPS Tide Gate (Block: 275 Lot: 1)

Date: 12/13/05 Time: 1:55 PM Tide Conditions: Low



Photo 1 Description: Metal flap gate

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: USPS Tide Gate

Location: 1200 Harrison Avenue - Kearny

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 2:45 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: USPS Tide Gate (Block: 275 Lot: 1)

Date: 12/08/05 Time: 2:45 PM Tide Conditions: High



**Photo 1 Description: Metal flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** USPS Tide Gate (Block: 275 Lot: 1)

**Date:** 12/08/05      **Time:** 2:45 PM      **Tide Conditions:** High



**Photo 2 Description:** Upstream view from the tide gate

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: USPS Tide Gate (Block: 275 Lot: 1)

Date: 12/08/05 Time: 2:45 PM Tide Conditions: High



**Photo 3 Description: Box culvert downstream from gate**



# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: DePeyster Creek Pump Station and Tide Gate

Location: Located at the end of Dietrich Street – Little Ferry

File No.: SP-501 Tide Conditions: (**Low**, High)

Date: 12-21-05 Time: 9:30 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Nicholas Agnoli and Wai Lee

Little Ferry DPW: Mike

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

DePeyster Pump Station has been completely refurbished by J. Fletcher Creamer.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

A regular debris removal schedule has been followed by the Little Ferry DPW.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: DePeyster Creek Pump Station and Tide Gate (Block: 107 Lot: 2.01)  
Date: 12/21/05 Time: 9:30 AM Tide Conditions: Low



**Photo 1 Description: View of tide gate and the outlet pipes for the pump station**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** DePeyster Creek Pump Station and Tide Gate (Block: 107 Lot: 2.01)  
**Date:** 12/21/05      **Time:** 9:30 AM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from the pump station**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** DePeyster Creek Pump Station and Tide Gate (Block: 107 Lot: 2.01)  
**Date:** 12/21/05      **Time:** 9:30 AM      **Tide Conditions:** Low



**Photo 3 Description: Upstream view from pump station**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** DePeyster Creek Pump Station and Tide Gate (Block: 107 Lot: 2.01)  
**Date:** 12/21/05      **Time:** 9:30 AM      **Tide Conditions:** Low



**Photo 4 Description: View of generator system**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Losen Slote Pump Station and Tide Gates

Location: Empire Boulevard (Block 106, Lot 3.01) – Little Ferry

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-21-05 Time: 10:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Nicholas Agnoli and Wai Lee

Little Ferry DPW: Mike

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Currently there is a removal of debris 6-7 times a year. Maintenance on generators is performed 3 times a year. The Little Ferry DPW performs a system check every Tuesday for an hour. The pump system needs an aerator system due to problems with ice in the winter.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Make sure that the debris is routinely removed. Install aerator system per DPW recommendation.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Losen Slote Pump Station and Tide Gates (Block: 106 Lot: 3.01)  
**Date:** 12/21/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 1 Description: View of trash racks at in-take structure**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

**Site ID/Name:** Losen Slote Pump Station and Tide Gates (Block: 106 Lot: 3.01)  
**Date:** 12/21/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 2 Description: Looking downstream at pump system**

# **Drainage System Inspection Log**

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Losen Slote Pump Station and Tide Gates (Block: 106 Lot: 3.01)  
**Date:** 12/21/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 3 Description: Upstream view from the pump station**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Losen Slote Pump Station and Tide Gates (Block: 106 Lot: 3.01)  
**Date:** 12/21/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 4 Description: View of pumps**



# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: West Riser Tide Gates

Location: 7 Purcell Court - Moonachie

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-8-05 Time: 9:50 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The cable system used for raising the gates is in poor shape and one cable has snapped completely. Undermining of the sheet pile cutoff must be investigated.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Drainage ditch needs to be cleaned out. The gates need cleaning and repairs made. Gates are timber and in the future may need to be replaced. A trash rack system also needs to be installed to keep debris out of the tide gates. The metal access walkway appears to be deteriorating and needs to be cleaned and repainted.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: West Riser Tide Gates (Block: 70 Lot: 7)  
Date: 12/08/05 Time: 9:50 AM Tide Conditions: Low



**Photo 1 Description: 4 timber tide gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** West Riser Tide Gates (Block: 70 Lot: 7)  
**Date:** 12/08/05      **Time:** 9:50 AM      **Tide Conditions:** Low



**Photo 2 Description:** Upstream view from the gates

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** West Riser Tide Gates (Block: 70 Lot: 7)  
**Date:** 12/08/05      **Time:** 9:50 AM      **Tide Conditions:** Low



**Photo 3 Description: Downstream view from the gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: West Riser Tide Gates

Location: 7 Purcell Court - Moonachie

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-21-05 Time: 1:45 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gates are not seating properly. Maintenance needs to be performed on the gates. The gates foundation is also being undermined

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Routine cleaning will help keep the gates operating properly. Gates may need to be replaced with metal flap gates in the future, currently they are timber. A trash rack system would also help to alleviate the collection of debris.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: West Riser Tide Gates (Block: 70 Lot: 7)  
Date: 12/21/05 Time: 1:45 PM Tide Conditions: High



**Photo 1 Description: 4 timber tide gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** West Riser Tide Gates (Block: 70 Lot: 7)

**Date:** 12/21/05      **Time:** 1:45 PM      **Tide Conditions:** High



**Photo 2 Description: Upstream view of trash rack system**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** West Riser Tide Gates (Block: 70 Lot: 7)  
**Date:** 12/21/05      **Time:** 1:45 PM      **Tide Conditions:** High



**Photo 3 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

---

## Memorandum



## New Jersey Meadowlands Commission

To: Nicolas Agnoli  
From: Wai Lee  
Cc: File  
Date: February 6, 2006  
Re: Kingsland Creek Tide Gate

---

The tide gate located to the west of the PSE&G sub-station on Disposal Road in North Arlington was inspected on December 8, 2005 during high tide conditions and December 19, 2005 during low tide conditions. A headwall was found during the inspection but no additional structures were visible. Additionally, site plans from GEOD Consulting did reveal the existing metal flap was removed subsequent to field investigation after their project with the Army Corps of Engineers in 2001. After analyzing the survey from GEOD Consulting and NJMC's field investigation, it is recommended that the Kingsland Creek Tide Gate no longer be inspected or considered to be part of the District's flood control system.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Kingsland Creek Tide Gates

Location: NJMC Erie Landfill Facility – Disposal Road – North Arlington

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 3:35 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gates appear to have been removed. All that remains is the existing headwall and pipes that they were attached to. The tide gates are to be decommissioned.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Kingsland Creek Tide Gate (Block: 193 Lot: 1)  
**Date:** 12/19/05      **Time:** 3:35 PM      **Tide Conditions:** Low



**Photo 1 Description: Location of removed tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Kingsland Creek Tide Gate

Location: Disposal Road - PSE&G Sub-Stations – North Arlington

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-8-05 Time: 3:15 AM / **PM**

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro, Frank Coppola, and Wai Lee

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gate was removed according to a microstation drawing file from Army Corps of Engineers. This information could not be verified during high tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Kingsland Creek Tide Gate (Block: 193 Lot: 1)  
**Date:** 12/08/05      **Time:** 3:15 PM      **Tide Conditions:** High



**Photo 1 Description: Tide gate structure**



# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Overpeck Creek Tide Gates

Location: Between the northbound and southbound roadways of the NJ Turnpike

File No.: SP-501 Tide Conditions: (Low, High)

Date: 1-20-06 Time: 9:15 AM / PM

Conditions: Sunny (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee and Nicholas Agnoli

Bergen County Engineering: Rocky Menzella

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

During the 1995-1996 rehabilitation of Overpeck Creek tidal dam, the following work was accomplished: addition of new control building of the dam, addition of a new generator building northeast of the dam, extensive refurbishment of existing gate building, modification and refurbishment of piers, new radial gates and embedded metal work, new radial gate hoists, new bascule gates and embedded metalwork, new bascule gate operators and hydraulic power unit, new heating system for deicing gate wall plates, new wooden stanchion gates and embedded metalwork, new computerized control equipment and software and new reinforced cut-off wall to reduce seepage beneath the dam. Gate operation is fully automated.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The system is in excellent condition.

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Overpeck Creek Tide Gates (Block: 4005 Lot: 1)  
Date: 1/20/06 Time: 9:15 AM Tide Conditions: Low



Photo 1 Description: View of the tide gates

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Overpeck Creek Tide Gates (Block: 4005 Lot: 1)  
Date: 1/20/06 Time: 9:15 AM Tide Conditions: Low



**Photo 2 Description: Overview of entire structure**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Overpeck Creek Tide Gates (Block: 4005 Lot: 1)  
Date: 1/20/06 Time: 9:15 AM Tide Conditions: Low



**Photo 3 Description: View of bascule tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Rutherford Tide Gates

Location: Adjacent to 299 Thomas E. Dunn Memorial Highway

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 3:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Water continues to seep through the gates and enter the upstream system. Of the five original designed 3 foot pipes, only three are functional and they are partially silted with their flap gates in varying degrees of damage. Two of the flap gates (culvert no. 4 and 5) have been welded closed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Army Corps is currently in the design phase of replacing the tide gates.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 1 Description: View of tide gates**

# **Drainage System Inspection Log**

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 2 Description: Upstream view from the tide gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 3:00 PM      **Tide Conditions:** Low



**Photo 3 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Rutherford Tide Gates

Location: Adjacent to 299 Thomas E. Dunn Memorial Highway

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-19-05 Time: 10:00 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Water continues to seep through the gates and enter the upstream system. Of the five original designed 3 foot pipes, only three are functional and they are partially silted with their flap gates in varying degrees of damage. Two of the flap gates (culvert no. 4 and 5) have been welded closed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Army Corps is currently in the design phase of replacing the tide gates.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 10:00 AM      **Tide Conditions:** High



**Photo 1 Description: Location of the tide gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 10:00 AM      **Tide Conditions:** High



**Photo 2 Description: Upstream view from the tide gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Rutherford Tide Gates (Block: 227 Lot: 1)  
**Date:** 12/19/05      **Time:** 10:00 AM      **Tide Conditions:** High



**Photo 3 Description: Downstream view from the tide gates**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Acorn Road Tide Gate

Location: Acorn River Playground & Secaucus Greenway

File No.: SP-501 Tide Conditions: (Low, High)

Date: 1-30-06 Time: 2:045 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Tide gate appears to be in good condition and functioning properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Acorn Road Tide Gate (Block: 203 Lot: 19.02)  
**Date:** 1/30/06      **Time:** 2:45 PM      **Tide Conditions:** Low



**Photo 1 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Acorn Road Tide Gate (Block: 203 Lot: 19.02)

**Date:** 1/30/06      **Time:** 2:45 PM      **Tide Conditions:** Low



**Photo 2 Description: Location of the tide gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Acorn Road Tide Gate (Block: 203 Lot: 19.02)

**Date:** 1/30/06      **Time:** 2:45 PM      **Tide Conditions:** Low



**Photo 3 Description:** Upstream view from the tide gate

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Acorn Road Tide Gate

Location: Next to Secaucus High School baseball field

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 1-13-06 Time: 9:20 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and Bob Segro

Secaucus DPW: Ed Rosen and Kevin

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Site contains one 30-inch metal flap gate. It appears to seal properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

**Other Notes:** This tide gate serves the drainage ditch from 236 Meadow Lane to the Hackensack River.

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Acorn Road Tide Gate (Block: 203 Lot: 19.02)

**Date:** 1/13/06      **Time:** 9:20 AM      **Tide Conditions:** High



**Photo 1 Description:** Upstream view from tide gate

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Acorn Road Tide Gate (Block: 203 Lot: 19.02)

**Date:** 1/13/06      **Time:** 9:20 AM      **Tide Conditions:** High



**Photo 2 Description: Location of tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Born Street Tide Gate and Pump Station

Location: Located at the end of Born Street - Secaucus

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 1-13-06 Time: 8:30 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and Bob Segro

Secaucus DPW: Ed Rosen and Kevin

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The site contains a diesel emergency power generator, three pumps that are located inside the pump house, one Godwin back-up pump system, and two 48-inch flap gates that are connected in series. Access is restricted to the site due to a locked gate

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Born Street Tide Gate and Pump Station (Block: 163 Lot: 1.01)  
Date: 1/13/06 Time: 8:30 AM Tide Conditions: High



**Photo 1 Description: Pump station outlet pipes**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Born Street Tide Gate and Pump Station (Block: 163 Lot: 1.01)  
**Date:** 1/13/06      **Time:** 8:30 AM      **Tide Conditions:** High



**Photo 2 Description: First 48-inch metal flap gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Born Street Tide Gate and Pump Station (Block: 163 Lot: 1.01)  
**Date:** 1/13/06      **Time:** 8:30 AM      **Tide Conditions:** High



**Photo 3 Description: Second 48-inch metal flap gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Born Street Tide Gate and Pump Station (Block: 163 Lot: 1.01)  
**Date:** 1/13/06      **Time:** 8:30 AM      **Tide Conditions:** High



**Photo 4 Description: Godwin diesel back-up pump**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Born Street Tide Gate and Pump Station (Block: 163 Lot: 1.01)  
**Date:** 1/13/06      **Time:** 8:30 AM      **Tide Conditions:** High



**Photo 5 Description: View of emergency power generator**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Farm Road Tide Gates

Location: West end of Riverview Garden Complex - Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-22-05 Time: 10:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gates at this location are not seating properly. The two gates are both metal flap gates. They are in a concrete chamber which is covered by unlocked steel grating. The tide gates are in series and appear to be redundant.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Gated access needs to be added at this location. The chamber in which the gates are housed needs to be cleaned out and repaired.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Farm Road Tide Gates (Block: 193 Lot: 1)  
**Date:** 12/22/05      **Time:** 10:30 AM      **Tide Conditions:** Low



**Photo 1 Description: Upstream view from gates**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

Site ID/Name: Farm Road Tide Gates (Block: 193 Lot: 1)  
Date: 12/22/05 Time: 10:30 AM Tide Conditions: Low



**Photo 2 Description: View of metal flap gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Farm Road Tide Gates (Block: 193 Lot: 1)  
Date: 12/22/05 Time: 10:30 AM Tide Conditions: Low



**Photo 3 Description: View of tide gate chamber**

# Drainage System Inspection Log

---

## Memorandum



## New Jersey Meadowlands Commission

To: Nicolas Agnoli  
From: Wai Lee  
Cc: File  
Date: February 6, 2006  
Re: Golden Avenue Pump Station

---

Golden Avenue Pump Station, located at the end of Golden Avenue in Secaucus, has not been inspected. The pump station system is currently in construction phase. Inspection is pending once construction is complete.

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Koelle Boulevard Tide Gate

Location: Koelle Boulevard and Mill Ridge Road - Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-12-05 Time: 10:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and Frank Coppola

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Koelle Boulevard Tide Gate (Block: 225 Lot: 4.02)  
**Date:** 12/12/05      **Time:** 10:30 AM      **Tide Conditions:** Low



**Photo 1 Description: Tide gate structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Koelle Boulevard Tide Gate (Block: 225 Lot: 4.02)  
**Date:** 12/12/05      **Time:** 10:30 AM      **Tide Conditions:** Low



**Photo 2 Description: Downstream view from the tide gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Koelle Boulevard Tide Gate

Location: Koelle Boulevard and Mill Ridge Road – Secaucus

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-13-05 Time: 9:55 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and Bob Segro

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Keep the tide gate clear of any debris.

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

Site ID/Name: Koelle Boulevard Tide Gate (Block: 225 Lot: 4.02)  
Date: 12/13/05 Time: 9:55 AM Tide Conditions: High



**Photo 1 Description: Tide gate structure shown during ice conditions**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Meadowlands Parkway Tide Gate

Location: Meadowlands Parkway – Armada Hess Property - Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 2-6-06 Time: 8:30 AM / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: John Enquist and Bob Segro

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The site contains a Tideflex™ check valve; it appears to be functional during low tide conditions.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Meadowlands Parkway Tide Gate (Block: 100 Lot: 2)  
**Date:** 2/6/06      **Time:** 8:30 AM      **Tide Conditions:** Low



**Photo 1 Description: Downstream view from tide gate**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Meadowlands Parkway Tide Gate (Block: 100 Lot: 2)  
**Date:** 2/6/06      **Time:** 8:30 AM      **Tide Conditions:** Low



**Photo 2 Description: Tideflex™ check valve**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Mill Ridge Road Tide Gate

Location: Behind 17 and 23 Mill Ridge Road – Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 1-25-06 Time: 11:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Bob Segro and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appears to seat properly. The gate is attached directly to storm drains located on Mill Ridge Road. In order to know if the gate is functional an inspection needs to be completed during a rain event to see if the gate opens. One of the tide gates found is located behind the property of 17 Mill Ridge Road.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The hinges located on the gate appear to be rusted and need to be cleaned and lubricated.

### Other Notes:

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Mill Ridge Road Tide Gate (Block: 226 Lot: 20 & 23)  
**Date:** 1/25/06      **Time:** 11:30 AM      **Tide Conditions:** Low



**Photo 1 Description: Metal flap gate shown**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Penhorn Creek Pump Station

Location: Intersection of Secaucus Road and Penhorn Avenue -Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-22-05 Time: 9:20 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and John Enquist

Hudson County Roads Department: Helmut Mross

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Tide Gate              | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The pump station could not be started during the time of the inspection due to the primer pipe being severed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Primer pipe must be replaced.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Penhorn Creek Pump Station (Block: 63 Lot: 2)  
Date: 12/22/05 Time: 9:20 AM Tide Conditions: Low



**Photo 1 Description: View of pump station**

# **Drainage System Inspection Log**

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Penhorn Creek Pump Station (Block: 63 Lot: 2)  
**Date:** 12/22/05      **Time:** 9:20 AM      **Tide Conditions:** Low



**Photo 2 Description: View of pump**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Penhorn Creek Pump Station (Block: 63 Lot: 2)  
**Date:** 12/22/05      **Time:** 9:20 AM      **Tide Conditions:** Low



**Photo 3 Description: Upstream view from pump station**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Penhorn Creek Pump Station (Block: 63 Lot: 2)  
**Date:** 12/22/05      **Time:** 9:20 AM      **Tide Conditions:** Low



**Photo 4 Description: Downstream view from pump station**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: River Road Tide Gates and Pump Station

Location: Intersection of River Road and Acorn Road

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 1-13-06 Time: 8:50 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and Bob Segro

Secaucus DPW: Ed Rosen and Kevin

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Site contains one diesel Godwin back-up pump. There is restricted access to the site due to a locked gate. During the time of the inspection, the outfall was submerged. There are two tide gates located in a concrete vault in series. The gates are 30-inch metal flap gates. The tide gates appear to seat properly. In addition to the vault, there is a Tideflex™ check valve located at the discharge point on the Hackensack River. The pump wet well is between the metal tide gates and Tideflex™.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: River Road Tide Gates and Pump Station (Block: 195 Lot: 5)  
Date: 1/13/06 Time: 8:50 AM Tide Conditions: High



**Photo 1 Description: 1<sup>st</sup> 30-inch flap gate**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: River Road Tide Gates and Pump Station (Block: 195 Lot: 5)  
Date: 1/13/06 Time: 8:50 AM Tide Conditions: High



**Photo 2 Description: 2<sup>nd</sup> 30-inch flap gate**

# **Drainage System Inspection Log**

---

National Flood Insurance Program / Community Rating System

**Site ID/Name:** River Road Tide Gates and Pump Station (Block: 195 Lot: 5)  
**Date:** 1/13/06      **Time:** 8:50 AM      **Tide Conditions:** High



**Photo 3 Description: View of submersible pump**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: River Road Tide Gates and Pump Station (Block: 195 Lot: 5)  
Date: 1/13/06 Time: 8:50 AM Tide Conditions: High



**Photo 4 Description: Godwin back-up pump**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Route 3 West Tide Gate

Location: 650 Route 3 West – Royal Motel – Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-19-05 Time: 2:30 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The tide gate appears to be working properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

There is limited access to the site due to a locked gate. The vegetation needs to be maintained regularly.

### Other Notes:

# **Drainage System Inspection Log**

---

National Flood Insurance Program / Community Rating System

**Site ID/Name:** Route 3 West Tide Gate (Block: 180 Lot: 23)

**Date:** 12/19/05      **Time:** 2:30 PM      **Tide Conditions:** Low



**Photo 1 Description: 1 metal flap gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Route 3 West D.O.T. Tide Gate

Location: 650 Route 3 West – Royal Motel – Secaucus

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 12-13-05 Time: 9:25 **AM** / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Frank Coppola and Bob Segro

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

No problems observed.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

**Other Notes:** Upstream view obstructed by vegetation.

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Route 3 West Tide Gate (Block: 180 Lot: 23)

**Date:** 12/13/05      **Time:** 9:25 AM      **Tide Conditions:** High



**Photo 1 Description: 1 metal flap gate**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Secaucus High School Pump Station

Location: Located on the Secaucus High School's property

File No.: SP-501 Tide Conditions: (Low, **High**)

Date: 1-13-06 Time: 9:30 **AM** / PM

Conditions: Cloudy (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and Bob Segro

Secaucus DPW: Ed Rosen and Kevin

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Tide Gate              | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The site contains three submersible pumps and one Godwin diesel back-up pump. The site is restricted by a locked fence and may be accessed with Secaucus DPW.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

### Other Notes:

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Secaucus High School Pump Station (Block: 226 Lot: 17.01)  
Date: 1/13/06 Time: 9:30 AM Tide Conditions: High



**Photo 1 Description: View of outlet pipes**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Secaucus High School Pump Station (Block: 226 Lot: 17.01)  
Date: 1/13/06 Time: 9:30 AM Tide Conditions: High



**Photo 2 Description: View of pump systems**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Secaucus High School Pump Station (Block: 226 Lot: 17.01)  
Date: 1/13/06 Time: 9:30 AM Tide Conditions: High



**Photo 3 Description: Godwin diesel back-up pump system**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: St. Paul's Avenue Tide Gate and Pump Station

Location: PSE&G Plant - Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-22-05 Time: 10:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and John Enquist

Hudson County Roads Department: Helmut Mross

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate   | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

The pumps are used only during large storm events. The pumps can only be operated manually as the float switches are not functional. The priming pumps do not shut off automatically due to the elevation of the pump system being to low.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

The system is in need of new pumps. Self priming pumps would be the best type to install at this location.

### Other Notes:

# Drainage System Inspection Log

---

National Flood Insurance Program / Community Rating System

**Site ID/Name:** St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
**Date:** 12/22/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 1 Description: Metal flap gate shown closed**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
**Date:** 12/22/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 2 Description: Pump discharge pipes**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
Date: 12/22/05 Time: 10:00 AM Tide Conditions: Low



Photo 3 Description: Pump station facility

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
Date: 12/22/05 Time: 10:00 AM Tide Conditions: Low



Photo 4 Description: View of pumps

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
**Date:** 12/22/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 5 Description: Downstream view from the pump station facility**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** St. Paul's Avenue Tide Gate and Pump Station (Block: 1200 Lot: 51)  
**Date:** 12/22/05      **Time:** 10:00 AM      **Tide Conditions:** Low



**Photo 6 Description: Upstream view from the pump station facility**

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Syms Tide Gate

Location: Parking Lot of 1 Emerson Lane – Secaucus

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-22-05 Time: 9:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Wai Lee, Nicholas Agnoli, and John Enquist

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Tide Gate | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch       | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream       | <input type="checkbox"/> Outfall     |
| <input type="checkbox"/> Pump System          | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

Flap gate is not seating properly. There is a piece of wood that is preventing the gate from functioning properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Remove the piece of wood. In order to access the tide gate, the inlet grate must be removed since the flap gate is located below grade.

### Other Notes:

# Drainage System Inspection Log

## National Flood Insurance Program / Community Rating System

Site ID/Name: Teterboro Pump Station

Location: Located at the end of Vincent Place - Teterboro

File No.: SP-501 Tide Conditions: (Low, High)

Date: 12-21-05 Time: 9:00 AM / PM

Conditions: Clear (Rain, Snow, High Wind, High/Low Tide, etc.)

Inspected By: NJMC: Nicholas Agnoli and Wai Lee

Teterboro DPW: John Fantacone

### Type of Inspection:

- Yearly
- Post-Storm
- Complaint

### System Designation:

- |   |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Tide Gate              | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Drainage Ditch         | <input type="checkbox"/> Culvert     |
| <input type="checkbox"/> Natural Stream         | <input type="checkbox"/> Outfall     |
| <input checked="" type="checkbox"/> Pump System | <input type="checkbox"/> Other       |

### Overall Functionality:

- Fully Functional
- Functional with Restrictions
- Non-Functional

### Notes On Condition/Problems:

A new pump station is currently being constructed. The current conditions are: 3 out of 4 pumps function, 1 out of 4 tide gates function. The two tide gates that function at discharge are seating properly.

### Maintenance Required:

- Immediate
- Repair
- Continued Upkeep

### Notes on Maintenance

Trash racks are clean and are in good condition. The construction by-pass appears to be undersized. The pump house is in good condition with a functional alarm system. Access needs to be cleared to all system components. The pumps were maintained as follows: pump #1 in 2006, pump # 2 in 2005 and pump #3 in 2000.

**Other Notes:** The current system is to be taken out of service in 2006.

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Teterboro Pump Station (Block: 201 Lot: 12)

Date: 12/21/05 Time: 9:00 AM Tide Conditions: Low



**Photo 1 Description: Flap gates shown on outlet structure**

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Teterboro Pump Station (Block: 201 Lot: 12)

**Date:** 12/21/05      **Time:** 9:00 AM      **Tide Conditions:** Low



**Photo 2 Description: In-flow at pump station**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Teterboro Pump Station (Block: 201 Lot: 12)  
Date: 12/21/05 Time: 9:00 AM Tide Conditions: Low



Photo 3 Description: View of pumps

# Drainage System Inspection Log

---

## National Flood Insurance Program / Community Rating System

**Site ID/Name:** Teterboro Pump Station (Block: 201 Lot: 12)  
**Date:** 12/21/05      **Time:** 9:00 AM      **Tide Conditions:** Low



**Photo 4 Description: Downstream view from the pump station**

# Drainage System Inspection Log

National Flood Insurance Program / Community Rating System

Site ID/Name: Teterboro Pump Station (Block: 201 Lot: 12)

Date: 12/21/05 Time: 9:00 AM Tide Conditions: Low



**Photo 5 Description: Upstream view from the pump station**